

AVAILABILITY OF REGISTERED PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA: 2003 UNTIL 2008

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*"When we build what God wants us to build, there is no
crumbling down"* Prof. T.C. Rabali

DEDICATION:

This dissertation is dedicated to God, the author and finisher of my faith.

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I have followed the pillar of cloud by day, and I followed the pillar of fire by night; I am not lost...I am assured, the path I tread is God's will on me, and I will one day reach the promised land.

ABSTRACT

TITLE: The availability of registered pharmaceutical structures in South Africa from 2003 until 2008

KEYWORDS:

Access, availability, equity, geographical distribution, pharmaceutical structures, pharmacy per population ratio.

BACKGROUND:

Despite the deteriorated state of health care in South Africa, the government remains committed to realising the right of every citizen to access health care, including good, quality and essential drugs. In recognising the availability of pharmaceutical facilities as a major component of access to health care, and the previous imbalances in the distribution of pharmaceutical structures and services, laws pertaining to the licensing and ownership of pharmacies were amended and promulgated in 2003 to address the distribution problem. In addition, regulations relating to a transparent pricing system on medicines and related substances were introduced in 2004. These, coupled with factors influencing the choice of a pharmacy location, and the deficiencies in human resources exercising an impact on both pharmacy and other health care personnel, have influenced the distribution and availability of pharmaceutical structures in South Africa from the year 2003 to 2008.

OBJECTIVE:

The main objective of this study was to investigate the availability and distribution of pharmaceutical structures registered with the South African Pharmacy Council, in South Africa, as of 2003 until 2008.

METHOD:

Data on the total number and geographical distribution of registered pharmaceutical structures in South Africa were obtained from the South African Pharmacy Council's register of pharmacies of August 2003, 2004, 2005, 2006, 2007 and 2008. The registered pharmaceutical structures were categorised according to their nature of services to the patient into "direct service" and "indirect service" (support) pharmacies. Availability was taken to refer to the actual presence of the pharmaceutical structures in relation to the demand for the services and measured quantitatively using population: provider ratios. The 'population' for indirect service pharmacies was taken as the direct service pharmacies and,

the 'population' for direct service pharmacies was taken as the estimated population of the different geographical regions.

RESULTS:

The results revealed a 12% increase in the total number of registered pharmaceutical structures between the study years, to a total of 4227 pharmaceutical structures in 2008. Gauteng was identified as the province with the highest number of registered pharmaceutical structures, while the Northern Cape province contained the lowest number of registered pharmaceutical structures throughout the entire study period. The percentage of municipalities without any registered pharmaceutical structures decreased from 23% in 2003 to 19% in 2008.

The indirect service pharmacies constituted 14% of the total number of registered pharmaceutical structures in South Africa. Most of these structures were situated in the province of Gauteng throughout the study period. National availability of these structures only improved for the manufacturing pharmacies.

The registered direct service pharmacies increased by 13.2% to total 3642 pharmacies in 2008. Approximately 20% of the municipalities in the country (respectively 5.5% of the population) did not contain any registered direct service pharmacy in 2008. Most of these municipalities were situated in the KwaZulu-Natal province. The province of Gauteng contained the highest proportion (32%) of the direct service pharmaceutical structures. The decrease in the pharmacy per population ratio of the structures from 1:14 547 people in 2003 to 1:13 615 people in 2008 indicated an improvement in the availability of the structures. However, the improved availability did not take effect within each province as the Northern Cape, Mpumalanga and Gauteng provinces experienced an increase in the pharmacy per population ratio.

CONCLUSION:

The availability of registered pharmaceutical structures in South Africa improved between 2003 and 2008. However, the distribution of these structures remains geographically uneven and inequitable to the population of the country.

OPSOMMING

TITEL: Die beskikbaarheid van geregistreerde farmaseutiese instellings in Suid-Afrika vanaf 2003 tot 2008.

SLEUTELWOORDE:

Toeganklikheid, beskikbaarheid, gelykheid, geografiese verspreiding, farmaseutiese instellings, apteek per populasie verhouding.

AGTERGROND:

Ten spyte van die dalende toestand van gesondheidsorg in Suid-Afrika, bly die regering toegewyd aan elke landsburger se reg tot toegang tot gesondheidsorg wat goeie, kwaliteit essensiële medisyne insluit. Die beskikbaarheid van farmaseutiese instellings is geïdentifiseer as 'n belangrike komponent wat toegang tot gesondheidsorg beïnvloed, te same met vorige ongelykhede in die verspreiding van farmaseutiese strukture en dienste, het aanleiding gegee tot die wysiging van wette rakende die lisensiëring en eienaarskap van apteke wat bekendgemaak is in 2003, om wanbalanse in verspreiding aan te toon.

Verder is die regulasies vir 'n deursigtige prys sisteem vir medisyne en verwante stowwe in 2004 bekendgestel. Hierdie regulasies, tesame met faktore wat die keuse van apteekligging beïnvloed, en tekorte in mensehulpbronne het 'n impak op beide apteek- en ander gesondheidspersoneel uitgeoefen en het die verspreiding en beskikbaarheid van farmaseutiese strukture in Suid-Afrika beïnvloed vanaf 2003 tot 2008.

DOELWIT:

Die hoof doelwit van hierdie studie was om die beskikbaarheid en verspreiding van farmaseutiese instellings wat by die Suid-Afrikaanse Aptekersraad geregistreer is te bestudeer vanaf 2003 ten einde 2008.

METODE:

Data oor die totale aantal en geografiese verspreiding van geregistreerde farmaseutiese strukture in Suid-Afrika is verkry vanaf die Suid-Afrikaanse Aptekersraad se register vir apteke vir Augustus 2003, 2004, 2005, 2006, 2007 en 2008. Die geregistreerde farmaseutiese instellings is gekategoriseer volgens die aard van dienste wat aan die pasiënt gelewer word as "direkte dienste" en "indirekte dienste" (ondersteunend) apteke. Beskikbaarheid van farmaseutiese instellings verwys na die werklike teenwoordigheid in

verhouding tot die aanvraag vir die dienste en is kwantitatief gemeet deur gebruik te maak van populasie: voorsiener verhoudings. Die 'populasie' vir indirekte dienste apteke is uitgedruk in terme van 'n verhouding tot apteke wat die direkte dienste apteke is in 'n verhouding tot geskatte populasie van die onderskeie geografiese gebiede.

RESULTATE:

Die resultate het 'n 12% verhoging getoon in die totale aantal geregistreerde farmaseutiese instellings tussen die studiejare, met 'n totaal van 4227 farmaseutiese strukture in 2008. Gauteng is geïdentifiseer as die provinsie met die hoogste aantal geregistreerde farmaseutiese instellings, terwyl die Noord-Kaap provinsie die minste geregistreerde farmaseutiese instellings gedokumenteer bevat het deur die loop van die totale studietydperk. Die persentasie munisipaliteite sonder enige geregistreerde farmaseutiese instellings het afgeneem vanaf 23% in 2003 na 19% in 2008.

Die indirekte dienste apteke verteenwoordig 14% van die totale aantal geregistreerde farmaseutiese instellings in Suid-Afrika. Die meeste van hierdie instellings is geleë in die Gauteng provinsie deur die loop van die hele studietydperk. Nasionale beskikbaarheid van hierdie nie direkte dienste instellings het slegs verhoog vir die vervaardigingsapteke.

Die geregistreerde direkte dienste apteke het toegeneem met 13.2% tot 'n totaal van 3642 apteke in 2008. Ongeveer 20% van die land se munisipaliteite (5.5% van die populasie) het nie enige geregistreerde direkte dienste van apteke ontvang gedurende 2008 nie. Die meeste van hierdie munisipaliteite is in KwaZulu-Natal geleë. Die Gauteng provinsie toon die grootste aantal (32%) van die direkte dienste farmaseutiese instellings. Die afname in die apteek per populasie verhouding van die instellings van 1:14 547 populasie in 2003 tot 1: 13 615 populasie verhouding in 2008 dui aan dat daar 'n verbetering was in die beskikbaarheid van die instellings. Die verbetering in beskikbaarheid het egter nie in al die provinsies plaasgevind nie: die Noord-Kaap, Mpumalanga en Gauteng provinsies het 'n toename in apteek per populasie verhouding getoon.

GEVOLGTREKKING:

Die beskikbaarheid van geregistreerde farmaseutiese instellings in Suid-Afrika het verhoog tussen 2003 en 2008 maar die verspreiding van hierdie instellings geografies oneweredig is, en nie gelyke toegang bied vir die populasie van die land.

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CHAPTER 1:

THE AVAILABILITY OF REGISTERED PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA

1.1 INTRODUCTION

This dissertation focuses on the following aspects:

- The geographical distribution of registered pharmaceutical structures in South Africa as of the year 2003 until the year 2008.
- The availability of the registered pharmaceutical structures in South Africa to the population of the country as of the year 2003 until 2008.

1.2 PROBLEM STATEMENT

In 1978 at an international conference on primary health care, in Alma Ata, the concept of primary health care was introduced. Attendants accepted this concept as a way of achieving universally available health care and an undertaking was made thenceforth to attain “health care for all” by the year 2000 (Dennill *et al.* 1999:6).

For years the South African government attempted to implement the principles of Alma Ata but, for the greater part of the 20th century, income, geographical location and especially, race or ethnicity were arc determinants of health care received by and delivered to South Africans and therefore equity and “health care for all” could not be achieved. Fragmentation of the country’s health care system; inequities and disparities in the provision of health care; inadequate infrastructure and severe shortages of resources were some of the reasons, that actuated the need for a reformation of the country’s health system. (Van Rensburg & Pelser, 2004:110). A reformation of the country’s health system came about with the inception of a democratic government in 1994. The government developed a *National Health Plan* to give effect to the restructuring of health care (Van Rensburg & Pelser, 2004:112). The health plan for restructuring the health system was based on the principles of the primary health care approach

declared in Alma Ata. The plan emphasised “*promotive, rehabilitative and curative care provided by the most appropriate facilities and with priority attention to services in the rural and impoverished urban areas*” (Van Rensburg & Pelsner, 2004:114).

Pertaining specifically to the problems of the pharmaceutical industry, the South African Department of Health released, in 1996, a National Drug Policy in an attempt to resolve them. In it, the Department of Health outlined its commitment to ensuring the availability and accessibility of safe, efficient and quality affordable medicines to all people (Department of Health, 1996:4). One should acknowledge that this aim could only be achieved with the presence of adequate and sufficient pharmaceutical structures and services rendered therein.

The health care system in South Africa can be divided into a private sector and a public (or state-provided) sector. The difference between the two sectors is marked in their ownership, financing and the provision and distribution of care (Van Rensburg *et al.*, 1992:26). Because of these differences, the availability of pharmaceutical structures in the private and public sectors may in some instances be affected by differing factors.

- **Public sector**

Pharmaceutical structures of the public sector include public hospitals (including military and correctional service hospitals) and clinics. These structures are state-owned and the provision or distribution of services is also state-regulated. Health care providers in this sector are state employees who are remunerated for their services at fixed salaries from public funds (Van Rensburg *et al.*, 1992:28). The availability of such structures will therefore depend on whether or not the state deems them necessary and whether or not the state can finance them.

- **Private sector**

Pharmaceutical structures of the private sector include retail pharmacies, private hospitals and specialised institutions (e.g. psychiatric hospitals, medical aid health care institutions, etc.).

Health care delivery in the private sector is to a large extent by private entrepreneurs and there is minimal government control of the financing of services. Remuneration for the services rendered is either on a fee-for-service basis or by means of a patient's health insurance. The individual's purchasing power therefore influences the provision and

distribution of services in this sector, resulting in limited availability of services in favour of those who can afford, or are willing to pay for them (Van Rensburg *et al.*, 1992:28).

According to Tootelian and Gaedeke (1993:28) pharmaceutical structures of the private sector are not only care giving orientated but also business orientated. They further continue to state that it is the business role of pharmacies in the private sector that governs the location of most pharmacies since the location of a pharmaceutical structure will determine the type and number of patients it will serve and thus also its success and sustainability.

Pharmacists often consider factors such as the characteristics of the population they are to service (e.g. the size, age, growth trend and income distribution), the number of and type of services delivered by competitors, physician availability and accessibility to patients in selecting the appropriate location to establish their pharmacies (Tootelian & Gaedeke, 1993:119). Mal-distribution of pharmacy structures in the country may occur as a result of consideration of these factors leading to overprovision of facilities in certain parts of the country and underprovision in others.

In an effort to regulate the distribution of pharmaceutical structures and also remedy the stark private-public, rural-urban disparities in the distribution of pharmaceutical services, the following measures have been undertaken:

- The regulations on ownership of pharmacies have been amended to allow ownership thereof to any person(s) who complies with the conditions of ownership of pharmacies. The granting of licences to the owners of the pharmacies is subject to criteria for the determination of need for a pharmacy in that area (Department of Health, 2003). This was done in order to open more pharmacies in underserved areas of the country (Van Rensburg, 2004a:342).
- In terms of the National Health Act (61/2003), every existing establishment should possess a certificate of need. The government may therefore prevent an establishment from opening at a place of choice if the government deems it inappropriate. Criteria that will be taken into consideration in making the decision include, but are not limited to, the need to promote equity and to correct inequities in service provision (Leon & Mabope, 2005:34).

The availability of health care may also be hampered or cancelled out by factors such as infrastructural deficiencies, discriminatory measures, communication, language and cultural

diversity and limited human resources to an extent that the health care is not available to the community or specific sectors thereof (Van Rensburg *et al.*, 1992:30). An example of this is the limited human resources that the country has. The expanding scope of practice of pharmacists (to also include the provision of primary health care) has resulted in increased responsibilities for the practising pharmacists. In a research study done in California (in the United States of America) to determine trends in the pharmacy workforce, it was found that as the number and types of medication grew and the needs of patients also increased, pharmacists reported longer working hours, reduced flexibility in scheduling and insufficient time to perform the range of tasks they are accountable for and have been trained for (Sarmento, 2004:1). This limits the spectrum and quality of services they are to provide and results in the service being less available or, in some parts of the country, not available at all. A similar study was done in South Africa where a researcher conducted interviews with health professionals and came to the same conclusion (Ijumba, 2002:181).

In a publication by the Canadian Pharmacists Association (2004:1), pharmacists were referred to as *“the drug therapy experts and thus essential to optimal primary health care”*. Furthermore, it was recognised that because of their knowledge, skills and accessibility, pharmacists are positioned to ensure that patients, other health care providers and the health care system safely achieve optimal drug therapy outcomes. In the primary care setting, pharmacists could provide direct patient care; face-to-face counselling and education to their patients; prescribing advice to other providers; advice on cost-effective drug therapy and options for treatments; and chronic disease therapy management.

This study is dedicated towards investigating the availability of registered pharmaceutical structures (registered with the South African Pharmacy Council) in South Africa; wherein the invaluable services of the pharmacy profession can be provided. *“Pharmacy does not operate in a vacuum but, is influenced by intricate crosscurrents of political, social and economic events”* (Goyns, 1994:2). The study is therefore undertaken in the context of a country that, not only has a unique profile but has also taken strides to implement the “health for all” principles of primary health care, while also taking into consideration the general factors that may influence the availability of the pharmaceutical structures.

1.3 RESEARCH QUESTIONS

The following research questions can be formulated from the preceding problem statement:

- What is the significance of the availability of pharmaceutical structures?
- Which factors influence the geographical location and availability of pharmaceutical structures?
- How are the pharmaceutical structures in South Africa geographically distributed and is this distribution even?
- Which changes have occurred in the distribution of the registered pharmaceutical structures in South Africa between the years 2003 and 2008?
- Are the pharmaceutical structures evenly distributed in relation to the population or clients they are to serve?
- Which changes have occurred in the availability of pharmaceutical structures from the year 2003 to 2008?
- What is the trend in the distribution of the different registered pharmaceutical structures in South Africa?
- In which way have the laws pertaining to licensing of pharmaceutical structures influenced their availability?

1.4 RESEARCH AIMS

The objectives of this research have been divided into a general objective and specific objectives.

1.4.1 General Aim

The general aim of the research was to investigate the availability of registered pharmaceutical structures in South Africa from 2003 until 2008.

1.4.2 Specific aims:

The specific objectives of this research included those that would be achieved by an overview of the relevant literature as well as those that would be achieved by an in-depth empirical study.

The specific research objectives of the literature review were:

- To determine the significance of the availability of pharmaceutical structures in South Africa.
- To determine factors that influence the geographical location and the availability of pharmaceutical structures.

The specific research objectives of the empirical investigation were:

- To establish the geographical distribution of registered pharmaceutical structures in South Africa as of the year 2003 until 2008.
- To establish whether the different registered pharmaceutical structures that exist are geographically evenly distributed within the country.
- To determine the changes and the degree of changes in the distribution of the registered pharmaceutical structures in South Africa from the year 2003 to 2008.
- To establish the distribution of the registered pharmaceutical structures in South Africa, in relation to the population and clientele they are to serve, from the year 2003 until 2008.
- To establish whether the registered pharmaceutical structures are equitably distributed in relation to the population or clients they are to serve.
- To determine the changes and degree of changes in the availability of registered pharmaceutical structures from the year 2003 to 2008.
- To evaluate the availability and distribution of the registered community pharmacies in South Africa, 2003 and 2008.
- To establish the distribution trend or pattern of the different kinds of pharmaceutical structures in South Africa.
- To determine the impact of laws pertaining to the ownership and licensing of pharmaceutical structures on their availability.

1.5 RESEARCH METHOD

The research methodology consisted of two phases corresponding to the specific objectives of the study. The first phase was a review of the relevant literature on the significance of available pharmaceutical structures in South Africa and the factors influencing the availability of pharmaceutical structures in South Africa. The second phase was an empirical investigation. The detailed procedures regarding the methodology employed for the empirical investigation are presented in chapter 4.

1.6 CHAPTER DIVISION

The study has been divided into the following chapters:

Chapter 1: Introduction and problem statement

Chapter 2: Literature review: The significance of available pharmaceutical structures in South Africa

Chapter 3: Literature review: Factors influencing the availability of pharmaceutical structures

Chapter 4: Empirical investigation

Chapter 5: Results and discussion of results

Chapter 6: Conclusion, recommendations and limitations of the study.

1.7 CHAPTER SUMMARY

In this chapter, an introduction to the study was given. This was achieved by way of presenting a problem statement, the research questions and the research objectives, the research method as well as a division of the chapters.

CHAPTER 2:

THE SIGNIFICANCE OF AVAILABLE PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA

2.1 INTRODUCTION

Pharmaceutical structures are an essential part of any health care system. This chapter draws attention to the importance of having pharmaceutical structures available in the country by extrapolating from existing literature the demographic, socio-economic and health profile of the South African population, addressing the concept of access to health care and thereby also elucidating the term availability, establishing the health care goals of South Africa's governance and health care delivery system, establishing the role of pharmacy in health care and, presenting a retrospective view of the availability of pharmaceutical structures in South Africa.

2.2 PROFILE OF THE SOUTH AFRICAN POPULATION

According to Van Rensburg *et al.* (1992:95) *"in order to gain a closer insight into the interplay between the society on the one hand, and disease, deaths, care and care systems on the other, it is essential that the internal composition of and the subdivisions within the population of that society be clarified."* An understanding of a country's population is also essential when seeking to assess the challenges a health system faces. This study therefore accordingly begins by paying attention to the relevant demographic details, the rural-urban distribution as well as the socio-economic characteristics of the South African population.

2.2.1 DEMOGRAPHICS OF THE SOUTH AFRICAN POPULATION

In October of 2001, South African citizens were counted for the second time since democratisation (Statistics South Africa, 2003a:iv). Published results of the census 2001 projected the total South African population of that year to be 44.8 million people (Statistics South Africa, 2003a:6). The population growth rate has varied over the years since then but, is

allegedly falling as a consequence of declining fertility rates (Kinsella & Ferreira, 1997:2) and the impact of the HIV/AIDS epidemic (Pelser, 2004:173).

It must be noted that Statistics South Africa has continued to predict an upward growth trend with reference to the South African population from 2001 to 2008. Through the use of cohort-component methodology of estimation on the 1996 and 2001 census results, Statistics South Africa have since published mid-year annual reports on the estimated population of South Africa (Statistics South Africa, 2003b:2). According to the mid-year population estimates of 2008, it was estimated that the South African population had increased to approximately 48.7 million people for that year (Statistics South Africa, 2008a:3).

Table 2.1: Estimated mid-year demographic characteristics of the South African population, 2003 to 2008

	Study years					
	2003	2004	2005	2006	2007	2008
Total population in millions	46.5	46.6	46.9	47.4	47.9	48.7
Provincial distribution of the population (% of total population)						
Eastern Cape	14.1	14.0	13.8	13.7	13.6	13.5
Free State	6.1	6.0	6.0	6.0	5.9	5.9
Gauteng	20.5	20.7	20.9	21.2	21.3	21.5
KwaZulu-Natal	21.1	21.0	20.9	20.9	20.8	20.8
Limpopo	11.0	10.9	10.9	10.8	10.8	10.8
Mpumalanga	7.4	7.4	7.4	7.4	7.4	7.4
Northern Cape	2.4	2.4	2.4	2.3	2.3	2.3
North West	7.1	7.1	7.1	7.1	7.1	7.0
Western Cape	10.3	10.5	10.6	10.7	10.7	10.8
Gender (mil)						
Male	22.2	23.0	23.1	23.3	23.6	23.4
Female	24.3	23.6	23.8	24.1	24.3	25.2
Population group (mil)						
African	36.9	36.9	37.2	37.7	38.1	38.6
Coloured	4.1	4.1	4.1	4.2	4.4	4.4
Indian/ Asian	1.1	1.1	1.2	1.2	1.2	1.2
White	4.2	4.4	4.4	4.4	4.4	4.5
Age group (mil)						
< 9yrs	9.3	10.3	10.1	10.2	10.2	10.4
10-19 yrs	10.5	10.0	10.0	10.0	10.1	10.4
20-44 yrs	17.9	18.1	17.9	18.0	18.2	18.6
45-59 yrs	5.3	5.3	5.4	5.5	5.6	5.8
60 yrs <	3.4	2.9	3.6	3.7	3.9	3.5

Table 2.1 is a summary of the estimated demographic characteristics of the country as of the year 2003 to 2008, using the mid-year population estimates of the country as published by Statistics South Africa for the years 2003 (Statistics South Africa, 2003b), 2004 (Statistics South Africa, 2004), 2005 (Statistics South Africa, 2005), 2006 (Statistics South Africa, 2006a), 2007 (Statistics South Africa, 2007a) and 2008 (Statistics South Africa, 2008a).

Population distribution within the country did not vary much over the study years. As is evident from table 2.1, Gauteng and the Western Cape are the only provinces that experienced a significant increase in their share of the country's total population. This may be attributed to the fact that the two provinces are the country's richest, most urbanised and well-resourced provinces (Gilbert, 1998a:276). According to statistics South Africa (2005:17), provinces with the highest outflow of people are the Eastern Cape and Limpopo.

Gauteng is the province with the least land area. However, it is presently the province with the largest share of the population (approximately 10.5 million people) followed by KwaZulu-Natal. (approximately 10.1million people). The Northern Cape Province, on the other hand, has the largest land area but the smallest share of the population (approximately 1.1 million people) (Statistics South Africa, 2008a:3). The uneven proportion of people in a province versus land area of the province influences the population densities of the different provinces. This is clear from figure 2.1 below, which compares the population densities of the different provinces. Evidently, Gauteng has the largest population density (617 people per km²) and Northern Cape has the smallest population density (3 people per km²) (Day & Gray, 2008:248).

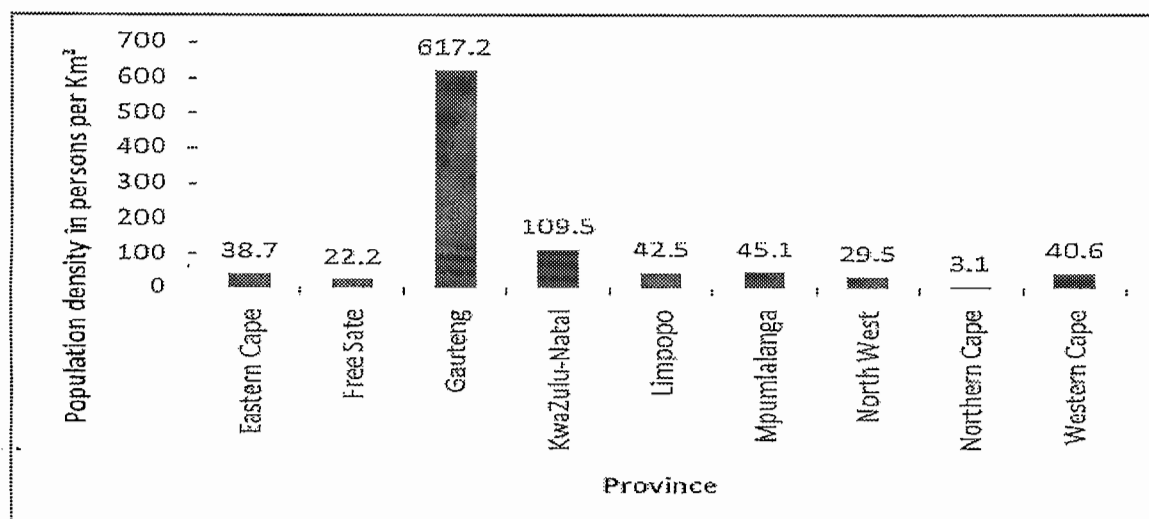


Figure 2.1: Population density of each province in South Africa, 2008 (Day & Gray, 2008:248)

The South African population has been described as a microcosm of the world's population, due to its diversity in character. According to the census of 2001, more than three quarters (79%) of South Africans were of the African/Black race group. The remaining 21% of the population was made up of 9.6% of the White, 8.9% of the Coloured and 2.5% of the Indian/Asian race groups. As indicated in table 2.1, the racial proportions of the population have not changed much since the 2001 census.

Fifty-two per cent of the population in 2008 was female. The population's gender proportions have remained higher for females over the six-year study period with a relatively stable gender ratio, which in 2008, stood at 93 males per 100 females (Statistics South Africa, 2008a:3).

The percentage proportion of elderly people (60 years and older) in the population has increased over the study years and stands at seven per cent of the total population for the year 2008. However, the age structure still shows that South Africa is generally a youthful country as nearly one third (32%) are younger than 15 years and 70% younger than 35 years. Median age of South Africa stands at 22 years (Statistics South Africa 2008a:11).

The gender and age structure of the South African population is that which would be expected to increase demand on medicine usage. A more detailed discussion on this aspect is presented in section 3.4.1.

2.2.2 RURAL-URBAN DISTRIBUTION OF THE POPULATION

Definitions for the urban and rural connotations differ from country to country due to national differences in the characteristics that distinguish urban from rural areas (UNSTAT, 2009). The general trend in defining the rural area is 'that which is not urban' or synonymously, 'non-urban'. However, there are various ways of defining the urban area, which are influenced by the common cultural (presence of formal role relations), political (presence of administrative functions), economic (percentage people in non-agricultural occupations) and demographic (specified size and density of the population) characteristics of the urban area (Palen, 1992:7). Most national definitions have a demographic approach (UNSTAT, 2009). An example of this is the common definition a town with a population of more than 1000 people or, the United Nations classification scheme that classifies an area with a population of more than 20 000 people as urban (SACN, 2005). The problem with demographic definitions is that the definitions may be distorted by varying sizes of administrative or census area demarcations around population clusters (Naude *et al.*, 2007).

In South Africa, the legal definition for an urban area prior to as well as for the 1996 census was an area governed by some form of local government (Kok & Collinson, 2006:18). The ambiguity between rural and urban has been further exacerbated in present day South Africa by the fact that the country's cities and towns do not exist as distinct institutional entities but, form part of a developmental system of local government. This system consists of 284 municipalities (six Metropolitan municipalities and 47 district municipalities – that are further divided into 231 local municipalities). These cover the entire geographical area of the country on a wall-to-wall demarcation system. This system has blurred the boundary between urban and rural as it seeks to ensure that no part of the country is without the jurisdiction of a local government or municipality (Statistics South Africa, 2008b:1; Patel, 2004:2).

It should be noted that prior to 2005 the boundaries of six of the district municipalities, eight of the local municipalities and one metropolitan municipality (Tshwane metropolitan municipality) were straddling provincial boundaries and were referred to as cross-boundary municipalities. As of the year 2005, new boundaries were released which realigned these into specific provinces (Statistics South Africa, 2008b:1). This resulted in a decrease in the total number of municipalities in South Africa and also affected the total population and services attributed to each province.

Statistics South Africa (Statistics South Africa, 2003c:3) classifies urban and rural areas according to their smallest spatial unit of information, which is the enumeration area (EA). During the Census 2001, there were 10 EA types, grouped in either urban-formal, urban-informal, rural-formal and tribal areas. The urban-formal and urban-informal were thereafter classified as urban and the rural-formal and tribal areas were classified as rural based on a combination of factors such as *cadastre* (surveyors' general plans) and land use.

According to the 2001 census results, based on the above-mentioned classification, more than half of the South African population live in urban areas (Statistics South Africa, 2003c:71). Table 2.2 serves as a tabular representation of the proportion (in percentage) urban to non-urban residence in each province for the year 2001.

Table 2.2: Proportion urban to non-urban (rural) population for the year 2001 (Statistics South Africa, 2003a:80)

province	Non-Urban population 2001 (%)	Urban population 2001 (%)
Eastern Cape	61.2	38.8
Free State	24.2	75.8
Gauteng	2.8	97.2
KwaZulu-Natal	54.0	46.0
Limpopo	86.7	13.3
Mpumalanga	58.7	41.3
North West	58.2	41.8
Northern Cape	17.3	82.7
Western Cape	9.6	90.4
South Africa	42	58

As indicated by the table 2.2, four of the country's nine provinces are urbanised, Gauteng being the province with the highest urbanised population. Generally, urban areas constitute a much smaller proportion of land and yet a much larger proportion of the population (Smith, 1986:103).

In the South African Cities Network (SACN) *State of the cities report 2006*, Johannesburg, Cape Town, Tshwane, Ethekwini and Ekurhuleni (previously Johannesburg, Cape Town, Pretoria, Durban and East Rand respectively) were identified as the five biggest cities in South Africa, on the basis of their major contributions to the country's economy (SACN, 2006:2-8). The SACN further identified 25 key functional urban areas in South Africa also based on their contribution to the national economy. These are presented in table 2.3 below along with their respective municipalities, district councils and provinces (SACN, 2006:2-9).

Table 2.3: The 25 key functional urban areas as identified by the SACN, 2006 (adapted from SACN, 2006:2-9)

KEY FUNCTIONAL URBAN AREA	MUNICIPALITY	DISTRICT COUNCIL	PROVINCE
Johannesburg	City of Johannesburg metropolitan		Gauteng
Pretoria	City of Tshwane metropolitan		
East Rand	Ekurhuleni metropolitan		
Vereeniging	Emfuleni	Sedibeng	
Vanderbijlpark			
Meyerton	Midvaal	West Rand	
Krugersdorp	Mogale City		
Cape Town	City of Cape Town Metropolitan		Western Cape
Stellenbosch	Stellenbosch	Cape Winelands	
Port Elizabeth	Nelson Mandela Metropolitan		Eastern Cape
Uitenhage			
Despatch			
East London	Buffalo City	Amatole	
King William's Town			
Kimberly	Sol Plaatjie	Frances Baard	Northern Cape
Witbank	Emalaheni	Nkangala	Mpumalanga
Middelburg	Steve Tshwete		
Nelspruit	Mbombela	Ehlanzeni	
Evander	Govan Mbeki	Gert Sibande	
Durban	eThekwiní metropolitan		KwaZulu-Natal
Pietermaritzburg	Msunduzi	Umgungundlovu	
Richards Bay	uMhlathuze	Uthungulu	
Bloemfontein	Mangaung	Motheo	Free State
Sasolburg	Metsimaholo	Fezile Dabi	
Rustenburg	Rustenburg	Bojanala	North West

The urban population is increasing due to, among other things, land restitution and reform efforts. More than 30% of the South African population were, in 2004 and 2005, concentrated in three of the major cities: Johannesburg, Cape Town and Durban (SACN, 2006:3-3; Patel, 2004:7). According to Schneider *et al.* (2007:318), the increase and rapid process of urbanisation, increased the population serviced by urban health delivery structures. Moreover, most of the newly arrived population live in informal urban settlements subject to health hazards associated with poverty and therefore would increase the demand for service especially on the public sector.

2.2.3 SOCIO-ECONOMIC CHARACTERISTICS OF THE POPULATION

"South Africa is classified as a middle income country by the World Bank. This, classification, however, tends to mask the reality of two worlds in one - one rich and predominantly white and, the other, poor and predominantly black." (Department of Health, 2000:5). *"The socio-economic status of an individual in South Africa is the primary determinant of the system through which he or she will receive access to health care"* (Harrison et al., 2007:vii).

South Africa has an impressive economy characterised by a stock exchange that ranks 17th largest in the world (Central Intelligence Agency, 2009) and steady, increasing growth that was averaged at 5% of the GDP between the years 2004 and 2007 (World Bank, 2009). The growth in economy is however, not keeping pace with the country's level of population growth and job creation need (Patel, 2004:8; Department of Health, 2000:5). Furthermore, the country has extreme disparities in income and wealth distribution between gender, racial and spatial lines (World Bank, 2009; Booysen, 2003:659) which often attributes to the economy being coined as a 'dual economy'. In addition, the South African economy is considered among the world's most unequal economies, with a relatively high Gini coefficient measuring poverty at 0.58 (Triegaardt, 2006:8).

2.2.3.1 Unemployment

South Africa's unemployment rate for the year 2008 was an estimated 22.9% with a labour force of 17.9 million people (Central Intelligence Agency, 2009). The *2007 South African labour force survey* (Statistics South Africa, 2008c:iv) maintains that unemployment, although high, has been on a downward trend since March 2003, reaching a total number of employed persons of 12.6 million in March of 2007. Figure 2.2 illustrates the decrease in unemployment over the years from a high strict unemployment rate of approximately 31% to a figure of 25.5% in the year 2007. Figure 2.2 further illustrates the different unemployment rates among gender lines, depicting South African women to have a higher unemployment rate than men.

According to the expanded definition of unemployment, the South African unemployment rate stood at 38.3% in 2007, with a 31.2% rate for males and 45.8% rate for females (Roodt, 2008:212). Of the population employed in 2007, the trade industry (both wholesale and retail) contributed to 23.4% of the employment, which was the industry with the largest single contribution to total employment in 2007 (Statistics South Africa, 2008c:v).

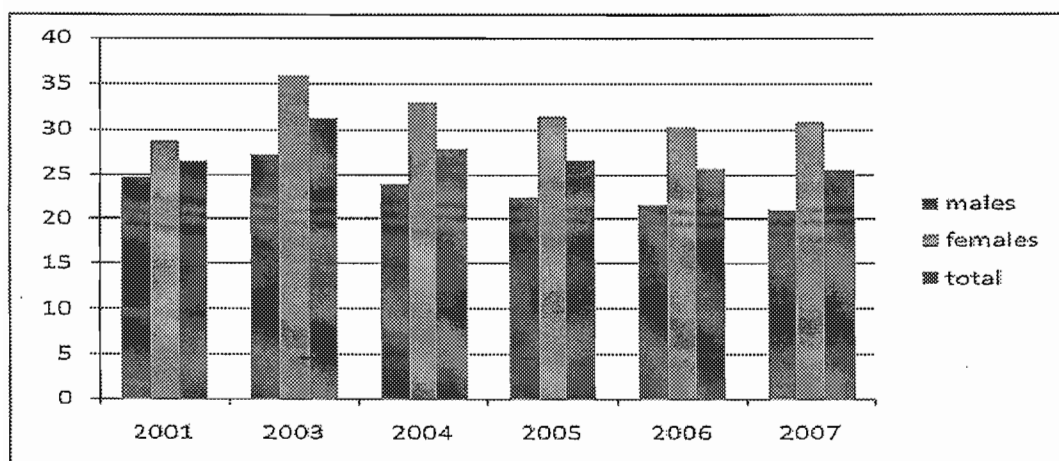


Figure 2.2: Unemployment rates, March 2003 to March 2007 (Statistics South Africa, 2008c:iv)

2.2.3.2 Poverty

South Africa contained an estimated 12.5 million households in 2007, of which a proportion of 70.5% were living in formal dwellings, 14.5% were living in informal dwellings and 11.7% were in traditional dwellings (Statistics South Africa, 2008b:18). The South African population living on less than \$1 a day was estimated to be 942,731 people (2.2% of the population) in 2007 (Roodt, 2008:252).

Definitions of poverty are debatable (Triegaardt, 2006:3) however; people in relative poverty may be defined as those living in households with less than the poverty income, where the poverty income ranges according to household size, with levels ranging from R1 023 per month for 1 individual, to R3 752 per month for a household of eight members or more in 2007 (Roodt, 2008:253). According to this measurement of relative poverty, a proportion of 42.9% of South Africans were living in relative poverty in the year 2007 (Roodt, 2008:253).

2.2.3.3 Social Welfare

The country has a welfare system described as “*exceptional among middle income and developing countries*” (Seekings, 2005). A large number of South Africans (12.4 million) are dependent on the country’s welfare system (National Treasury, 2008:91). Social grants are considered an important factor in poverty alleviation in South Africa, with a designated 13% of the budget in 2007. Social grants given out include those for old age, disability and child support of which the majority given out are those for child support (Statistics South Africa, 2007b:12, National Treasury, 2007:2). The country’s expenditure on social welfare amounted to 4.6% of the GDP in 2008 (National Treasury, 2008:91).

2.3 THE STATE OF HEALTH IN SOUTH AFRICA

The World Health Organization (WHO) defines health as *“a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity”* (WHO, 2006a:1). It is against this understanding of health that Bradshaw (2008:51) describes the health of South Africa as that which has worsened in the past 15 years.

Pharmaceutical structures exist to service some of the population's health needs. It is therefore necessary to demonstrate the country's state of health in arguing the importance of the different pharmaceutical structures. This will be achieved in the study using certain health indicators and by highlighting the extent of morbidity in the country

2.3.1 HEALTH INDICATORS

Major indicators of health that will be discussed include life expectancy, fertility rate and mortality.

2.3.1.1 Life expectancy

The mid-year population estimates of 2008 as by Statistics South Africa estimated an average life expectancy of 52.1 years (50.3 years for males and 53.9 years for females) (Statistics South Africa, 2008a:3). There is diversity among the population groups wherein, for example, life expectancy for White women exceeds that of African women by 25% (Kinsella & Ferreira, 1997:3).

Figure 2.3 depicts the estimated provincial life expectancies for the years 2007 and 2010 based on the Actuarial Society of South Africa (ASSA) 2003 AIDS and demographic model (Eddy, 2008:38). As evident from the figure, the Western Cape province has the highest life expectancy at birth while the province with the lowest life expectancy at birth is KwaZulu-Natal for both years. The model also estimated a decrease in the life expectancy of most of the provinces between 2007 and 2010. A decline in the life expectancy of a population can be seen as evidence of a decrease in that population's health status (Bradshaw & Nannan, 2004:45).

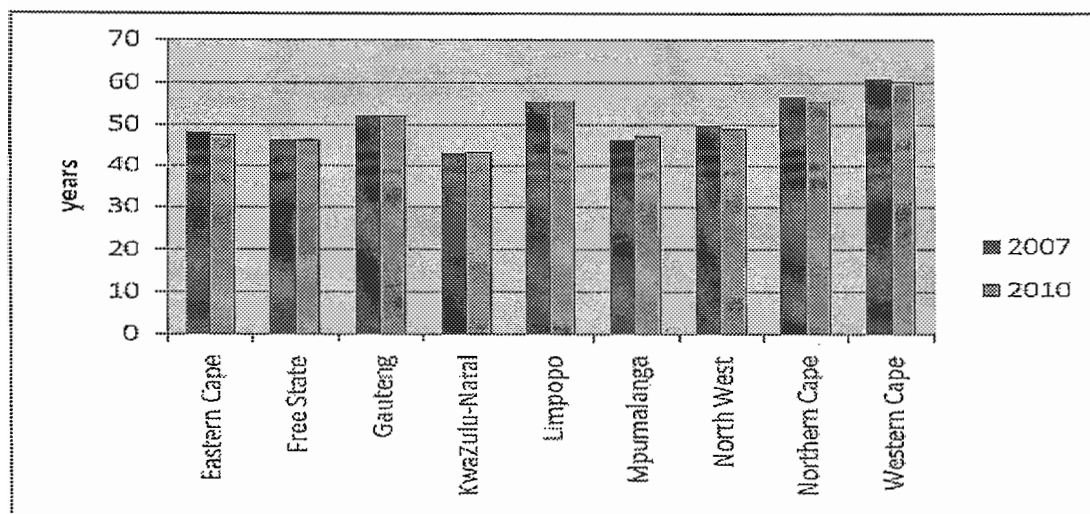


Figure 2.3: ASSA 2003 AIDS and demographic model based estimated life expectancy per province, 2007 and 2010 (adapted from Eddy, 2008:38)

2.3.1.2 Fertility rate

The fertility rate is defined as the average number of children born live to a woman during her child-bearing age of 15 to 49 years (Eddy, 2008:33).

For the year 2004, the average South African fertility rate was 2.8 children per woman (WHO, 2006b). Statistics South Africa has projected the fertility rate to be at 2.5 births per woman for the year 2007 (Statistics South Africa, 2007b:56). This indicates a decrease in the country's fertility rate which often means a decline in the health state of the country and also results in and increases the percentage of older people in the country (Bradshaw & Nannan, 2004:48).

2.3.1.3 Mortality

Mortality statistics for South Africa prove to be better than those of most African countries (WHO, 2006b) but poor in comparison with other middle-income countries (Redelinghuys & Van Rensburg, 2004:226).

Table 2.4 summarises the country's mortality rates for the years 2004 and 2006 as published by the World Health Organization (WHO, 2006b). As evidenced in the table, the infant mortality rate in 2006 stood at 48 deaths per 1000 births and the under-five mortality rate was 75 deaths per 1000 live births.

Table 2.4: South African mortality rates (WHO, 2006b)

	Year	Rate
Infant mortality per 1000 births (the probability of dying within the first month of life)	2004	54
	2006	48
Under five mortality per 1000 live births (probability of dying before the 5 th birthday)	2004	67
	2006	75
Adult mortality per 1000 people (probability of dying between 15 and 65 yrs)		
Male	2004	667
Females	2004	598
Maternal mortality per 100 000 live births	2000	230

According to Eddy (2008:54), a report titled *Countdown to 2015: Maternal, Newborn and Child survival* published in 2008 by an international group of researchers, identified South Africa as among 68 high priority countries in terms of child mortality between the years 1990 and 2006. The 68 countries identified accounted for 97% of all the maternal, newborn and infant deaths worldwide.

McFarlane (2008:423) noted that the infant mortality rates of South Africa had increased since 1994 (48 per 1000 live births) and peaked during the year 2002 (58 per 1000 live births), after which they had started to decrease to an estimated rate of 46 per 1000 live births in 2007. McFarlane (2008:423) furthermore noted that 2002 was the year that preventive mother-to-child transmission medication (with regard to HIV/AIDS) was first provided in public hospitals and attributed the decreases in infant mortality rates and under-five mortality rates to such preventive measures.

An analysis conducted by Statistics South Africa on the mortality and causes of death in South Africa in 2006, revealed that the demographic structure of mortality in South Africa showed the highest number of deaths (10.5% of all deaths) occurring among those aged 0–4 years during the year 2006. These were followed by deaths in the age group 30–34 years (Statistics South Africa, 2008d:11). The province with the highest proportion of deaths in 2006 was KwaZulu-Natal with 23.2 per cent of all deaths occurring in that province. Figure 2.4 illustrates further proportions of the percentage of deaths within each province.

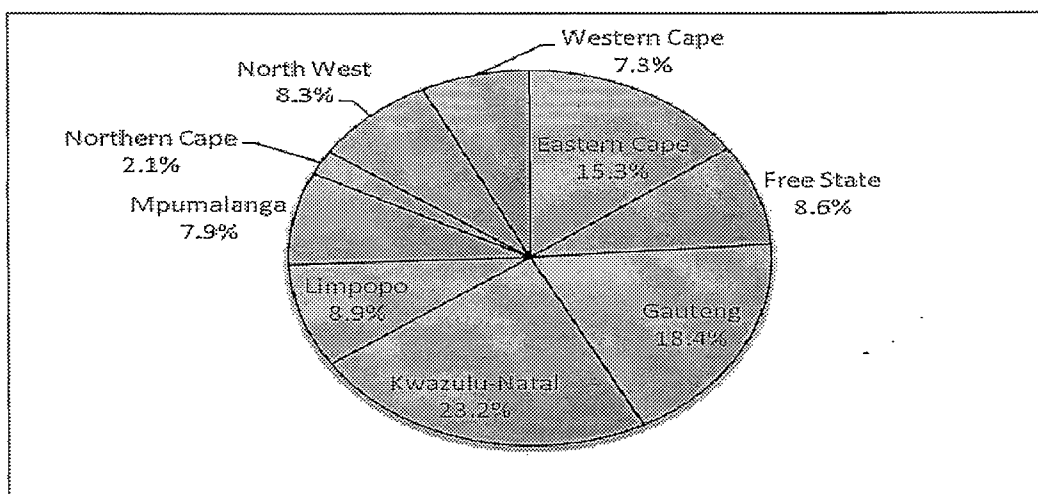


Figure 2.4 Percentage distribution of deaths in each province, 2006 (Adapted from Statistics South Africa, 2008d:17)

In 2006, the top ranking group of causes of death (using the ICD10 code classification system) was *certain infectious and parasitic diseases*, that includes the Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), and Tuberculosis (TB), including also the Multi-drug resistant (MDR-TB) and extreme drug resistant (XDR-TB) strains. This group was responsible for more than a quarter (26%) of deaths that occurred in South Africa during that year. The group was followed by the group of *diseases of the respiratory system* (14.2%) and *diseases of the circulatory system* (13.7%) (Statistics South Africa, 2008d:19). Table 2.5 presents a further breakdown of the top ten underlying natural causes of death in South Africa for the year 2006 (Statistics South Africa, 2008d:23).

As presented in table 2.5, the leading underlying causes of death are tuberculosis and influenza/pneumonia. McFarlane (2008:427) affirms, taking into consideration that 70% of people diagnosed with Tuberculosis in South Africa are HIV-positive, the assumption that at least 70% of the observed mortality from Tuberculosis have HIV/AIDS as an underlying cause. In the report on the *Revised Burden of Disease Estimates for the Comparative Risk Factor Assessment, South Africa 2000* (Norman *et al.*, 2006:20), HIV/AIDS was identified as the leading single cause of death for both males and females in the country.

Table 2.5: The 10 leading underlying natural causes of death in South Africa, 2006 (Statistics South Africa, 2008d:23)

Rank	Causes of Death	Percentage
1	Tuberculosis	12.7
2	Influenza and Pneumonia	8.7
3	Intestinal infectious diseases	6.5
4	Other forms of heart diseases	4.4
5	Cerebro-vascular diseases	4.2
6	Diabetes Mellitus	3.2
7	Chronic lower respiratory diseases	2.6
8	Certain disorders involving the immune system	2.6
9	Human immunodeficiency virus	2.4
10	Ischaemic heart diseases	2.1

Indicatively, the burden of mortality in South Africa is borne by causes that will have a considerable influence and impact on the medicine usage of the country.

2.3.2 MORBIDITY

South Africa bears a quadruple burden of disease associated with an epidemiological transition. This consists of communicable diseases associated with poverty (e.g. TB, malaria, sexually transmitted infections including HIV and AIDS), non-communicable diseases associated with lifestyle factors such as smoking, poor diet and stress, as well as trauma and violence (Bradshaw, 2008:67).

2.3.2.1 Communicable diseases

Communicable diseases are a threat mostly in underdeveloped areas where poverty, unemployment and poor environmental conditions persist (De Haan *et al.*, 2005:10). The most common communicable diseases in South Africa are HIV/AIDS, TB, malaria, measles and sexually transmitted infections (Department of Government Communication and Information System, 2008:336). In 2004, Bradshaw & Nannan (2004:55) were of the view that the AIDS epidemic fuelled the TB epidemic and also resulted in increased deaths due to pneumonia, diarrhoea and other indicator conditions.

- HIV/AIDS

According to a report by the Joint United Nations Programme on HIV/AIDS (UNAIDS), Sub-Saharan Africa is the region most affected by the HIV/AIDS epidemic (UNAIDS, 2008a:30). The estimated total number of newly infected people in the region in 2007 was 1.7 million people,

which brought the total number of people living with HIV/AIDS in that region to an estimated 22.5 million.

In 2008, an estimated 5.7 million people in South Africa were living, infected with the Human Immunodeficiency Virus (UNAIDS, 2008b:1), positioning South Africa as the country with the highest number of HIV infections in the world (Matjila *et al.*, 2008:90). Table 2.6 presents other HIV/AIDS indicators as estimated by using the Actuarial Society of South Africa's (ASSA) 2003 AIDS and demographic model for the years 2003 and 2009. The number of people infected with HIV is beginning to stabilise at almost six million while the number of people dying from AIDS each year is increasing and expected to stabilise only after the year 2015 (Dorrington *et al.*, 2006:3).

Table 2.6: Estimated effects of HIV/AIDS based on the ASSA2003 AIDS and demographic model, 2003 and 2009 (Eddy, 2008c:40)

	2003	2009
Total HIV infections	4 741 791	5 728 712
AIDS deaths	282 348	382 521
AIDS death proportion	42%	49%
HIV/AIDS Prevalence rate	10.2%	11.7%

The HIV/AIDS prevalence rate in South Africa exceeds 11%. As depicted in figure 2.5, the prevalence of infections varies within each province. In 2008, the province worst affected by the epidemic was KwaZulu-Natal with an estimated 16% of the population infected (McFarlane, 2008:419). This was followed by Gauteng, Free State and Mpumalanga provinces consecutively. All four provinces contribute almost 60% of the country's HIV/AIDS-infected population.

As has previously been mentioned, HIV/AIDS is the leading cause of death in South Africa. The epidemic has put considerable strain on the health status of the country as a whole due to its substantial effects on mortality, Tuberculosis and other diseases (Blecher & Harrison, 2006:32). HIV/AIDS has, and will continue to have, a profound effect on certain aspects of the South African society such as the demographic structure and economic, education and health sector.

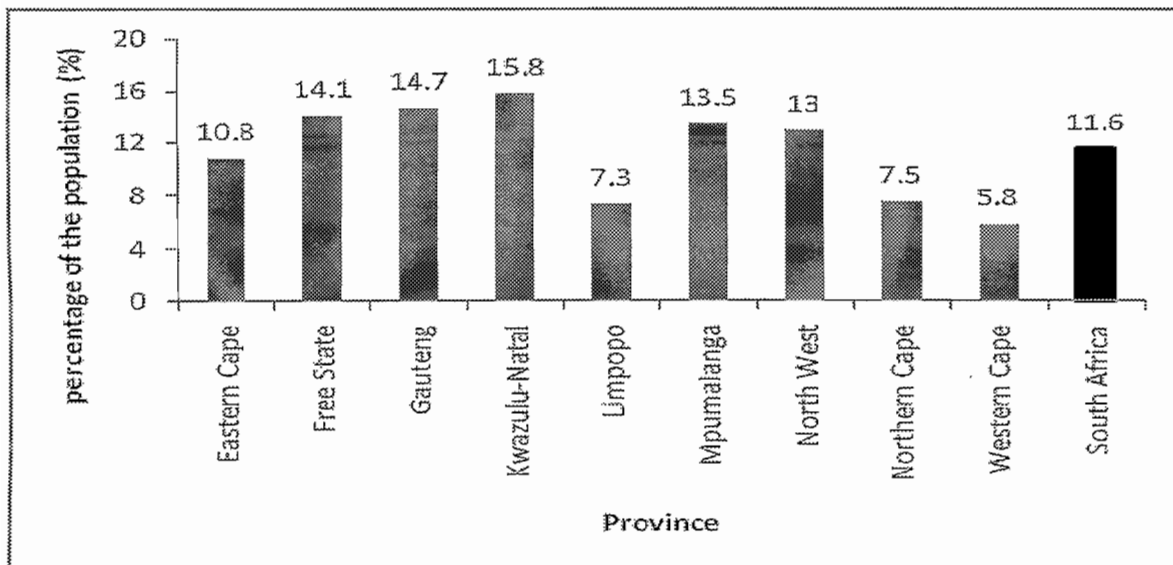


Figure 2.5: HIV/AIDS prevalence rates in each province of South Africa, 2008 (adapted from McFarlane, 2008:440)

- Tuberculosis (TB)

In 2006, more than 300 000 people were suffering from tuberculosis (TB) in South Africa, with at least 12% of TB patients defaulting on their treatment (Department of Government Communication and Information System, 2008:339).

Figure 2.6 shows the number of TB cases within each province of South Africa for the year 2006. The worst affected provinces are the Eastern Cape, Western Cape, KwaZulu-Natal and Gauteng, contributing about 80% of the country's total TB burden (Department of Government Communication and Information System, 2008:339).

TB is the most common opportunistic infection for the HIV-infected patients. It is for this reason that it cannot be viewed in isolation from HIV/AIDS. *"Obtaining good TB treatment outcomes is critical to decreasing HIV/AIDS related morbidity and mortality. Likewise, access to appropriate treatment and care for HIV/AIDS is essential to containing TB"* (Grimwood et al., 2006:77).

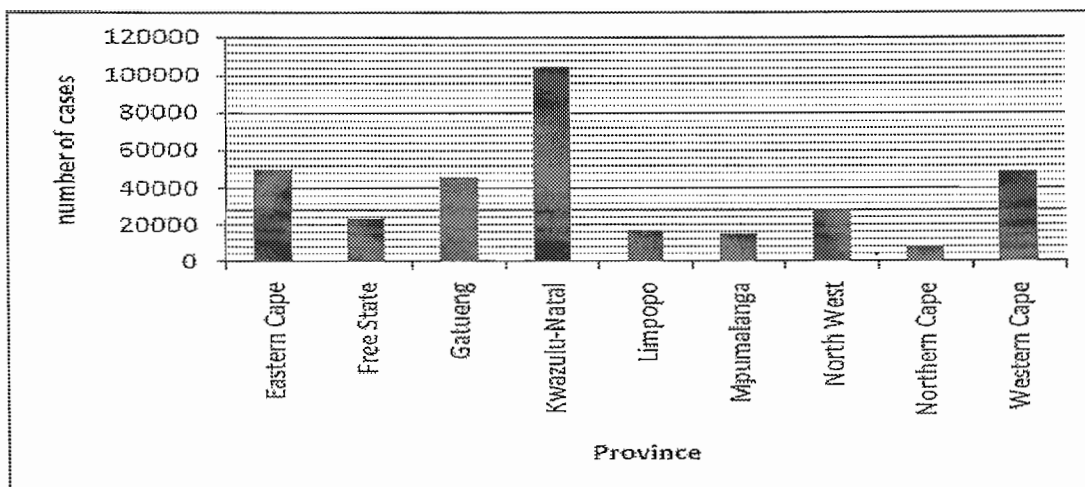


Figure 2.6: Number of TB cases per province, 2006 (adapted from McFarlane, 2008:435).

- Malaria

Malaria is endemic to the low-altitude areas of Limpopo, Mpumalanga and North-Eastern KwaZulu-Natal. About 10% of the population lives in malaria-risk areas (Department of Governmental Communications and Information Systems, 2008:337). For the year 2006, the Department of Health reported 12 098 malaria cases in the country and 87 deaths due to malaria. This meant that South Africa experienced a 36% increase in the number of malaria cases and a 25% increase in the number of mortality cases due to malaria from the previous year (McFarlane, 2008:433).

2.3.2.2 Non-communicable diseases

Non-communicable diseases count among those associated with factors such as high blood cholesterol, high blood pressure, obesity, physical inactivity, unhealthy diets, tobacco use and inappropriate use of alcohol. Ailments among the non-communicable diseases are more commonly known to manifest in developed countries. However, the changing lifestyle of populations due to urbanisation has led to an increase in non-communicable diseases also in the developing countries (Puoane *et al.*, 2008:74).

According to the World Health Statistics of 2008, it is expected that leading infectious diseases such as diarrhoea, HIV, tuberculosis, neonatal infections and malaria will become less important causes of death globally over the next 20 years (WHO, 2008:29). *“At the same time, South Africa is also facing an obesity “epidemic”, with older White men and middle aged Black women the most prone to being seriously overweight. This is causing an upsurge in chronic “lifestyle” diseases associated with poor diets high in fat, sugar and carbohydrates and a lack of exercise”*

(Cullinan, 2006:23). Common chronic diseases include diabetes, hypertension and cardiovascular or heart diseases. These have been ranked among the top twenty causes of death in South Africa.

2.4 THE CONCEPT OF ACCESS TO HEALTH CARE

Ensuring the availability of pharmaceutical structures is a component of the overall concept of access to health care. Access to health care has been a major objective of health care policies worldwide for a long time (Thiede & McIntyre, 2008:1168; Gulliford *et al.*, 2002:186; Clark, 1983:5;). Clark (1983:6) expressed this political idea of access to be more than merely a political slogan but more so “*a broad political movement to assure care to the public generally and certainly to groups seen as underserved*”.

According to Van Rensburg *et al.* (1992:29), the general concept of access can also be used as a framework against which to identify, analyse, and reform problems, deficiencies and constraints of the health care system. Moreover, as according to Campbell *et al.* (2000:1614), access is, together with effectiveness, a component of the overall concept within which the quality of a health care system can be evaluated, understood and delivered.

The concept of access is elucidated in literature from various viewpoints. Among them, is the notion that the broad concept of access is concerned with both the demand for health care (the nature and composition of the clientele with regard to their needs and use of the health system) and the supply of health care (the nature and composition of the health resources and organisation of the service delivery system) (Ricketts & Goldsmith, 2005:274; Van Rensburg *et al.*, 1992:30; Clark, 1983:6; Penchansky & Thomas, 1981:127). It can therefore be defined as representing the “*degree of fit between the clients and the [health care] system*” (Penchansky & Thomas, 1981:127)

2.4.1 THE ANDERSON-ADAY HEALTH BEHAVIOUR MODEL

Another viewpoint is one conceptualised by Aday and Anderson in 1974 and subsequently revised over the years (Anderson, 1995:6). The Health Behaviour Model indicated in figure 2.7 demonstrates this viewpoint. As indicated in the model, access to health care is expressed as a function of the characteristics of the health care system, the external environment and

population characteristics (that determine the use of health care services). The interplay between these factors determines whether the patient gains access to health care services and utilises them as well as the outcome thereof (Ricketts & Goldsmith, 2005:274; Anderson, 1995:4;).

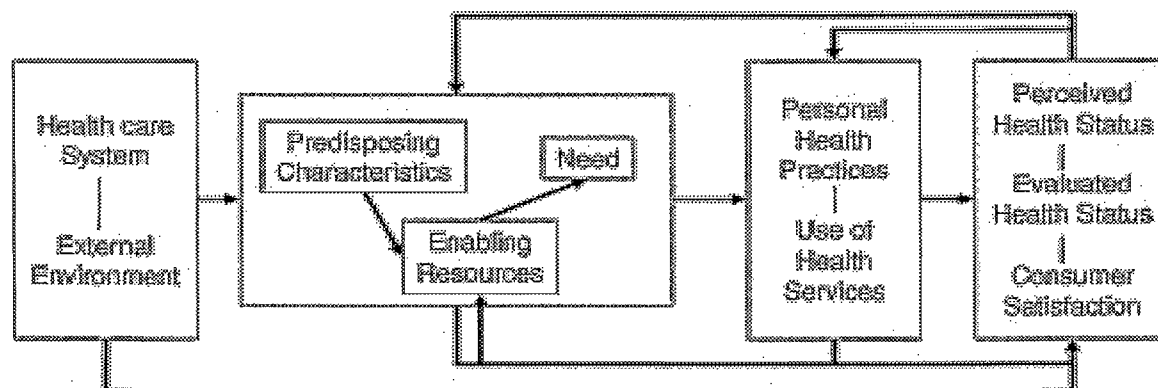


Figure 2.7: The Aday-Anderson Health Behaviour Model (adopted from Ricketts & Goldsmith, 2005:274)

Characteristics of the health care delivery system together with the external environment are collectively referred to as environmental factors. These include health care policies, health care resources (their distribution volume and organisation in the health care system), relative wealth of the country, level of stress and violence as well as community level enabling variables such as the attitudes of that community (Anderson, 1995:6; Phillips *et al.*, 1998:576).

Population characteristics in the health behaviour model pertain to predisposing, enabling and need variables.

- *Predisposing variables*

Predisposing variables include social and demographic (age, gender and race) characteristics as well as the religion, health care beliefs and attitudes of the population at risk (Miralles & Kimberlin, 1998:345). The predisposing variables thus indicate the tendency of individuals to utilise health services (Aday & Anderson, 1974:213).

- *Enabling variables*

Enabling variables include health personnel and facilities which must be present where people live and work and refer to all the necessary means and resources that people need to get to the

health resources and use them, i.e. income, health insurance coverage , distance to health services and transportation to the health services (Murray *et al.*, 2004:39; Anderson, 1995:3; Aday & Anderson, 1974:213). Enabling variables therefore help to identify potential barriers to seeking care when care is needed (Miralles & Kimberlin, 1998:347).

- *Need variables*

Need variables describe the extent to which an individual needs a given service thus referring to the illness level of an individual as perceived by the individual himself or the health care delivery system (Aday & Anderson, 1974:213).

In essence, the perspective of access to health care offered by the Health Behaviour Model is that access exists in two broad stages namely potential for care delivery and realised delivery of care (Guagliardo, 2004:2; Gulliford *et al.*, 2002:186; Anderson, 1995:4;). *“Potential exists when a needy population coexists in time and space with a willing and able health care delivery system and realised care follows when all barriers to provision are overcome”* (Guagliardo, 2004:2).

2.4.2 THE DIMENSIONS OF ACCESS

An alternate approach to elucidating the concept of access to health care is one that disaggregated the concept into a set of dimensions. Although consensus in literature acknowledges this approach, differences present in views on what these dimensions are (Thiede & McIntyre, 2008:1169). Penchansky and Thomas (1981:128) proposed the following five dimensions:

- **Availability** – This refers to the actual existence of health services and resources as well as the volume and type thereof in relation to the demand for the services.
- **Accessibility** – This is the relationship between the location of the service and the location of the clients.
- **Accommodation** – This describes the manner in which health resources or services are organised in relation to the ease with which people can use them (e.g.: appointment systems, hours of operation, waiting times).

- Affordability – This refers to the relationship between the prices of health services and resources and the client's financial ability to pay for them.
- Acceptability – this represents the attitudes of health care users towards the personal and practice characteristics of the health service provider and likewise.

The dimensions are in practice however, so closely associated with one another that it is sometimes difficult to see them in isolation (Van Rensburg *et al.*, 1992:30). This offers a possible explanation why some researchers measure the availability and accessibility dimensions simultaneously, referring to this as 'spatial accessibility' (Guagliardo, 2004:4). Guagliardo (2004:4) furthermore states that spatial accessibility would be determined by measures such as provider-population ratios, travel impedance to nearest provider, average travel impedance to nearest provider and gravity models.

Others such as Miralles and Kimberlin (1998:345) conjointly view the availability and accommodation dimensions and refer to this as perceived availability or as Campbell *et al.* (2000:1615) would have it, 'organisational access'. This view of availability refers to the existence of health care facilities in the presence of barriers to accessing their services such as appointment systems, hours of operation, assured regularity of services and the language spoken, which may ultimately render the facility unavailable.

Given the above-mentioned differences in what is understood under 'availability', for the purposes of this dissertation, 'availability' is taken to refer to the definition proposed by Penchansky and Thomas (1981:128) which is limited to the actual presence and volume of health resources in relation to the demand for the services. This aspect is mainly determined in this study by population-provider ratios.

Ensuring availability of health facilities requires that they be equitably distributed within the population, be it horizontally or vertically (Campbell *et al.*, 2000:1618). Horizontal equity can be otherwise referred to as 'equality' and refers to the mathematical division of available facilities equally among a given population while vertical equity refers to a just distribution of facilities in relation to need, that is to say, greater provision of the health facilities to those who are more in need of them (Campbell *et al.*, 2000:1618; Kinman, 1999:664).

Problems, deficiencies and constraints of availability in the health care system not only allude to the scarcity or loss of facilities, personnel and services but also to the oversupply thereof to certain groups in the population (Clark, 1983:7).

Access to health and health care service is a human right (WHO, 1978:2) which requires that governments accept responsibility for the health of their people. According to the World Health Organization, this government responsibility “...can be fulfilled by the provision of adequate and equitably distributed health and social measures” (WHO, 1978:16).

The South African health policy and legislation have put access to health care on their political agenda for some time. Notably among these are: the 1996 South African Constitution (1996) wherein access to health care services is declared a right to every citizen; the National Health Act (61/2003) and, pertaining specifically to the pharmaceutical industry, the National Drug Policy (Department of Health, 1996). It is therefore imperative that health care services, including the pharmaceutical services rendered in pharmaceutical structures, be made available to the population.

2.5 HEALTH CARE DELIVERY IN SOUTH AFRICA

Clause 27(1) of the 1996 South African Constitution (1996) states: “*Everyone has the right to have access to health care services, including reproductive health...*” The South African government is furthermore mandated by clause 27(2) of the Constitution (which requires government to take the necessary legislative and other measures in order to ensure every citizen has access to health care services) to realise this right and accept the responsibility of providing adequate health care for every South African citizen (Schneider *et al.*, 2007:294).

Health care delivery in South Africa has undergone considerable transformation, which makes its mark in the evolving health care system. Health care access, quality and cost are the main goals of health care transformation worldwide and, whereas cost is the major driver for health sector reform globally (Ijsselmuiden, 1995:15); the quest for equity has been the main driver for reform in South Africa, fuelling efforts to reduce the disparities in health care provision (Chetty, 2007:34; Ijsselmuiden, 1996:15).

According to Van Rensburg and Pelser (2004:110), it would not be correct to view the transformation of the South African health care system as marked by a distinct event at a fixed point in time, but it should rather be viewed as a process that already set in before democratisation in 1994. Van Rensburg and Pelser (2004:111) further contend the following main reasons for reform since 1994:

- The manifold fragmentation in the country's health care system along sectoral (public/private), structural, functional, racial, geographic and socio-economic lines.
- Major inequities and disparities in health care provision along racial, geographical and socio-economic lines and favouring White, urban, wealthy and medically insured patients.
- Severe shortage of financial, human and other resources due mainly to the mismanagement and mal distribution thereof.
- Highly inappropriate emphasis and orientations in health care, with a curative, hospital-based and doctor-oriented service causing an oversight on preventive, primary health care centred and community health services.
- Striking inequalities in the health status of the population.

Motivated by an exigency to eradicate the inequities in the system and achieve a 'better life for all', transformation of South Africa's health care sector gained momentum in 1994 and is still unfolding. In this section, the following aspects of South Africa's health care delivery system will be discussed:

- The concept of primary health care.
- Achievements and goals of the health care system.
- The structure of the health care system.
- Financial resources for health care.
- Human resources for health care in South Africa.

2.5.1 PRIMARY HEALTH CARE

In 1978, the World Health Organization (WHO) and the United Nations Children's Fund jointly sponsored an international conference on Primary health care at Alma-Ata. The primary health care concept as introduced at the conference was adopted by national governments as the means to eradicate the then existing unacceptable gross inequalities in health between and within countries (Hall & Taylor, 2003:18; WHO, 1978:2). The concept was also seen as the necessary means of providing comprehensive, universal, equitable and affordable health care services for all countries (Hall & Taylor, 2003:17). The conference defined primary health care as

“...essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost the community and country can afford to maintain at every step of their development in the spirit of self-reliance and self-determination. It forms an integral part of both the country’s health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.” (WHO, 1978:3)

The national health system in South Africa is based on the primary health care approach (Schneider *et al.*, 2007:29) and health care programmes have been developed based on the policy on universal access to primary health care. Health care services provided through the primary health care based programmes include immunisation, communicable and endemic disease prevention, maternity care, child screening, integrated management of childhood illnesses and health care, health promotion, care of chronic diseases and diseases of the elderly, accident and emergency services, family planning and oral health services (Department of Government Communications and Information System, 2008:328)

2.5.2 ACHIEVEMENTS AND GOALS OF THE HEALTH CARE SYSTEM

A number of policies and legislative documents were drafted in order to facilitate transformation of the health care delivery system in South Africa. The White Paper for the Transformation of the Health System in South Africa (Department of Health, 1997) was the main policy document guiding transformation. The document was drafted on the basis of the ANC health plan and the Reconstruction and Development Programme (RDP) document (Van Rensburg & Pelser, 2004:118). In it, the government proposed the following directions and programmes of action towards transformation (Schneider *et al.*, 2007:295; Van Rensburg & Pelser, 2004:118):

- Consolidation of the 14 different health departments into a single unified health system.
- Health care service delivery based on the principles of the primary health care approach.
- Decentralisation of health delivery with districts as the major locus of implementation.

- Unification of the three spheres of government, non-governmental organisations (NGOs) and the private sector.
- Reduction of inequities in resource allocation and expansion of access to essential care.

Considerable progress has been made since 1994. The transformation has been guided by five year planning frameworks which reflected major transformation agendas of the health department. The period of 1994-1999 focused mainly on increasing access to health care especially to those who did not have access like the rural and underserved areas. The period of 1999-2004 concentrated on quality issues in health care and also marked the beginning of the government's interventions in private health care through legislative reform. During the period of 2004-2009, the department has committed itself to consolidating the health care system and solving human resource issues (Yach & Kistnasamy, 2007:7).

Schneider *et al.* (2007:305) critically evaluated this development and came to the following conclusion regarding it: *"the integration of the health system into one unified structure; changes to gender, racial and professional profile of health administration, stand as the most significant achievements of the post apartheid era. Beyond this, many of the structural problems of the health system still remain...In some respects – the availability of skilled providers and strains on the system – things appear to have worsened."*

From the above, it would seem that the South African health care system is still faced with the challenge of reducing disparities and inequities, which are still particularly evident when comparing the public and private health care sectors, the nine different provinces, rural and urban areas, different socio-economic status, race groups, gender and age as well as the quality of services.

The mission of South Africa's Department of Health is *"consolidate and build on the achievements of the past five years in improving access to health care for all and reducing inequity, and to focus on working in partnership with other stakeholders to improve the quality of care of all levels of the health system, especially preventive and promotive health, and to improve the overall efficiency of the health care delivery system"* (Department of Health, 2009). Furthermore, the broad aims of the South African Department of health are *"to combat communicable and non-communicable diseases and to strengthen health promotion and health systems"* (Department of Government Communication and Information System, 2008:328)

Considering the impact and prevalence of the HIV/AIDS epidemic in South Africa, the Department introduced a comprehensive plan to focus on both treatment and prevention of the epidemic (Dorrington, 2006:14; Department of Health, 2007:8). Among the interventions introduced with the plan were the prevention of mother-to-child transmission through antiretroviral therapy (ART), the treatment of sexually transmitted infections, the introduction of and increase in access to voluntary counselling and testing, increased retention of children and adults on ART and management of HIV-TB co-infections (Dorrington, 2006:14; Department of Health, 2007:14).

2.5.3 STRUCTURE OF SOUTH AFRICA'S HEALTH CARE DELIVERY SYSTEM

Various typologies exist in literature with which one may classify, describe and distinguish between the different types of national health care systems (van Rensburg, 2004b:9). According to Cockerham's fourfold classification of national health systems (*in* van Rensburg, 2004b:14), the South African national health system may be classified as a free-market or 'mixed-market' medical system. This type of system is characterised by the following:

- Private and public systems of financing and the organisation of health care delivery services.
- Providers who are mainly private entrepreneurs.
- Health care facilities that are both privately and state owned.
- A high likelihood for inequitable access of health services by the general public.
- Encouraged or enforced private care for those patients who can afford it.

Figure 2.8 structurally illustrates the macro organisation of the country's health care delivery system. As indicated by the figure, the country's health care delivery system is dualistically divided into the public and the private health care sectors (Department of Health, 2006a:21). Differences exist between the two sectors in their organisational structure, service delivery and ownership. These differences in turn influence the availability of resources (financial, human and infrastructural) within the sectors (Van Rensburg *et al.*, 1992:26).

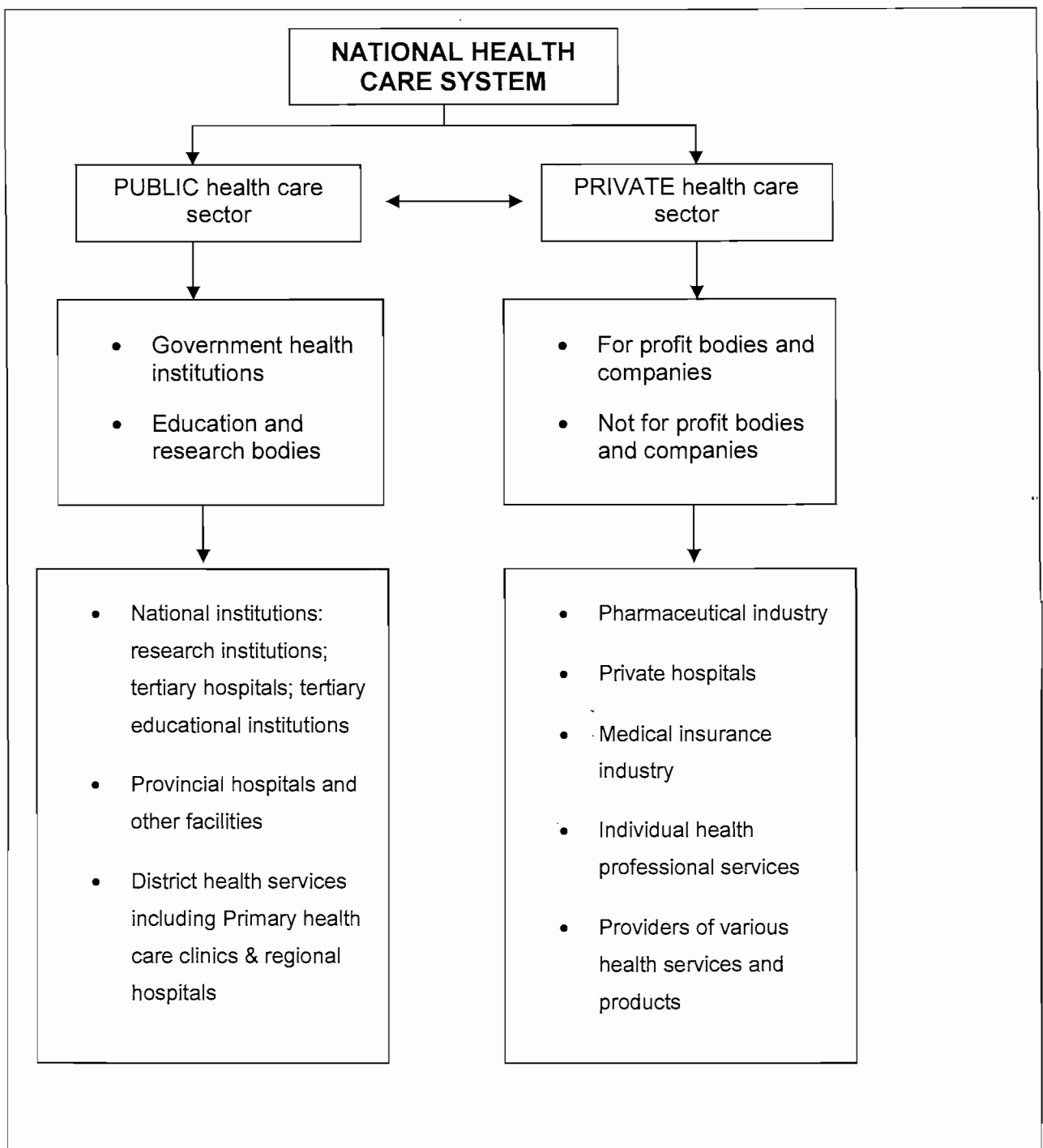


Figure 2.8: Macro organisation of the national health care system (Department of Health, 2006a:21).

The government has a stewardship role in the health care system which includes running an equitable, efficient and effective health care system, regulating the private health care sector as well as facilitating a cooperative working relationship between the public and the private health care sector; which would be beneficial to the population as a whole (Leone & Mabope, 2005:33)

2.5.3.1 The Public Health Care Sector

The public health sector encompasses any persons or entities involved in the provision and funding of health care services that are government departments, organs of state or institutions exercising a public power or performing a public function in terms of legislation (Department of Health, 2005:19; Department of Health, 2006b:5). This means that the National Department of Health is directly responsible for and leads the public health sector. It has been referred to as the “backbone of health care delivery in South Africa”, providing services for the majority of the population (McIntyre *et al.*, 2007:57).

According to the goals of health care transformation (presented in the White paper for the transformation of health services in South Africa), the health care system has developed into a single, unified health care system (Van Rensburg & Pelser, 2004:126). The unified system comprises three interdependent spheres of health care organisation and delivery: the National, Provincial and District health systems. There are consequently nine provincial health departments and 53 health districts (Cullinan, 2006:6; Van Rensburg & Pelser, 2004:137). The 53 health districts are geographically consistent with the six metropolitan and 47 districts of the country. The overall framework that governs the public health system is provided for in the National Health Act 61 of 2003 (Schneider *et al.*, 2007:296).

Provision of health care within the public sector is divided into a hierarchy of health services concurrent with those proposed by the primary health care philosophy. The system was put in place in order to facilitate diverting the focus of health service delivery from being curative and hospital centred to that which is preventive and primary health care centred. The different levels in the health system then work together through a referral system (Cullinan 2006:7).

Ideally, the first point of entry, for patients into the public health system, is through local clinics and community health centres where primary health care services are rendered (Von Holdt & Murphy, 2007:313; Cullinan, 2006:7). Facilities of the kind are run by nurses and guided by the Essential Drug List as to the medication they should keep (Cullinan, 2006:7). From 1996, services at these facilities were free of charge (beneficiaries of medical aid schemes are excluded from the free services). The government reports that between 1994 and 2007, over

1600 clinics were built or upgraded (Department of Government Communication and Information System, 2008:328).

The next level of health care services is the institutional (hospital) facilities. These may also be differentiated into level 1 (district), level 2 (regional) and level 3 (central) hospitals. Each level provides for a more specialised level of care than the level below it. However, due to the weakness in the referral system and lack of comprehensive hospital coverage, regional and central hospitals often accommodate patients who ought to be treated in levels above or below them (von Holdt & Murphy, 2007:313; Cullinan, 2006:10).

2.5.3.2 The Private Health Care Sector

The private sector encompasses all persons and entities involved in the provision and funding of health care services that are not within the public sector; including all non-governmental organisations which are private for-profit and not-for-profit bodies (Department of Health, 2005:18).

- *Private for profit:*

A unit where the staff delivering the health services is employed by a sole trader, partnership or registered business and the costs of services are recovered from fees for services (Department of Health, 2006b:5).

- *Private not-for-profit:*

A unit where the staff delivering health services is employed by a charitable institute or other organisation registered under section 21 of the Companies Act, or a unit where the staff delivering the health services is employed by a sole trader, partnership or registered business and the cost of services are subsidised (Department of Health, 2006b:5).

As illustrated in figure 2.8, the private health care sector encompasses the pharmaceutical industry, private hospitals, medical insurance companies, individual health professional services and providers of various health services and products, including community pharmacies. Community pharmacies are an important first point of entry in the private health care system.

The 2006 general household survey (Statistics South Africa, 2006b:xvi) estimated that public health facilities serviced 80% of the population while the rest of the population was dependent on private institutions for their services.

2.5.4 THE USAGE OF HEALTH CARE FACILITIES

According to the *General Household Survey 2007*, the percentage of people injured or ill who consulted a health worker decreased from about 84% in 2003 to 79.7% in 2007 (Statistics South Africa, 2008e:4). The percentage of the injured/ill population who did not seek health care services because they were too expensive decreased from 29.7% in 2003 to 14.4% in 2007 and those who perceived the services as being too far decreased from 7.9% in 2003 to 5.8% in 2007 (Statistics South Africa, 2008e:17).

Table 2.7 summarises the health services usage in South Africa from 2003 to 2007, according to the *General Household Survey 2007*. The table shows that in June of the study years, public sector consultations were always higher than private sector consultations and the level of service satisfaction in both sectors was rising. However, the level of service satisfaction in the public sector remained lower than that of the private sector (Statistics South Africa, 2008e:5).

Table 2.7: Health services usage in June, 2003-2006 (adapted from Statistics South Africa, 2008e:5)

	2003	2004	2005	2006	2007
Injured or ill in June and consulted a health worker (%population)					
Public sector consultation	57.6	58.5	59.4	61.2	56.0
Private sector consultations	42.4	41.5	40.6	38.5	42.4
Public sector: satisfied with service	82.4	82.5	82.2	90.0	87.8
Private sector: satisfied with service	94.4	97.0	96.1	98.2	96.7
Injured or ill in June and did not consult a Health worker (%population)					
Too expensive	29.7	21.0	19.2	19.4	14.4
Too far	7.9	7.3	7.6	8.6	5.8
Medical aid coverage (%population)					
	14.8	14.9	14.0	13.8	14.3

Health care services in the public health care sector have been made universally accessible by the wide distribution of service points and complementary primary health care services. However, the quality of care is sometimes sub-optimal, the facilities often have long waiting

hours and there are few health care personnel. The private health care sector, on the other hand, provides relatively high quality of services but is only accessible by a minority (14%) of the population due to high cost of medical schemes and private hospitals.

2.5.5 FINANCIAL RESOURCES FOR HEALTH

In 2005, South Africa's total expenditure on health was approximately R107 billion and equivalent to 8.7% of the Gross Domestic Product (GDP) (Department of Health, 2005:34). This has been recognised as an unusually high proportion according to international standards considering that the average proportion for the middle income group and the WHO African region (to which South Africa belongs) for that year was 6.6% and 5.9% respectively (WHO, 2008:90).

Funding for the Department of Health increased with an annual growth rate of 11.9% from R7.7 billion in 2003/04 to 15.2 billion in 2009/10 (Department of Government Communications and Information, 2008:329). However, although financial resources are relatively abundant, access to high quality health care for the majority of the population remains a challenge. This has led to the belief that the challenge with regard to resources in South Africa is not one of the availability of resources but rather pertains to the equal distribution of the resources (Department of Health, 2005:35; McIntyre & Thiede, 2007:36). In the Revised draft of the Health Charter (Department of Health, 2005:35), the Department of Health acknowledges that the inequities in health care financing are skewed in favour of the public sector and urban areas.

The Department of Health's budget has increased by 14.4% between the years 2004 and 2007 with the highest growth areas being the HIV and AIDS sub-programme and the hospital revitalisation project (Department of Government Communications and Information, 2008:329).

Figure 2.9 provides an illustration of the flow of financial resources from the source, through financial intermediaries then to where it is spent for differing health care services. The flow of financial resources, as illustrated by figure 2.9, is further discussed below.

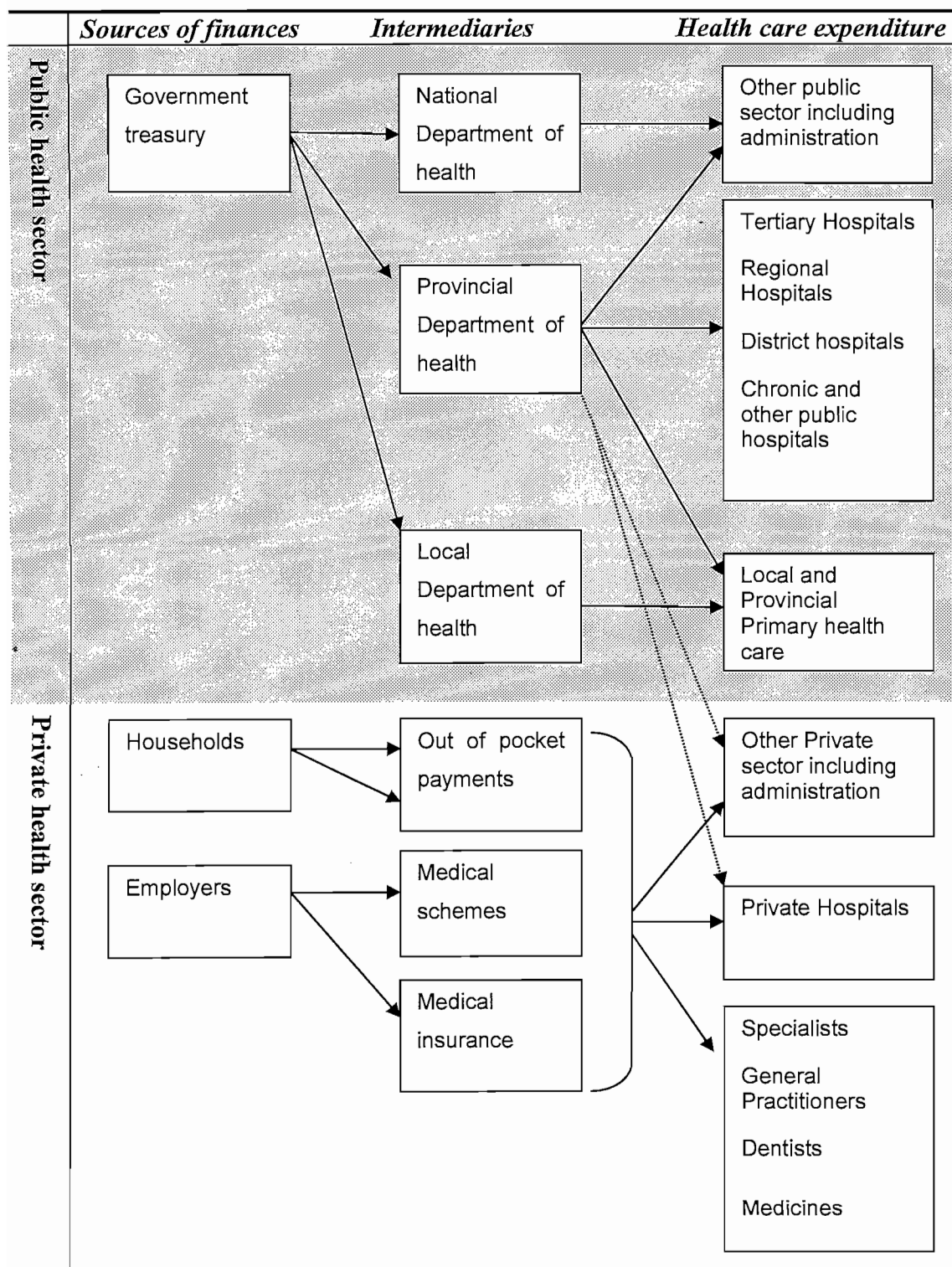


Figure 2.9 Flow of funds from sources of finance, through financing intermediaries to health care expenditure (adapted from McIntyre & Thiede, 2007:37).

2.5.5.1 Health Care Financing

There are four main sources of health care funding: the government, households, employers and external donors and non-governmental organisations (McIntyre & Doherty, 2004:380). The public sector is financed mainly by government departments and the private sector sources its financing from households and employers.

- *Government*

The government is the largest source of health care funding in South Africa, accounting for 44% of all health care funding in 1999/2000 (Doherty *et al.*, 2002:ii). It encompasses all government departments including the national, provincial and local departments of health. Most of these funds are directed to the public health care sector and a small portion thereof is made out to the private health care sector in the form of subsidies to private sector employers. The funds are accrued from general taxes, licences, sales of utilities and other sources of income. Government funding is heavily dependent on taxes which makes it vulnerable to macro-economic policy and international market volatility (Thomas & Muirhead, 2000:3).

Government funds are distributed vertically, along the national, provincial and district primary health care levels of health services. One of the key aims of the government has been to fund a Primary Health Care package of services which, in 1996, was made free of charge at the clinic and community health centre levels (Thomas & Muirhead, 2000:3).

Funds are also distributed horizontally among the different provinces. Inequities in health funding between provinces exist. Since the introduction of fiscal federalism, there has been inequity among the provinces in resources distributed to health care (McIntyre & Doherty, 2004:393). The government mandates that 85% of financial resources in provinces be distributed to social services which include health, education and welfare. However, there has been a decrease in total government health expenditure from 11.2% to 10.9% (between the years 2000 and 2008) of the total government expenditure. This is due to the increase in social welfare funding which, although indirectly leading to an improvement in the health care of the people, leaves a gap in the provision of funds for adequate health infrastructure (McIntyre & Thiede, 2007:39).

- *Households*

Households contributed 39% of the total health care funding during the year 1999/2000 (Doherty *et al.*, 2000:ii), making them the second largest source of health care financing.

Households finance the health care sector either directly through 'out-of-pocket' payments or indirectly through medical schemes and other health insurance as the intermediaries. Thomas & Muirhead (2000:30) identified an increase in funds available for health care that had been mainly sourced from households and was particularly due to out-of-pocket expenditure.

- *Employers*

Employers are then the third largest source of health care funding, accounting for 16.6% of the country's total health care funding in the year 1999/2000 (Doherty *et al.*, 2000:ii). Employers fund health care for their employees either directly through health services provided at their work places or indirectly through contributing to different forms of private health insurance on behalf of their employees (Thomas & Muirhead, 2000:3).

- *International and local donors*

Contrary to many African countries health care financing from international and local donors as well as non-governmental organisations is low (McIntyre & Gilson, 2005:2). The 2000 National Health Accounts Report attributed only 0.1% of all health care funding to donors (Doherty *et al.*, 2000:ii).

2.5.5.2 Financing Intermediaries

Financing intermediaries have a pronounced effect on efficiency and equity within the health system particularly through the resource allocation mechanisms they employ (Doherty *et al.*, 2002:37). As can be seen from figure 2.9, financing intermediaries can be divided into those that are publicly owned and managed and those that are privately owned and managed.

The most prominent public sector intermediaries are the national, provincial and local government departments of health (Thomas & Muirhead, 2000:3). Private sector intermediaries include the medical schemes, health insurance offered by insurance companies and household 'out-of-pocket' payments (Thomas & Muirhead, 2000:5).

The single largest financing intermediaries are medical schemes which account for almost 47% of health expenditure. The second largest are provincial departments of health with 33% of health care funds flowing through them. Household 'out-of-pocket' payments follow as the third largest, estimated to contribute to 14% of health expenditure (Department of Government Communications and Information, 2008:336; McIntyre & Thiede, 2007:38). The remaining proportion of less than 6% of all health care expenditure is attributed to the national and local

government health departments and direct expenditure by firms (Chetty, 2007:20). The proportion of total finances controlled by private sector intermediaries therefore exceeds that of public sector intermediaries.

2.5.5.3 Health Care Expenditure

In 2003 and 2004, it was estimated that medical schemes spent approximately R8 800 per beneficiary, while the public sector spent only R1 050 per person for the same period of time (Department of Health, 2005:35).

Efforts to improve access to particular levels of care saw a downsizing in the overall size of the hospital sector. This resulted in a decrease in the bed numbers of the public health care sector. This brought the rate to be similar to that of the private sector (Doherty, *et al.*, 2002:33). However, the level of hospital provision increased in the private sector.

2.5.6 HUMAN RESOURCES FOR HEALTH

One of the most significant constraints to improving access to health care is the poor availability of health care personnel, particularly in underserved geographical areas (Schneider *et al.*, 2007:298). In addition to the inappropriate and inequitable training opportunities, low staff morale and weaknesses in skills and attitudes towards patients that present (Gilson & Erasmus, 2005:36), Chetty (2007:32) notes the following challenges related to human resources for health in South Africa:

- Shortage of certain categories of health workers such as primary health care nurses, doctors and pharmacists.
- Poor management of health service facilities including hospitals.
- Shortage of skilled health professionals in rural areas and concentration thereof in urban centres.
- Migration of skilled health professionals to the private sector and overseas.
- Lack of essential equipment and poor management, procurement and distribution of drugs.

- Rapidly escalating HIV rates since the 1900s, an escalating TB epidemic and the emergence of Multi-drug resistant TB.
- Deficiencies in infrastructure and management capacity in underprivileged areas.
- Difficulties of recruiting and retaining health personnel in deprived areas.
- Dissatisfaction of the quality of health services by users.

The Department of Health has made a commitment to ensuring the availability of a continuous supply of suitably qualified, competent human resources in health facilities (Department of Health, 2006a:6). Among the strategies implemented by the Department of Health to address the human resource challenges are the following (Gilson & Erasmus, 2005:39):

- The Cuban doctor programme and introduction of community service for health professionals in order to increase the pool of trained staff working in less resourced areas.
- The issuing of scarce skills and rural allowances for health professionals in rural and underserved areas, in order to retain staff in these areas.
- The development and training of health personnel for primary health care skills and the continued professional development programme (CPD) in order to increase the availability of adequately trained personnel and promote continuous upgrading of training and skills.
- Bilateral agreements as well as exchange agreements between countries.
- Strengthening of provider accountability to the patient and community through the patient right's charter and clinic committees.
- The training of mid-level workers such as community health workers and pharmacy assistants.

Further discussions on human resources pertaining specifically to the pharmaceutical industry are included in section 3.5 of chapter 3.

2.6 THE ROLE OF PHARMACY IN HEALTH CARE

"The pharmacy profession would not exist if it was not needed. Society says there need to be pharmacists in the health care system. Pharmacy's role is to oversee the drug use process, to make it safe, and to make it efficient. It also exists to help patients make the best use of their medications." (Kelly, 2007:16)

From drug discovery through to drug consumption, pharmacy is the health profession most concerned with drugs and their clinical application (Zellmer, 1989:105). In the same way that one would view physicians as professionals who interface between man and disease, lawyers as professionals who interface between man and man or priests as those who intervene between man and spirit, so also pharmacists are the professionals who interface between man and medicine (McGhan, 1989:89).

The value of medicinal therapy in today's society is undisputable and, it is believed to be the most frequently used form of treatment intervention in any health practice setting (Wiedenmeyer *et al.*, 2006:5; Cipolle *et al.*, 1998:5). Medicines are used in society to improve people's quality of life by either curing diseases, reducing or eliminating symptoms, arresting or slowing down a disease process or preventing a disease or symptoms (Hepler & Strand, 1990:535).

Due to an ever-increasing, ever-changing global burden of disease, technological advances have resulted in an increase not only in the number and in type of medicines and drugs on the market, but also an increase in the potency and effectiveness thereof (Wiedenmeyer *et al.*, 2006:5; Breland, 2007:18). The World Health Organization (1990:1) affirms that *"effective medicine can be practiced only where there is efficient drug management"*.

Then again, drug treatment generally involves risks and if inappropriately used, poses a health hazard to the patient. Numerous problems of drug toxicities, adverse reactions and treatment failures, resulting in drug morbidity and mortality, may be experienced with drug and medicine use (Zellmer, 2005:260; Homedes & Ugalde, 2001:101; Cipolle *et al.*, 1998:6; Hepler and Strand, 1990:538). This precipitates the challenge of ensuring quality control and rational use of medicines towards preventing drug-related morbidity and mortality (Wiedenmeyer *et al.*, 2006:3).

Drug-related morbidity and mortality is costly (Johnson & Bootman, 1997:554). Moreover, drug treatment in itself is costly and has been identified as a major cost driver within the continuously

rising cost of health care (Cipolle *et al.*, 1998:4; Smith, 2001:86). Appropriate control of medicine usage is necessary to avoid health care being an economic burden to society.

Pharmacists are the better-qualified health professionals to ensure adequate, safe, effective and cost-effective use of medicine (Zellmer, 2005:259). This may be further substantiated by the following reasons:

- They have extensive knowledge on the action, uses and chemistry of drugs, their formulation into medicines and how they can be used to manage various diseases (WHO, 1990:7; Zellmer, 2005:259; Shane, 2007:1300).
- They understand the principles of quality assurance as they are applied to medicines (WHO, 1990:2).
- They appreciate the intricacies of the distribution chain and the principles of efficient stock-keeping and stock turnover (WHO, 1990:2).
- They are familiar with the pricing structures applied to medicinal products (WHO, 1990:2).
- They are able to provide informed advice to patients with minor illnesses and often to those with chronic conditions who are on established maintenance therapy (WHO, 1990:2).
- They provide an interface between the duties of prescribing and selling medicines and, in so doing, they dispose of any perceived or potential conflict of interest between these two functions (WHO, 1990:2).
- They are readily accessible to the public and are available for a considerable period during the day with no appointment necessary to see them (FIP, 1996:1).

However, the reality with regard to the pharmacy profession is as Zellmer (2005:259) notes: *"There is a profound gap between what pharmacists have been educated to do and what they typically behave in the practice"*. Gilbert (2004:304) supports this claim, indicating that the situation in South Africa is no different as *"by and large, most [pharmacists] continue to do what they have always done: dispensing medication prescribed by a doctor, or dealing with 'over the counter' medication for minor ailments..."*

Nonetheless, reality does not erase potential, nor can it erase the responsibilities given to the pharmacy profession. Such responsibilities as those articulated in the International Pharmaceutical Federation's *statement of professional standards – code of ethics for*

pharmacists (1997a:1): "... to help people to maintain good health, to avoid ill health and, where medication is appropriate, to promote the rational use of medicines and to assist patients to acquire and gain maximum therapeutic benefits from their medicines".

This section aims to indicate both the potential and realised role that pharmacy plays in health care. Because pharmacists are found practising in a variety of settings, it is important to firstly know and understand the different practice settings, as well as the services rendered therein in order that one may fully understand the role of pharmacy in health care.

2.6.1 THE DIFFERENT PHARMACY PRACTICE SETTINGS

According to Zellmer (2005:260), individuals educated as pharmacists are found working in many sectors of society, inside and outside health care, which adds to the uncertainty about what it means to be a pharmacy practitioner. A meeting convened by the World Health Organization in 1988 on the role of pharmacists in the health care system distinguished between the following categories of pharmacists (WHO, 1990:6):

- Community and hospital or institutional pharmacists.
- Specialists in various scientific aspects of pharmacy.
- Occupational specialists, mainly industrial pharmacists engaged particularly in pharmaceutical technology and research.
- Teachers, and managers and administrators of pharmaceutical services and systems.

In terms of the Pharmacy Act of 1974⁴ as amended in November 2000, only five categories of pharmacies are registered by the South African Pharmacy Council: manufacturing pharmacies, wholesale pharmacies, community pharmacies, institutional pharmacies and consultant pharmacies.

The different categories of pharmacies will be defined by way of referring to the services pertaining to the scope of practice of a pharmacist which may be rendered therein as presented in the Pharmacy Act 53 of 1974, as amended.

2.6.1.1 Manufacturing Pharmacy

Manufacturing pharmacies are mainly concerned with the large scale production of pharmaceutical products (Mrtek & Catizone, 1989:36) as well as the distribution, marketing and sale of those products in a finished form (Slinn, 2005:156). The manufacturing pharmacy as a practice setting therefore *“adheres exclusively to the technical paradigm, demanding accuracy and fidelity to the scientific and technical steps required to produce safe and effective pharmaceutical products”* (Mrtek & Catizone, 1989:36). In some instances, manufacturing pharmacy may also involve extensive research and development towards discovering new compounds and testing them extensively to establish their safety and medical efficacy (Slinn, 2005:156).

The South African Pharmacy Act (53/1974), as amended, legalises the following services pertaining to the scope of practice of a pharmacist to be rendered in a manufacturing pharmacy:

- The manufacturing of any medicines or scheduled substances.
- The purchasing, acquiring, keeping, possessing, using, supplying or selling of any medicine or scheduled substance.
- The furnishing of information and advice to any person with regard to medicines manufactured in that pharmacy.
- The application for the registration of a medicine or medical device.
- The formulation of medicine for the purpose of registration as a medicine.
- The distribution of medicine or scheduled substances.
- The repackaging of medicine in accordance with the Medicines Act.
- The initiation and conducting of pharmaceutical research and development.

2.6.1.2 Wholesale Pharmacy

Wholesale pharmacies act as intermediaries in the distribution of pharmaceutical products earmarked for sale to the public. Manufacturers generally supply their products through a wholesaler, who buys the products in bulk. According to the Constitutional Court of South Africa (CCSA), wholesale pharmacies are charged with ensuring the smooth, safe and efficient

distribution of pharmaceutical products in smaller quantities to the community and institutional pharmacies (CCSA, 2004:114).

The following services as pertaining to the scope of practice of a pharmacist may be provided in a wholesale pharmacy:

- The wholesale distribution of any medicine or scheduled substance through the purchasing, acquiring, keeping, possessing, using, supplying or selling of any medicine or scheduled substance.
- The furnishing of information or advice to any person with regard to medicine distributed by that particular wholesale pharmacy.
- The application for the registration of a medicine or medical device.
- The initiation and conducting of pharmaceutical research and development.

In accordance with the Medicines and Related Substances Control Act 101 of 1965, wholesale pharmacies owned or controlled by an organ of the State are permitted the additional service of repackaging medicine.

Evidently, the manufacturing and wholesale pharmacies do not deliver services directly to the patient and consideration of the patient may only enter into the routine work of the pharmacists in considering the philosophical commitment to manufacture and distribute products that are safe and effective in their use by the patient (Mrtek & Catizone, 1989:36).

2.6.1.3 Community Pharmacy

The International Pharmaceutical Federation (FIP, 1997b:11) defined community pharmacy as *“the area of pharmacy practice in which medicines and other related products are sold or provided directly to the public from a retail (or other commercial) outlet designed primarily for the purpose of providing medicines. The sale or provision of the medicine may be either on the order or prescription of a doctor (or other health care worker), or “over the counter” (OTC)”*

Community pharmacies are among the health structures most accessible to the public (WHO, 1990:10). Types of community pharmacies that exist in South Africa include independent or retail pharmacies, chain store pharmacies and pharmacies owned and managed by private clinics that serve the public. All of these structures serve the public more directly and fall under the private health care sector.

The World Health Organization's consultative group (WHO, 1990:10) described the scope of practice for a community pharmacist to include the following responsibilities:

- Processing prescriptions.
- Care of patients.
- Monitoring drug utilisation.
- Extemporaneous preparation and small scale manufacturing.
- Enabling for the adaptation of medicine formulation to the needs of the individual patient.
- Supplying traditional and homeopathic medicines.
- Prescribing in response to symptoms of minor ailments.
- Informing other health care professionals and the public.
- Health promotion.
- Domiciliary services.
- Agricultural and veterinary services.

Specific to South Africa, the following services pertain to the scope of practice of a pharmacist in a community pharmacy:

- The provision of pharmaceutical care by taking responsibility for the patient's medicine related needs and being accountable for meeting these needs, which includes but is not limited to the following functions:
 - Evaluation of a patient's medicine-related therapy by determining the indication, safety and effectiveness of the therapy.
 - Dispensing of any medicine or scheduled substance on the prescription of an authorised prescriber.
 - Furnishing of information and advice to any person with regard to medicine.

- Determining patient compliance with the therapy and following up to ensure that the patients needs are being met.
- Providing pharmacist initiated therapy.
- The compounding, manipulation or preparation of any medicine or substance.
- The purchasing, acquiring, keeping, using, supplying or selling of any medicine or substances.
- The application for registration of a medicine or medical device.
- The re-packaging of medicines.
- The promotion of public health in accordance with guidelines and standards as determined by competent authority.
- The initiation and conducting of pharmaceutical research and development.
- The provision of primary care drug therapy with prior authorisation from the South African Pharmacy Council (pharmacists who qualify for this service undergo specific training which results in their registration with the council certifying their qualification).

In summary, community pharmacies supply medicines in accordance with a prescription or, when legally permitted, sell them without a prescription. In addition to ensuring an accurate supply of appropriate products, their professional activities also include counselling of patients at the time of dispensing the drugs, drug information of health professionals, patients and the general public, as well as participation in health promotion programmes (WHO, 1990:10).

2.6.1.4 Hospital/ Institutional Pharmacy

In South Africa, the services pertaining to the scope of practice of a pharmacist at institutional pharmacies are similar to those which may be rendered in community pharmacies.

According to a communication by Professor J.H.P Serfontein (2009), institutional pharmacies may be categorised into those that are part of the public health care sector and those of the private health care sector. Private institutional pharmacies are dispensaries at private hospitals that supply only the in-patients at the facility. Public institutional pharmacies, on the other hand, are state-owned pharmacies and community health clinics that serve both the public and in-

patients at the institutions. These institutions include public hospitals, military and correctional service institutions.

The 1988 World Health Organization consultative group noted that in addition to the activities for the community pharmacist mentioned above, institutional pharmacies are unique in that

- there is better opportunity to interact with the prescriber and thus promote rational prescribing and use of drugs;
- there is access to medical records making it easier to influence the selection of drugs and drug regimes; monitor a patient's response to drugs and recognise and report adverse drug reactions;
- they provide a much easier environment for monitoring patterns of drug use and thus recommending changes where necessary;
- There is opportunity to educate other health care personnel on rational use of drugs (WHO, 1990:13).

2.6.1.5 Consultant Pharmacy

Consultant pharmacies focus on the provision of pharmaceutical care and are not concerned with the keeping and supplying of medicines (South African Pharmacy Council, 2001:16).

The following are services pertaining to the scope of practice of a pharmacist, at a consultant pharmacy:

- The provision of pharmaceutical care with the goal of improving compliance with medicine therapy and which is limited to the following functions:
 - Evaluation of a patient's medicine regimen with respect to the indications, safety and effectiveness of therapy.
 - The provision of information and advice to any person with regard to the use of medicine.
 - Determining patient compliance with therapy and follow-up to ensure that the patient's medicine related needs are being met.
- The initiation and conducting of pharmaceutical research and development.

- The application for the registration of a medicine or a medical device.
- The promotion of public health.

The aforementioned services rendered in consultant pharmacies include drug utilisation reviews, counselling on the safe and correct use of medicine, consultations on the registration of medicines and related matters, services of pharmaceutical consultants to third parties, processing of prescriptions for medical schemes and the provision of supplementary services. Facilities of certain medical aids or pharmaceutical benefit management companies rendering these services therefore fall under the category of consultant pharmacies (South African Pharmacy Council, 2001:16).

The consultative group of the World Health Organization (WHO, 1990:4) was of the view that *“wherever pharmacy establishes its roots as a profession, it is within the health care institutions and in the community itself that pharmacists serve in greater numbers and with the most immediate effect on patient welfare”*. This is no doubt of specific reference to the community, institutional and consultant pharmacy practice settings. Nonetheless, the primary aim of all the pharmacy practice settings remains to be ensuring optimum drug therapy, be it by *“contributing to the preparation, supply and control of medicinal products, or by providing information and advice to those who prescribe and use pharmaceutical products”* (WHO, 1990:8).

2.6.2 THE EXTENDED ROLE OF PHARMACY PRACTICE

The services rendered in the different pharmacy practice settings have not always been as mentioned in the preceding discussion. Already in 1986, Brodie (1986:117) highlighted this reality in the following words:

“With the passing of time, the spectrum of pharmaceutical function and practice has continued to expand, partially in a horizontal sense, so as to encompass the discovery, the isolation, the characterisation and synthesis of drugs; the formulation, the manufacture, the control of quality, the standardisation, the sterilisation, the compounding, and distribution of drug products; the knowledge and understanding of the pharmacodynamics, the mode of action, the therapeutic usefulness the indications and contraindications of use, toxicology and side effects of drugs; the social implications of the use and abuse of drugs, and the legal factors governing their distribution.”

This restructuring together with expansion in pharmacy practice roles has contributed to the uncertainty in the role of pharmacy in health care. Stone and Curtis (2002:213) maintain that the role of the pharmacist was better understood by both the public and other health professionals when it consisted purely of compounding and dispensing.

2.6.2.1 The Evolution of the Pharmacy Profession

Political, social and economic transitions in society have influenced the activities ascribed and carried out by the pharmacy profession. Holland and Nimmo (1999:1758) identified five stages of major change in the pharmacy profession, since the 1800s as the pharmacy profession shifted its focus from a drug-centred profession to a more patient-centred profession. These stages are presented in figure 2.10 below.

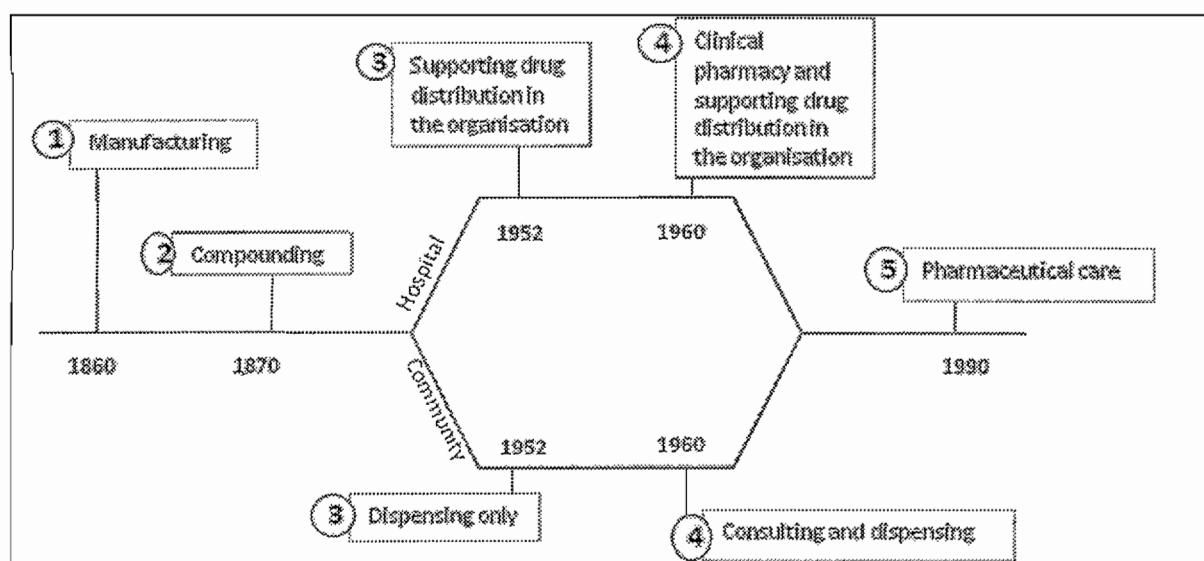


Figure 2.10: Timeline of the five major changes in pharmacy practice (Holland & Nimmo, 1999:1759)

In the first stage, the main task in pharmacy practice was to manufacture medicine. Medicines would be manufactured in the pharmacy according to the pharmacists own recipe and then sold from the pharmacy's own dispensary. In addition to the activities of procuring, preparing and evaluation of the pharmaceuticals, pharmacists would also render advice on medicines usage and selection. Around 1870 (the second stage), the profession shifted focus from manufacturing activities to compounding due to, among others, industrialisation and the emergence of pharmaceutical manufacturing companies. Pharmacy practice was now confined to the mixing

of already manufactured drugs according to a prescription, with the added advisory functions still present. During the third and fourth stages, the pharmacist's role became narrowly constrained with its focus specifically on the different practice settings. Hospital pharmacy practice became confined to supporting drug distribution in the organisation and later developed clinical care. Community pharmacy, on the other hand, lost some of its social roles and went from dispensing only to later on, an added function of consulting. The fifth stage took place during the 1900s when the practice philosophy of pharmaceutical care was adopted (Holland & Nimmo, 1999:1759).

2.6.2.2 Clinical Pharmacy

Clinical pharmacy may be defined as that area of pharmacy concerned with the science and practice of rational medicine use (American College of Clinical Pharmacy, 2000:991).

The task in clinical pharmacy as identified by Holland and Nimmo (1999:1763) is to contribute to the physician's therapeutic management of the patient by providing one or more clinical services, such as drug information, pharmacokinetic dosing or taking a drug history or by modifying or designing, recommending, monitoring and evaluating the patient's pharmacotherapy.

Pharmacists carrying out clinical pharmacy interact closely with the health care team and carry out activities such as interviewing and assessing the patient; making specific therapeutic recommendations; monitoring the patient's response to drug therapy and providing medicine-related information. It is mostly practised in in-patient settings and hospitals where access to medical data and the medical team is readily available (Wiedenmeyer *et al.*, 2006:10).

2.6.2.3 Pharmaceutical Care

Pharmaceutical care was originally developed with the aim of maximising the pharmacist's role in reducing the costs of health care by decreasing the incidence of misadventure which includes overdosing, sub-therapeutic dosing, improper drug selection, drug interactions, adverse reactions, drug non-compliance and untreated conditions (Desselle & Hunter, 1998:55). The concept has been identified as a practice philosophy which aims to and responds to the drug related needs of people and reduces the risk of drug-related problems. The concept of pharmaceutical care has had the greatest impact on the role of pharmacists, more so than any other pharmacy-led initiative in the last decade.

Although the concept of pharmaceutical care had already been conceptualised in the 1980s, the most widely used definition of Pharmaceutical care was construed by Hepler and Strand (1990:539) as “... *the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life*”. Hepler and Strand further acknowledged that the philosophy “*involves the process through which a pharmacist cooperates with a patient and other health care professionals in designing, implementing and monitoring a therapeutic plan that will produce specific therapeutic outcomes for the patient.*” However, pharmaceutical care has developed differently in different countries and various definitions to the practice philosophy exist, depending on the health care system as a whole, as well as the pharmacy culture (Simpson, 1999:464). Consensus in the various definitions of pharmaceutical care is that it is patient-centred rather than medication-centred (Dugan, 2006:1).

Bjorkman *et al.* (2008:339) maintain that pharmaceutical care also develops and is conceived differently depending on whether the ideology or the philosophy is based on patient centredness or evidence-based medicine (EBM). In the patient centeredness care ideology, practitioners make sure that patients are met as individuals and that they take part in decisions about their treatment (Bjorkman *et al.*, 2008:337). The drug therapy discussion is based on the concerns of the patient and a biopsychosocial understanding of health is used. Explicit individual patient therapy goals are set and the pharmacist would therefore have to work to help the patients reach their individual therapy goals (Bjorkman *et al.*, 2008:341). On the other hand, the EBM care ideology is focused on optimal therapy outcome for the patient that is based on the best scientific knowledge and a biomedical understanding of health. Thus, the patient therapy goal is implicitly equal to a theoretical therapy goal and the practitioner works to help the patient reach these therapy goals (Bjorkman *et al.*, 2008:341).

The three major functions involved in achieving pharmaceutical care, as identified in the original definition of the concept by Hepler and Strand (1990:539), are identifying potential drug-related problems, resolving drug-related problems and preventing drug-related problems. Holland and Nimmo (1999:1763) articulated these functions as tasks by which the pharmacist assumes responsibility on the patient care team, for modifying or designing, recommending, monitoring, and evaluating a patient’s pharmacotherapy and for ensuring the outcomes of pharmacotherapy provided.

Dugan (2006:1) recognises that in fulfilling the roles in pharmaceutical care, pharmacists would have to be involved in patient history taking, conducting physical assessments and assessing therapeutic markers for the purpose of monitoring medication safety and efficacy. The ultimate

goal of the process is then the avoidance of medication-related problems to ensure more positive patient outcomes.

2.6.3 PHARMACY PRACTICE AND PRIMARY HEALTH CARE

Pharmaceutical services form a vital component of Primary Health Care considering that Primary Health Care *"includes at least... prevention and control of locally endemic diseases, appropriate treatment of common diseases and injuries and the provision of essential drugs."* In addition, *"...Inadequacies in the provision of primary health care can be attributed to shortcomings within the drug-distribution chain. Only when the pharmacist has been accepted as a vital member of the health care team can the necessary supporting services be organized with the professionalism that they demand."* (WHO, 1988:1).

2.6.3.1 The Health Care Team

Primary health care calls for a multidisciplinary team approach of delivering health care. This approach would include the patient, the community and all health care professionals responsible for patient care (Dennil *et al.*, 1999:10). As has previously been mentioned, most treatments in contemporary health care include drug therapy, making the health care team inevitably concerned with the use of drugs. The pharmacists' specialised knowledge on the management and property of medicines in an increasingly sophisticated health environment makes them an important source of independent information about therapeutic options and about the positive and negative consequences of treatment (WHO, 1990:4). This, therefore, necessitates the inclusion of pharmacist into the health care team, such as that demonstrated by the team approach in clinical pharmacy, practiced in hospitals and health care centres (WHO, 1990:17).

The health care team approach is also necessary as pharmacists cannot provide drug therapy without cooperation from prescribers and patients (Hepler, 2004:1493). The WHO recommends that *"physicians and pharmacists within communities and hospitals should work together to establish common approaches to the choice of medicines to be used, and the role of the pharmacist in advising all health care professionals should be developed in community care and in hospitals."* (WHO, 1990:31)

In order for the health team to function effectively, each member of the team is to understand his or her role and respect the roles of other team members; in addition, the entire team should

have the patients' best interests at the centre of their attention (Kelly, 2007:233). The role of pharmacists in the health care team can be summarised by using the World Health Organization's seven-star concept that describes pharmacists' roles as including those of caregiver, decision maker, communicator, manager, life-long-learner, teacher, leader and the added function of researcher (Wiedenmeyer *et al.*, 2006:16).

2.6.3.2 Primary Care

The World Health Organization at the international conference at Alma Ata defined primary care as: *"essential health care universally accessible to individuals and families in the community by means acceptable to them through their full participation and at a cost that the community and the country can afford."* (WHO, 1978:3) The technical connotation for primary care, however refers to the first contact a patient has with a health professional to diagnose or treat his or her complaint (Stone & Curtis, 2002:3).

To avoid cost of medical consultation, people are believed to go directly to a pharmacy for medication. Thus, pharmacists may fulfil a health need for people who cannot afford to see a doctor or where there is no medical practitioner available (Smith, 2001:87). According to Viberg *et al.* (2007:25) pharmacists selling over the counter drugs are usually the first and often the only contact with health services for people in low-income settings. This is due to the ease of access as well as ready availability of drugs and lower costs. It is here that also the concept of primary care drug therapy comes into play.

Primary care drug therapy is defined, in the Pharmacy Act 53 of 1974, as the *"diagnosing of a health need, prescribing and supplying of medicine to meet the health needs of a patient or group of patients or, where necessary, the referral to another health care provider by a pharmacist who has received the necessary authorisation from council"*. A consumer study done in Australia has shown, however, that although pharmacists are perceived as close to everyday life, representing a link to primary health care, they were perceived as primarily concerned with selling of medicines (Blenkinsopp *et al.*, 2001:160).

2.6.3.3 Health Promotion

Health promotion may be defined as the *"process of enabling people to increase control over the determinants of health and thereby improve it"* (Dennill *et al.*, 2000:122). Furthermore, health promotion is concerned with the prevention of diseases, prolonging of life, promotion of physical health and efficiency through organised community efforts. Health

promotion therefore includes efforts such as environmental sanitation, control of community infections, educating individuals on principles of personal hygiene and the organisation of health services in a manner that enables early diagnosis and preventive treatment of diseases (Bury & Svensson, 1994:8).

As with primary care, the pharmacist is favourably positioned to provide health advice and education due to the ease of access, ready availability of medication, convenience due to long opening hours and the availability of cheaper product options (Smith, 2001:92). Blenkinsopp *et al.* (2001:160) propose the following components of pharmacists' health promotion activities:

- Use of the pharmacy premises to promote health through the display of posters and leaflets on health topics.
- A private or semi-private area for counselling area and provision of one to one advice about individual behaviours such as with smoking cessation.
- Offering clinics within the pharmacies.
- Targeting individuals known to be at risk, such as those on chronic medications, and discussing management options involving family and careers in management if appropriate and considering with the individuals the effect of the treatment on their quality of life.
- Networking with other health professionals and health agencies for the participation in activities and campaigns that address the local community's health needs.

2.6.3.4 Self-care and Self-medication

The 1998 fourth consultative meeting of WHO on the role of the pharmacist in health care focused on the role of the pharmacist in self-care and self-medication (WHO, 1998:1). The consultative group defined self care as "*what people do for themselves to establish and maintain health, prevent and deal with illness.*" (WHO, 1998:2). The consultative group also recognised self-care as a broad concept with self-medication as one of its elements. Self-medication was then defined as "*the selection and use of medicines by individuals to treat self recognised illnesses or symptoms.*" (WHO, 1998:3)

People's inclination towards self-care and self-medication increased due to factors such as a ready access to drugs and medication, the increased potential to manage certain diseases (including acute, chronic and recurrent illnesses) through self-care, public health, the

emergence of a better-informed patient and the greater availability of medical products (WHO, 1998:4; FIP, 1996:1). However, people's understanding of the use of medication will remain restricted to the medicines pharmacological and therapeutic properties. Moreover, people's cultural and social circumstances, their views and perceptions on their health problems, their expectations on the health care system and their beliefs regarding the role and effects of medication, will influence their use of the medication (Smith, 2001:92).

Pharmacists become key role-players in self-care by helping people to make informed choices through providing general advice and information as well as interpreting the information available (WHO, 1998:10; Holland & Nimmo, 1999:1763). Where self-medication is concerned, the pharmacist may, in individual settings, recommend safe and efficacious products as well as make the necessary referrals (Holland & Nimmo, 1999:1763).

According to the WHO consultative group, the role of the pharmacist in self-care and self-medication lies in the pharmacist's function as a communicator, a quality drug supplier, a trainer and supervisor, a collaborator (between other health professionals, national professional associations, the pharmaceutical industry, government and patients) and a health promoter (WHO, 1998:7).

In recognising that encouraging self-care would help improve people's health and limit the rate of increase in third party funded expenditure on health care, the FIP recommended that the aim of governments in countries where the pharmacies are unevenly distributed, should be ensuring that the vast majority of the public would have access to a pharmacy (FIP, 1996:1).

2.6.3.5 Preventive Care

Pharmacists can and should play an increasingly important role in preventative health through individual counselling and the activation of the patients to practise good self-care. Preventative health care may be primary or secondary. Primary prevention involves promotion and maintenance thereof. Pharmacists may take part in this through health education, however *"although many pharmacists passively make this information available to patients, they are generally not zealous in their promotion of primary prevention since there are no economic incentives to do so"*. Secondary prevention involves early detection of an unknown health problem through screening or optimising drug therapy (Jinks *et al.*, 1982:12).

The South African Pharmacy Council (2007:13) found that pharmacists in South Africa have diversified their practice by promoting public health and providing primary health care services.

Furthermore, according to the South African Pharmacy Council, pharmacy in South Africa has become an essential entry point into the health care environment.

However, according to the National Drug Policy in South Africa (Department of Health, 1996:6), the manufacture, supply and dispensing of drugs may only be conducted in pharmaceutical structures registered and/or licensed with the relevant councils. In addition, the retail trade in drugs is confined to a licensed place for the sale of drugs or medication, which by virtue of its staffing can provide comprehensive pharmaceutical service. This is to ensure the safety, effectiveness and quality of the pharmaceutical services and products reaching the patient. Schommer *et al.* (2006:349) maintain that an understanding of the location of pharmaceutical structures is important for monitoring access to pharmacy services such as those discussed in the preceding discussions. Moreover, the location of pharmacies affects the extent to which pharmacists participate as active members of collaborative health care teams.

2.7 RETROSPECTIVE VIEW ON THE AVAILABILITY OF PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA

In 1998, the pharmaceutical services in South Africa in terms of human and financial resources were inequitably distributed, between and within the provinces of South Africa. Furthermore, pharmaceutical services were identified as *“a poorly developed segment of health care delivery in most areas, with considerable room for improvement if it is to deliver an acceptable, affordable, and equitable service at all levels”* (Gray, 1998:110).

Gilbert (1998a:277) found that the mal-distribution of pharmaceutical resources between the rural and urban areas and between the public and private health care sectors led to a situation where the health care services did not meet the health needs of those communities suffering from the greatest burden of disease. In addition, good quality health care was not available to them from the public sector and private health facilities were expensive and affordable only to an affluent minority.

According to a 1998 report by the Interim Pharmacy Council of South Africa (IPCSA), there were 3,672 pharmaceutical structures in South Africa for that year (1998). The pharmaceutical structures could be classified into five main categories namely, public hospital pharmacies, community pharmacies (which included also private hospital pharmacies), manufacturing pharmacies, wholesale pharmacies and Transmed pharmacies.

Of the registered pharmaceutical structures providing services directly to the patients, those of the private health care sector were significantly more than those of the public health sector. Table 2.8 shows the total number of registered structures for each pharmacy category, with an indication of the percentage proportion of each. As evident from the table, the majority of pharmaceutical structures (74%) were community pharmacies while the public hospital pharmacies made up 10% of the total number (IPCSA, 1998:28).

Table 2.8: Total number of pharmacies per pharmacy category, 1998 (IPCSA, 1998:29)

	Total number	% proportion
Community pharmacies	2700	74
Wholesale pharmacies	396	11
Public hospital pharmacies	376	10
Manufacturing pharmacies	96	3
Transmed pharmacies	59	2
Total	3 627	100

There was a maldistribution of the registered pharmaceutical structures among and within the provinces of South Africa (Gilbert, 1998a:279). This is also apparent from table 2.9 which shows the percentage proportion of each pharmacy category situated within each province for the year 1998. The ICPSA noted that although less than 20% of the country's total population was situated in Gauteng, about 36% of the registered community pharmacies were situated in this province, while the percentage of community pharmacies situated in the Eastern Cape and Northern Cape province were significantly lower than the percentage population situated within them (IPCSA, 1998:34). Furthermore, according to the IPCSA, the percentage proportion of registered public hospital pharmacies situated in Gauteng (15%) was slightly under-representative of the population spread while, on the other hand, the 25% of the public hospital pharmacies were situated in the Western Cape province which contained a proportion of 11% of the country's total population (IPCSA, 1998:29). This fact may have been contributed to by the nature of hospitals in the Western Cape operating as 'day hospitals' servicing outpatients (Serfontein, 2009).

Table 2.9: Percentage of pharmacies situated within each province per pharmacy category, 1998 (IPCSA, 1998:29)

	Public hospital pharmacies (%)	Community pharmacies (%)	Manufacturing pharmacies (%)	Wholesale pharmacies (%)	Transmed pharmacies (%)
Eastern Cape	10	8	8	7	12
Free State	5	6	1	4	5
Gauteng	15	36	70	59	44
KwaZulu-Natal	15	18	10	11	10
Mpumalanga	7	6	1	1	5
Northern Cape	5	2	-	1	3
Northern Province	8	3	-	1	2
North West	10	5	-	1	2
Western Cape	25	16	10	14	17
Total (South Africa)	100	100	100	100	100

Gilbert (1998b:276) noted that the provinces with a lesser proportion of the total number of registered pharmacies (Northern Province, Eastern Cape and Northern Cape) were also provinces which were largely disadvantaged in other resources. Furthermore, the community pharmacies were notably distributed such that the provinces which were mainly rural contained few community pharmacies which were concentrated in the urban centres, while a larger proportion of these were situated in the then “white centres” of the metropolitan areas.

Given that the estimated total population of South Africa was 42,130,500 people in 1998 (Statistics South Africa, 1998:12), it can be estimated that the ratio of the pharmaceutical structures providing services directly to the patients was one per 13,696 people for that year. Further projections of the pharmacy per population ratio for each province using the estimated total populations of each province by Statistics South Africa (1998:14) are presented in table 2.10.

Table 2.10: Estimated pharmacy per population ratio for the direct service pharmacies in each province, 1998

	Public hospital pharmacy per population ratio	Community pharmacy per population ratio	Direct service pharmacy per population ratio
Eastern Cape	1:171 560	1:30 181	1:25 666
Free State	1:143 400	1:16 818	1:15 053
Gauteng	1:136 207	1:7 847	1:7 419
KwaZulu-Natal	1:155 827	1:17 955	1:16 100
Mpumalanga	1:112 477	1:18 052	1:15 555
Northern Cape	1:45 336	1:15 952	1:11 800
Northern Province	1:172 623	1:63 935	1:46 655
North West	1:91 610	1:25 786	1:20 122
Western Cape	1:43 478	1:9 460	1:7 770
South Africa	1:112 046	1:15 604	1:13 696

Gilbert (1998b:283) described pharmacists in South Africa as *“an untapped, and highly qualified, resource that can be utilised more effectively and appropriately to the benefit of the health-care system and the public”*. Gilbert continued by pointing out pharmacy's potential as a relatively inexpensive, readily accessible institution from which persons may seek medical help and thus recommended a more equitable distribution of pharmacies so that they would be more accessible to all.

According to Norris (1997:260), the following interventions may be used in response to problems of access and availability of pharmaceutical structures:

- Allowing market forces, which are subject to interventions such as state funded pharmaceuticals, state remunerated dispensing services, state regulated prices on medication and pharmaceuticals and state regulated entry into the pharmacy market, to determine pharmacy location.
- Nationalising pharmacies, where the state owns the pharmacies and decides on the necessity of a pharmacy in a particular location and operate the pharmacy at a loss, where necessary.

- Introduction of a pharmacy licensing system whereby pharmacies are privately owned but subject to restrictions imposed by the state on the number and location thereof in particular geographic areas.
- Increasing incomes of pharmacists operating pharmacies in remote areas.
- Allowing doctors to dispense prescribed drugs, which may increase prescription errors due to the absence of a pharmacist to double-check prescriptions.
- Introduction of mail-order pharmacies.

These and other interventions are outlined in the South African National Drug Policy (discussed in section 3.3.1) which has formed the basis of statutory regulations imposed on the pharmaceutical sector to improve access to and availability of pharmaceutical structures.

2.8 CHAPTER SUMMARY

This chapter reviewed relevant literature on the demographic, urban-rural and socio-economic profile of the South African population, the state of health in South Africa, the concept of access to health care, the South African health delivery system and goals thereof, the role of pharmacists in health care as well as a retrospective view of the availability of pharmaceutical structures in South Africa, in order to establish the significance of pharmaceutical structures in South Africa. In addition, the discussions on these aspects provided a framework for the demographic, social, economic, health and political context within which pharmaceutical structures in South Africa exist.

CHAPTER 3:

FACTORS INFLUENCING THE AVAILABILITY OF PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA

3.1 INTRODUCTION

Pharmaceutical structures are subject to a unique set of constraints and incentives, which either limit or promote their availability (Norris, 1997:259). This chapter serves to provide insight on how the health care system, of which pharmaceutical structures are part of, the regulations of the pharmaceutical sector, the subject of location allocation and human resources in pharmacy act as constraints and incentives to influence the availability of pharmaceutical structures.

3.2 THE HEALTH CARE DELIVERY SYSTEM

Pharmaceutical structures operate as part of the country's health care system. Already in 1986, Weaver (1986:716) recognised that "*pharmacy will need to change as the health care systems change*". Furthermore, according to Selden (1989:42), the availability of pharmaceutical structures and services is not only influenced by their contribution to the health care system but, also by transformation and the present state thereof.

In a study done on market forces and the availability of community pharmacies in America, Doucette *et al.* (1999:1726) found that the areas containing a high proportion of people receiving public assistance tend to be serviced by independent pharmacies, which act as an important health care access point to the patients. However, this is not necessarily true of South Africa given the difference in socio-economic status of the population, as well as the relatively free health care services provided for by the government.

Discussions of the health care delivery system in South Africa were included in section 2.5 of chapter 2.

3.3 REGULATIONS OF THE PHARMACEUTICAL SECTOR

The pharmaceutical sector has traditionally been characterised by strict regulation, with the aim of providing high quality broadly accessible drugs (Volger *et al.*, 2006:1; CCSA, 2005:140; Anell, 2005:9). As has been mentioned in the preceding chapter (refer to chapter 2 section 2.5), the quest for equity and reduced disparities in health care provision additionally drives efforts of reform in South Africa. This also provides an added incentive to the regulation of health establishments in the country.

Legislation and regulations have been introduced which have influenced the distribution and availability of health establishments including also pharmaceutical structures. This section reviews the following legislation, that affects the availability of pharmaceutical structures:

- The National Drug Policy.
- The Certificate of Need.
- Regulations relating to pharmacy ownership and licensing.
- Regulations relating to the pricing of medicines.

3.3.1 THE NATIONAL DRUG POLICY (NDP)

In 1996, the South African Department of Health released the *National Drug Policy* (NDP). Through it, the government aims “to ensure an adequate supply of safe, cost-effective drugs of acceptable quality to all citizens of South Africa and the rational use of drugs by prescribers, dispensers and consumers.” (Department of Health, 1996:3)

The specific health objectives of the document are (Department of Health, 1996:4):

- To ensure the availability and accessibility of essential drugs to all citizens.
- To ensure the safety, efficacy and quality of drugs.
- To ensure good dispensing and prescribing practices.
- To promote the rational use of drugs by prescribers, dispensers and patients through the provision of the necessary training, education and information.

- To promote the concept of individual responsibility for health, preventive care and informed decision making.

The specific economic objectives of the document are (Department of Health, 1996:4):

- To lower the cost of drugs in both the private and public sectors.
- To promote the cost-effective and rational use of drugs.
- To establish a complementary partnership between Government bodies and private providers in the pharmaceutical sector.
- To optimise the use of scarce resources through cooperation with international and regional agencies.

The NDP recommended the following implementation strategies, with regard to legislation and regulation, for the purpose of ensuring that drugs reaching patients are safe, effective and meet approved standards and specifications, which in turn influence the availability of pharmaceutical structures in South Africa (Department of Health, 1996:7):

- Only practitioners that are registered with the relevant Council and Premises that are registered and/or licensed in terms of the Medicines and Related Substances Control Act 101 of 1965 may be used for the manufacture, supply and dispensing of drugs.
- Medical practitioners and nurses will not be permitted to dispense drugs except where separate pharmaceutical services are not available and are subject to the requirement that they be in possession of a dispensing licence.
- The retail trade of drugs will be confined to a licenced place for the sale of drugs, which by virtue of its staffing can provide a comprehensive pharmaceutical service.
- Where it is deemed in the interest of the public, ownership of pharmacies by lay persons and other health professionals will be considered and, should this type of ownership be permitted, the pharmacy will be expected to be under the full-time management and supervision of a registered pharmacist.

With regard to drug pricing, implementation strategies outlined in the NDP which aim to promote the availability of safe and effective drugs at the lowest possible cost, which in turn affect the

viability and consequently the availability of pharmaceutical structures, are (Department of Health, 1996:9):

- The pricing structure will be rationalised by way of ensuring total transparency in the pricing structure of all involved in the distribution chain;
- introducing a non-discriminatory pricing system which if need be will be enforced;
- replacement of mark up prices on drugs with a pricing system based on a fixed professional fee for services;
- free supply of drugs at the primary care level and a levy of a fixed, affordable co-payment for drug supplies at secondary and tertiary levels; and
- the regulation of price increases.

Within the key area of procurement and distribution, the NDP aims to achieve an adequate supply of effective and safe drugs of good quality to all people in South Africa (Department of Health, 1996:13). Among the strategies outlined to ensure this, the document once more proposes allowing and permitting ownership of pharmacies by non-pharmacists. In this case, however, it is recommended for those areas with inadequate pharmaceutical services and where it is clearly not for personal gain (Department of Health, 1996:15).

The strategies put forward in the NDP document have formed the basis of various legislative regulations imposed on the pharmaceutical sector since 1996.

3.3.2 THE CERTIFICATE OF NEED

The National Health Act (61/2003) requires every new and existing health establishment to possess a certificate of need in order to be allowed to practice in a particular geographic area (Leon & Mabope, 2005:34).

On recognising that the health care resources in the country were inequitably distributed, with a concentration thereof in well-heeled urban areas rather than in poorer or rural areas, the government introduced the certificate of need as a measure to ensure that, gradually, health services would become evenly and equitably distributed in South Africa (Tshabalala-Msimang,

2002; Bisseker, 2003). This would be achieved based on consideration of the following criteria before issuing or renewing of the certificate of need (South Africa, 2003:45):

- The need to ensure consistency in the development of health services in terms of national, provincial and municipal planning.
- The need to promote an equitable distribution and rationalisation of health services and health care resources, as well as the need to correct racial, gender, economic and geographic based inequities.
- The need to promote an appropriate mix of public and private health services.
- The demographic and epidemiological characteristics of the population potentially to be served by the health establishment in question.
- The potential advantages and disadvantages to already existing private or public health services and to the affected community.
- Employment equity.
- The potential benefit of research and development with respect to the improvement of health service delivery.
- The need to ensure that ownership of health facilities does not create perverse incentives for health care services providers.
- The probability that the health establishment in question will be financially sustainable and viable.
- The quality of care offered.

The Department of Health would be hereby given the authority to prevent the opening of any health establishments, in their geographic areas of choice, if according to the above-mentioned and other criteria, it is deemed inappropriate to do so.

The implementation of the Certificate of Need was challenged by doctors and other health professionals on the basis of the following arguments:

- The Certificate of Need infringes on the health practitioner's right to freedom of choice in trade, occupation or profession and occupation (Bateman, 2003:889).

- The criteria for the determination for issuing a Certificate of Need, as presented above, are poorly defined and accompanied by the lack of an information system to verify the accuracy thereof, which may lead to subjective political decisions on the issuing of the Certificate to health establishments (Bateman, 2003:888; Besseker, 2003).
- The health care system lacks sufficient and efficient infrastructure to deal with the implementation of the Certificate of Need (as applications from existing and prospective health establishments may become a burden) (Bateman, 2003:888, Besseker 2003).
- The fear that the Certificate of Need may force practitioners and health establishments to move to the rural areas and the fear that such enforcement may stimulate a mass exodus of practitioners to foreign countries (Bateman, 2003:888).

Consequently, implementation of the Certificate of Need has remained dormant over the years and remained 'unproclaimed' during the study years (De Roubaix, 2006:514)

3.3.3 REGULATIONS RELATING TO OWNERSHIP AND LICENSING OF PHARMACIES

The Pharmacy Act 53 of 1974 directly regulates pharmacies and pharmacists in South Africa. In terms of section 22A of the Pharmacy Act, as amended, the Minister of Health has prescribed who is authorised to own a pharmacy, the conditions under which they may own a pharmacy as well as the conditions upon which authority for ownership may be withdrawn.

Subsequent to the above-mentioned section 22A, regulations relating to the ownership and licensing of pharmacies came into effect, in 2003 (Department of Health, 2003:3). The regulations make provision for pharmacy ownership by non-pharmacists. This was done in consultation with the South African Pharmacy Council and in line with the implementation strategies set in the NDP, as a measure to promote more equitable distribution of pharmacies throughout the country (South African Pharmacy Council, 2002:2; Deeney, 2003:453).

The regulations relating to the ownership and licensing of pharmacies are summarised in table 3.1, wherein the entities allowed ownership along with the restrictions and criteria for ownership of the different categories of pharmacy, have been indicated.

Table 3.1: Summary of the regulations relating to the licensing and ownership of pharmacies in South Africa.

Type of pharmacy	Entities allowed ownership	Restrictions	Conditions for ownership
Community Pharmacy	-Any person. -In case of body corporate, the: shareholder, director, trustee, beneficiary or member,	- Prohibition by legislation - Authorised prescribers - Persons with any direct or indirect beneficial interests in or on behalf of the persons mentioned above - Owners or holders of any direct or indirect beneficial interest in a manufacturing pharmacy	- Must satisfy Good Pharmacy Practice criteria - Must satisfy criteria for the determination of need with respect to the area they wish to practise - Pharmacy must be under management and supervision of a responsible pharmacist at all times.
Institutional Pharmacy in private and public health facilities			
institutional pharmacies in public health facilities	The State	None applicable	- Pharmacy must be under management and supervision of a responsible pharmacist at all times.
Consultant Pharmacy	Any person	None	- Must satisfy Good Pharmacy Practice criteria - Must satisfy criteria for the determination of need with respect to the area they wish to practise
Manufacturing and Distribution (Wholesale) Pharmacies	Any person	None	-Must satisfy Good Manufacturing and Good Distribution standards as applicable - Pharmacy must be under management and supervision of a responsible pharmacist.

3.3.3.1 Ownership

In terms of the ownership regulations, ownership of institutional pharmacies (in private and public facilities) and community pharmacies is permitted to any person or in the case of a body corporate, the shareholder, director, trustee, beneficiary or member, as the case may be, who

- is not prohibited by any legislation from owning a pharmacy or having any direct or indirect beneficial interest in such a pharmacy;
- is not an authorised prescriber;
- does not have any direct or indirect beneficial interest in or on behalf of a person contemplated in the above mentioned criteria; or
- is not the owner or the holder of any direct or indirect beneficial interest in a manufacturing pharmacy.

In addition, co-ownership and ownership of multiple pharmacies is permitted in South Africa. The result is the deregulation of pharmacy ownership, as non-pharmacists may own pharmacies on condition that the pharmacy be under the constant supervision and management of a registered, responsible pharmacist.

The ownership regulations additionally make provisions for ownership of institutional pharmacies in public health facilities by the State. Further provisions permit the State to enter into arrangements with the private sector for the management of an institutional pharmacy in a public health facility. The pharmacy council foresees these provisions as those that may *“...pave the way for possible public-private partnerships between the State and the private sector for the provision of pharmaceutical services.”* (South African Pharmacy Council, 2003:2)

The ownership regulations also allowed for ownership of private institutional pharmacies by private hospitals, provided that the authorised prescribers of the hospital do not have a direct or indirect beneficial interest in the pharmacy (South African Pharmacy Council, 2002:2).

Pertaining to Consultant, Wholesale and Manufacturing pharmacies, the ownership regulations allow for any person to own or have beneficial interests in them. However, for the purpose of this study, the licensing of these providers is outside the scope of this study.

3.3.3.2 Licensing

According to the National Drug Policy, the retail trade in drugs is confined to a licensed place for the sale of drugs, which by virtue of its staffing can provide a comprehensive pharmaceutical service (Department of Health, 1996:7). Persons or entities who wish to and are entitled to own a pharmacy, should apply for the licensing of the pharmacy.

The granting of licences depends on whether the prospective owners satisfy delivery standards as well as the Department of Health's criteria for the determination of need for the pharmaceutical service in a particular area. The Department of Health is hereby given the authority to prevent the establishment of any pharmaceutical structure if it does not comply with these criteria.

Delivery standards

Delivery standards are evaluated based on the following two principles:

- Whether the pharmacy is able to comply with standards of Good Pharmacy Practice (GPP); Good Manufacturing Practice (GMP) or Good Distribution Practice (GDP) as applicable.
- An undertaking that the owner will comply with the standards of the GPP, GMP or GDP, as applicable.

The pharmacy is legally required to be under continuous supervision of a responsible pharmacist. The applicants should therefore be able to provide the Department of Health with information regarding the pharmacist.

Criteria for the determination of need

Criteria for the determination of need for the pharmaceutical service in respect of an area, for which the application is made, which must be satisfied, include but are not limited to the following:

- The location of the premises applied for.
- The benefit to members of the specific community that the pharmacy intends to serve.
- The nature and extent of the pharmaceutical services to be provided.

- A statutory requirement for the location of a pharmacy within a private or public health facility.
- The approximate number of the population to whom the pharmaceutical services will be provided.
- The relationship between the proposed pharmaceutical service and existing services and facilities.
- The extent of the provision of services to persons outside the service area and the extent and nature of the availability of pharmaceutical services in the nearby areas.
- Any special care needs of the community to be served.
- An inspection report of the premises by the South African Pharmacy Council.

Prospective pharmacy owners are accordingly required to supply the Department of Health with the following in order to prove the necessity for the pharmacy in a particular area:

- The exact geographic location of the pharmacy.
- The benefit of the pharmacy to the community within which it will operate. This includes information such as geographic accessibility and the health status of the specific community to be served.
- The type of pharmaceutical services to be rendered.
- The size of the population wherein the pharmacy will operate as well as an indication of special needs in that area that will be addressed and how they will be addressed.
- An indication of all other services present in the area such as dispensing doctors, clinics, hospitals and other private health service providers.

Table 3.2 shows the geographic and demographic criteria used by the Department of Health in establishing the need for a pharmacy in a particular area. The demographic determinants include that there should be a minimum of one pharmacy per 5000 people in city or town centres and urban areas, not more than one pharmacy per 50 000 foot count for pharmacies situated in shopping malls, and a minimum of one pharmacy per 2500 people in rural areas. The geographic criteria include that the minimum distance to the next pharmacy be 500m in city

or town centres and urban areas, and a minimum distance of 5km to the next pharmacy in rural areas, depending on the topography of the area (South African Pharmacy Council, 2006:36).

Table 3.2: Demographic and geographic criteria used by the Department of Health in establishing the need for a pharmacy in a certain area (South African Pharmacy Council, 2006:36)

	City/town centre	Urban area	Shopping Mall	Rural	Special circumstances *
Pharmacy per Population size	One per 5000 including daily visitors	One per 5000	One per 50 000 foot count per month	One per 2500	Special needs clinic, Elderly population, Disabled etc, Taxi Ranks, Bus stations, Railway Station
Proximity to other pharmacies	500 meters	500 meters	Not applicable	5 km dependent on topography	
Proximity to other medical services	Consider doctors in area – 500m (+ 40 patients per day)	Consider doctors in area – 500m (+ 40 patients per day)	Consider doctors in area – 500m (+ 40 patients per day)		

It should be noted that other health care providers may, under certain conditions, be issued with a licence to provide medicines to patients. This however, is outside the scope of this study.

The regulations relating to the ownership and licensing of pharmacies give the National Department of Health, as well as the South African Pharmacy Council, the authority to prevent the establishment of any pharmaceutical structures if they do not comply with the requirements as presented above.

3.3.3.3 Consequences of Regulations on Pharmacy Ownership and Licensing

Global trends in pharmacy ownership regulations prove that allowing for total freedom in pharmacy ownership (lay ownership without licensing and establishment criteria) leads to a growth in the number of newly established pharmacies and most likely increases pharmacy density, with a resultant increase in the availability of pharmacies to the population. However,

the growth in number of pharmacies does not necessarily mean improved availability in all areas as the pharmacies tend to become clustered in urban areas at the expense of less densely populated rural areas (Rudholm, 2008:262; Volger *et al.*, 2006:9; Anell, 2005:12; Norris, 1997:267). In addition, the growth in the total number of pharmacies in a particular area may damage the economic viability of already existing individual pharmacies (Volger *et al.*, 2006:132).

To the contrary, introduction of licensing systems and establishment criteria may limit the concentration of pharmacy structures in urban areas (Norris, 1997:261; Volger *et al.*, 2006:132).

Other consequences of allowing lay ownership of pharmacies include the following:

- The increase in the total pharmacy number leads to a decrease in the number of pharmacists per pharmacy and consequently increases workload and decreases job satisfaction for pharmacy personnel which may lead to a decrease in the quality of services rendered (Volger *et al.*, 2006:133; Anell, 2005:14).
- Lay ownership of pharmacies, where multiple ownership is permitted, leads to the development of pharmacy chains (Volger *et al.*, 2006:133). In South Africa, this has been the case as large retail firms (such as Clicks®, Dis-Chem®, Pick n Pay® and Shoprite®) have integrated the pharmacy market (Lowe & Montagu, 2009:38; Hall, 2007:428).
- The development of retail pharmacy chains may put pressure on independent pharmacies and subsequently result in closures of these (Lowe & Motangu, 2009:40). According to Hall (2007:416), in South Africa, a number of community pharmacies closed down, following the introduction of these regulations, a number of which were situated outside the metropolitan areas.

In 2007, Hall (2007:428) noted that the long-term effect of the regulations relating to the ownership and licensing of pharmacies in South Africa on the availability of pharmaceutical services in the rural areas of South Africa was unclear.

3.3.4 REGULATIONS RELATING TO THE PRICING OF MEDICINES

The viability and sustainability of a pharmacy is influenced by its ability to generate income from dispensing activities and the sale of medicines and related substances, among other activities (Department of Health, 2006c:1).

The sale or distribution of medicines and scheduled substances is strictly controlled by the Medicines and Related Substances Control Act 101 of 1965 (CCSA, 2004:212). In 1997, amendments were made to the Act, in an endeavour to make medicines more affordable and thus also to fulfil the state's constitutional obligation of providing everyone with access to health care services (Gray & Pillay, 2006:13; CCSA, 2004:6).

Of particular relevance to the viability, sustainability and therefore, the availability of pharmaceutical structures, is section 22G of the Medicines and Related Substances Control Act (101/1965). This section 22G makes provision for the introduction of a transparent pricing system for all medicines and scheduled substances that are sold in the country. Section 22G furthermore requires that the pricing system include a Single Exit Price (SEP) which is a fixed price at which manufacturers or importers may sell medicines to any person other than the state. Moreover, pharmacists and all other authorised dispensers are prohibited, by section 22G, from selling medicines at a price higher than the SEP. Section 22G additionally makes provision for pharmacists and all other authorised dispensers to be remunerated for their professional services by charging an appropriate dispensing fee. wholesalers would also be subject to selling medication at the SEP, but remunerated with a logistics fee (Beaumont & Klinck, 2008:1).

In April of 2004, in keeping with the above-mentioned provisions in the Medicines and Related Substances Act, the Department of Health published Regulations Relating to a Transparent Pricing System for Medicines and Scheduled substances (GNR.553 of April 2004). Important aspects of the regulations include the removal of perverse incentives by outlawing bonus systems (whereby dispensing practitioners are rewarded for selling more of a particular product), rebate systems and any other incentive schemes (TAC, 2003).

The Regulations GNR 553 of April 2004 accordingly also included a prescribed dispensing fee for pharmacists and other authorised prescribers. The Department of Health envisaged that such a measure would lower the price of medicines for consumers by between 40 to 70 per cent (Tshabalala-Msimang, 2003:1).

Retail pharmacy groups challenged the regulations and the prescribed dispensing fee claiming that they were not enough to ensure the viability of pharmaceutical structures such as community pharmacies, courier pharmacies, pharmacies in medical centres and hospital pharmacies as they depended heavily on revenue accrued from dispensing activities. Community pharmacies situated in rural areas would also be adversely affected by these regulations. Further speculation showed that this all would lead to pharmacies closing down thus limiting constitutional rights to access to health care (CCSA, 2005:211).

Arguing on the basis of an independent audited actuarial assessment, the Department of Health responded to these allegations making it clear that they were aware that community pharmacies would have to close down due to the new regulations but viewed it as necessary to improve access to pharmaceutical services (Williams, 2006:1288). They went on to claim that *“there are presently too many pharmacies for the population served by them, and the pricing system is premised on the assumption that when it comes into force the market will become more rational and pharmacies that are not viable will close down. The volume of business of those pharmacies that remain will increase and will be sufficient to enable them to trade profitably”* (CCSA, 2005:181).

The Constitutional Court of South Africa ruled in favour of the retail pharmacy groups. The Department of Health thereafter revised the prescribed dispensing fee. The newly revised dispensing fee for medicine, announced in 2006, stands as follows (Department of Health, 2006c:2):

- Where the SEP of a medicine is below seventy-five rand, the dispensing fee is a total of four rand plus 33% of the SEP of the medicines.
- Where the SEP of a medicine is seventy-five rand or more but below two hundred and fifty rand, the dispensing fee is a total of twenty-five rand plus 6% of the single SEP of the medicines
- Where the SEP of a medicine is two hundred and fifty rand or more but below one thousand rand, the dispensing fee is a total of thirty-three rand plus 3% of the SEP of the medicine.
- Where the SEP of a medicine is one thousand rand or more, the dispensing fee is a total of fifty-five rand plus 1.5% of the SEP of the medicines.

The newly proposed dispensing fee is believed to offer the consumer “a saving on medicine” in comparison to the mark-up system. This will therefore still ensure that “South African citizens

obtain value for their money when purchasing pharmaceutical products, whether this is in the public or private health sector" (Department of Health, 2006c:1) at the same time, maintaining viability and sustainability of pharmaceutical structures. This matter had, however, not yet been concluded during the study years of this study.

3.4 LOCATION ALLOCATION

The specific location of pharmaceutical structures directly influences their geographical distribution. This considered, factors affecting their location allocation would in turn influence their availability.

In order to optimise the location of a particular pharmaceutical structure, the establisher should be able to predict the possibility that clients will engage in that particular location for the services offered in the structure and the sales potential of the target market (Tootelian & Gaedeke, 1993:127). Health service utilisation is determined by the need for a service, the availability, accessibility and affordability of the services and the perception of the service itself (Rankin *et al.*, 2002). This section draws on the subject of location allocation with particular reference to the factors that influence the choice of location (market forces), the geography of the locations and quantitative location allocation analysis, so as to determine their influences on the availability of pharmaceutical structures.

3.4.1 FACTORS INFLUENCING THE CHOICE OF LOCATION

As indicated in section 3.3, the location of any pharmaceutical structure in a specific area is subject to government-imposed constraints that require that the pharmaceutical structure prove its necessity for the community of the particular area. Moreover, the location of any pharmaceutical structure is a vital element to its success as it determines the type and number of patients it will attract (Tootelian & Gaedeke, 1993:119). Smith (1986:103) maintains that the basic principle to a good pharmacy location is *"to locate in or near high population density and where competition is not too severe"*.

Nolutshungu & Davie (2005:20) are of the opinion that economic factors are the main drivers determining choice of locations for private health facilities, while political factors are the main drivers determining choice of location for public health facilities. Private providers have to justify

establishing a new facility by showing that it will be a viable business. A good location for a private health facility would therefore be one that will show a good return consequently leading to an establishment of more private health facilities in high-density urban areas and bigger cities. On the other hand, government facilities in South Africa are intended to serve those members of the population who are unable to afford services from service providers or pay anything at all. A good location for the public health facilities would therefore be one that would serve the largest number of the population, regardless of their ability to pay.

A summary of the factors influencing the choice of pharmacy location as presented by Smith (1986:108), Tootelian & Gaedeke (1993:121) and The American College of Apothecaries (1980:25) yields the following classes of factors, which will be discussed:

- Population distribution.
- Demographic factors.
- Economic factors.
- Competitive factors.
- Institutional factors.
- Pharmacy type.

3.4.1.1. Population Distribution

The characteristics of the population that are considered would include the total size and density as well as the growth trends of the population to be served (Tootelian & Gaedeke, 1993:121).

A study done in Minnesota by Schommer *et al.* (2006:355) found that the growth of community pharmacies occurred in areas typically experiencing increases in population density. This study and one also done by Doucette *et al.* (1999:1276) found that retail pharmacy chains were not likely to locate in sparsely populated rural areas which did not have the prospected minimum number of people needed to support the pharmacy.

The American College of Apothecaries (1980:28) recommended that pharmacies should be located in areas which will continue to attract a large number of patients for the next 15 to 20 years. Given the increased migration of people from rural to urban and also suburban areas (Smith, 1986:102) it is evident that if the recommendation is considered, there will be more pharmaceutical structures in the urban areas.

3.4.1.2. Demographic Factors

Demographic factors include the gender, age, and race characteristics of the population. These characteristics are considered the primary factors in the selection of a location because they determine largely the need and demand for the pharmaceutical structure and thus its potential viability (Smith, 1986:108).

According to Cockerham (1992:39), women suffer from more frequent disabilities and illnesses than men. However, their usual health disorders are not as life-threatening as those of men. As a result, women utilise health services more often than men (Lyons & Chamberlain, 2006:212; Taylor, 2006:220 & Cockerham, 1995:97). However, women's use of health care services may, in instances such as developing or underdeveloped countries, be complicated by the custom and traditions of the area, their education, income, an abundance of domestic activities and power over household finances and decision making (Buor, 2004:385).

An individual's age also influences his or her health care utilisation. The very young and elderly use health services most frequently (Aday & Anderson, 1974). This may be attributed to the fact that young children develop a number of infectious childhood diseases as they are acquiring immunities. The frequency of illnesses and the use of services decline in adolescence and throughout young adulthood. Use of health services then increases again in late adulthood, when people begin to develop chronic conditions and diseases. The elderly use services for a variety of disorders related to the ageing process (Taylor, 2006:220). Already in 1976, Knoben and Wertheimer (1976:398) stated that medicine usage of people of 45 years and older is about twice as high as the expected average. Also in the same year, based on their research in the United States of America, Bush and Rabin (1977:227) made the comment: "after childhood, the rate of prescribed medicine use tended to increase with age with female rates remaining higher than male rates." According to a study by Doucette *et al.* (1999:1275), a low percentage of elderly people in a particular area implies a younger population in the area which may result in less use of the pharmacy services.

Patterns of help-seeking behaviour among lower class ethnic groups appear to be strongly influenced by both the conditions of poverty and existence of tightly knit social networks (Cockerham, 1995:106). What is suggested by various studies conducted on effects of ethnicity on health care utilisation is that ethnicity per se is not important but rather represents a social experience that influences how a particular person perceives his or her health situation and plays a role in providing a cultural context for decision making within social networks (Cockerham, 1995:106). Attempts have been made to relate people's utilisation of health

services to their own cultural background. This mainly concerns the belief in and acceptance of modern medicines (Cockerham, 1995:98). Cultural factors may determine whether a person uses formal treatment or traditional and other treatment options. In addition, people may hold beliefs about illness that do not correspond with the beliefs of the medical profession, and this could lead those people to use a lay referral system of care instead (Taylor, 2006:221).

3.4.1.3. Economic Factors

Tootelian & Gaedeke (1993:127) recommend that the pharmacy owner estimates the total spending of the people in each target market and the amount they would spend on pharmaceuticals, in selecting an appropriate pharmacy location. The American College of Apothecaries (1980:26) also recommended that the source of purchasing power be examined when considering a particular community wherein to establish a pharmacy. A consequence of this logical and sensible approach is that there will be more private health facilities in high-density urban areas than in sparsely populated rural areas. There will also be more facilities in bigger cities than in smaller towns (Nolutshungu & Davie, 2005:21) or areas with diversified industries (Tootelian & Gaedeke, 1993:121, Smith, 1986:109, American College of apothecaries, 1980:27)

Poverty is associated with poor utilisation of health care services (Buor, 2004:377). According to Taylor (2006:220), the lower classes use medical services less than the more affluent social classes, in part because the poorer classes have less money to spend on health services (Taylor, 2006:220). Doucette *et al.* (1999:1276), however, found that community pharmacies in America, especially independently owned pharmacies, provide services in areas of definite poverty. The presence of a community pharmacy in a poor area created opportunities for people to access health care.

Financing intermediaries have also been found to play a role in the availability of community pharmacies. Where a financing intermediary such as medical aid schemes, possesses considerable bargaining power, this may reduce the number of community pharmacies that survive (Doucette *et al.*, 1999:1276).

3.4.1.4. Competitive Factors

Competitors for pharmacies include other pharmacies, independently owned, chain pharmacies and those situated in shopping centres and malls, as well as mail order pharmacies and other

medication dispensing practitioners (Tootelian & Gaedeke, 1993:129, American College of Apothecaries, 1980:27).

According to Tootelian and Gaedeke (1993:129), it is important for a retail pharmacy to know everything there is to know about its competitors including the total number thereof, their size and distribution, their competitive growth trends, aggressiveness, methods of operation and the type of services provided. The presence of competitors in an otherwise suitable market may adversely affect the viability of a pharmacy (American College of Apothecaries, 1980:27). The American College of Apothecaries (1980:37) furthermore noted that the optimal location would be one with minimal competition.

3.4.1.5. Institutional Factors

Smith (1986:109) maintains that a suitable pharmacy location is one that contains supportive social and cultural institutions. These institutions include economic institutions such as banks and an adequate number of shops and stores, adequate transportation, utilities, good educational and health institutions such as hospitals, cultural and religious institutions such as churches, and skilled artisans and professionals.

These supportive social and cultural institutions increase the cumulative attraction of a specific location and often represent the market place. The American College of Apothecaries (1980:35) maintain that locations with optimum business interception are those situated between the market and the market place.

According to Doucette *et al.* (1999:1277), areas in America with a small number of hospital admissions are serviced primarily by independently owned pharmacies, while areas with high levels of hospital admissions attracted chain store pharmacies.

The South African Department of Health also recognised that the location of almost all health education and training institutions in urban areas influences the choice of urban employment by young professionals (Department of Health, 2006a:15).

3.4.1.6. Pharmacy Type

According to Smith (1986:109), another factor to be considered is the type of pharmacy practice to be established. Section 2.6.1 of this dissertation provides an in-depth discussion of the different types of pharmacies in South Africa.

3.4.2 QUANTITATIVE LOCATION ALLOCATION ANALYSIS

Location allocation models are used as scientific methods to locate health facilities in the most desirable location (Scarpaci, 1984:1155). Location allocation modelling can play a significant role in making health facilities more accessible to people (Rahman & Smith, 1999:892). In the absence of any formal analysis and generation of alternatives, the final decision of facility location can be made based on political or pragmatic decisions (Rahman & Smith, 2000:437). Nolutshungu and Davie (2005:21) believe this to be the reality for public facilities in South Africa where ruling parties allocate government facilities (including those for health) *“in places that are politically most beneficial for them so that the best quality of service is provided for their political supporters”*.

The use of location allocation models in locating health facilities, particularly in developing countries, not only serves to find a set of optimal sites but also to locate optimal sites in new areas, measure the effectiveness of past location decisions and improve existing location patterns (Rahman & Smith, 2000:440).

Literature abounds with a myriad of models used in locating health facilities (Smith *et al.*, 2007:769; Moller-jensen & Kofie, 2001:145; Carreras & Serra, 1999:91;). Carreras and Serra (1999:91) classify the models into two groups – those employed in locating public health facilities and those applied in the location of private health facilities.

The first group includes models that aid in locating facilities of the public sector where the main aim is to optimise some measure of service quality in terms of access (e.g. minimising average distance to the service). The second group includes models for the location of facilities in the private sector, which are often located to fulfil precisely stated objectives such as to minimise cost or maximise profit (Rahman & Smith, 2000:439).

3.4.3 THE GEOGRAPHY OF LOCATIONS

Land area can be divided geographically into urban and rural areas. The characteristics of these areas differ according to their demographic, economic and institutional characteristics (see also section 2.2.2).

Rural areas are characterised by extensive land uses such as agriculture and forestry or by large spaces of underdeveloped land, which contain small, lower order settlements (Dictionary

of Human Geography, 2000:718). Rural areas are also least affected by the process of urbanisation and are therefore more associated with a much more dispersed pattern of population distribution and economic activity. Urban areas, on the other hand have higher levels of economic development and opportunities (Grimes, 2000:14).

Rural populations are generally poorer, have less education and have fewer population of the working age in comparison to the urban areas. In addition, their isolation and distance from the metropolitan or urban centres accompanied with the poor quality of roads increase their difficulty in contacting health personnel or facilities (Arcury *et al.*, 2005:136).

Nolutshungu & Davie (2005:22) note the following reasons for the fact that advanced facilities and medical specialists are most likely situated in urban than rural areas, which could also apply to pharmaceutical structures:

- A greater incidence of complex medical problems can be expected in cities because of the greater population densities.
- There is a preference to work where there are other skilled professionals and to live where there are higher quality amenities.
- City hospitals can afford to have better and more modern equipment than rural hospitals.
- There is a greater possibility that patients in urban areas can travel relatively long distances to the facilities than in rural areas where the services have to come to them.
- There is a greater supply of affluent patients who can afford an array of treatments as opposed to rural areas which are limited to the most basic and essential treatments.

Other reasons for the preference of urban to rural areas for the location of pharmaceutical structures were included in section 3.4.1.

3.5 PHARMACY HUMAN RESOURCES

The NDP requires that pharmaceutical services be rendered only in licensed facilities which “*by virtue of (their) staffing can produce a comprehensive pharmaceutical service*”. Furthermore, as discussed in section 3.3.3, registered pharmaceutical structures, in South Africa, are required to be under the management of a responsible pharmacist. From this, it is evident that the availability of registered pharmaceutical structures in South Africa will be influenced by the availability of pharmacy human resources.

The pharmacy Act 53 of 1974 recognises the following categories of pharmacy personnel: pharmacists, pharmacy interns, pharmacy students and support personnel, which include pharmacist's basic, learner basic and post-basic assistants.

Hall (2007:427) is of the opinion that the number of new pharmacists produced in South Africa is sufficient. However, as a result of the inequitable distribution of pharmacy personnel across provinces, between the private and public health care sectors and the outflow of pharmacists to other countries, the shortages of pharmaceutical skills in the country prevail.

Pharmacists in South Africa prefer to work in the private health care sector and metropolitan areas. However, demand for pharmaceutical skills is greater in the public health care sector and provinces with large rural populations (Hall, 2007:427).

The changing duties and responsibilities of pharmacists require them to offer a broader range of services than in the past (see also section 2.6.2 and 2.6.3). Additional pharmacy personnel are needed to assist with the rollout of free antiretroviral therapy, which is part of the Department of Health's strategy to mitigate the impact of HIV/AIDS (Hall, 2007:414). In addition, pharmacists are often required to relieve the workload problems of other health care professionals. This, coupled with the increase in dispensing demand, increases the workload of pharmacists and pharmacy personnel (Hall, 2007:411).

3.6 CHAPTER SUMMARY

In this chapter, the health care system, the regulations of the pharmaceutical sector, the subject of location allocation and the issues of human resources in pharmacy, with particular reference to the South African situation, were discussed as factors that may either promote or limit the availability of registered pharmaceutical structures in South Africa.

CHAPTER 4:

EMPIRICAL INVESTIGATION

4.1 INTRODUCTION

In this chapter, the methodology used in conducting this research will be discussed. The chapter therefore includes a discussion of the research objectives, the research design, the target population, the research instruments, the data collection procedures as well as the data and statistical analysis procedures of the study. Ethical considerations as well as the limitations to the methodology of the study will also be discussed.

4.2 RESEARCH OBJECTIVES

The objectives of this research have been divided into a general objective and specific objectives.

4.1.1 GENERAL OBJECTIVE

The general aim of the research was to investigate the availability of registered pharmaceutical structures in South Africa over a six-year time period, extending from the year 2003 to the year 2008, according to the population distribution.

4.1.2 SPECIFIC OBJECTIVES

The specific objectives of this research included those which would be achieved by an overview of the relevant literature as well as those which would be achieved by an in depth empirical study.

The specific research objectives of the literature review were:

- To determine the significance of the availability of pharmaceutical structures in South Africa.
- To determine factors that influence the geographical location and the availability of pharmaceutical structures.

The specific research objectives of the empirical investigation were:

- To establish the geographical distribution of registered pharmaceutical structures in South Africa as of the year 2003 until 2008.
- To establish whether the different registered pharmaceutical structures that exist are geographically evenly distributed within the country.
- To determine the changes and the degree of changes in the distribution of the registered pharmaceutical structures in South Africa from the year 2003 to 2008.
- To establish the distribution of the registered pharmaceutical structures in South Africa, in relation to the population and clientele they are to serve, from the year 2003 until 2008.
- To establish whether the registered pharmaceutical structures are equitably distributed in relation to the population or clients they are to serve.
- To determine the changes and degree of changes in the availability of registered pharmaceutical structures from the year 2003 to 2008.
- To evaluate the availability and distribution of the registered community pharmacies in South Africa, 2003 and 2008.
- To establish the distribution trend or pattern of the different kinds of pharmaceutical structures in South Africa.
- To determine the impact of laws pertaining to the ownership and licensing of pharmaceutical structures on their availability.

4.3 RESEARCH DESIGN

The research was carried out in two phases. The first phase aimed to achieve the objectives set out for the literature review, as discussed above, through an extensive overview of the relevant literature.

The second phase, the empirical investigation, assumed a quantitative research methodology of a descriptive nature, to achieve the specific objectives set out for the empirical investigation

discussed above. This research methodology was selected as it allows for the application of mathematical and statistical treatment on evaluating the results (White, 2000:24).

4.4 TARGET POPULATION

The target population of this study included all pharmaceutical structures that existed and were registered with the South African Pharmacy Council as of the year 2003 to the year 2008. Furthermore, the pharmaceutical structures had to have appeared on the South African Pharmacy Council's register of pharmacies of August 2003, August 2004, August 2005, August 2006, August 2007 and August 2008.

The pharmacies retrieved from the South African Pharmacy Council's registers were arranged into the following different categories:

- Community pharmacies
- Mail order pharmacies
- Private institutional pharmacies (private hospital pharmacies)
- Private psychiatric pharmacies (private psychiatric hospital pharmacies)
- Public institutional pharmacies (public hospital pharmacies)
- Public psychiatric pharmacies (public psychiatric hospital pharmacies)
- Public correctional service pharmacies
- Public military service pharmacies
- Consultant pharmacies
- Manufacturing pharmacies
- Wholesale pharmacies

The specific geographical location (physical address) of the registered pharmaceutical structures was also obtained from the South African Pharmacy Council's registers of pharmacies. The empirical investigation made use of the country's demarcation system (discussed in section 2.1.2 of chapter 2), located, and analysed the pharmacies on the national, provincial, district council and local municipality level (also referred to as geographical regions of the country). As of the year 2006, certain district councils and local municipalities changed in that they were either merged with others, therefore shifting their borders across provinces, or their names changed but their borders remained the same. This made that the total number of municipalities in South Africa change from 272, for the years 2003-2005 to 256 for the years

2006-2008. In addition, municipalities which were cross boundary municipalities in the country, prior to 2006, were realigned into specific provinces (see also section 2.2.2). These changes were acknowledged in the study.

The target population of the study also included the estimated total South African population. Estimations relied on publications from Statistics South Africa as well as mathematical and statistical procedures. The total South African Population was estimated for the different provinces, district councils and local municipalities for all study years.

The study considered all the pharmaceutical structures that appeared on the South African Pharmacy Council's registers of pharmacies for the study years, as well as estimates of the total South African population and therefore, no sampling was effected.

4.5 RESEARCH INSTRUMENTS

The following documents were used as research instruments in collecting data for this study:

- The South African Pharmacy Council's register of pharmacies, for August 2003, August 2004, August 2006, August 2007 and August 2008.
- Publications by Statistics South Africa.

4.5.1 THE SOUTH AFRICAN PHARMACY COUNCIL'S REGISTER OF PHARMACIES

In terms of Act 53 of the Pharmacy Act of 1974, as amended, the South African Pharmacy Council is the statutory body responsible for the registration and de-registration of pharmaceutical structures. Registration of pharmaceutical structures is, furthermore, a prerequisite for all pharmaceutical structures wherein the business of pharmacy is to take place. In order to safeguard and promote the health of the South African population, any pharmacy not registered with the South African Pharmacy Council is therefore considered "unsuitable for carrying on the business of a pharmacy".

This study utilised the South African Pharmacy Council's register of pharmacies of August 2003, August 2004, August 2005, August 2006, August 2007 and August 2008.

As by Regulation 104 of Pharmacy Act 53 of 1974, the register of pharmacies contained the following information:

- The name and postal and physical address of the pharmacy.
- The name and address of the pharmacy owner.
- The name of the responsible pharmacist.
- The name of the managing director or manager, as the case may be.
- The name of the nominee, if applicable.
- The category in which the pharmacy is registered i.e. manufacturing, wholesale, institutional, community or consultant pharmacy.

The South African Pharmacy Council registers any pharmacy for which application has been sought wherefore the duly required registration fees have been paid and which meets the requirements and conditions for the registration of a pharmacy as set out in the Pharmacy Act 53 of 1974 (see also section 3.3.3).

The names of pharmacies may be removed from the pharmacy register due to the following reasons:

- The pharmacy does not comply with the conditions of registration e.g. the owner has not paid the duly requested registration fees.
- The responsible pharmacist of the pharmacy fails to perform the duties of a responsible pharmacist.
- The nominee of a company or the manager or nominee of a close corporation who owns a pharmacy fails to perform his/her required duties.
- The pharmacy fails to comply with Good Pharmacy Practice principles as published by the South African Pharmacy Council.
- The pharmacy has undergone a change of name or address.
- The owner has requested that the pharmacy be removed from the register.

4.5.2 PUBLICATIONS BY STATISTICS SOUTH AFRICA

The study utilised results from the following publications by Statistics South Africa to estimate the population of South Africa on national, provincial, district council and local municipality

levels: *Census 2001*, the *Community survey 2007* (Statistics South Africa, 2007b) and the *Mid-year population estimates 2008* (Statistics South Africa, 2008a).

4.6 DATA COLLECTION

Data regarding the distribution of pharmaceutical structures in South Africa were retrieved from the South African Pharmacy Council's register of pharmacies and consolidated with the published lists of pharmacies opened and pharmacies closed between the year 2003 and 2008.

The different types of pharmaceutical structures as discussed in section 4.3 above, were divided into the following categories, illustrated in figure 4.1:

- Direct service pharmacies – which included all pharmaceutical structures providing services directly to the patients (i.e.: community pharmacies, private hospital pharmacies, private psychiatric hospital pharmacies, public hospital pharmacies, public psychiatric hospital pharmacies, mail order pharmacies, public correctional and military pharmacies and consultant pharmacies).
- Indirect service pharmacies – which included all pharmaceutical structures providing services indirectly to the patients which may also be described as a support system to direct service pharmacies (i.e.: manufacturing pharmacies, wholesale pharmacies, government depots and, in some instances, consultant pharmacies).
- Private institutional pharmacies – included all private hospital and private psychiatric pharmacies.
- Public institutional pharmacies – included all public hospital and public psychiatric pharmacies.
- Closed institutional pharmacies – included all public correctional service and public military service pharmacies.

The quantity of pharmaceutical structures, in their different categories and in the divisions mentioned above, were organised and summarised using descriptive statistics. This was done on the national, provincial, district council and local municipality levels.

Using the Statistical Analysis System® for Windows (SAS) the data from the South African Pharmacy Council's register of pharmacies, were merged with the South African census data for the relevant study years.

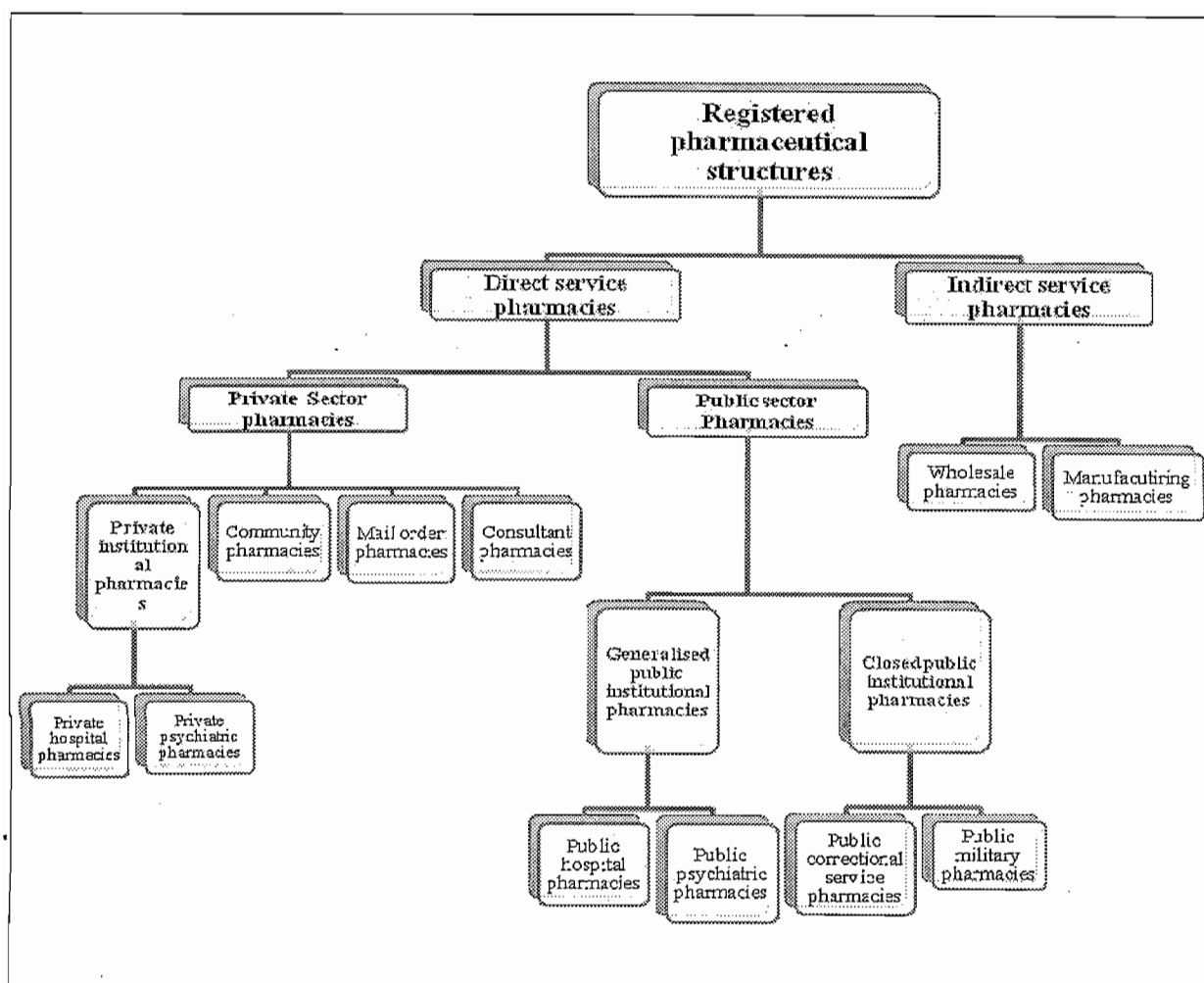


Figure 4.1: Classification of the different categories of pharmaceutical structures (adapted from Serfontein, 2009)

The availability of the structures was taken as the actual presence of the pharmaceutical structures in relation to the demand for the services (see Chapter 2 section 2.4.2). Demand for the services of indirect pharmaceutical structures (i.e.: manufacturing pharmacies, wholesale pharmacies and public support pharmacies) is limited to the direct pharmaceutical structures that use them. This was therefore evaluated as a ratio of the number of direct service pharmacies per wholesale or manufacturing pharmacy, for all the study years.

Demand for services of the direct pharmaceutical structures is limited to the number of people who make use of them. The study assumed that every member of the South African Population would at some point make use of the pharmaceutical services offered at the pharmaceutical structures that were studied. The availability of direct service pharmaceutical structures was

therefore evaluated as a ratio of the estimated population in the whole country, province, district council or local municipality per the number of direct service pharmaceutical structures present in the whole country, province, district council or local municipality, for all the study years.

4.6.1 POPULATION ESTIMATES

For the purpose of this study, estimates of the South African population on national, provincial, district council and local municipality levels were done based on the certain results of the estimated population of South Africa in the *Census 2001*, the *Community survey 2007* and the *Mid-year population estimates 2008*, as published by Statistics South Africa. Detailed information on the methodology applied by Statistics South Africa is available from these publications.

4.6.1.1 National Population Estimates

Table 4.1 provides the estimated annual population growth rates of South Africa from the year 2001 to the year 2008 as determined by Statistics South Africa (2008a:7).

Table 4.1: Estimated annual population percentage growth rates, 2001-2008 (Statistics South Africa, 2008a:7)

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Total	1.45	1.35	1.25	1.16	1.06	0.94	0.82

The growth rate between two years was multiplied with the total population of the initial year; the sum of this value and the total population of the initial year gave the estimated total population of the subsequent year. This was done for all years from the census year 2001 until 2008, for instance:

$$\text{Estimated Population}(2002) = \text{Population}(2001) + [1.45 \times \text{Population}(2001)]$$

4.6.1.2 Provincial Population Estimates

Table 4.2 presents the percentage distribution of the projected provincial share of the population from the year 2001 to the year 2008, as published by Statistics South Africa (Statistics South Africa, 2008a:11).

Table 4.2: Percentage distribution of the projected provincial share of the total population, 2001 to 2008 (adapted from Statistics South Africa, 2008a:11)

Province	2001	2002	2003	2004	2005	2006	2007	2008
Eastern Cape	14.4	14.3	14.1	14.0	13.8	13.7	13.6	13.5
Free State	6.2	6.1	6.1	6.0	6.0	6.0	5.9	5.9
Gauteng	20.0	20.2	20.5	20.7	20.9	21.2	21.3	21.5
KwaZulu-Natal	21.3	21.2	21.1	21.0	20.9	20.9	20.8	20.8
Limpopo	11.1	11.0	11.0	10.9	10.9	10.8	10.8	10.8
Mpumalanga	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Northern Cape	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3
North West	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0
Western Cape	10.1	10.2	10.3	10.5	10.6	10.7	10.7	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The percentage proportions presented in table 4.2 were applied to the results of the estimated national population for all years in estimating the total provincial population in each province.

The total national and provincial population estimates for the years 2003 to 2008 as according to the application of tables 4.1 and 4.2, yielded in the following results, presented in table 4.3:

Table 4.3: National and provincial population estimates, 2003 to 2008

Province	2003	2004	2005	2006	2007	2008
Eastern Cape	6 480 431	6 693 437	6 380 177	6 534 040	6 547 318	6 571 726
Free State	2 738 116	2 726 715	2 710 746	2 741 487	2 767 072	2 797 961
Gauteng	9 267 189	9 521 943	9 767 765	10 356 663	10 503 327	10 720 299
Kwazulu-Natal	9 600 825	9 674 901	9 782 753	9 826 682	9 871 593	9 981 789
Limpopo	5 373 150	5 390 857	5 477 111	5 114 038	5 220 240	5 278 513
Mpumalanga	3 211 182	3 251 321	3 303 343	3 545 426	3 578 753	3 659 430
Northern Cape	3 720 479	3 820 041	3 881 162	3 403 818	3 435 814	3 425 236
North West	846 009	856 584	870 289	1 004 036	1 013 474	1 024 788
Western Cape	4 744 047	4 896 617	5 022 343	5 101 275	5 149 227	5 255 368
Total (South Africa)	46 083 505	46 659 549	47 154 228	47 701 140	48 149 531	48 715 109

4.6.1.3 District council and Local Municipality Population Estimates

The results of the estimated total provincial population presented in table 4.3 were used to calculate the intra-provincial population growth rate percentages between the year 2007 and each of the study years. This was done using the following formula:

$$Gr \% = \frac{Pop(2007) - Pop(required\ year)}{Pop(2007)} \times 100$$

The intra-provincial growth rates obtained from this calculation were then applied to the district council and local municipality population estimates for 2007 obtained from the 2007 Community Survey (Statistics South Africa, 2007b), to estimate the district council and local municipality total population. This was done in the same manner as for the national level population estimates.

4.6.2 EVALUATION OF THE AVAILABILITY OF REGISTERED COMMUNITY PHARMACIES IN SOUTH AFRICA: AN ILLUSTRATION OF EXISTING vs EXPECTED COMMUNITY PHARMACIES ACCORDING TO ESTIMATED POPULATIONS

The study also undertook to evaluate the availability of the registered community pharmacies between 2003 and 2008, based on the principle that pharmaceutical services should be evenly distributed within the country or, rather, that of horizontal equity, which refers to a mathematical division of available facilities equally among a given population (refer to section 2.4.2).

The method of evaluating the availability of registered community pharmacies in South Africa used in this study was one determined according to a communication with Serfontein (2009) whereby the existing number of community pharmacies is compared to the expected number of community pharmacies on the national, provincial, district council and local municipality levels.

In the first place, the national level pharmacy per population ratio was used as the benchmark ratio to determine the total number of community pharmacies that would be situated in each local municipality, in the event that the registered community pharmacies in the country would be evenly distributed throughout the entire country. The total number of these pharmacies was calculated in the following manner:

$$T_{pharm} = \frac{\text{estimated population}}{\text{pharmacy: population ratio}}$$

Where:

T_{pharm} = The number of pharmacies that would be situated in the particular local municipality, should the pharmacies be evenly distributed.

Estimated population = The total estimated population of the local municipality in question.

Pharmacy: population ratio = The national pharmacy per population ratio.

In addition, the provincial pharmacy per population ratio, of the province wherein the local municipality under consideration is situated, was used as a benchmark ratio to determine the total number of community pharmacies that would be situated in the local municipality, in the event that the community pharmacies were evenly distributed throughout the province. This was

done using the formula presented above, while substituting the national pharmacy per population ratio for the provincial pharmacy per population ratio.

The district council pharmacy per population ratio, of the district council wherein the local municipality under consideration was situated, was also used as a benchmark ratio to determine the total number of community pharmacies that would be situated in the local municipality, in the event that the community pharmacies were evenly distributed throughout the district council. This was done using the formula presented above, while substituting the national pharmacy per population ratio for the district council pharmacy per population ratio. In the event that a district council contained no registered community pharmacy, and therefore no pharmacy per population ratio, for the purpose of calculations, it was assumed only one community pharmacy would be situated in the particular local municipality, should the pharmacies be evenly distributed throughout the district council.

In the second place, the expected number of pharmacies in each local municipality, should the pharmacies be evenly distributed, as calculated using the national, provincial, district and local municipality levels pharmacy per population ratio were, used in calculating a threshold number of community pharmacies against which to measure availability. Serfontein (2009) suggests that the influence borne by the three different benchmark ratios, as according to the geographical level, should contribute not less than 10% and not more than 40% to this threshold number, with increments of 10% between the different geographical levels. Since the national level is the furthest away from the local municipality for which a threshold was to be established, it was taken that the benchmark ratio on national level should bear a lesser influence on this threshold number of pharmacies. The threshold was therefore calculated as the sum of:

- 10% of the required number of pharmacies calculated using national level ratio as benchmark
- 20% of the required number of pharmacies calculated using the provincial level ratio as benchmark
- 30% of the required number of pharmacies calculated using the district council ratio as a benchmark
- 40% of the number of pharmacies in that particular local municipality for the year.

For those local municipalities without any registered community pharmacies situated within them, it was taken that one registered community pharmacy was situated in the local municipality, for the purpose of the above indicated calculations.

For the six metropolitan municipalities in the country, the threshold was calculated using the sum of:

- 30% of the required number of pharmacies calculated using the national level ratio as benchmark
- 30% of the required number of pharmacies calculated using the provincial level ratio as benchmark
- 40% of the number of pharmacies calculated using the metropolitan municipality ratio as a benchmark

The threshold number of community pharmacies, as calculated above, was taken as the expected number of community pharmacies for the local municipality. The total expected number of community pharmacies within each district council and province was calculated by summation of the threshold number of community pharmacies in each local municipality situated in the particular district council or province, as calculated above.

The geographical regions (local municipalities, district councils or provinces) with possible “oversupply” of community pharmacies, were identified as those regions wherein the total number of registered community pharmacies situated within them, exceeded the total number of expected pharmacies, as calculated above.

The geographical regions (local municipalities, district councils or provinces) with possible “undersupply” of community pharmacies, were identified as those regions wherein the total number of registered community pharmacies situated within them, was below the total number of expected community pharmacies, as calculated above.

4.7 DATA ANALYSIS

The data were analysed by using the Statistical Analysis System® for Windows, Version 9.1. The System was used to analyse and extract certain data from the database.

4.8 STATISTICAL ANALYSIS

This research made use of different statistical methods including measuring instruments, calculations and descriptive statistics. Descriptive statistics refers to the organising and summarising of data by means of tabulation and graphic representation and parameters such as averages or means. In this way, the inherent trends and properties of the observed data emerge clearly (Steyn *et al.*, 1996:5; Coolidge, 2006:30).

4.9 ETHICAL CONSIDERATIONS

The annual pharmacy registers were obtained with consent from the South African Pharmacy Council, for the purpose of this and such other studies by the North-West University. Precautions were taken to protect the privacy of the pharmacies appearing on the registers as no specific mention of pharmacy names was made, thereby maintaining confidentiality.

4.10 LIMITATIONS

The limitations with regard to the methodology of the study include the following:

- The annual growth rates for the study years were calculated on national and provincial levels. However, for the district council and local municipality population estimates, the study assumed that the intra-provincial growth rates applied consistently within every district council and local municipality of the province.
- The information on the total number of and distribution of pharmacies was based on the records of the South African Pharmacy Council registers. The study assumed that the South African Pharmacy Council records were accurate and up to date.
- The study only considered those pharmaceutical structures that were registered with the South African Pharmacy Council. Pharmaceutical structures such as Clinics, Primary Health Care Clinics or Facilities and Community Health Centres, which are customarily not registered with the South African Pharmacy Council, were not included in the study.

4.11 CHAPTER SUMMARY

This chapter provided a discussion on the procedures followed in conducting of this study. This was achieved by discussing the study's research objectives, target population, research instruments, data collection as well as data and statistical analysis measures applied to the study. The chapter also highlighted how ethical principles were adhered to and also acknowledged the limitations of the study.

CHAPTER 5:

RESULTS AND DISCUSSION OF RESULTS

5.1 INTRODUCTION

In this chapter, the results of the analysis on the geographical distribution of and the availability of registered pharmaceutical structures in South Africa, as of the year 2003 to the year 2008, will be reported and discussed.

5.1.1 ANNOTATIONS

The following annotations are to be considered on reading and understanding the results presented in this chapter:

- The results for the geographical and per-population distribution of the registered manufacturing pharmacies are reported only on national level as these are not area bound in their service. (Manufacturing pharmacies provide services to the direct pharmaceutical structures mainly through the wholesalers).
- The results for the geographical and per-population distribution of the registered wholesale pharmacies are reported only on the national and provincial levels as they are not necessarily restricted by provincial boundaries in their provision of services to the direct pharmaceutical structures.
- The results on the geographical distribution of the closed institutional pharmacies (i.e.: public military and public correctional service pharmacies) are only presented on national, provincial and district levels. The results on the per-population distribution of this type of pharmaceutical structure have been excluded from this study as they only service a specific group of patients.
- Consultant pharmacies are not discussed beyond the parameters of the national level as they are not area bound and may service across the entire country.

- The mail order pharmacies have been regarded and analysed as community pharmacies as from the provincial level (within the specific provinces wherein they are situated) or unless otherwise specified. However, from a practical perspective, they are “borderless” within the entire country.
- The results of the private psychiatric hospital pharmacies have been merged with those of the private hospital pharmacies unless otherwise specified in the results. The same is true for the public psychiatric hospital pharmacies and public hospital pharmacies. These have been referred to in the text as private institutional pharmacies and public institutional pharmacies, respectively.
- Analysis of the distribution and availability of the pharmaceutical structures will mainly focus on the results for the years 2003 vs. 2008. The results of all the other study years are listed in the Reference Manual. This is necessary due to the extent of the results. The Reference Manual should therefore be used as a distribution reference source for the individual years. However, the required reference may be used to identify individual provinces, district councils and local municipalities.
- The realignment of the cross boundary municipalities, present in the years 2003 to 2005, into specific provinces for the years 2006 to 2008, directly affects the boundaries as well as the total number of municipalities and district councils in the Limpopo, Mpumalanga, North West and Gauteng provinces. This also may have had a minor to a medium effect in certain cases of district councils and local municipalities.
- To indicate the possible influence of the implementation of laws (Pharmacy Act 53 of 1974) pertaining to the licensing and registration of pharmacies in 2004 (related to the direct service pharmaceutical structures), the highest and the lowest provider per patient ratio will, where required, be shown.
- In all cases where reference is made to a category or categories of pharmaceutical structures, it should be noted that these included only those registered with the South African Pharmacy Council for that specific year.
- “Registered” in the context of pharmaceutical structures providing services directly or indirectly to the patients, refers to legislation with the South African Pharmacy Council.
- “Total population” refers to the estimated total population. The terms have been used synonymously in the results and discussion thereof.

- “District municipality” refers to the specific district council and the terms have been used synonymously in the results and discussion thereof.
- All data compilations for the different pharmaceutical structures were recorded during August of the specific years.
- The focus of the presentation of results for the direct pharmaceutical structures is population ratio orientated. A lower population/provider ratio is interpreted as a better ratio than a larger population/provider ratio. In practice, this may be an oversimplification of possible complex problems as other demographic and environmental factors are not taken into consideration. However, this approach is in accordance with the guidelines published by the Department of Health (DoH) for the issuing of a licence to a community pharmacy to provide medicine (Refer to section 3.3.3.2)
- Please note that no distinction is made between ‘rural’ and ‘non-rural’ areas in this study as in the guidelines of the DoH. This applies to all levels (National, provincial, district council, metropolitan and local municipalities) presented in the results. Also, “malls” and other special considerations with issuing of licenses were not taken into consideration.
- The phrase “pharmacy per population” measures one pharmacy per a specific number (x) of population (the term “population per pharmacy” may have been used in some instances to refer to this).

5.1.2 COMPILATION OF THE REFERENCE MANUAL

The comprehensive results of this study have been compiled into a five-part Reference Manual which will be referred to in this chapter. These have been organised in the following manner:

- **Reference Manual part A: National level Results**

The tables in this part of the Reference Manual present the results of the study pertaining to South Africa as a whole from 2003 to 2008.

- **Reference Manual part B: Provincial level Results**

The tables in this part of the Reference Manual present results of the study pertaining to the nine provinces in the country from 2003 to 2008

- **Reference Manual part C: District level Results**

The tables in this part of the Reference Manual present the results of the study pertaining to the individual district councils of each province from 2003 to 2008. These are further subdivided into the following:

- C.1 Present the results of the districts in Eastern Cape province
- C.2 Presents the results for the districts in the Free State province
- C.3 Presents the results for the districts in Gauteng province
- C.4 Presents results for the districts in the KwaZulu-Natal province
- C.5 Presents the results for the districts in Limpopo province
- C.6 Presents the results for the districts in Mpumalanga province
- C.7 Presents the results for the districts in North West province
- C.8 Presents the results for the districts in Northern Cape province
- C.9 Presents the results for the districts in the Western Cape province

- **Reference Manual part D: Local Municipality level Results**

The tables in this part of the Reference Manual present the results of the study pertaining to the individual local municipalities in each district council. The tables under subdivision D.1 present the results for the local municipalities as of the years 2003 to 2005. The tables under subdivision D.2 present the results for the local municipalities as of the years 2006 to 2008. The Reference Manual is furthermore subdivided in the following manner:

- D.1.1 & D.2.1: Results for the local municipalities in Eastern Cape province
- D.1.2 & D.2.2: Results for the local municipalities in the Free State province
- D.1.3 & D.2.3: Results of the local municipalities in the Gauteng province
- D.1.4 & D.2.4: Results of the local municipalities in KwaZulu-Natal province
- D.1.5 & D.2.5: Results of the local municipalities in Limpopo province

- D.1.6 & D.2.6: Results for the local municipalities in Mpumalanga province
 - D.1.7 & D.2.7: Results for the local municipalities in North West province
 - D.1.8 & D.2.8: Results for the local municipalities in Northern Cape province
 - D.1.9 & D.2.9: Results for the local municipalities in Western Cape province
- **Reference Manual part E: Results on the evaluation of the availability of community pharmacies in South Africa, 2003 and 2008: an illustration of existing vs. expected community pharmacies according to estimated populations**

The tables in this part of the Reference Manual present the results of the calculations done on evaluation of the availability of the registered community pharmacies within each local municipality of the provinces of South Africa, for the years 2003 and 2008. These tables of results are further organised in the following manner:

- E.1: Results for the local municipalities in the Eastern Cape province. (E.1.1 for the year 2003 and E.1.2 for the year 2008).
- E.2: Results for the local municipalities in the Free State province. (E.2.1 for the year 2003 and E.2.2 for the year 2008)
- E.3: Results for the local municipalities in Gauteng province. (E.3.1 for the year 2003 and E.3.2 for the year 2008)
- E.4: Results for the local municipalities in KwaZulu-Natal province. (E.4.1 for the year 2003 and E.4.2 for the year 2008)
- E.5: Results for the local municipalities in Limpopo province. (E.5.1 for the year 2003 and E.5.2 for the year 2008)
- E.6: Results of the local municipalities in Mpumalanga province. (E.6.1 for the year 2003 and E.6.2 for the year 2008)
- E.7: Results for the local municipalities in the North West province. (E.7.1 for the years 2003 and E.7.2 for the year 2008)

- E.8: Results for the local municipalities in the Northern Cape province. (E.8.1 for the year 2003 and E.8.2 for the year 2008)
- E.9: Results for the local municipalities in the Western Cape province. (E.9.1 for the year 2003 and E.9.2 for the year 2008)

5.2 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN SOUTH AFRICA 2003 TO 2008

This section offers an overall presentation of the distribution of the registered pharmaceutical structures within the country, considering also the inter-provincial distribution of these structures. In the first place, the total number of the registered pharmaceutical structures from 2003 to 2008 will be reported and discussed. Secondly the results on the geographical distribution, followed by the distribution of the pharmaceutical structures relative to the population of the country, will be presented and discussed.

5.2.1 CHANGES IN THE TOTAL NUMBER OF REGISTERED PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA, 2003 TO 2008

Consider tables A.1 and A.6.1 in part A of the Reference Manual and table B.1 in part B of the Reference Manual, for the comprehensive results of the results of the discussion which follows below.

For the year 2008, there were a total of 4227 pharmaceutical structures registered with the South African Pharmacy Council (SAPC). This total number of pharmaceutical structures registered in the year 2008 indicated a 12% ($n=+462$) increase from the 3765 pharmacies that were registered in 2003. This increase is demonstrated in figure 5.1 which shows the changes in the number of registered pharmaceutical structures in South Africa from 2003 to 2008. As evident from figure 5.1, the sharpest increase in the overall number of registered pharmaceutical structures occurred between the years 2005 and 2006 ($n=+195$).

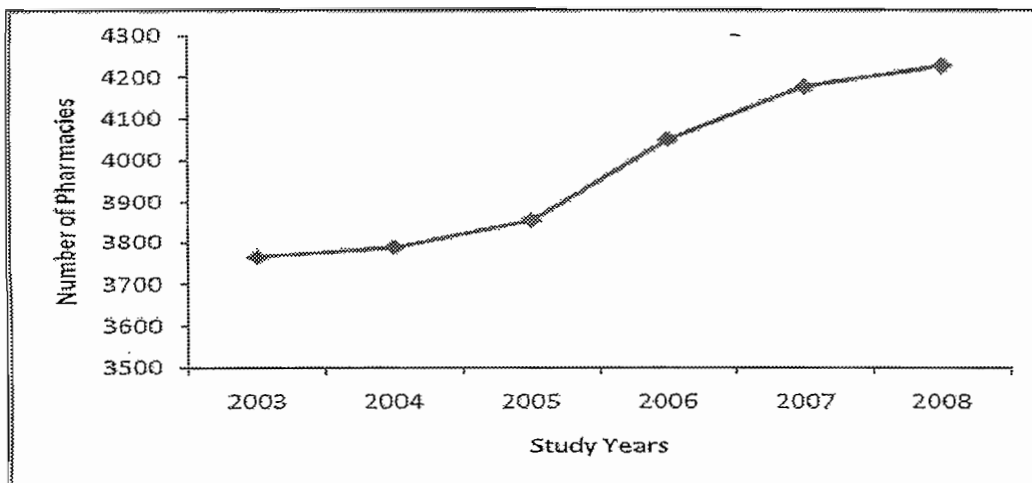


Figure 5.1: Changes in the total number of all registered pharmaceutical structures in South Africa, 2003-2008

Community pharmacies are the dominant category of pharmaceutical structures in South Africa. In 2008, the pharmacy category accounted for 66% of the total number of the registered pharmaceutical structures in the country. A ranking of the different pharmaceutical structures by order from pharmacy category with the highest to the lowest number of structures in the country for the year 2008, is provided in table 5.1.

It should be noted that the South African Pharmacy Council's register of pharmacies for 2003 and 2004 contained a pharmacy category for indirect service pharmaceutical structures that carried no stock. These pharmaceutical structures were not part of the provider system and were removed from the South African Pharmacy Council's registers of pharmacies as of 2005. This pharmacy category is therefore not discussed in this study but is included within the total number of registered pharmaceutical structures in the country for 2003 and 2004.

It should be further noted that the South African Pharmacy Council did not have a separate registration category for mail order pharmacies. The classification of mail order pharmacies was done purely for the identification of 'across border' providers at community level, as such infrastructures may influence the sustainability of the community pharmacy, especially in the provision of chronic medication. However, for further analysis, mail order pharmacies were considered as part of the community pharmacy category.

Table 5.1: The distribution of the different categories of pharmaceutical structures in South Africa by rank order, 2008

	Pharmacy category	Total number of pharmacies	Proportion of the total number of registered pharmacies (%)	Proportion municipalities with pharmacy (%)	Province with the highest number of pharmacies
1.	Community pharmacies	2805	66.36	74.61	Gauteng
2	Public institutional pharmacies	531	12.56	73.83	Western Cape
3	Wholesale pharmacies	310	7.33	13.28	Gauteng
4	Manufacturing pharmacies	246	5.82	6.64	Gauteng
5	Private institutional pharmacies	217	5.13	25.78	Gauteng
6	Public military pharmacies	32	0.76	6.64	Western Cape
7	Public support pharmacies	29	0.67	6.64	Gauteng
8	Public correctional service pharmacies	19	0.45	6.64	Gauteng
9	Public psychiatric hospital pharmacies	15	0.35	4.30	Gauteng
10	Consultant pharmacies	13	0.31	2.34	Gauteng
11	Mail order pharmacies	6	0.14	1.95	Gauteng
12	Private psychiatric hospital pharmacies	4	0.09	1.17	Gauteng

The changes in the total number of registered pharmaceutical structures in South Africa are further elaborated in table 5.2, which shows the added number of pharmacies in each pharmacy category for each one-year interval of the study years. Community pharmacies emerge as the pharmacy type that increased the most during the study period ($n=+281$), followed by manufacturing ($n=+144$) and private institutional pharmacies ($n=+68$) respectively. The mail order pharmacies, private psychiatric pharmacies, public psychiatric pharmacies, public correctional service pharmacies and consultant pharmacies did not experience any significant changes over the study period.

From the table 5.2, it is evident that the most significant increase, for most of the pharmaceutical structures, occurred during the period 2005-2006. Of these, the community pharmacies experienced the most significant growth during that time-period and constitute 68% of the overall growth in pharmaceutical structures of that time period. The significant increase in community pharmacies between the years 2005 and 2006 may possibly have influenced the sharp increase indicated in figure 5.1, during this time period.

Table 5.2: Changes in the total number of pharmacies per pharmacy category during each one-year interval of the study years (2003-2008)

Pharmacy category	Years						
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	Total 2003-2008	
						n	%growth
Community pharmacies	-3	13	133	82	56	281	+11.3%
Mail order pharmacies*	0	0	0	0	0	0	0
Private institutional	7	18	24	17	2	68	+44%
Private psychiatric	0	0	0	0	0	0	0
Public institutional	2	10	24	21	4	61	+12.98%
Public psychiatric	0	0	0	0	0	0	0
Public correctional	1	0	0	0	0	1	+5.56%
Public military pharmacies	7	13	0	0	-4	16	+50%
Public support pharmacies	0	-1	0	-3	0	-3	-9.09%
Wholesale pharmacies	-3	-1	-1	-9	-44	-58	-15.76%
Manufacturing pharmacies	14	58	15	18	39	144	+141.2%
Consultant pharmacies	1	0	0	-1	-1	-1	+12.74
All registered pharmacies	24	66	195	125	52	462	
* As could be identified							

It should be noted that although laws pertaining to the licensing and ownership of pharmacies came into effect during 2003, the regulations relating to the pricing of medicines (which prescribed new dispensing fees) were introduced in 2004, and further contested by retail pharmacy groups, yielding a newly prescribed dispensing fee through a single exit price, which was announced in the year 2006 (see chapter 3, sections 3.2.2 and 3.2.3). Although problems with the dispensing fee had not yet been completely resolved during the study years, the year 2006 was possibly the first time the laws of lay ownership to pharmacies could come into effect without implications of the dispensing fee. This may have had an effect on the sudden increase observed for the interval 2005-2006. However, it should again be mentioned that the problem of the dispensing had not been finally clarified during the study period.

5.2.2 THE GEOGRAPHICAL DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA

Consider tables A.1 and A.6.1 in part A of the Reference Manual, as well as table B.1 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total number of municipalities containing at least one registered pharmaceutical structure decreased by 1% (n=2) from the year 2003 to 2008. However, this negative growth percentage change has been hugely influenced by the restructuring of the country's municipal system in 2005 (refer to section 2.1.2 of chapter 2). This is evidenced in that the proportion of municipalities in South Africa with at least one pharmaceutical structure has increased from 77% in 2003 to 81% in 2008.

The provincial distributions of the registered pharmaceutical structures in South Africa for the years 2003 and 2008 are displayed in figure 5.2, below. Gauteng is the province wherein most of the registered pharmaceutical structures are situated (35.7% in 2003 and 36.2% in 2008). This is followed by the Western Cape (16.8% in 2003 and 17.1% in 2008) and KwaZulu-Natal (16.4% in 2003 and 16.1% in 2008) provinces respectively. The Northern Cape province has the lowest number of registered pharmaceutical structures (2.7% in 2003 and 2.5% in 2008).

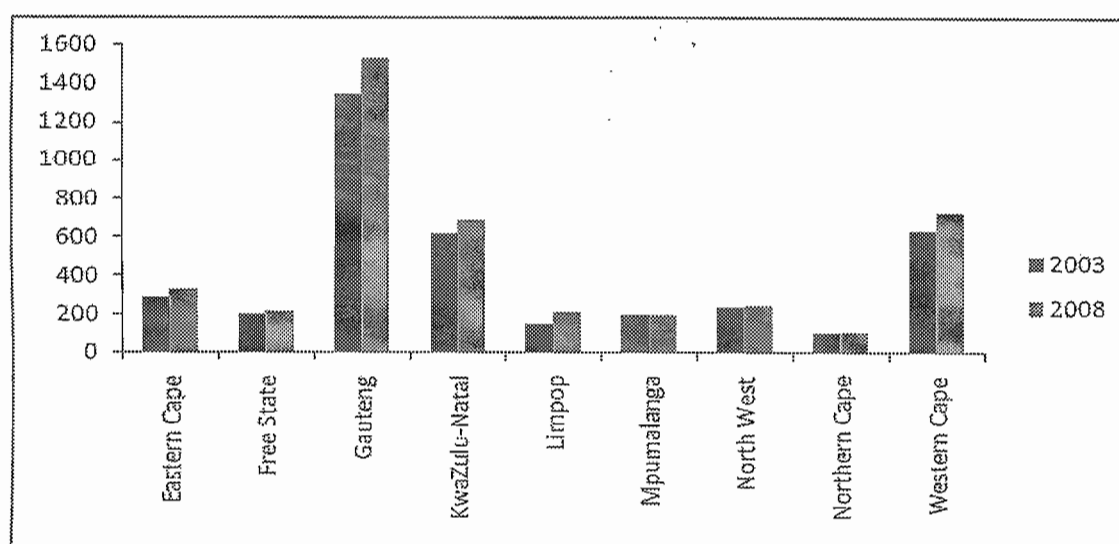


Figure 5.2: The total number of all registered pharmaceutical structures in South Africa per province, 2003 and 2008

Table 5.3: Changes in the total number of registered pharmaceutical structures between the years 2003 and 2008 per province

Province	Total number pharmacies 2003 (a)	Total number pharmacies 2008 (b)	Change in the number of Pharmacies from 2003 to 2008 (b-a)	
			n	%
Gauteng	1344 (35.7%)	1529 (36.2%)	185	+13.8
Western Cape	633 (16.8%)	723 (17.1%)	90	+14.2
Kwazulu-Natal	616 (16.4%)	680 (16.1%)	64	+10.4
Eastern Cape	289 (7.7%)	327 (7.7%)	38	+13.2
North West	233 (6.2%)	243 (5.8%)	10	+4.3
Free State	206 (5.5%)	216 (5.1%)	10	+4.8
Limpopo	149 (3.9%)	212 (5.0%)	63	+42.3
Mpumalanga	192 (5.1%)	192 (4.5%)	0	+0
Northern Cape	103 (2.7%)	105 (2.5%)	2	+1.9
South Africa (Total)	3765 (100%)	4227 (100%)	462	+12

Table 5.3 (on the previous page) summarises the changes that took place in the provincial distribution of the registered pharmaceutical structures between the years 2003 and 2008. The most significant increase in the total number of registered pharmaceutical structures occurred in Gauteng (n=+185). However, the province that experienced the greatest percentage growth in pharmaceutical structures is Limpopo (42%). The province of Mpumalanga is the only province that did not experience a change in the total number of registered pharmaceutical structures between 2003 and 2008.

The geographical distribution of the registered pharmaceutical structures will be further discussed as per the different categories of pharmaceutical structures.

INDIRECT SERVICE PHARMACEUTICAL STRUCTURES

In the year 2008, approximately 14% of the total number of registered pharmaceutical structures in South Africa could be attributed to the indirect service pharmaceutical structures. As has been discussed in the previous chapters, these are pharmaceutical structures that provide services mainly to those pharmaceutical structures which provide services directly to the patients, and include all manufacturing, wholesale and public support pharmacies.

5.2.2.1 Public Support Pharmacies

Consider table A.1 in part A of the Reference Manual, along with table B.11 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total number of registered public support pharmacies in South Africa was 29 in 2008. This showed a decrease of four pharmacies in comparison with 2003. The total number of municipalities wherein these pharmaceutical structures were situated also decreased from 19 in the year 2003 to 17 in the year 2008.

Provinces wherein the decrease in these pharmaceuticals structures took place are Gauteng (n=-1), North West (n=-2) and the Western Cape (n=-1). The province of Gauteng remained the province with the highest number of public support pharmacies. The fact that the province of Mpumalanga remained the only province without any registered public support pharmacies, over the study years, needs attention as a province should contain at least one medicine depot

providing medicine distribution services to the hospitals and clinics in that province. It must be further mentioned, however, that the purpose of these pharmacies was not investigated in the study as this falls outside the scope of this study.

5.2.2.2 Manufacturing Pharmacies

Consider table A.1 in part A of the Reference Manual and table B.13 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

From the year 2003, manufacturing pharmacies increased by a growth percentage of 141% to total 246 pharmacies in South Africa for the year 2008. These were situated in only 6.64% (n=17) of the municipalities in South Africa in 2008.

Provinces which did not contain a registered manufacturing pharmacy in 2003 were: Limpopo, Mpumalanga, North West and the Northern Cape province. In 2008, the number had been reduced to only two provinces, namely, Mpumalanga and the Northern Cape provinces. However, over the study years, the manufacturing pharmacies remained concentrated within the province of Gauteng. The province accumulated 120 more manufacturing pharmacies between the years 2003 and 2008 to total 194 manufacturing pharmacies in 2008. The increase in manufacturing pharmacies in Gauteng accounted for approximately 83% of the increase in manufacturing pharmacies in South Africa. The province wherein the second highest increase in manufacturing pharmacies occurred was the Western Cape, which accumulated 15 more pharmacies over the study years to total 27 manufacturing pharmacies in the province for 2008.

It should be emphasised that the location of a place wherein the manufacturing pharmacy is located may be depicted as of less importance because their service provision is not area bound. However, the effect of the structures on creating wealth in a community should not be overlooked.

5.2.2.3 Wholesale Pharmacies

Consider table A.1 in part A of the Reference Manual, along with table B.14 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

Wholesale pharmacies in the country decreased in number from a total of 368 in the year 2003 to 310 in the year 2008. The available wholesale pharmacies in 2008 were situated in every province within 34 of the municipalities in the country. The provinces with the highest number of

these structures in 2008 were Gauteng (n=169), Western Cape (n=53) and KwaZulu-Natal (n=43) respectively.

Gauteng remained the province containing the most number of the pharmaceutical structures over the study years, but also experienced the highest loss in wholesale pharmacy number (n=53). However, the province that experienced the greatest percentage loss of the pharmacies is the North West with a 71.4% decrease in the percentage wholesale pharmacies that were in the province in 2003.

The decrease in total wholesale pharmacy number did not take effect in each province. Mpumalanga and Limpopo provinces experienced an increase of two pharmacies each, while the provinces of KwaZulu-Natal and Western Cape both experienced no change in the total number of pharmacies situated therein over the study years.

The effects of the introduction of the logistics fee in 2004, as part of the income of these providers, as well as the possible inclusion of end providers in the logistical chain as 'wholesalers' to increase their profits were not investigated as these aspects are outside the scope of the study.

DIRECT SERVICE PHARMACEUTICAL STRUCTURES

Consider tables A.1, A.2 and A.6.2 in part A of the Reference Manual, as well as table B.15 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

The majority (86%) of all registered pharmaceutical structures in South Africa are the direct service pharmaceutical structures. These include all community, mail order, public and private institutional, public correctional service, public military and consultant pharmacies. These pharmaceutical structures provide services directly to the patient, with the exception of consultant pharmacies which may also render services to other pharmaceutical structures.

The total number of these pharmaceutical structures in South Africa for the year 2008 was 3642. This indicated a total growth percentage of 13.2% from the total number of direct service pharmacies in 2003. This increase in the total number of registered direct service pharmaceutical structures also took effect within all the individual provinces.

Table A.2 in Reference Manual part A differentiates between direct service pharmaceutical structures in the private from those in the public health sector. The total number of direct service pharmaceutical structures in the private health sector remained significantly higher than the total number of those in the public sector over the study years. In 2008, direct service pharmaceutical structures in the private health sector made up about 84% (n=3032) of the total number of the direct service pharmaceutical structures.

The structures were, in 2008, situated in about 80% of the municipalities in South Africa, leaving about 5.5% of the population living in municipalities which did not have at least one registered direct service pharmaceutical structure of both the private and public sectors situated within them. Most of the population living in municipalities without registered direct service public and private pharmaceutical structures was in the province of KwaZulu-Natal. The inter-provincial distribution of the direct service pharmaceutical structures for 2008 as per the pharmacy category is presented in table 5.4.

Table 5.4: The provincial distribution of registered pharmaceutical structures providing services directly to the patient, 2008

	Eastern Cape	Free State	Gauteng	KwaZulu- Natal	Limpopo	Mpumala- nga	North West	Northern Cape	Western Cape	TOTAL
Community Pharmacies	202	141	989	498	145	144	159	58	469	2805
Mail Order Pharmacies	0	0	5	0	0	0	1	0	0	6
Private institutional Pharmacies	15	13	78	33	10	13	16	4	35	217
Private Psychiatric Hospital Pharmacies	1	0	3	0	0	0	0	0	0	4
Public Institutional Pharmacies	72	40	55	79	46	28	56	39	116	531
Public Psychiatric Hospital Pharmacies	1	1	4	3	0	0	2	1	3	15
Public correctional service Pharmacies	3	3	5	2	0	3	0	0	3	19
Public Military pharmacies	2	2	9	4	3	0	1	1	10	32
Consultant Pharmacies	0	0	9	2	0	0	0	0	2	13
Total	296	200	1157	621	204	188	235	103	638	3642

5.2.2.4 Consultant Pharmacies

Consider table A.1 in part A of the Reference Manual, along with table B.12 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

For the year 2008, only 13 consultant pharmacies were registered with the South African Pharmacy Council to service the entire population. This number was one below than the total number of the pharmacies in 2003. Most of these pharmaceutical structures (70%, n=9 for 2008) were situated in Gauteng province all throughout the study years. Other provinces wherein these pharmaceutical structures are situated are the Western Cape and KwaZulu-Natal only. The remaining six provinces in the country do not have a consultant pharmacy situated within them. It is not certain whether a lack of the need for the structures exists or whether these services are a “latent need” – that is, the patients or providers do not know of the existing services or the value that may be added through the use of these services.

5.2.2.5 Community Pharmacies

Consider table A.1 in part A of the Reference Manual, along with tables B.2, B.3, B.16, B.28.2 and B.33.2 in part B of the Reference Manual, for the comprehensive results of the discussion which follows below.

Only six mail order pharmacies could be identified on the South African Pharmacy Council's register of pharmacies. From 2003 to 2005, the pharmacies were all situated in the Gauteng province alone. As of 2006, due to changes in the provincial boundaries, there was one registered mail order pharmacy in the North West province, while the province of Gauteng had lost one pharmacy. These are the only two provinces identified wherein the mail order pharmacies were situated, distributed across only five of the municipalities in South Africa. As has previously been mentioned, these pharmaceutical structures are regarded as community pharmacies in the discussion which follows below.

The 2811 community pharmacies registered in 2008 were distributed across 73% of the municipalities in South Africa, leaving an estimated 4 million people living in municipalities without registered community pharmacies. The 2003 versus 2008 distribution of these pharmaceutical structures among the country's provinces is indicated in table 5.5. The provinces in table 5.5 are ranked by decreasing order of province containing the most number of registered community pharmacies for the year 2008. As is presented in table 5.5, Gauteng

remains the province with the highest proportion of the registered community pharmacies, followed by the KwaZulu-Natal and Western Cape provinces respectively, while the Northern Cape province remains the province with the least number of community pharmacies.

Table 5.5: Changes in the total number of registered community pharmacies between the years 2003 and 2008 per province

Province	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Gauteng	880 (34.8%)	994 (35.4%)	+114	13.0
Kwazulu-Natal	462 (18.3%)	498 (17.7%)	+36	7.8
Western Cape	420 (16.6%)	469 (16.7%)	+49	11.7
Eastern Cape	193 (7.6%)	202 (7.2%)	+9	4.7
North West	152 (6.0%)	160 (5.7%)	+8	5.2
Limpopo	97 (3.8%)	145 (5.2%)	+48	49.5
Mpumalanga	144 (5.7%)	144 (5.1%)	0	0
Free State	134 (5.3%)	141 (5.0%)	+7	5.2
Northern Cape	48 (1.9%)	58 (2.1%)	+10	20.8
South Africa (Total)	2530 (100%)	2811 (100%)	289	11.4

All provinces, except for Mpumalanga, experienced an increase in their total number of registered community pharmacies between the years 2003 and 2008. The percentage proportion of the registered community pharmacies situated in each province during the year 2003 does not vary much from that of 2008. Due to a significant increase in the total number of community pharmacies in the Limpopo province, over the study period, the province of Limpopo had more registered pharmaceutical structures in 2008 than the Free State and Mpumalanga provinces, which had not been the case for the year 2003.

The province of Gauteng is the province wherein the highest growth in total community pharmacy number, between 2003 and 2008, occurred. Table 5.6 presents the changes in the *total number* of the registered community pharmacies during each one-year interval of the study

period, in each province. It is evident that all provinces, excluding Mpumalanga and the North West, experienced the highest growth in the total community pharmacy count during the period 2005-2006.

Table 5.6: Changes in the total number of registered community pharmacies in each province for each one-year interval of the study years

Pharmacy category	Years						Total change 2003-2008	
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008			
						n	% growth	
Eastern Cape	+1	-4	+10	+10	-8	+9	4.7	
Free State	0	-3	+7	+2	+1	+7	5.2	
Gauteng	-1	-1	+56	+28	+32	+114	13.0	
Kwazulu-Natal	-7	+4	+20	+9	+10	+36	7.8	
Limpopo	+6	-2	+22	+6	+16	48	49.5	
Mpumalanga	-5	+2	-12	+8	+7	0	0	
North West	0	-1	+2	+2	+5	8	5.2	
Northern Cape	+2	+3	+3	+3	-1	10	20.8	
Western Cape	+1	+15	+25	+14	-6	49	11.7	
Total (South Africa)	-3	+13	+133	+82	+56	+281	11.4	

5.2.2.6 Private Institutional Pharmacies

Consider table A.1 in Reference Manual A along with tables B.4, B.5, B.17 B.28.3 and B.33.3 in Reference Manual B for the comprehensive results of the discussion which follows below.

The total number of registered private psychiatric hospital pharmacies remained constant (n=4) over the study period. The implication thereof is that the distribution of the registered private psychiatric hospital pharmacies also remained the same. Provinces that contained a registered private psychiatric hospital pharmacy therefore remained to be Gauteng (n=3) and the Eastern Cape (n=1) only. These pharmaceutical structures have been regarded as part of the private institutional pharmacies in the discussion which follows.

South Africa accumulated a total of 68 private institutional pharmacies to total 221 private institutional pharmacies in 2008. The growth in number of private institutional pharmacies took place within each province. Approximately 82% of the municipalities in South Africa did not have a private institutional pharmacy situated within them in 2003. The percentage of such municipalities decreased to about 75% in 2008, which resulted in a total estimated number of 18.8 million people living in municipalities without registered private pharmaceutical structures in 2008.

Table 5.7: Changes in the total number of registered private institutional pharmacies between the years 2003 and 2008 per province

Province	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Gauteng	60 (39.2%)	81 (36.7%)	+21	35.0
Western Cape	23 (15.0%)	35 (15.8%)	+12	52.2
Kwazulu-Natal	23 (15.0%)	33 (14.9%)	+10	43.5
Eastern Cape	11 (20.8%)	16 (7.2%)	+5	45.5
North West	9 (5.9%)	16 (7.2%)	+7	77.8
Free State	10 (6.5%)	13 (5.9%)	+3	30.0
Mpumalanga	8 (5.2%)	13 (5.9%)	+5	62.5
Limpopo	7 (4.6%)	10 (4.5%)	+3	42.9
Northern Cape	2 (1.3%)	4 (1.8%)	+2	100.0
South Africa (Total)	153 (100%)	221 (100%)	+68	44.4

The changes in the provincial distribution of these pharmaceutical structures between 2003 and 2008 are indicated in table 5.7. The order of provinces in table 5.7 is a ranking of province with the highest number of the registered private institutional pharmacies for the year 2008. From the table, it is evident that Gauteng remained the province with the highest number of registered private pharmaceutical structures situated therein (n=60 for 2003 and n=81 for 2008), followed by the Western Cape (n=23 for 2003 and n=35 for 2008) and KwaZulu-Natal (n=23 for 2003 and n=33 for 2008) provinces respectively. Gauteng was also the province which experienced the

largest increase in the total number of private institutional pharmacies over the study years, followed by the Western Cape province. The province with the lowest number of the registered private institutional pharmacies remained to be Northern Cape all throughout the study years (n=2 for 2003 and n=4 for 2008).

5.2.2.7 Public Correctional Service Pharmacies

Consider table A.1 in Reference Manual A along with table B.8 in Reference Manual B for the comprehensive results of the discussion which follows below.

The public correctional service pharmacies increased with only one pharmacy through the study years to a total of 19 pharmacies for the year 2008. These were situated in 17 of the municipalities in the country all throughout the study years such that only three provinces (Limpopo, North West and the Northern Cape) did not have at least one of the structures situated within them. The change in the total number of the pharmacies occurred in the Free State province in 2003-2004 (n=+1). All other provinces experienced no change in their total number of the structures over the study years.

5.2.2.8 Public Military Pharmacies

Consider table A.1 in Reference Manual A along with table B.9 in Reference Manual B for the comprehensive results of the discussion which follows below.

The total number of the registered public military pharmacies increased from 16 in the year 2003 to 32 pharmacies in the year 2008. There was also an increase in the total number of municipalities wherein these structures were situated (from 12 in 2003 to 17 in 2008). However, Mpumalanga remained the only province without a registered military pharmacy all throughout the study years.

Provinces which experienced increases in the total number of registered public military pharmacies, between 2003 and 2008, were Gauteng (+7), Western Cape (+5), KwaZulu-Natal (+3) and Free State (+1) only. The Western Cape province remained the province with the highest number of the registered military pharmacies, throughout the study years. As was indicated in table 5.2, the highest increase of total pharmacy number for the structures occurred

during the period 2004-2005 of the study years. This increase took place in the Western Cape (+6), Free State (+5) and also Gauteng (+2) provinces.

As previously mentioned, it must be taken into account that from 2004, legislation (Pharmacy Act 53 of 1974) required that the state subsidised pharmaceutical structures in the country, be also registered with the South African Pharmacy Council. A legalising of the previously existing structures and not an establishment of new military pharmacy structures may therefore have contributed to the considerable increase in the total number of registered military pharmacies.

5.2.2.9 Public Institutional Pharmacies

Consider table A.1 in Reference Manual A along with tables B.6, B.7, B.18, B.28.4 and B.33.4 in Reference Manual B for the comprehensive results of the discussion which follows below.

The total number of registered public psychiatric hospital pharmacies in South Africa remained to be 15 and situated within 11 municipalities from 2003 to 2008. Furthermore, no changes occurred in the provincial distribution of these pharmacies and Limpopo and Mpumalanga therefore remained the only two provinces without any public psychiatric pharmacies. These pharmaceutical structures are included in the discussion on public institutional pharmacies which follows below.

In 2008, about 4.1 million people were living in municipalities without public institutional pharmacies, given that the 546 registered structures for that year were located in 74% of the municipalities in the country. Interestingly, this is nearly the same number of municipalities as those containing the registered community pharmacies of that year ($n=191$, 75%), despite the considerable difference in the total number of registered pharmacies for the two pharmacy categories during that year. The inter-provincial distribution of the registered public institutional pharmacies for 2003 and 2008, as well as the changes that occurred between the two years, are indicated in table 5.8 below. The provinces in table 5.8 are listed by decreasing rank order of province containing the highest number of the registered public institutional pharmacies for the year 2008.

Table 5.8: Changes in the total number of registered public institutional pharmacies between the years 2003 and 2008 per province

Province	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Western Cape	99 (20.4%)	119 (21.8%)	20	20.2
Kwazulu-Natal	71 (14.6%)	82 (15.0%)	11	15.5
Eastern Cape	48 (9.9%)	73 (13.4%)	25	52.1
Gauteng	48 (9.9%)	59 (10.8%)	11	22.9
North West	60 (12.4%)	58 (10.6%)	-2	-3.3
Limpopo	36 (7.4%)	46 (8.4%)	10	27.7
Free State	41 (8.5%)	41 (7.5%)	0	0
Northern Cape	48 (9.9%)	40 (7.3%)	-8	-16.7
Mpumalanga	34 (7.0%)	28 (5.1%)	-6	-17.6
South Africa (Total)	485 (100%)	546 (100%)	61	12.6

There is a noteworthy difference in the provincial distribution of the registered public institutional pharmacies in comparison to that of the other registered direct service pharmaceutical structures. The province with the highest number of the pharmaceutical structures is Western Cape (n=99, 20.4% for 2003 and n=119, 21.8% for 2008) followed by the KwaZulu-Natal province (n=71, 14.6% for 2003 and n=82, 15.2% for 2008). Mpumalanga remained the province with the lowest number of registered public institutional pharmacies situated therein, throughout the entire study period (n=34, 7.0% for 2003 and n=28, 5.1% for 2008).

Contrary to the overall growth of the pharmaceutical structures in the country, the total number of public institutional pharmacies in Mpumalanga, North West and the Northern Cape provinces decreased between the years 2003 and 2008. All other provinces experienced an increase in the total number of the pharmaceutical structures situated in them, with the most substantial increase occurring in the Eastern Cape province.

5.2.3 THE POPULATION DISTRIBUTION VERSUS THE DISTRIBUTION OF REGISTERED PHARMACEUTICAL STRUCTURES IN SOUTH AFRICA

This section reports the results of the pharmacy per population ratio for each pharmacy category, as the selected measure of availability for this study. It should be taken into consideration that the population for indirect pharmaceutical structures (manufacturing and wholesale pharmacies) is considered to be all the registered direct service pharmaceutical structures. It must be noted that direct service pharmaceutical structures are not the only clients of manufacturing and wholesale pharmacies but include also other health providers such as medical doctors that are not included in this study.

The population for the direct service pharmaceutical structures (consultant, community, private institutional, public correctional service, public military service and public institutional pharmacies) is considered to be the estimated total number of people living in that region during that particular study year.

5.2.3.1 Manufacturing Pharmacies

Consider table A.3 in Reference Manual A for the comprehensive results of the discussion which follows below.

Due to a significant increase in the total number of registered manufacturing pharmacies, the ratio of the total direct service pharmaceutical structures per manufacturing pharmacy decreased from 31.4 in 2003 to 14.8 in 2008. This indicated an improvement in the availability of the registered manufacturing from pharmacies 2003 to 2008.

5.2.3.2 Wholesale Pharmacies

Consider table A.4 in Reference Manual A, along with the tables from B.19 through to B.27 in Reference Manual B for the comprehensive results of the discussion which follows below.

The availability of the registered wholesale pharmacies decreased over the study period. This is evidenced in that the ratio of direct service pharmaceutical structures per wholesale pharmacy increased from 8.7 in 2003 to 11.7 in 2008. This was due to the overall decrease in the total

number of registered wholesale pharmacies, over the study years, in the presence of an increasing number of direct service pharmacies in the country.

The results for the availability of the registered wholesale pharmacies in each province, for the years 2003 and 2008, are indicated in table 5.9 below. As indicated in table 5.9, the availability of wholesale pharmacies in each province, except for Mpumalanga, declined. The slight increase in the availability of wholesale pharmacies in Mpumalanga is due to the slight decrease in the total number of direct service pharmacies in the province.

With a pharmacy per wholesale pharmacy ratio of 4.5 in 2003 and 6.8 in 2008, Gauteng is the province wherein the wholesale pharmacies were most available in comparison to other provinces. In 2003, the province with the poorest availability of wholesale pharmacies was Mpumalanga. This changed for the year 2008 whereas wholesale pharmacies in the North West and Northern Cape provinces became less available, due to a decrease in the total number of wholesale pharmacies in these provinces (see also paragraph 5.2.2.3).

Table 5.9: Provincial pharmacies per wholesale pharmacy ratio for the years 2003 and 2008

Province	Pharmacies per wholesale pharmacy 2003	Pharmacies per wholesale pharmacy 2008
Eastern Cape	12.9	15.6
Free State	13.4	15.4
Gauteng	4.5	6.8
KwaZulu-Natal	13.6	14.4
Limpopo	28.6	29.1
Mpumalanga	63.3	62.7
North West	31.7	117.5
Northern Cape	33.0	103.0
Western Cape	10.4	12.0
South Africa	8.7	11.7

5.2.3.3 Pharmaceutical Structures Providing Services Directly to the Patients

Consider tables A.5 and A.6.1 in Reference Manual A as well as table B.15 in Reference Manual B for the comprehensive results of the discussion which follows below.

The estimated total population of South Africa rose from approximately 46 million in 2003 to approximately 48.7 million in 2008 (refer to chapter 4, section 4.5.1 for the population estimation methodology used). Given that the total number of registered direct service pharmaceutical structures in South Africa also increased over the study period, the overall pharmacy per

population ratio then decreased from 14,329 people per pharmaceutical structure, in 2003, to 13,375 people per pharmaceutical structure, in 2008. This indicated an improvement in the availability of registered direct service pharmacies over the study years.

Due to the relatively insignificant increase in the total number of the registered correctional service pharmacies, versus the increase in the estimated total population of the country, the availability of these pharmacies declined slightly over the study years but remained at approximately 2.6 million people per pharmacy for 2003 and 2008. The increase in the total number of registered military service pharmacies, from a ratio of approximately 2.8 million people per pharmacy in 2003 to approximately 1.5 million people per pharmacy in 2008, indicates an increase in their availability. However, the two pharmacy categories do not offer open access to the entire population but rather service a specific group of people in the country. This study's pharmacy per population ratio for these pharmacies, is based on the total estimated population of the country and may in certain cases provide slightly inflated figures. This, however, must not be seen as a limitation, as members of these closed pharmacies may also use the services of the community pharmacies in certain instances. The two pharmacy categories are therefore also not included in further discussions on the availability of the direct service pharmacies to the entire population.

The pharmacy per population ratio for the direct service pharmaceutical structures in 2008, with the exclusion of the public correctional service and military pharmacies is then 13 615 people per pharmacy. The results on the provincial pharmacy per population ratio of 2003 and 2008 are presented in table 5.10, ranked in decreasing order of provinces wherein the availability of the pharmaceutical structures was most available for the year 2008.

Throughout the study years, the Northern Cape province remained the province with the lowest number of direct service pharmaceutical structures. Despite this, the results as indicated in table 5.10, prove that the direct service pharmaceutical structures in the Northern Cape province were, in 2003, the most favourably available to the population, relative to the other provinces. The province was followed by the Western Cape (n=1:8,752) and Gauteng (n=1:9,380) provinces, respectively for that year. Although in 2008 the three remained the provinces wherein the pharmaceutical structures are most available, the order changes to Western Cape (n=1:8,436), Gauteng (n=1:9,453) and Northern Cape (n=1:10,047). This change is a result of the relatively high growth percentages in the Western Cape (14.9%) and Gauteng (14.7%) in contrast to the weak growth percentage of the pharmacies in the Northern Cape (4.1%), between the study years. The province of Limpopo remained the province with the poorest

availability of the pharmaceutical structures in relation to the population they were to serve, between the two years.

Table 5.10: Changes in the provincial pharmacy per population ratio of the direct service pharmaceutical structures for 2003 and 2008

Province	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Western Cape	8 752	8 436	-316	-3.6
Gauteng	9 380	9 453	+73	0.8
Northern Cape	8 632	10 047	+1 685	19.5
Free State	14 800	14 349	-451	-3.0
North West	16 834	14 638	-2 196	-13.0
KwaZulu-Natal	17 268	16 283	-985	-5.7
Mpumalanga	17 264	19 781	+2 517	+14.6
Eastern Cape	25 716	22 583	-3 133	-12.2
Limpopo	38 380	26 261	-12 119	-31.6
South Africa (Total)	14 547	13 615	-932	-6.4

From table 5.10, it is furthermore evident that the overall improvement in the availability of direct service pharmaceutical structures took effect within each province, excluding Mpumalanga. This is due to the fact that the total number of direct pharmaceutical structures in each province, excluding Mpumalanga, increased between the year 2003 and 2008. Mpumalanga on the other hand experienced a slight decrease in the total number of direct service pharmaceutical structures between the two years, while the population in the province continued to increase, therefore decreasing the availability of the structures to the population in the province. This may also have been the result of the change in provincial borders between Limpopo and Mpumalanga in 2006.

Throughout the study years, the availability of the registered pharmaceutical structures in South Africa was at its poorest in 2004, as the pharmacy per population ratio in that year was the highest of the study years. The most favourable availability of direct service pharmaceutical structures, throughout the study years, is of the year in 2008, indicated by a low pharmacy per population ratio. The results for the years wherein the pharmacy per population ratios of the

direct pharmaceutical structures were at their highest and lowest, for each province, are further presented in table 5.11.

Table 5.11: Years with the highest and lowest pharmacy per population ratio for each province

Province	Highest		Lowest	
	Year	ratio	Year	ratio
Eastern Cape	2004	26 249	2007	21 971
Free State	2004	14 819	2006	14 059
Gauteng	2005	9 837	2003	9 380
KwaZulu-Natal	2004	17 559	2008	16 283
Limpopo	2003	38 380	2008	26 261
Mpumalanga	2006	21 104	2003	17 264
North West	2005	17 641	2008	14 638
Northern Cape	2008	10 047	2005	8 532
Western Cape	2004	8 985	2007	8 212
South Africa (Total)	2004	14 696	2008	13 615

The availability of these structures will be further discussed as per the different pharmacy categories which render services directly to the patient.

5.2.3.3.1 Community Pharmacies

Consider table A.6.2 in Reference Manual A along with table B.16 in Reference Manual B for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered community pharmacies decreased from 1:18 215 in 2003 to 1:17 330 in 2008. This implies an improvement in the availability of the registered community pharmacies in the country, between the study years.

The results for the provincial pharmacy per population ratio are presented in table 5.12 in a decreasing rank order of the provinces with the most favourable distribution of the pharmacies, in 2008. The availability, represented as a pharmacy per population ration of the pharmaceutical structures, is more favourable within the province of Gauteng (1:10 785). Despite the high growth percentage (49.5%) in the total community pharmacies in Limpopo province, the

province remained the province wherein the community pharmacies were least available, throughout the study years.

Table 5.12: Changes in the provincial pharmacy per population ratio of community pharmacies for 2003 and 2008

Province	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Gauteng	10 531	10 785	254	2.4
Western Cape	11 295	11 205	-90	-0.8
Northern Cape	17 625	17 669	44	0.2
Free State	20 434	19 844	-590	-2.9
Kwazulu-Natal	20 781	20 044	-737	-3.5
North West	24 477	21 408	-3 069	-12.5
Mpumalanga	22 300	25 413	3 113	14.0
Eastern Cape	33 577	32 530	-1 047	-3.1
Limpopo	55 393	36 404	-18 989	-34.3
South Africa (Total)	18 216	17 330	-886	-4.9

The province with the highest improvement in the availability of the community pharmacies is Limpopo. This is due to the high growth percentage in the total number of community pharmacies in the province. Provinces which experienced an overall decline in the availability of community pharmacies, between 2003 and 2008, were Gauteng, Mpumalanga and the Northern Cape. The slight decrease in availability of the structures in Gauteng and Northern Cape provinces implies that the growth in community pharmacies that took place in the provinces did not keep pace with the population growth in the province. The decrease observed for the province of Mpumalanga can be attributed to the fact that the total number of community pharmacies in the province remained the same for 2003 and 2008 while the estimated population continued to increase. All other provinces experienced an improvement in the availability of community pharmacies situated within them, over the study years.

Table 5.13 presents the results for the years during which the pharmacy per population ratios for community pharmacies were at their highest and lowest, for each province. The availability of the registered community pharmacies to the South African population was most favourable in the year 2008 and least favourable in the year 2005.

Table 5.13: Years with the highest and lowest pharmacy per population ratio of community pharmacies for each province

Province	Highest		Lowest	
	Year	ratio	Year	ratio
Eastern Cape	2004	34 502	2007	31 178
Free State	2005	20 693	2007	19 765
Gauteng	2005	11 125	2003	10 531
Kwazulu-Natal	2005	21 313	2008	20 044
Limpopo	2003	55 393	2008	36 404
Mpumalanga	2006	27 484	2003	22 300
North West	2005	25 703	2008	21 408
Northern Cape	2006	17 929	2005	16 420
Western Cape	2004	11 631	2007	10 840
South Africa (Total)	2005	18 565	2008	17 330

5.2.3.3.2 Private Institutional Pharmacies

Consider table A.6.3 in Reference Manual A along with table B.17 in Reference Manual B for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the private institutional pharmacies in South Africa decreased significantly from 1:301 199 people in 2003 to 1:220 430 people in 2008. This implies a considerable improvement in the availability of the registered private institutional pharmacies in the country.

Table 5.14 presents the results for the changes in the pharmacy per population ratio of private institutional pharmacies between 2003 and 2008, for each province. The provinces in the table 5.14 are ranked by decreasing order of province with the most favourable availability of the structures for the year 2008. The availability of the pharmaceutical structures is most favourable in the province of Gauteng and Western Cape throughout the study years. These are also the provinces with the highest number of the registered private institutional structures situated therein throughout the study years. The province wherein private institutional pharmacies are least available is Limpopo.

Table 5.14: Changes in the provincial pharmacy per population ratio of private institutional pharmacies for 2003 and 2008

Province	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Gauteng	154 453	132 349	-22 104	-14.3
Western Cape	206 263	150 153	-56 110	-27.2
North West	413 387	214 077	-199 310	-48.2
Free State	273 812	215 227	-58 585	-21.4
Northern Cape	423 005	256 197	-166 808	-39.4
Mpumalanga	401 398	281 495	-119 903	-29.8
KwaZulu-Natal	417 428	302 478	-114 950	-27.5
Eastern Cape	589 130	410 968	-178 162	-30.2
Limpopo	767 593	527 851	-239 742	-31.2
South Africa (Total)	301 199	220 430	-80 769	-26.8

The overall improvement in the availability of the private institutional pharmacies in South Africa, took effect within each individual province. The province which experienced the highest improvement was the North West province, with a percentage change of 48.2% from 2003. This was followed by the Northern Cape province with a percentage change of 39.4% from the year 2003.

The results for the years during which the pharmacy per population ratios of the private institutional pharmacies were at their highest and lowest are presented in table 5.15. The availability of the private institutional pharmacies was at its best in the year 2007 and at its worst in the year 2003, of the study years.

Table 5.15: Years with the highest and lowest pharmacy per population ratio of the private institutional pharmacies for each province

Province	Highest		Lowest	
	Year	ratio	Year	ratio
Eastern Cape	2003	589 130	2007	409 207
Free State	2004	302 968	2007	212 852
Gauteng	2003	154 453	2007	131 292
KwaZulu-Natal	2003	417 427	2008	302 478
Limpopo	2003	767 592	2006	511 404
Mpumalanga	2003	104 398	2007	275 289
North West	2004	424 449	2008	214 077
Northern Cape	2005	435 145	2006	251 009
Western Cape	2004	212 896	2007	147 121
South Africa (Total)	2003	301 199	2007	219 861

5.2.3.3.3 Public Institutional Pharmacies

Consider table A.6.4 in Reference Manual A along with table B.18 in Reference Manual B for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered public institutional pharmacies decreased from 1:95 018 people in 2003 to 1:89 222 people per pharmacy in 2008. This implies an improvement in the availability of the pharmaceutical structures over the study period.

Table 5.16 presents the results for the pharmacy per population ratio of the registered public institutional pharmacies, during 2003 and 2008, in each province. The provinces are ranked by decreasing order of province with the most favourable availability of the pharmaceutical structures in 2008.

From the table 5.16, it is evident that public institutional pharmacies have the most favourable availability in the Northern Cape province. This is despite the fact that the province contains the smallest number of public institutional pharmacies of all the provinces. The Western Cape province follows on with a pharmacy per population ratio of 1:44 163 people for 2008. The province of Mpumalanga remains the province wherein the public institutional pharmacies are least available throughout the entire study period. The province also contained the lowest number of the registered public institutional pharmacies in the country.

Table 5.16: Changes in the provincial pharmacy per population ratio of public institutional pharmacies for 2003 and 2008

Province	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Northern Cape	17 625	25 619	+7 994	45.3
Western Cape	47 920	44 163	-3 757	-7.8
North West	62 008	59 056	-2 952	-4.8
Free State	66 783	68 243	+1 460	2.2
Eastern Cape	135 009	90 016	-44 993	-33.3
Limpopo	149 254	114 750	-34 504	-23.1
KwaZulu-Natal	135 223	121 729	-13 494	-10.0
Gauteng	193 066	181 700	-11 366	-5.9
Mpumalanga	94 447	130 694	+36 247	+38.4
South Africa (Total)	95 018	89 222	-5 796	-6.1

The overall improvement in the availability of the registered public institutional pharmacies in the country, as a ratio of the pharmacy per population, did not take effect in each province. Provinces that experienced a decrease in the availability are Northern Cape, Free State and Mpumalanga. This is due to the fact that the total number of registered public institutional pharmacies in those provinces decreased over the study years. All other provinces experienced an improvement in the availability of the structures, over the study years. The province which experienced the highest improvement was the Eastern Cape province with a percentage change of 33.3% in the pharmacy per population ratio between 2003 and 2008.

The results for the years wherein the pharmacy per population ratios of public institutional pharmacies were at their highest and lowest are presented in table 5.17 below. The availability of the registered public pharmaceutical structures in South Africa was at its poorest in 2004, with a pharmacy per population ratio of 1:95 810 people and at its best in 2007, with a pharmacy per population ratio of 1:88 185 people.

Table 5.17: Years with the highest and lowest pharmacy per population ratio of the public institutional pharmacies for each province

Province	Highest		Lowest	
	Year	ratio	Year	ratio
Eastern Cape	2004	136 600	2008	90 016
Free State	2007	69 177	2006	60 922
Gauteng	2006	258 917	2008	181 700
KwaZulu-Natal	2004	236 266	2008	121 729
Limpopo	2003	149 254	2008	114 750
Mpumalanga	2007	132 546	2003	94 446
North West	2005	68 091	2008	59 056
Northern Cape	2008	25 620	2003	17 625
Western Cape	2004	48 481	2007	44 010
South Africa (Total)	2004	95 810	2007	88 185

5.3 THE DISTRIBUTION OF THE REGISTERED DIRECT SERVICE PHARMACEUTICAL STRUCTURES WITHIN THE EASTERN CAPE PROVINCE, 2003-2008

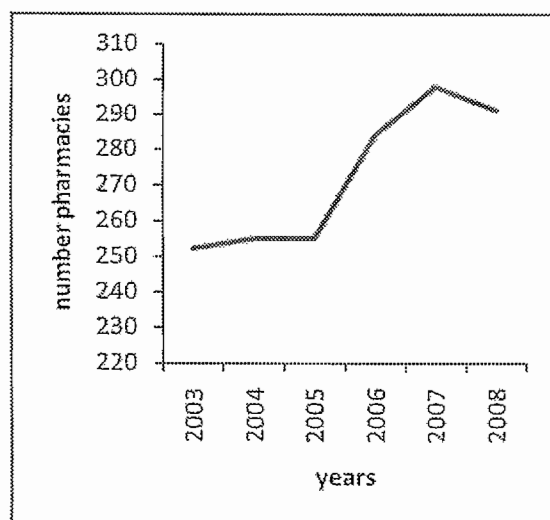
This section presents and discusses the results of both the geographic and per-population distribution of the registered direct service pharmacies within the district councils and local municipalities of the Eastern Cape province for 2003 to 2008.

Consider tables C.1.1, C.1.2, C.1.3 and C.1.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

The changes in the total number of the registered direct service pharmaceutical structures situated in the Eastern Cape province are illustrated in figure 5.3. There is a general increase in the total number of the direct service pharmacies in the province from 252 pharmacies in 2003 to 291 pharmacies in 2008. As illustrated in figure 5.3 (a), the highest increase took place between the years 2005 and 2006 ($n=+29$).

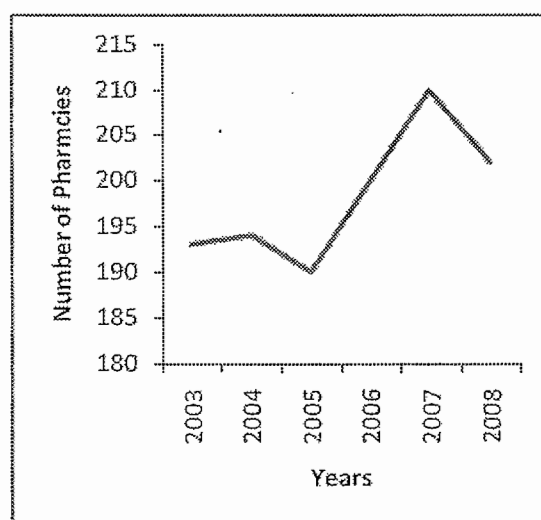
Figure 5.3 further illustrates that the overall increase in the total number of the registered direct service pharmaceutical structure, in the province, takes effect in each category of the direct service pharmaceutical structures in the province. The total number of community pharmacies, as presented by figure 5.3 (b), increased from 193 pharmacies in 2003 to 202 pharmacies in 2008. The highest increase in community pharmacies occurred during the one-year intervals 2005-2006 and 2006-2007 ($n=+10$).

Private institutional pharmacies, illustrated in figure 5.3(c), gradually increased with one pharmacy each year from 2003 to 2005. For the 2005-2006 year interval, two private institutional pharmacies were added to the total number in the province, and after that the total number remained constant. Public institutional pharmacies, illustrated in figure 5.3(d), increased from a total of 48 pharmacies in 2003 to 73 pharmacies in 2008. The period wherein the highest increase in the pharmaceutical structures occurred was 2005-2006 ($n=+18$).



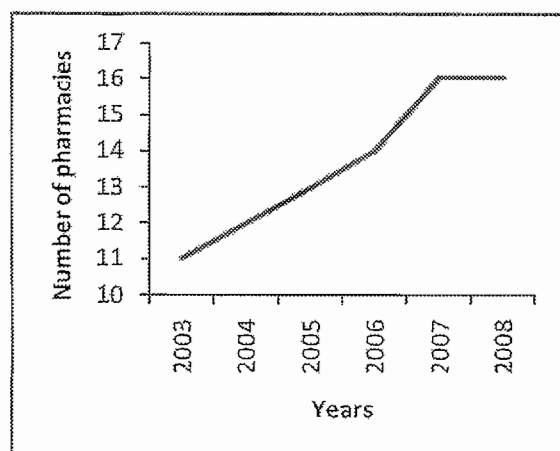
(a)

All registered pharmaceutical structures



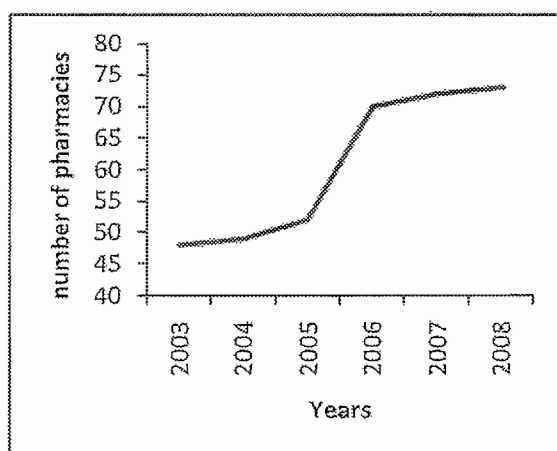
(b)

Registered Community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.3: Changes in the total number of (a) all registered direct service pharmacies, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Eastern Cape province, 2003 to 2008

5.3.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE EASTERN CAPE PROVINCE

Consider table C.1.1 in Reference Manual C along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1, and B.33.1 in Reference Manual B, as well as tables D.1.1 and D.2.1 in Reference Manual D, for the comprehensive results of the discussion which follows below.

Municipalities containing at least one pharmaceutical structure providing services directly to the patients increased from 77% in 2003 to 83% in 2008. Consequently, the estimated number of people living in municipalities without at least one registered direct service pharmaceutical structure, in the Eastern Cape, decreased from more than 600,000 in 2003 to about 500,000 people in 2008.

Table 5.18 presents the results of the changes in the distribution of the direct service pharmaceutical structures among the district councils of the Eastern Cape province between 2003 and 2008. The district councils in table 5.18 are ranked by decreasing order of district council containing the most number of the registered direct service pharmaceutical structures in the province for 2008.

Table 5.18: Changes in the total number of registered direct service pharmaceutical strictures in the Eastern Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
Nelson Mandela	109 (43.2%)	111 (38.1%)	+2	1.8
Amatole	56 (22.2%)	69 (23.7%)	+13	23.2
Cacadu	31 (12.3%)	34 (11.7%)	+3	9.7
O.R. Tambo	15 (6.0%)	27 (9.3%)	+12	80
Chris Hani	24 (9.5%)	26 (8.9%)	+2	8.3
Umkhahlamba	15 (6.0%)	15 (5.1%)	0	0
Alfred Nzo	2 (0.8%)	9 (3.1)	+7	350
Eastern Cape (Total)	252 (100%)	291 (100%)	+39	15.4

The district council wherein the most direct service pharmaceutical structures (n=109 for 2003; n= 111 for 2008) are situated is the Nelson Mandela Metropolitan municipality for all the study years, followed by the Amatole district council. In 2008, almost 62% of all the registered direct service pharmaceutical structures were situated in the two districts. Alfred Nzo district remained the district in which the lowest number of pharmacies in the province were situated, throughout the study years.

All district councils, excluding the Umkhahlamba district council, experienced an increase in the total number of registered direct service pharmaceutical structures situated within them from 2003 to 2008. The highest increase in number of the pharmaceutical structures took place in Amatole district council (n=+13).

Tables D.1.1 and D.2.1 in the Reference Manual part D, presents the results of the 2003 to 2008 distribution of the registered direct service pharmaceutical structures within the local municipalities of the Eastern Cape province.

The results of the total number of registered pharmaceutical structures in each local municipality of the Eastern Cape, for the year 2008, are presented in table 5.19 below. The table further ranks the municipalities by decreasing order of municipality with the most direct service pharmaceutical structures situated therein. As indicated in the table 5.19, the Nelson Mandela Metropolitan contains the highest number of registered direct service pharmaceutical structures (n=111) in the province. This is followed by Buffalo City municipality which contains a total of 45 direct service pharmaceutical structures. The two municipalities are where 54% of the registered direct service pharmaceutical structures were situated in the year 2008.

Table 5.19: Ranking of local municipalities in the Eastern Cape by order of local municipality with the highest number registered direct service pharmaceutical structures, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Nelson Mandela	111	22	Matatiele	3
2	Buffalo City	45	23	Nxuba	3
3	King Sabata Dalindyebo	15	24	Elundini	2
4	Kouga	10	25	Intsika Yethu	2
5	Lukanji	10	26	Mbizana	2
6	Makana	7	27	Port St Johns	2
7	Mnguma	7	28	Sakhisizwe	2
8	Quakeni	7	29	Emalahleni	1
9	Inxuba Yethemba	6	30	Inkwanca	1
10	Senqu	6	31	Mhlontlo	1
11	Umzimbuvu	6	32	Kou Kamma	1
12	Ndlambe	5	33	Ngqushwa	1
13	Nkokobe	5	34	Tsolwana	1
14	Amahlathi	4	35	Baviaans	0
15	Camdeboo	4	36	Cacadu	0
16	Maletswai	4	37	Chris Hani	0
17	Mbashe	4	38	Great Kei	0
18	Sundays River Valley	4	39	Ikwezi	0
19	Blue Crane	3	40	Ntabankulu	0
20	Engcobo	3	41	Nyandeni	0
21	Gariep	3			

5.3.1.1 Community Pharmacies

Consider table C.1.2 in Reference Manual C; tables B.28.2, B.29.2, B.30.2, B.31.2, B.32.2, and B.33.2 in Reference Manual B, as well as tables D.1.1 and D.2.1 in Reference Manual D, for the comprehensive results of the discussion which follows below.

In 2008, 12 of the 41 (29.3%) municipalities in the Eastern Cape province were without a registered community pharmacy. The estimated number of people in the province living in those municipalities was more than 920,000 people, a decrease from the estimated 1.2 million in 2003.

The results for the distribution of the registered community pharmacies among the district councils of the Eastern Cape province are presented in table 5.20. Furthermore, the district councils in table 5.20 are ranked by decreasing order of district councils with the highest number of the registered community pharmacies situated within them.

Table 5.20: Changes in the total number of registered community pharmacies in the Eastern Cape province per district council, 2003 and 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Nelson Mandela	94 (48.7%)	94 (46.5%)	0	0
Amatole	39 (20.2%)	46 (22.8%)	+7	17.9
Cacadu	23 (11.9%)	23 (11.4%)	0	0
Chris Hani	17 (8.8%)	15 (7.4%)	-2	11.8
O.R. Tambo	10 (5.2%)	14 (6.9%)	+4	40
Umkhahlamba	9 (4.7%)	7 (3.5%)	-2	22.2
Alfred Nzo	1 (0.5%)	3 (1.5%)	+2	200
Eastern Cape (Total)	193	202	9	4.7

As indicated in table 5.20, the municipality containing the highest number of the registered community pharmacies is the Nelson Mandela Metropolitan (n=94 for 2003 and 2008). This is followed by Amatole district council with a total of 39 community pharmacies in 2003 and 46 community pharmacies in 2008. In 2008, almost 70% of the registered community pharmacies in the province were situated in the two districts. The district council with the lowest number of community pharmacies remained to be Alfred Nzo, all throughout the study years.

The overall increase in the total number of registered community pharmacies in the province did not take effect within each district council. The number of community pharmacies in Nelson Mandela metropolitan and Cacadu district council remained the same between the study years. Chris Hani and Umkhahlamba district councils each experienced a decrease of two community pharmacies between the study years. Table 5.20 also indicates that the district council with the greatest growth in the total number of community pharmacies, between the study years, was Amatole (n=+7).

Tables D.1.1 and D.2.1 in Reference Manual D present the results of the 2003 to 2008 distribution of the registered community pharmacies among the local municipalities of the Eastern Cape province.

In 2008, the registered community pharmacies in the Eastern Cape province were distributed among the local municipalities as indicated in table 5.21. The table also ranks the municipalities by decreasing order of municipality with the most community pharmacies for that year. The Nelson Mandela metropolitan contains the highest number of community pharmacies (n=94), followed by Buffalo City municipality (n=35). About 75% of the community pharmacies in the province were, in 2008, situated among the top five municipalities as presented in table 5.21.

Table 5.21: Ranking of local municipalities in the Eastern Cape by order of local municipality with the highest number registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Nelson Mandela	94	22	Elundini	1
2	Buffalo City	35	23	Intsika Yethu	1
3	King Sabata Dalindyebo	8	24	Gariep	1
4	Kouga	8	25	Kou Kamma	1
5	Lukanji	6	26	Port St Johns	1
6	Inxuba Yethemba	4	27	Mbizana	1
7	Makana	4	28	Sakhisizwe	1
8	Mnquma	4	29	Umzimvubu	1
9	Ndlambe	4	30	Tsolwana	1
10	Qaukeni	4	31	Baviaans	0
11	Maletswai	3	32	Cacadu	0
12	Blue Crane Route	2	33	Chris Hani	0
13	Camdeboo	2	34	Emalahleni	0
14	Engcobo	2	35	Great Kei	0
15	Matatiele	2	36	Inkwanca	0
16	Mbashe	2	37	Ikwezi	0
17	Mkokobe	2	38	Mhlontlo	0
18	Nxuba	2	39	Ngqushwa	0
19	Senqu	2	40	Nyandeni	0
20	Sunday's River Valley	2	41	Ntabankulu	0
21	Amahlathi	1			

5.3.1.2 Private Institutional Pharmacies

Consider table C.1.3 in Reference Manual C; with tables B.28.4, B.29.4, B.30.4, B.31.4, B.32.4, and B.33.4 in Reference Manual B, as well as, tables D.1.1 and D.2.1 in Reference Manual D for the comprehensive results of the discussion which follows below.

Private institutional pharmacies are the poorest supplied category of direct service pharmaceutical structures in the province. In 2003, 88% of the municipalities in the Eastern Cape province did not contain a registered private institutional pharmacy, this percentage

decreased to 81% in 2008. The estimated total population living in the municipalities without registered private institutional pharmacies also decreased from more than 4.1 million in 2003 to about 3.9 million people in 2008.

Table 5.22 below presents the results of the distribution of the registered private institutional pharmacies among the district councils of the Eastern Cape province between the years 2003 and 2008. The metropolitan and district councils in table 5.22 are listed by decreasing order of district council wherein the most registered private institutional pharmacies in the province are situated.

Table 5.22: Changes in the total number of registered private institutional pharmacies in the Eastern Cape province per district council, 2003 and 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Nelson Mandela	5 (45.5%)	6 (37.5%)	+1	+20
Chris Hani	1 (9.1%)	4 (25%)	+3	+300
Amatole	3 (27.3%)	3 (18.8%)	0	0
Cacadu	1 (9.1%)	2 (12.5%)	+1	+50
O.R. Tambo	1 (9.1%)	1 (6.3%)	0	0
Alfred Nzo	0 (0%)	0 (0%)	0	0
Umkhahlamba	0 (0%)	0 (0%)	0	0
Eastern Cape (Total)	11 (100%)	16 (100%)	+5	45.5

From the table 5.22, it is evident that, as in the case of the registered community pharmacies, Nelson Mandela metropolitan contained the highest number of private institutional pharmacies. In 2003, Amatole district council had the second highest number of the private institutional pharmacies in the province. In 2008, however, the Nelson Mandela metropolitan was succeeded by the Chris Hani district council, with the second highest number of the pharmaceutical structures. This is attributed to the fact that the number of private institutional pharmacies in Amatole remained the same while those in Chris Hani district council increased.

The Alfred Nzo and Umkhahlamba district councils did not have private institutional pharmacies situated within them.

The overall increase in the total number of private institutional pharmacies in the province took effect in the Nelson Mandela metropolitan (n=+1), Chris Hani district (n=+3) and Cacadu district council (n=+1) only. The remaining four district councils did not experience a change in the total number of registered private institutional pharmacies situated within them, between the study years.

5.3.1.3 Public Institutional Pharmacies

Consider table C.1.4 in Reference Manual C along with tables B.28.2, B.29.2, B.30.2, B.31.2, B.32.2, B.33.2 in Reference Manual B for the comprehensive results of the discussion which follows below.

Public institutional pharmacies of the Eastern Cape province were situated in 58% of the municipalities in the province in 2003. This percentage increased, with the increase in the total number of the pharmacies, to 71% in 2008. The estimated total number of people living in municipalities without registered public institutional pharmacies also decreased from about 1.5 million in 2003 to about 710,000 people in 2008.

The results of the 2003 versus 2008 distribution of the public institutional pharmacies of the Eastern Cape province, among the district councils of the province, are indicated in table 5.23. The district councils in table 5.23 are listed in decreasing order of district with the highest number of public institutional pharmacies in the province for the year 2008.

The distribution trend of the registered public institutional pharmacies among the district councils in the Eastern Cape province, slightly differs from that of the other direct service pharmaceutical structures. The district council wherein most of the registered public pharmaceutical structures, in the province, are situated is Amatole. Nelson Mandela metropolitan municipality then follows this. The Alfred Nzo district council remains the district council in which the lowest number of public institutional pharmacies are situated, even though the district experienced the highest growth percentage in public institutional pharmacies over the study years.

Table 5.23: Changes in the total number of registered public institutional pharmacies in the Eastern Cape province per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Amatole	14 (29.2%)	20 (27.4%)	+6	+42.9
Nelson Mandela	10 (20.8%)	11 (15.1%)	+1	10
O.R. Tambo	4 (8.3%)	12 (16.4%)	+8	+200
Cacadu	7 (14.6%)	9 (12.3%)	+2	+28.6
Umkhahlamba	6 (12.5%)	8 (11.0%)	+2	33.3
Chris Hani	6 (12.5%)	7 (9.6%)	+1	16.7
Alfred Nzo	1 (2.1%)	6 (8.2%)	+5	+500
Eastern Cape (Total)	48 (100%)	73 (100%)	+25	+52.1

The general increase in public institutional pharmacies in the province took effect in all districts. O.R. Tambo is the district council which accumulated the highest number of registered public institutional pharmacies, over the years (n=+8).

Tables D.1.1 and D.2.1 in Reference Manual D present the results of the distribution of the registered public institutional pharmacies among the local municipalities of the Eastern Cape province from 2003 to 2008. The 2008 results of the total number of the registered public institutional pharmacies situated in each local municipality, are presented in table 5.24. Furthermore, the local municipalities in table 5.24 are ranked by decreasing order of local municipality with the highest number of registered public institutional pharmacies for the year 2008.

From table 5.24, it is evident that the Nelson Mandela metropolitan, as municipality, contained the most number of the registered public institutional pharmacies (n=11), followed by Buffalo city local municipality (n=7). Although this trend is similar to that of the community pharmacies, the two municipalities contain a smaller proportion (25%) of the public institutional pharmacies, in contrast to the community pharmacies of the province (75%).

Table 5.24: Ranking of local municipalities in the Eastern Cape by order of local municipality with the highest number registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Nelson Mandela	11	22	Maletswai	1
2	Buffalo City	7	23	Mbizana	1
3	King Sabata Dalindyebo	6	24	Mhlontlo	1
4	Umzimvubu	5	25	Ngqushwa	1
5	Senqu	4	26	Ndlambe	1
6	Amahlathi	3	27	Nxuba	1
7	Makana	3	28	Port St Johns	1
8	Mnquma	3	29	Sakhisizwe	1
9	Nkokobe	3	30	Sunday's River Valley	1
10	Qaukeni	3	31	Tsolwana	0
11	Camdeboo	2	32	Baviaans	0
12	Gariep	2	33	Cacadu	0
13	Inxuba Yethemba	2	34	Chris Hani	0
14	Lukanji	2	35	Emalahleni	0
15	Mbashe	2	36	Great Kei	0
16	Blue Crane Route	1	37	Ikwezi	0
17	Elundini	1	38	Inkwanca	0
18	Engcobo	1	39	Kou Kamma	0
19	Intsika Yethu	1	40	Ntabankulu	0
20	Kouga	1	41	Nyandeni	0
21	Matatiele	1			

5.3.2 THE POPULATION DISTRIBUTION VERSUS DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE EASTERN CAPE PROVINCE

Consider tables C.1.5, C.1.6, C.1.7 and C.1.8 in part C of the Reference Manual, as well as D.1.1 and D.2.1 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total estimated population in the Eastern Cape province increased from 6.5 million in 2003 to 6.6 million in the year 2008. The results of the estimated population in the Eastern Cape province, as well as the estimated population within each district council of the province, from 2003 to 2008, are presented in table C.1.5 in part C of the Reference Manual. The results of the estimated population within each local municipality of the province are presented in tables D.1.1 (for 2003 to 2005) and D.2.1 (for 2006 to 2008) in part D of the Reference Manual.

The changes in the pharmacy per population ratio for all the categories of direct service pharmaceutical structures situated in the province, from the year 2003 to 2008, are illustrated in figure 5.4. This figure 5.4 should be viewed alongside figure 5.3 to determine the effect of the total number of the direct service pharmacies situated in the Eastern Cape province on the pharmacy per population ratio of the province in that year.

From the graph in figure 5.4(a), it is evident that there was an overall decrease in the pharmacy per population ratio of the direct service pharmaceutical structures in the province, where in 2003, the province had one pharmacy per 25,716 people and in 2008 the ratio was one pharmacy per 22,583 people. This suggests an overall improvement in the availability of the structures in the Eastern Cape province.

The graph in figure 5.4(a) also shows the overall trend in pharmacy per population ratio of the direct service pharmacies in the province. Initially, the pharmacy per population ratio increases during the period 2003 to 2004. This suggests that the increase in the total number of the pharmacies, for that period, was not significant enough to improve the availability of the structures, given the high population growth of that province, in that period. The total estimated population of the province decreases in 2005 so that, although the total number of the pharmacies remains the same, the pharmacy per population ratio decreases. During the subsequent periods from 2005 to 2007 the pharmacy per population ratio of the direct service pharmacies in the province decreases, due to significant increases in the total number of the pharmacies in the province. The increase in the ratio during the period 2007-2008 may be attributed to the decrease in the total number of the registered direct service pharmaceutical structures situated in the province.

Table 5.25 below presents the results of the changes in the pharmacy per population ratio of the direct service pharmacies in each district council of the Eastern Cape province. The district councils are, in table 5.25, listed by rank order from the district council with the lowest pharmacy per population ratio (implying a more favourable availability of the structures in comparison to other district councils in the province) to the district council with the highest pharmacy per population ratio (implying poorer availability of the structures to the district councils population, in comparison to the other district councils in the province) for the year 2008.

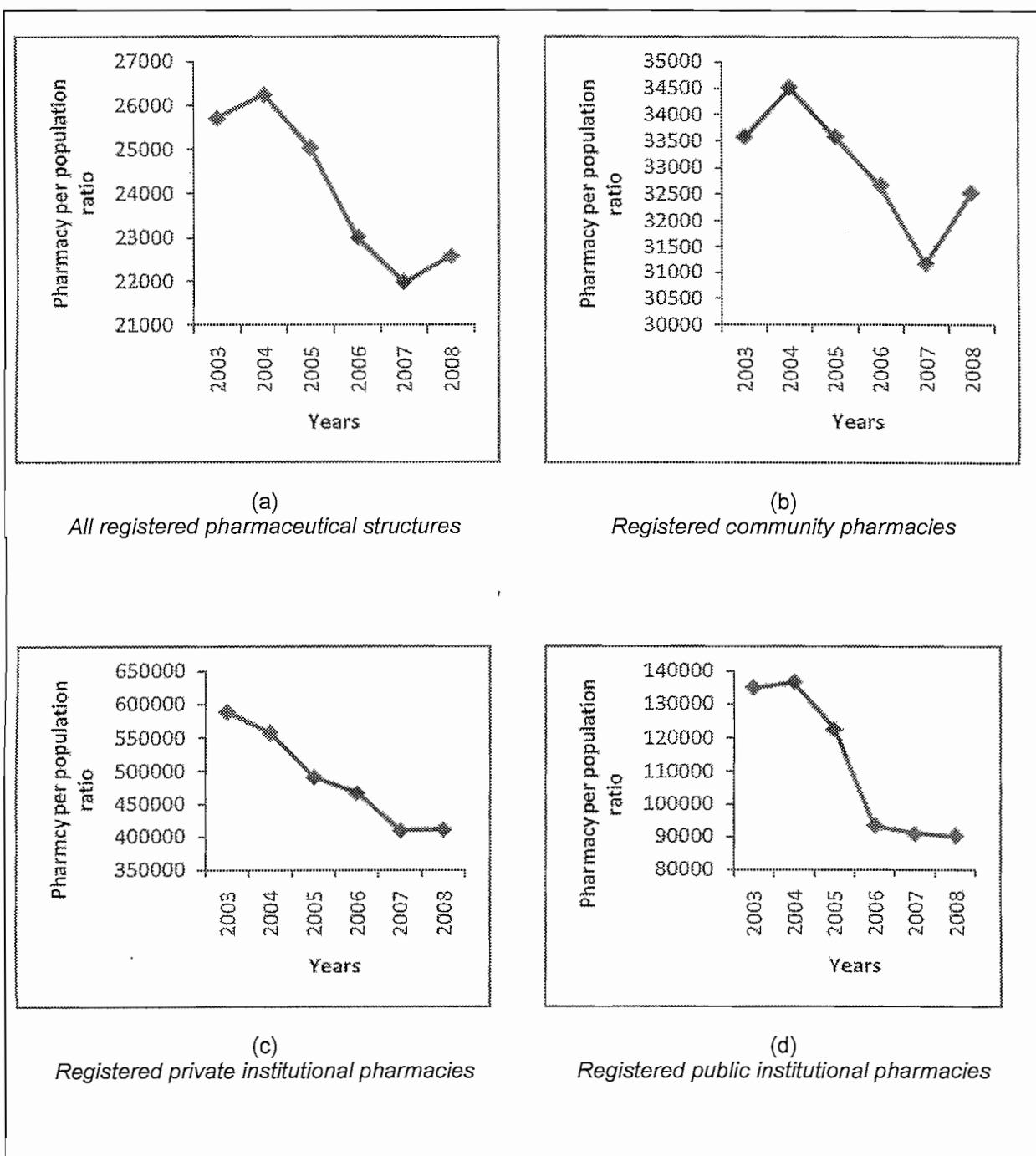


Figure 5.4: Changes in the pharmacy per population ratio of (a) all registered direct service pharmacies, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Eastern Cape province, 2003 to 2008

From the table 5.25, it is evident that all district councils, excluding Umkhahlamba district council experienced a decrease in their pharmacy per population ratio for the direct service pharmacies situated in them. This implies an overall improvement in the availability of the pharmacies in each district council, except Umkhahlamba district council, from 2003 to 2008. The decline in availability of pharmacies situated in Umkhahlamba district council may be attributed to the fact that the total number of pharmacies situated in the district remained the same for the years 2003 and 2008, while the estimated population in the district continued to increase.

The Nelson Mandela metropolitan municipality, the municipality which contains the highest number of direct service pharmacies and the third largest proportion of the population in the province, has the lowest pharmacy per population ratio, throughout the study years. Interestingly, the O.R. Tambo district council contains the largest percentage proportion of the population in the Eastern Cape province and has the second highest pharmacy per population ratio. This is due to the small number of pharmacies situated in the district council (refer to table 5.17). Alfred Nzo district council contains the smallest proportion of the population in the province and also the lowest number of pharmacies in the province. The pharmacy per population ratio of the Alfred Nzo district is also the highest, throughout the study years, implying poorer availability of the structures in this district council, relative to the availability of the structures in the other district councils in the province.

Table 5.25: Changes in the provincial pharmacy per population ratio of all registered pharmaceutical structures in each district council of the Eastern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Nelson Mandela	9 290	9 228	-62	-0.7
Cacadu	12 607	11 625	-982	-7.8
Umkhahlamba	22 910	23 174	+264	+1.2
Amatole	29 921	24 564	-5 357	-17.9
Chris Hani	33 991	31 739	-2 252	-6.6
O.R. Tambo	112 522	63 234	-49 288	-43.8
Alfred Nzo	277 081	64 121	-212 960	-76.9
Eastern Cape (Total)	25 716	22 583	-3 133	-12.2

Table 5.25 also shows the disparities in the distribution and availability of the registered direct service pharmacies in the province, where the provincial pharmacy per population ratio (n= 22, 583 for the year 2008) is used as a benchmark ratio in the case that all direct service pharmaceutical structures are evenly distributed throughout the province. The pharmacy per population ratio of pharmacies in the Nelson Mandela metropolitan is less than two times that of the benchmark in 2008, while the pharmacy per population ratio for pharmacies situated in the Alfred Nzo district council is more than two times that of the benchmark. Furthermore, the Nelson Mandela metropolitan and Cacadu district council are the only districts with a pharmacy per population ratio below the benchmark. This suggests that the distribution of registered direct pharmaceutical structures is more favourable towards the Nelson Mandela metropolitan and Cacadu district council.

Table 5.26 presents the results for the years during which the pharmacy per population ratios of the registered direct service pharmacies, for each district were at their highest and lowest. The pharmacy per population ratio of the direct service pharmacies in the Eastern Cape province was at its highest in 2004 (n=1:26 249) and at its lowest in 2007 (n=1:21 670), this is also demonstrated by the peaks in the graphs in figure 5.4(a). From table 5.26, it is also evident that the highest pharmacy per population ratio for most of the districts was in 2004 and the lowest in 2007.

Table 5.26: Years with the highest and lowest pharmacy per population ratios of all the registered direct service pharmaceutical structures in each district council of the Eastern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Alfred Nzo	2004	286 188	2007	57 494
Amatole	2004	31 466	2007	24 473
Cacadu	2004	13 021	2007	11 584
Chris Hani	2004	35 108	2007	30 450
Nelson Mandela	2004	9 595	2007	8 874
O.R. Tambo	2003	112 522	2007	62 999
Umkhahlamba	2004	23 663	2006	20 330
Eastern Cape (Total)	2004	26 249	2007	21 670

Tables D.1.1 and D.2.1 in part D of the Reference Manual present the results for the pharmacy per population ratio of the direct service pharmaceutical structures situated in each local municipality in the Eastern Cape province, from 2003 to 2008.

The results for the 2008 pharmacy per population ratio of the direct service pharmacies in the local municipalities of the Eastern Cape province are presented in table 5.27. The local municipalities listed in table 5.27 are ranked by order from the local municipality with the lowest pharmacy per population ratio to the local municipality with the highest population per pharmacy ratio.

Table 5.27: Ranking of local municipalities in the Eastern Cape by order from local municipality with lowest to the highest pharmacy per population ratio for registered direct service pharmacies, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Kouga	7 199	18	King Sabatha Dalindyebo	28 190
2	Nxuba	8 432	19	Tsolwana	33 129
3	Nelson Mandela metro	9 228	20	Kou Kamma	34 922
4	Maletswai	9 498	21	Amahlathi	35 406
5	Inxuba Yethemba	10 233	22	Quakeni	37 154
6	Sunday's River Valley	10 584	23	Mnquma	41 867
7	Gariep	10 626	24	Engcobo	50 381
8	Makana	10 846	25	Umzimvubu	63 833
9	Camdeboo	11 294	26	Mbashe	64 512
10	Ndlambe	11 300	27	Matatiele	64 697
11	Blue Crane Route	11 885	28	Elundini	70 047
12	Buffalo City	15 883	29	Port St Johns	74 413
13	Lukanji	18 792	30	Nggushwa	85 800
14	Inkwanca	20 612	31	Intsika Yethu	98 908
15	Senqu	22 940	32	Emalahleni	118 067
16	Nkokobe	26 212	33	Mbizana	124 971
17	Sakhisizwe	27 512	34	Mhlontlo	200 293

5.3.2.1 Community Pharmacies

Consider table C.1.6 in part C of the Reference Manual, as well as tables D.1.1 and D.2.1 in part D of the Reference Manual for the comprehensive results of the discussion which follows below.

The changes in the pharmacy per population ratio of the community pharmacies situated in the Eastern Cape province are illustrated by the graph in figure 5.4(b). In 2003, the Eastern Cape province had one community pharmacy per 33,577 people. The ratio decreased to one community pharmacy per 32,548 people in 2008. This indicates an overall improvement of registered community pharmacies to the people in the Eastern Cape province, throughout the study years.

As indicated by the graph in figure 5.4(b), the pattern of change in the pharmacy per population ratio, from 2003 to 2008, is similar to that of the registered direct service pharmacies in the province. During the initial study period from 2003 to 2004, the pharmacy per population ratio increases. As was the case with the direct service pharmacies, this may be attributed to the minor increase of the total number of community pharmacies during the period ($n=1$), in the presence of a significant increase in the total estimated population in the province, for that period. This period is followed by periods of a decrease in the pharmacy per population ratio until the year 2007, due to significant increases in the total number of registered community pharmacies in that period. During the period 2007-2008, the ratio again increases as a result of the decrease in the total number of community pharmacies in the presence of a still increasing population in the province.

The changes in the pharmacy per population ratio of the registered community pharmacies in the each district council of the Eastern Cape province, between 2003 and 2008, are presented in table 5.28. The districts in table 5.28 are listed by order from district council with the lowest ratio (implying that a more favourable availability of the community pharmacies to the population) to the highest pharmacy per population ratio (or least favourable availability of the community pharmacies to the population) for the year 2008. The community pharmacies in Nelson Mandela metropolitan are more favourably available to the population, while the district council with the least favourable availability of community pharmacies to the population is Alfred Nzo.

The overall decrease in the pharmacy per population ratio observed for the province as a whole does not apply within all district councils. As is evident from table 5.28, most of the district councils in the province experienced an increase in the pharmacy per population ratio of the community pharmacies. For the Nelson Mandela metropolitan and Cacadu district council, the increase in pharmacy per population ratio is a result of the total number of community pharmacies situated in the districts for the years 2003 and 2008 remaining the same, while the estimated population living in those districts continues to rise. Umkhahlamba and Chris Hani

district councils experienced a decrease in the total number of community pharmacies situated in them therefore bringing about the increase in pharmacy per population ratio. This implies a decline in the availability of the registered community pharmacies situated in these district councils. The remaining district councils (Amatole, O.R. Tambo and Alfred Nzo) experienced increases in the total number of community pharmacies situated within them between 2003 and 2008, therefore, a decrease in their pharmacy per population ratio was effected. Availability of community pharmacies in these districts therefore improved over the study years.

Table 5.28: Changes in the community pharmacy per population ratio in each district council of the Eastern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Nelson Mandela	10 772	10 896	+124	1.2
Cacadu	16 992	17 188	+200	1.2
Amatole	42 964	36 846	-6 118	-14.2
Umkhahlamba	38 183	49 658	+11 475	30.1
Chris Hani	47 988	55 014	+7 026	14.6
O.R. Tambo	168 783	121 950	-46 833	-27.7
Alfred Nzo	554 161	192 363	-361 798	-65.3
Eastern Cape (Total)	33 577	32 548	-1 029	-3.1

Table 5.28 also demonstrates the unequal distribution and availability of the community pharmacies among the district councils of the Eastern Cape province, where the provincial pharmacy per population ratio (n=1: 32 548) is used as a benchmark ratio in the event that the community pharmacies in the province be equally distributed among the population in each district council of the province. Only Nelson Mandela (n=1:10 896) and Cacadu district council (n=1:17 188) have ratios above the benchmark ratio, suggesting an oversupply of community pharmacies to the population in these areas. On the other hand, the district council with the highest pharmacy per population ratio, Alfred Nzo (n=1:192 363), has a ratio six times more than that of the benchmark, suggesting an undersupply of the community pharmacies to the population in this district. A more extensive evaluation of the availability of the community pharmacies in the district councils of the Eastern Cape province is offered in section 5.12 of this chapter.

Table 5.29 presents the results for the years in which the pharmacy per population ratio of the registered community pharmacies for each district council of the Eastern Cape province were at their highest and lowest. The highest pharmacy per population ratio for the community pharmacies in the Eastern Cape province is observed during the year 2004 (n= 1:34 502) and the lowest is observed during the year 2007 (n=1: 31 178). These ratios are also demonstrated by the high and low peak in the graph in figure 5.4(b). The results presented in table 5.29, show that the years during which the population per pharmacy ratios for community pharmacies in the Eastern Cape were at their highest and lowest do not pertain to all the district councils.

Table 5.29: Years with the highest and lowest pharmacy per population ratio for the registered community pharmacies in each district council of the Eastern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Alfred Nzo	2004	572 376	2006	143 445
Amatole	2004	45 543	2007	35 928
Cacadu	2004	17 551	2005	16 729
Chris Hani	2008	55 014	2003	47 988
Nelson Mandela	2004	11 246	2006	10 720
O.R. Tambo	2003	168 783	2007	121 498
Umkhahlamba	2008	49 658	2005	37 593
Eastern Cape (Total)	2004	34 502	2007	31 178

The total number of registered community pharmacies situated in the Alfred Nzo district council was the lowest during the years 2003, 2004 and 2005. Since the estimated pharmacy per population ratio of the district was the highest in 2004, this effected the high pharmacy per population ratio. The low pharmacy per population ratio observed for the year 2006 may be attributed to the fact that although the total number of community pharmacies situated in the district was highest in 2006 and 2007, of the two years, 2006 was the year with the lowest total estimated population.

The total number of community pharmacies situated in the Amatole district council was lowest in 2004 and 2005 of the study years. Of the two years, 2004 had the higher total estimated population and therefore the highest pharmacy per population ratio of the entire study period. The low pharmacy per population ratio of the Amatole district council, observed in 2007, may be

attributed to the total number of registered community pharmacies situated in the district being significantly higher in that year.

The total number of community pharmacies situated in Cacadu district council remained constant throughout the study years. As a result, the pharmacy per population ratio of community pharmacies in the district was only influenced by the total estimated population of the study years. Of the study years, in 2004 the total estimated population of the district was at its highest number of 403,669 people and the lowest estimated population was for the year 2005 with 384,777 people.

Chris Hani district council experienced a decrease in the total number of registered community pharmacies situated in it, over the study years. The pharmacy per population ratio of 2008, which is the highest, is due to the fact that the total number of the community pharmacies in the district was at its lowest in that year, and the estimated population at its highest. The year 2003 had the lowest pharmacy population ratio of community pharmacies in the district since the total number of community pharmacies in the district was at its highest in 2003, in the presence of the lowest estimated population of the district, throughout the study years.

The total number of community pharmacies situated in the Nelson Mandela metropolitan municipality is not at its lowest for the year 2004. However, the number is not significant enough to produce a pharmacy per population ratio lower than that observed for the year 2005 (the year during which the total number of community pharmacies in the metro is at its lowest), due to a higher estimated population. The total number of the pharmacies was at its highest in 2007 and therefore correlated to the low pharmacy per population ratio of that year.

For both the O.R. Tambo and Umkhahlamba district councils, the years in which the pharmacy per population ratio of the community pharmacies in the districts was at its highest was indicated for the years during which the total number of registered community pharmacies in those districts was lowest. On the other hand, the years during which the pharmacy per population ratio was at its lowest, were the years during which the total number of community pharmacies in those districts was at its highest, in the presence of a lower estimated district population.

Tables D.1.1 and D.2.1 in part D of the Reference Manual present the results of the pharmacy per population ratio of the community pharmacies in each local municipality of the Eastern Cape province, as of 2003 to 2008. The results of the year 2008 pharmacy per population ratio of the community pharmacies for each local municipality in the province, are presented in table 5.30.

Table 5.30: Ranking of local municipalities in the Eastern Cape by order from local municipality with lowest to the highest pharmacy per population ratio for registered community pharmacies, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Kouga	8 999	16	King Sabatha Dalindyebo	52 857
2	Nelson Mandela metro	10 897	17	Sakhisizwe	55 025
3	Nxuba	12 647	18	Quakeni	65 019
4	Maletswai	12 664	19	Nkokobe	65 529
5	Ndlambe	14 125	20	Senqu	68 821
6	Inxuba Yethemba	15 350	21	Mnquma	73 266
7	Blue Crane Route	17 827	22	Engcobo	75 571
8	Makana	18 980	23	Matatiele	97 046
9	Buffalo City	20 422	24	Mbashe	129 124
10	Sunday's River Valley	21 168	25	Elundini	140 094
11	Camdeboo	22 587	26	Amahlathi	141 626
12	Lukanji	31 319	27	Port St Johns	148 827
13	Gariep	31 879	28	Intsika Yethu	197 815
14	Kou Kamma	34 922	29	Mbizana	249 943
15	Tsolwana	33 129	30	Umzimvubu	382 995

The local municipalities listed in table 5.30, are ranked by order from the local municipality with the lowest pharmacy per population ratio (implying a more favourable availability of the community pharmacies for the population in that local municipality, in comparison to the other local municipalities in the province) to the local municipality with the highest pharmacy per population ratio (implying less favourable availability of community pharmacies for the population in that local municipality, in comparison to the other local municipalities in the province). As is evident from the table 5.29, the availability of community pharmacies in the local municipalities of the Eastern Cape province ranges from more favourable municipalities such as Kouga, with one community pharmacy for approximately 9000 people, to less municipalities in which the availability is far less favourable, such as Umzimvubu, where there is one community pharmacy per 382,995 people.

5.3.2.2 Private Institutional Pharmacies

Consider table C.1.7 in part C of the Reference Manual, as well as tables D.1.1 and D.2.1 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The graph in figure 5.4(c) illustrates the changes in the pharmacy per population ratio of the registered private institutional pharmacies situated in the Eastern Cape province, a ratio of one private institutional pharmacy per 589,130 people in 2003 to a ratio of one private institutional pharmacy per 410,968 people. This implied an overall improvement in the availability of these pharmaceutical structures to the population in the Eastern Cape province.

Table 5.31 presents the results of the changes in the pharmacy per population ratio for the private institutional pharmacies within each district council of the Eastern Cape. The district councils in table 5.31 are listed by order from district council with the lowest pharmacy per population ratio to the highest pharmacy per population ratio for the year 2008.

Of the district councils that contained registered private institutional pharmacies in 2003 and 2008, the Nelson Mandela metropolitan, Cacadu and Chris Hani district councils were the only district councils that experienced a decrease in their pharmacy per population ratio between 2003 and 2008. These were the only districts in which an increase in the total number of registered private institutional pharmacies took place. For the remaining two districts (Amatole and O.R. Tambo), the total number of registered private institutional pharmacies situated within them remained constant from 2003 to 2008. The pharmacy per population ratio for the private institutional pharmacies in those districts therefore increased between the years due to an increase in the total estimated population of the districts.

The Nelson Mandela metropolitan remained to be the municipality with the lowest private institutional pharmacy per population ratio ($n=1:170,712$) among the district municipalities of the Eastern Cape province. Where the provincial private institutional pharmacy per population ratio of the Eastern Cape ($n=1:410,733$) is used as the benchmark ratio in the case that all the private institutional pharmacy are evenly distributed among the district councils of the province, table 5.30 shows that four of the district councils' ratio fall below this benchmark. This suggests an uneven distribution of the pharmacies to the population in the province.

Table 5.31: Changes in the provincial pharmacy per population ratios of private institutional pharmacies in each district council of the Eastern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Nelson Mandela	202 518	170 712	-31 806	-15.7

Cacadu	390 823	197 666	-193 157	-49.4
Chris Hani	825 795	206 302	-619 493	-75.0
Amatole	558 526	564 970	+6 444	+1.2
O.R. Tambo	1 687 832	1 707 307	+19 475	+1.2
Alfred Nzo	-	-	-	-
Umkhahlamba	-	-	-	-
Eastern Cape (Total)	589 130	410 733	-178 397	30.3

In table 5.32, the results for the years during which the private institutional pharmacy per population ratio for each district council of the Eastern Cape province, was at its highest and at its lowest, are presented. As was illustrated by the graph in figure 5.4(c), the provincial ratio decreased progressively throughout the study years, making 2003 the year during which the ratio was at its highest and 2008 the year during which the ratio was at its lowest.

Table 5.32: Years with the highest and lowest pharmacy per population ratio of the registered private institutional pharmacies in each district council of the Eastern Cape province.

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Alfred Nzo	-	-	-	-
Amatole	2004	576 884	2005	549 885
Cacadu	2004	403 669	2006	196 533
Chris Hani	2004	842 609	2007	205 535
Nelson Mandela	2003	202 518	2005	166 154
O.R. Tambo	2004	1 743 309	2005	1 661 721
Umkhahlamba	-	-	-	-
Eastern Cape (Total)	2003	589 130	2007	409 207

As has been previously mentioned, the total number of private institutional pharmacies in the Amatole and O.R. Tambo district councils remained constant over the study period. The years during which the pharmacy per population ratio in these districts was highest and lowest were therefore influenced by the total estimated population in the districts and not by the total number of pharmacies.

For the Nelson Mandela metropolitan, the private institutional pharmacy per population ratio was lowest in the year 2003. This was the year with the lowest number of private institutional pharmacies for the metropolitan. The total number of the pharmacies in the metropolitan municipality increased from 2004 and remained constant until 2008. Of the period 2004-2008, the total estimated population was lowest in 2005, therefore decreasing the demand for the pharmaceutical structures and also the pharmacy per population ratio.

Tables D.1.1 and D.2.1 in part D of the Reference Manual present the results of the private institutional pharmacy per population ratio for each local municipality of the Eastern Cape province, from 2003 to 2008. The ratio for those municipalities which contained private institutional pharmacies in 2008 are presented in table 5.33 below. Furthermore, the municipalities in table 5.33 are ranked by order from municipality with the lowest to the highest pharmacy per population ratio in 2008. From table 5.33, it is evident that although the Nelson Mandela metropolitan has the more favourable availability in comparison to the district councils, the availability of its private institutional pharmacies is not most favourable to the population in comparison to other local municipalities.

Table 5.33: Ranking of local municipalities in the Eastern Cape by order from local municipality with lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Inkwanca	20 612
2	Sunday's River Valley	42 337
3	Kouga	71 991
4	Lukanji	93 959
5	Emalahleni	118 067
6	Nelson Mandela metropolitan	170 712
7	Buffalo City	238 252
8	King Sabatha Dalindyebo	422 854

5.3.2.3 Public Institutional Pharmacies

Consider table C.1.8 in part C of the Reference Manual, as well as tables D.1.1 and D.2.1 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, the Eastern Cape province had one public institutional pharmacy per 135,009 people. Due to the significant increase in the total number of public institutional pharmacies in the province, the ratio decreased to one pharmacy per 90,024 people. This implied an improvement in the availability of the public institutional pharmacies to the population of the province. The changes in the public institutional pharmacy per population ratio in the Eastern Cape from 2003 to 2008 are illustrated by the graph in figure 5.4(d).

As illustrated by the graph in figure 5.4(d), it is evident that during the initial period of 2003-2004, the pharmacy per population ratio increases slightly. This is due to the fact that although there was a slight increase in the total number of public institutional pharmacies situated in the province during the period ($n=+1$), the increase was not significant enough to improve the availability of the structures to the estimated population in the year 2004. From 2004 to 2006, the total number of the registered public institutional pharmacies increases significantly, resulting in the significant decrease in the pharmacy per population ratio of the structures. The most significant decrease is observed during the period 2005-2006, which was also the period during which the most significant increase in the total number of the registered public institutional pharmacies in the province occurred. From 2006 to 2008, the pharmacy per population ratio continues to decrease. As illustrated by the graph in figure 5.4(d) however, the decrease is not as significant as that observed in the preceding periods. This is a result of the decrease in the growth of the total number of registered public institutional pharmacies from 2006 to 2008 (illustrated by the graph in figure 5.3(d)).

Table 5.34 presents the results of the changes in the public institutional pharmacy per population ratio of each district of the Eastern Cape province from 2003 to 2008. The district councils in table 5.34 are ranked by order from district council with the lowest to the highest public institutional pharmacy per population ratio for the year 2008.

Table 5.34: Changes in the provincial pharmacy per population ratio of public institutional pharmacies in each district council of the Eastern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Umkhahlamba	57 275	43 451	-13 824	-24.1

Cacadu	55 832	43 926	-11 906	-21.3
Amatole	119 684	84 745	-34 939	-29.2
Nelson Mandela	101 259	93 116	-8 143	-8.0
Alfred Nzo	554 161	96 181	-457 980	-82.6
Chris Hani	135 966	117 887	-18 079	-13.3
O.R. Tambo	421 958	142 275	-279 683	-66.3
Eastern Cape (Total)	135 009	90 024	-44 985	-33.3

From table 5.34, it is evident that the overall decrease in the public institutional pharmacy per population ratio in the Eastern Cape province, between 2003 and 2008, took effect within each district council of the province. This is due to the fact that there was an increase in the total number of registered public institutional pharmacies situated in each district council of the province. This implies an improvement in the availability of the registered public institutional pharmacies to the population for each district of the province. Alfred Nzo district council is the district council with the best improvement in availability of the structures between 2003 and 2008. As was presented in table 5.23, Alfred Nzo was also the district council which experienced a higher percentage increase in the total number of the registered public institutional pharmacies from 2003 to 2008.

In 2008, Umkhalhlamba district council was the district council wherein the public institutional pharmacies were most available to the population, with a public institutional pharmacy per population ratio of 1:43,451. Interestingly, the district council is ranked fifth in table 5.23 which ranks the district councils from district council with the highest number of registered public institutional pharmacies to the lowest. The O.R. Tambo district council, with a public institutional pharmacy per population ratio of 1:142,275, had a relatively poor availability of public institutional pharmacies to its population. This district council was ranked third in table 5.23.

Table 5.34 also shows the uneven distribution of the registered public institutional pharmacies among the population of the district councils in the Eastern Cape province. The provincial public institutional pharmacy per population ratio is used as the benchmark ratio, should the public institutional pharmacies be evenly distributed. Only the Amatole, Cacadu and Umkhalhlamba district councils have pharmacy per population ratios above the benchmark, suggesting that the distribution of the structures is skewed in favour of these districts.

The Eastern Cape public institutional pharmacy per population ratio was highest in the year 2004 (n=1:135,009) and lowest in the year 2007 (n=1:90,024). The results of the years during

which the public institutional pharmacy per population ratio, for each district council, was at its highest and lowest are presented in table 5.35.

Table 5.35: Years with the highest and lowest pharmacy per population ratios for the registered public institutional pharmacies in each district council of the Eastern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Alfred Nzo	2004	572 376	2007	95 824
Amatole	2004	123 618	2006	88 694
Cacadu	2004	57 667	2007	43 763
Chris Hani	2004	140 435	2006	117 211
Nelson Mandela	2004	104 587	2007	92 770
O.R. Tambo	2003	421 958	2006	141 460
Umkhahlamba	2004	59 158	2006	1 697 516
Eastern Cape (Total)	2004	135 009	2008	90 024

Tables D.1.1 and D.2.1 in part D of the Reference Manual present the results of the pharmacy per population ratio of the public institutional pharmacies for each local municipality of the Eastern Cape province, from 2003 to 2008. The results of the year 2008 pharmacy per population ratio of the local municipalities in the Eastern Cape which contained registered public institutional pharmacies are presented in table 5.36 below. Furthermore, table 5.36 ranks the local municipalities by order from local municipalities with the lowest to the highest public institutional pharmacy per population ratio in 2008.

Table 5.36: Ranking of local municipalities in the Eastern Cape by order from local municipality with lowest to the highest public institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Ndlambe	10 584	16	Umzimvubu	76 599
2	Gariep	15 939	17	Ngqushwa	85 800

3	Nxuba	25 295	18	Quakeni	86 692
4	Makana	25 307	19	Nelson Mandela metro	93 116
5	Camdeboo	22 587	20	Lukanji	93 959
6	Inxuba Yethemba	30 700	21	Mnquma	97 689
7	Senqu	34 410	22	Buffalo City	102 108
8	Blue Crane Route	35 654	23	Mbashe	129 124
9	Maletswai	37 993	24	Elundini	140 094
10	Sunday's River Valley	42 337	25	Port St Johns	148 827
11	Nkokobe	43 686	26	Engcobo	151 141
12	Amahlathi	47 209	27	Matatiele	194 092
13	Sakhisizwe	55 025	28	Intsika Yethu	197 815
14	King Sabatha Dalindyebo	70 476	29	Mhlontlo	200 293
15	Kouga	71 991	30	Mbizana	249 943

5.4 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN THE FREE STATE PROVINCE, 2003-2008

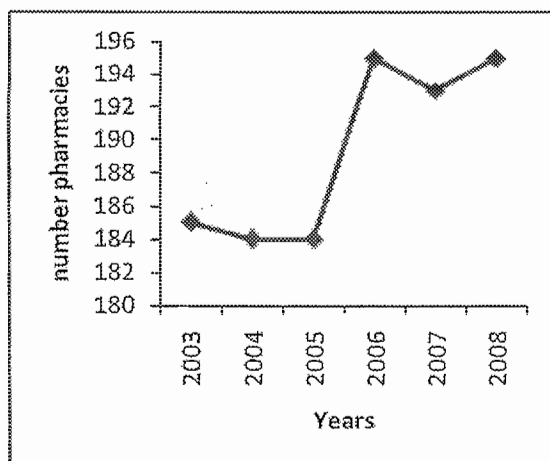
This section presents and discusses the results on both the geographic and per-population distribution of the direct service pharmaceutical structures among the district councils and local municipalities of the Free State province for the years 2003 to 2008.

Consider tables C.2.1, C.2.2, C.2.3 and C.2.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

The changes in the total number of the direct service pharmaceutical structures in the Free State as of 2003 to 2008 are illustrated in figure 5.5. As illustrated by the graph in the figure 5.5(a), the total number of direct service pharmaceutical structures in the province increased from 185 in 2003 to 195 in 2008. The highest increase ($n=+11$) took place during the interval 2005-2006. From figure 5.5, it is, however, evident however that the growth trends for the different categories of pharmaceutical structures providing services directly to the patients differ.

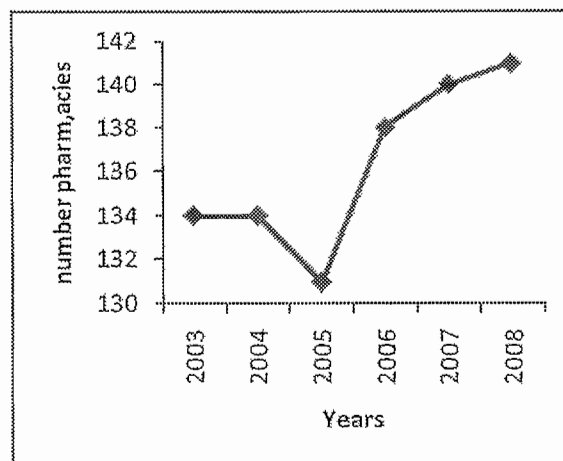
The total number of community pharmacies in the province, illustrated by the graph in the figure 5.5(b), also increased over the study period. The total number of the pharmacies remained constant between the years 2003 and 2004 and then slightly decreased ($n=-3$) from 2004 to 2005. The following period from 2005 to 2006 was the period during which the highest increase in number of community pharmacies in the province took place ($n=+8$), from where the total number of community pharmacies continued to increase, coming to a total of 141 in 2008.

The growth trend of the private institutional pharmacies is illustrated by the graph in figure 5.5(c). The total number of the pharmacies in the Free State decreased by one pharmacy between the years 2003 and 2004. From 2004 the number of private institutional pharmacies in the province continued to increase to total 13 pharmacies in 2008. The highest increase ($n=+2$) took place during the one year interval 2004-2005.



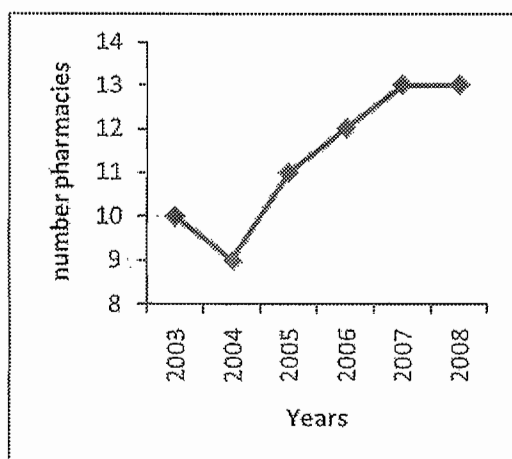
(a)

All registered direct service pharmaceutical structures



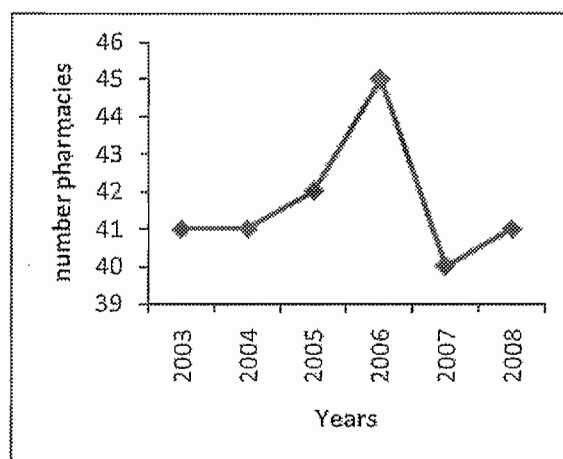
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.5: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Free State, 2003 to 2008

The changes in the total number of registered public institutional pharmacies are illustrated by the graph in figure 5.5(d). The total number of public institutional pharmacies in the province remains constant for the years 2003 and 2004 (n=41). From the year 2004, the number then increases to a peak number of 45 pharmacies in the year 2006. The total number of the pharmacies then decreases (n=-5) between 2006 and 2007 and increases again with one pharmacy to total again total 41 pharmacies in 2008. In this way, the total number of registered public institutional pharmacies in the province remains the same for the years 2003 and 2008.

5.4.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE FREE STATE PROVINCE

Consider table C.2.1 in Reference Manual C along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1, B.33.1 in Reference Manual B as well as tables D.1.1 and D.2.1 in Reference Manual D for the comprehensive results of the discussion which follows below.

The total number of municipalities in the Free State, in which the registered direct service pharmaceutical structures were situated (18 of the 21 municipalities in the province), remained the same over the study years. Consequently, the estimated population, in the province, living in municipalities without registered direct service pharmaceutical structures increased due to the general population increases over the study years. The estimated population living in the municipalities without registered direct service pharmacies was 62,134 in 2008.

The results of the distribution of the registered direct service pharmaceutical structures among the district councils of the Free State province, are presented in table 5.37 below. The district councils in table 5.37 are listed by decreasing order from district council with the highest to the district council with the lowest number of registered direct service pharmacies, for the year 2008.

Table 5.37: Changes in the total number of registered direct service pharmacies in the Free State province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Motheo	58 (31.4%)	65 (33.3%)	+7	+12.1
Fezile Dabi	42 (22.7%)	45 (23.1%)	+3	+7.1
Lejweleputswa	43 (23.2%)	43 (22.1%)	0	0
Thabo Mofutsanyane	33 (17.8%)	35 (17.9%)	+2	+6.1
Xhariep	9 (4.9%)	7 (3.6%)	-2	-22.2
Free State (total)	185 (100%)	195 (100%)	+10	5.4

The rank order of district councils with the highest number of the registered direct service pharmaceutical structures remained the same all throughout the study years. In 2008, more than 30% of the direct service pharmacies in the province were situated in Motheo district council while the district council containing the lowest number of the pharmaceutical structures was Xhariep with only 3.6% of the pharmaceutical structures in the province.

Motheo district council experienced the highest increase in the total number of registered pharmaceutical structures ($n=+7$) between 2003 and 2008. Other district councils in which an increase in the total number of direct service pharmacies occurred were Fezile Dabi ($n=+3$) and Thabo Mofutsanyane ($n=+2$). The total number of direct service pharmacies in Lejweleputswa district remained the same for the two years, while the Xhariep district experienced a loss of direct service pharmacies ($n=-2$).

Tables D.1.2 and D.2.2 in part D of the Reference Manual present the findings of the distribution of the registered direct pharmaceutical structures in the Free State per local municipality, for the years 2003 to 2008.

The results of the 2008 distribution of the registered direct service pharmaceutical structures in the Free State among the local municipalities of the province, are presented in table 5.38 below. The local municipalities presented in table 5.38 are listed by rank order from the local municipality with the highest number of the registered direct pharmaceutical structures in the province to the local municipality with the lowest.

Table 5.38: Ranking of local municipalities in the Free State by order of local municipality with the highest number registered direct service pharmaceutical structures, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mangaung	62	12	Masilonyana	4
2	Matjhabeng	32	13	Mohokare	4
3	Moqhaka	14	14	Mantsopa	3
4	Ngwathe	14	15	Nketoana	3
5	Metsimaholo	13	16	Kopanong	2
6	Maluti a Phofung	10	17	Tswelopele	2
7	Dihlabeng	9	18	Letsemeng	1
8	Setsoto	8	19	Naledi	0
9	Nala	5	20	Thabo Mofutsanyane	0
10	Phumelela	5	21	Tokologo	0
11	Mafube	4			

As indicated in the table, almost 70% (69.2%) of the registered direct service pharmaceutical structures in the province are situated in the top five local municipalities (i.e. Mangaung, Matjhabeng, Moqhaka, Ngwathe and Metsimaholo). The local municipality of Mangaung (in Motheo district council) contains the highest number of the registered pharmaceutical structures (n=62) in the province.

5.4.1.1 Community Pharmacies

Consider table C.2.2 in Reference Manual C along with tables B.28.2, B.29.2, B.30.2, B.31.2, B.32.2, B.33.2 in Reference Manual B, as well as tables D.1.1 and D.2.1 in Reference Manual D for the comprehensive results of the discussion which follows below.

The total number of local municipalities in the Free State with registered community pharmacies remained to be 18 all throughout the study years. Consequently, the estimated population living in municipalities without registered community pharmacies increased as according to population growth which took place in the province. The total estimated population living in municipalities without registered community pharmacies was 62,134 in 2008.

Table 5.39 presents the results of the distribution and changes in the distribution of the community pharmacies in the Free State, among the district councils of the province for 2003 and 2008. Furthermore, the district councils are listed in table 5.39 by rank order from the

district council which contained the highest to the lowest number of registered community pharmacies in the province, for the year 2008.

Table 5.39: Changes in the total number of registered community pharmacies in the Free State province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Motheo	42 (31.3%)	47 (33.3%)	+5	11.9
Lejweleputswa	34 (25.4%)	35 (24.8%)	+1	2.9
Fezile Dabi	30 (22.4%)	32 (22.7%)	+2	6.7
Thabo Mofutsanyane	23 (17.2%)	23 (16.3%)	0	0
Xhariep	5 (3.7%)	4 (2.8%)	-1	20
Free State (total)	134 (100%)	141 (100%)	+7	5.2

The distribution trend of the registered community pharmacies in the province is similar to that of the total number of all direct service pharmaceutical structures in the province except for that Lejweleputswa district council that has the second highest number of the registered community pharmacies in the province. Motheo district council contains a proportion of more than 30% of the community pharmacies in the province, for both years, whilst Xhariep district council contains the lowest proportion with merely 2.8% of the pharmacies in 2008.

The overall growth in the number of community pharmacies in the province was a result of the accumulation of five pharmacies in Motheo district, two pharmacies in Fezile Dabi district and one pharmacy in Lejweleputswa district council, over the study years. The district council of Xhariep experienced a loss of one community pharmacy over the study years which occurred between the years 2003 and 2004. The total number of registered community pharmacies in Thabo Mofutsanyane district council remained the same for 2003 and 2008.

Tables D.1.2 and D.2.2 in Reference Manual D present the results of the distribution of the registered community pharmacies in the Free State province per local municipality from 2003 to 2008.

The distribution of the community pharmacies among the local municipalities of the Free State, for the year 2008, is indicated in table 5.40 below; ranked by order from local municipality with the highest number of the registered community pharmacies to the local municipality wherein the lowest number of the pharmacies is situated.

Table 5.40: Ranking of local municipalities in the Free State by order of local municipality with the highest number registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mangaung	45	12	Mafube	2
2	Matjhabeng	27	13	Mantsopa	2
3	Metsimaholo	10	14	Mohokare	2
4	Moqhaka	10	15	Nketoana	2
5	Ngwathe	10	16	Kopanong	1
6	Maluti a Phofung	7	17	Letsemeng	1
7	Dihlabeng	6	18	Tswelopele	1
8	Phumelela	4	19	Naledi	0
9	Setsotho	4	20	Thabo Mofutsanyane	0
10	Nala	4	21	Tokolologo	0
11	Masilonyana	3			

More than 70% of the community pharmacies in the province are situated in the top five municipalities as indicated by table 5.40. The local municipality of Mangaung (in Motheo district council) contains the highest number of the registered community pharmacies (n=45), followed by the local municipality of Matjhabeng in Lejweleputswa district council (n=27).

5.4.1.2 Private Institutional Pharmacies

Consider table C.2.3 in Reference Manual C along with tables B.28.3, B.29.3, B.30.3, B.31.3, B.32.3, B.33.3 in Reference Manual B, as well as tables D.1.1 and D.2.1 in Reference Manual D for the comprehensive results of the discussion which follows below.

In 2003, only five of the 21 municipalities in the Free State had registered private institutional pharmacies situated within them. The number increased to six local municipalities in 2008. Consequently, the estimated population living in municipalities without the registered pharmaceutical structures decreased from about 1.3 million in 2003 to 1.2 million on 2008.

The 2003 and 2008 distribution of these pharmaceutical structures among the district councils of the Free State is indicated in table 5.41, which presents the results of the changes in distribution of private institutional pharmacies between the years 2003 and 2008. District councils in the table are listed by decreasing rank order from district council in which the highest number of registered private institutional pharmacies are situated.

Table 5.41: Changes in the total number of registered private institutional pharmacies in the Free State province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Motheo	5 (50.0%)	7 (53.8%)	+2	40
Fezile Dabi	3 (30%)	3 (23.1%)	0	0
Lejweleputswa	2 (20%)	2 (15.4%)	0	0
Thabo Mofutsanyane	0 (0.0%)	1 (7.7%)	+1	-
Xhariep	0 (0.0%)	0 (0.0%)	0	0
Free State (total)	10	13	+3	30

In 2008, more than 50% of the private institutional pharmacies in the Free State were situated in Motheo district council while, on the other hand, the Xhariep district council contained no registered private institutional pharmacies, throughout the study years. The district councils of Thabo Mofutsanyane contained no registered private institutional pharmacies from 2003 until 2005, from where one registered private institutional pharmacy could be identified until 2008.

The accumulation of three private institutional pharmacies in the province over the study years took effect in the Motheo (n=+2) and Thabo Mofutsanyane (n=+1) district councils only. The remaining three district councils experienced no changes in the total number of registered private institutional pharmacies situated within them.

Tables D.1.2 and D.2.2 in part D of the Reference Manual present the results of the distribution of the registered private institutional pharmacies among the local municipalities of the province from 2003 to 2008.

Table 5.42 ranks the six local municipalities in the province which contained private institutional pharmacies, by decreasing order from local municipality with the highest number of private institutional pharmacies for the year 2008. As with the registered community pharmacies, the local municipality with the highest number of the registered private institutional pharmacies is Mangaung. This is the only local municipality in the district council of Motheo which contains a registered private institutional pharmacy and constitutes 54% of the pharmaceutical structures in the province. Matjhabeng local municipality is the only local municipality in the Lejweleputswa district council which contains a registered private institutional pharmacy. The remaining four pharmacies are situated in three of the local municipalities in Fezile Dabi district council and one in Thabo Mofutsanyane district council.

Table 5.42: Ranking of local municipalities in the Free State by order of local municipality with the highest number registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies
1	Mangaung	7
2	Matjhabeng	2
3	Dihlabeng	1
4	Moqhaka	1
5	Metsimaholo	1
6	Mafube	1

5.4.1.3 Public Institutional Pharmacies

Consider table C.2.4 in Reference Manual C along with tables B.28.4, B.29.4, B.30.4, B.31.4, B.32.4, B.33.4 in Reference Manual B, as well as tables D.1.1 and D.2.1 in Reference Manual D for the comprehensive results of the discussion which follows below.

The total number of local municipalities in the Free State containing at least one registered public institutional pharmacy decreased from 18 in 2003 to 17 in 2008. As a result of this and the general population growth over the study years, the estimated population living in municipalities without any registered public institutional pharmacies increased from 60,805 in 2003 to 106,554 people in 2008.

The results of the 2003 versus 2008 distribution of and changes in the distribution of the registered public institutional pharmacies among the district councils of the province are presented in table 5.43 below. The district councils listed in the table are ranked by decreasing order from district council with the highest number of the registered public institutional pharmacies in the province.

Table 5.43: Changes in the total number of registered public institutional pharmacies in the Free State province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
Motheo	11 (26.8%)	11 (26.8%)	0	0
Thabo Mofutsanyane	10 (24.4%)	11 (26.8%)	+1	10
Fezile Dabi	9 (22.0%)	10 (24.4%)	+1	11.1
Lejweleputswa	7 (17.1%)	6 (14.6%)	-1	-14.3
Xhariep	4 (9.8%)	3 (7.3%)	-1	-25
Free State (total)	41 (100%)	41 (100%)	0	0

As in the previously discussed pharmacy categories in the province of Free State, Motheo district council contained the highest number of the registered public institutional pharmacies in the province (n=11). However, in 2008, this total number (in Motheo district) was equal to the total number of public institutional pharmacies in Thabo Mofutsanyane district council (n=11) while the Fezile Dabi district contained only one less public institutional pharmacy than the two (n=10). Xhariep district council remained the district council with the lowest number of public institutional pharmacies; however, the percentage proportion of the pharmacies situated in the district was higher in comparison to that of the other pharmacy categories in the province.

District councils which experienced an increase in the total number of registered public institutional pharmacies over the study period, were, Thabo Mofutsanyane and Fezile Dabi which both accumulated one pharmacy each. On the other hand, Lejweleputswa and Xhariep district council experienced a loss of one pharmacy each.

Tables D.1.2 and D.2.2 in Reference Manual D present the results of the distribution of the registered public institutional pharmacies among the local municipalities in the Free State from 2003 to 2008.

The results for the distribution of the registered public institutional pharmacies in the province, among the local municipalities of the province, for the year 2008, are presented in table 5.44 below. The local municipalities in table 5.44 are ranked by order from local municipality with the highest to local municipality with the lowest number of registered public institutional pharmacies situated therein.

Table 5.44: Ranking of local municipalities in the Free State by order of local municipality with the highest number registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mangaung	10	12	Masilonyana	1
2	Ngwathe	4	13	Mantsopa	1
3	Setsotho	4	14	Nala	1
4	Matjhabeng	3	15	Nketoana	1
5	Maluti a Phofung	3	16	Phumelela	1
6	Moqhaka	3	17	Tswelopele	1
7	Dihlabeng	2	18	Letsemeng	0
8	Metsimaholo	2	19	Naledi	0
9	Mohokare	2	20	Thabo Mofutsanyane	0
10	Kopanong	1	21	Tokolologo	0
11	Mafube	1			

Thirty-eight per cent of the local municipalities are those with only one registered public institutional pharmacy. The local municipality of Mangaung contains the highest number of the registered public institutional pharmacies in the province, however, the percentage proportion of the pharmacies contained in this local municipality is significantly lower in comparison to that of the previously discussed pharmacy categories in the province.

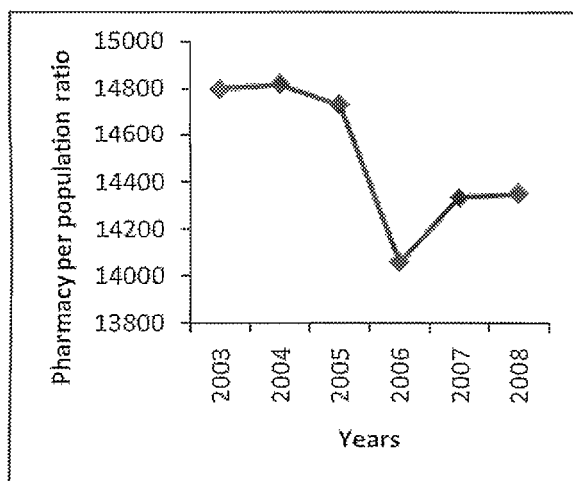
5.4.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE FREE STATE PROVINCE

Consider tables C.2.5, C.2.6, C.2.7 and C.2.8 in part C of the Reference Manual, as well as D.1.2 and D.2.2 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The estimated total population of the Free State province was 2,738,116 people in 2003. In 2008, the estimated population had risen to 2,797,961 people. The results of the estimated population in the Free State province for all the study years, from 2003 to 2008, as well as the estimated population within each district council of the province, for all the study years, are included in table C.2.5 in part C of the Reference Manual. The results of the total estimated population within each local municipality from 2003 to 2008 are presented in tables D.1.2 (for the years 2003 to 2005) and D.2.2 (for the years 2006 to 2008) in part D of the Reference Manual.

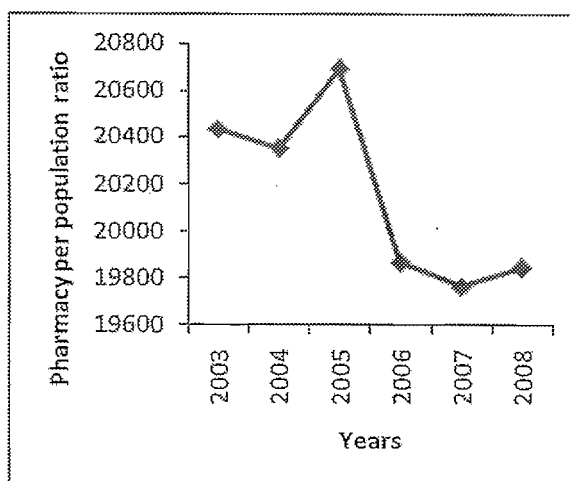
The changes in the pharmacy per population ratio of the direct service pharmaceutical structures situated in the Free State are illustrated in figure 5.6. When viewed alongside figure 5.5, it is evident that the changes in the pharmacy per population ratio of the direct service pharmaceutical structures were directly influenced by the changes in the total number of the pharmaceutical structures situated in the province, throughout the entire study period.

The graph in figure 5.6(a) illustrates, specifically, the changes in the pharmacy per population ratio of the direct service pharmacies in the Free State, from 2003 to 2008. The pharmacy per population ratio of these pharmaceutical structures decreased from one pharmacy per 14,800 people to one pharmacy per 14,349. This implies an overall improvement in the availability of these pharmaceutical structures over the study period. The most significant improvement in the availability of the pharmacies occurred during the period from 2005 to 2006. This is a result of the increase in the total number of pharmacies situated in the province during that time period. From the year 2006 to 2007, there was a notable increase in the pharmacy per population ratio due to the decrease in the total number of direct service pharmacies in the province during that time period.



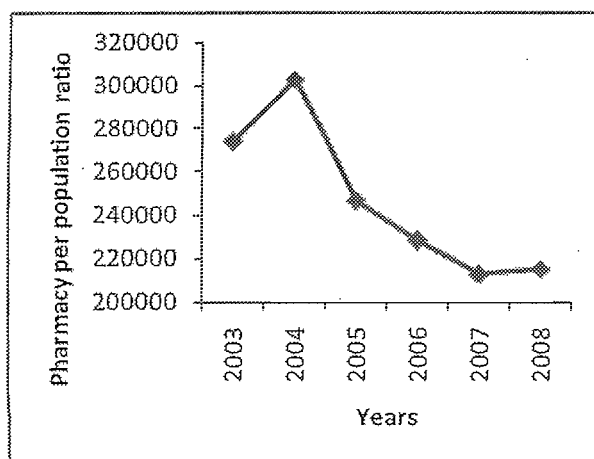
(a)

All registered pharmaceutical structures



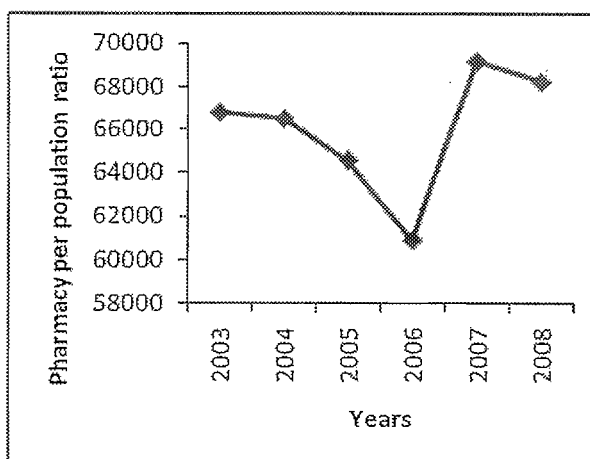
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.6: Changes in the pharmacy per population ratio of (a) all registered direct service pharmacies, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Free State province, 2003 to 2008

The results of the changes in the pharmacy per population ratio of the direct pharmaceutical structures for each district council of the Free State are presented in table 5.45 below. The district councils of the province are, in table 5.45, listed by rank order from district council with the lowest pharmacy per population ratio (implying a more favourable availability of direct service pharmacies in that district council, relative to the other district councils in the province) to district council with the highest pharmacy per population ratio (implying a poorer availability of direct service pharmacies to the population of that district council) for the year 2008.

Table 5.45: Changes in the pharmacy per population ratio of registered direct service pharmaceutical structures in each district council of the Free State province, 2003 and 2008

District council	Pharmacy population ratio in 2003	Pharmacy population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Northern Free State/ Fezile Dabi	11 087	10 574	-513	-4.6
Motheo	12 702	11 582	-1 120	-8.8
Lejweleputswa	15 456	15 794	+338	+2.2
Xhariep	15 202	19 973	+4 771	+31.4
Thabo Mofutsanyane	22 252	21 439	-813	-3.7
Total	14 801	14 349	-452	-3.1

It is evident, from the table 5.45, that only Fezile Dabi, Motheo and Thabo Mofutsanyane district councils experienced a decrease in their pharmacy per population ratio for the direct service pharmacies, between 2003 and 2008. These are also the three district councils in the Free State which experienced an increase in the total number of registered direct service pharmacies situated within them between the years 2003 and 2008 (refer to table 5.37). The increase in the pharmacy per population ratio of the direct service pharmacies in Lejweleputswa district council is due to the fact that the total number of direct service pharmacies situated in the district council remained the same for 2003 and 2008 while the estimated population of the district continues to increased. Between the years 2003 and 2008, the total number of registered direct service pharmacies in the Xhariep district council decreased. This, along with the growth in the estimated population of the district council over the study period, caused the increase in the pharmacy per population ratio of the direct service pharmacies in the district.

Table 5.45 also shows that the direct service pharmaceutical structures of the Fezile Dabi district council were, in 2008, more favourably available to the population of that district, in comparison to the other district councils in the Free State. Although Motheo district council contained the highest number of direct service pharmacies in 2008, the district council was ranked second with regard to the availability of the structures to the population of the district. Thabo Mofutsanyane remained the district council with the highest pharmacy per population ratio throughout the study years.

The direct service pharmacies in the Free State are unevenly distributed to the population of the province. Where the provincial pharmacy per population ratio ($n=1:14,349$ in 2008) is used as the benchmark ratio, in the event that the direct service pharmaceutical structures are evenly distributed among the population of the district councils in the province, table 5.45 shows that only Fezile Dabi and Motheo district councils have pharmacy per population ratios lower than the benchmark. The pharmacy per population ratios of the remaining district councils are higher than this benchmark.

The results for the years during which the pharmacy per population ratios of the direct service pharmacies were at their highest and lowest, for each district council of the Free State, are presented in table 5.46. The pharmacy per population ratio of the direct pharmaceutical structures in the province was highest in 2004 ($n=1:14,819$) and lowest in 2006 ($n=1:14,059$) of the study years. The year 2004 was the year during which the total number of registered direct service pharmacies in the province was at its lowest and in 2006 the total number of the pharmacies was at its highest.

Table 5.46: Years with the highest and lowest pharmacy per population ratios of the registered direct service pharmacies in each district council of the Free State province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Lejweleputswa	2005	16 048	2004	15 392
Motheo	2003	12 702	2006	10 847
Northern Free State/ Fezile Dabi	2005	11 243	2008	10 574
Thabo Mofutsanyane	2004	22 852	2008	21 439
Xhariep	2008	19 973	2003	15 202
Total	2004	14 819	2006	14 059

The results of the pharmacy per population ratio of the direct service pharmacies for each local municipality of the Free State, from 2003 to 2008, are presented in tables D.1.2 and D.2.2 in part D of the Reference Manual. The table 5.47 below presents the results of the 2008 pharmacy per population ratio of the direct service pharmacies for each local municipality. The local municipalities in table 5.47 are ranked by order from the local municipality with the lowest to the local municipality with the highest pharmacy per population ratio, for the year 2008.

As is evident from table 5.47, the population ratio for the direct service pharmacies in the province, ranges from one pharmacy per 8,773 people (Ngwathe local municipality), to the local municipality of Letsemeng with one pharmacy per 44,420 people.

Table 5.47: Ranking of local municipalities in the Free State by order from local municipality with the lowest to the highest pharmacy per population ratio for registered direct service pharmacies, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Ngwathe	8 773	10	Setsoto	15 917
2	Metsimaholo	9 221	11	Masilonyana	16 647
3	Mohokare	9 387	12	Mantsopa	19 074
4	Phumelela	10 523	13	Nala	20 313
5	Mangaung	10 761	14	Nketoana	21 345
6	Moghaka	12 397	15	Tswelopele	27 753
7	Matjhabeng	13 186	16	Kopanong	28 920
8	Dihlabeng	14 806	17	Maluti a Phofung	37 294
9	Mafube	14 892	18	Letsemeng	44 420

5.4.2.1 Community Pharmacies

Consider table C.2.6 in part C of the Reference Manual, along with tables D.1.2 and D.2.2 in part D of the Reference Manual for the comprehensive results of the discussion which follows below.

The changes in the pharmacy per population ratio of the community pharmacies in the province are illustrated by the graph in figure 5.6(b). The graph shows an overall improvement in the availability of community pharmacies in the province, where the pharmacy per population ratio decreases from one community pharmacy per 20,433 people in 2003, to one pharmacy per 19,844 people in 2008. Initially, from the year 2003 to 2004, the ratio decreases (albeit the

decrease in the total number of pharmacies during that period). The improvement in availability during this time-period is attributed to the decrease in the total estimated population of the province during that period. During the period from 2005 to 2006, there is a significant increase in the total number of community pharmacies situated in the province. This causes the significant improvement in the availability of the pharmacies to the population of the province.

The results of the changes in the pharmacy per population ratio of the registered community pharmacies for each district council of the Free State province are presented in table 5.48. The district councils in table 5.48 are listed by order from the district council with the lowest to the district council with the highest community pharmacy per population ratio of the year 2008.

Table 5.48: Changes in the pharmacy per population ratio of community pharmacies in each district council of the Free State province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Northern Free State/ Fezile Dabi	15 521	14 869	-652	-4.2
Motheo	17 541	16 018	-1 523	-8.7
Lejweleputswa	19 548	19 404	-144	-0.7
Thabo Mofutsanyane	31 927	32 624	+697	+2.2
Xhariep	27 364	34 952	+7 588	27.7
Total	20 434	19 844	-590	-2.9

From table 5.48, it is evident that the overall decrease in the community pharmacy per population ratio, observed for the province, only took effect within the Fezile Dabi, Motheo and Lejweleputswa district councils of the province. This may be attributed to the fact that the total number of registered community pharmacies in these three district councils increased over the study period. Motheo district council, which experienced the highest improvement in the availability of community pharmacies to the population, was the district council in which the highest increase in the total number of registered community pharmacies occurred. The total number of community pharmacies situated in the Thabo Mofutsanyane district council remained the same for the years 2003 and 2008. As a result of the estimated population growth between the years, there was a decrease in the availability of the community pharmacies to the population of the Thabo Mofutsanyane district council. The community pharmacy per population

ratio in the Xhariep district council increased as a result of a decrease in the total number of community pharmacies situated in the district as well as the growth in the estimated population of the district council.

The Fezile Dabi district council with one community pharmacy per 14,869 people, for the year 2008, has a more favourable availability of the structures, relative to the other district councils in the province. Interestingly, the Fezile Dabi district council was ranked third in table 5.39, which ranked the district councils by order from district council with the highest to district council containing the lowest number of the registered community pharmacies in the province for the year 2008. Thabo Mofutsanyane district council had the lowest community pharmacy per population ratio of all district councils in the year 2003. For the year 2008, it was Xhariep district council that had the lowest community pharmacy per population ratio of the districts. This may be attributed to the decrease in the total number of community pharmacies situated in the Xhariep district council, over the study years, while the total number of community pharmacies in Thabo Mofutsanyane remained the same for 2003 and 2008.

Table 5.48 furthermore shows the disparities in the distribution of the community pharmacies to the population in each district council of the Free State. Where the provincial community pharmacy per population ratio is used as the benchmark ratio, in the event that the community pharmacies in the province are evenly distributed across the population of each district municipality, the distribution of the community pharmacies is more favourable in the Fezile Dabi and Motheo district councils, as they both have community pharmacy per population ratios above (less than) the benchmark ratio. The distribution of the community pharmacies in the province is then less favourable towards the Thabo Mofutsanyane and Xhariep district councils, as they have community a pharmacy per population ratio below (higher than) the benchmark, for the year 2008.

The results of the years during which the community pharmacy per population ratio of each district council in the Free State was at its highest and at its lowest, are presented in table 5.49. For the entire province, the highest ratio was observed during the year 2005 and the lowest ratio during the year 2007. This is also illustrated by the high and low peaks in the graph in figure 5.6(b). The year 2005 was the year during which the total number of community pharmacies in the province was lowest, of the study years. The year 2007 was the year during which the total number of community pharmacies in the province was highest, of the study years.

Table 5.49: Years with the highest and lowest community pharmacy per population ratios in each district council of the Free State province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Lejweleputswa	2005	20 562	2008	19 404
Motheo	2003	17 541	2006	15 054
Northern Free State/ Fezile Dabi	2006	16 076	2008	14 869
Thabo Mofutsanyane	2006	33 419	2003	31 927
Xhariep	2005	45 150	2003	27 364
Total	2005	20 693	2007	19 765

Tables D.1.2 and D.2.2 in part D of the Reference Manual present the results of the community pharmacy per population ratio of the local municipalities in the Free State, from 2003 to 2008. The results of the year 2008 community pharmacy per population ratio of these local municipalities are also presented in table 5.50 below. The local municipalities in table 5.50 are listed by order from local municipality with the lowest to the local municipality with the highest community pharmacy per population ratio for 2008. The availability of the registered community pharmacies to the population of each local municipality ranges from Metsimaholo local municipality with one community pharmacy per 11,987 people, to the local municipality of Kopanong, with one community pharmacy per 57,841 people.

Table 5.50: Ranking of local municipalities in the Free State by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Metsimaholo	11 987	10	Nala	25 392
2	Ngwathe	12 282	11	Mantsopa	28 610
3	Phumelela	13 154	12	Mafube	29 784
4	Mangaung	14 826	13	Setsotho	31 834
5	Matjhabeng	15 628	14	Nketoana	32 017
6	Moqhaka	17 356	15	Letsemeng	44 420
7	Mohokare	18 773	16	Maluti a Phofung	53 277
8	Masilonyana	22 196	17	Tswelopele	55 506
9	Dihlabeng	22 210	18	Kopanong	57 841

5.4.2.2 Private Institutional Pharmacies

Consider table C.2.7 in part C of the Reference Manual, along with tables D.1.2 and D.2.2 in part D of the Reference Manual for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered private institutional pharmacies in the Free State province decreased from one pharmacy per 273,812 people in the year 2003 to one pharmacy per 215,228 people in 2008. The change in the private institutional pharmacy per population ratio of the Free State, from 2003 to 2008, is illustrated by the graph in figure 5.6(c). When figure 5.6(c) is viewed alongside the graph in figure 5.5(c), it becomes evident that the changes in the pharmacy per population ratio of the private institutional pharmacies in the province are directly influenced by the changes in the total number of private institutional pharmacies. The private institutional pharmacy per population ratio increased with a decrease in the total number of the pharmacies and decreased with an increase in the total number of private institutional pharmacies in the province. The period from 2004 to 2005 was the period with the most significant improvement in the availability of the registered private institutional pharmacies to the population of the province, due to the fact that it was also the period with the most significant increase in total number of private institutional pharmacies situated in the province throughout the study years.

The changes in the pharmacy per population ratio of the private institutional pharmacies for each district council, between 2003 and 2008, are presented in table 5.51. Furthermore, the district councils are, in table 5.51, listed by order from district council with the lowest to district council with the highest pharmacy per population ratio, for the year 2008.

The Motheo and Thabo Mofutsanyane district councils were the only district councils in the province that experienced an improvement in the availability of private institutional pharmacies to their population. This is due to the fact that the districts were the only two districts that experienced an increase in the total number of private institutional pharmacies situated within them. The total number of private institutional pharmacies in the remaining three districts (Fezile Dabi, Lejweleputswa and Xhariep) remained constant over the study period. This in the presence of the growth in the estimated population in each of these district councils decreased the extent of availability of the structures to the population of the three district councils.

Motheo district council, which contained the highest number of registered private institutional pharmacies throughout the study period, had the lowest pharmacy per population ratio of all

district councils in the province. There remained to be no institutional pharmacy for the population of the Xhariep district council over the study years. In 2008, the estimated population of Xhariep district council was 139,808 people.

Table 5.51: Changes in the private institutional pharmacy per population ratio for each district council of the Free State province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Motheo	147 344	107 546	-39 798	-27.0
Northern Free State/ Fezile Dabi	155 213	158 605	+3 392	+2.2
Lejweleputswa	332 313	339 576	+7 263	+2.2
Thabo Mofutsanyane	-	750 364	-	-
Xhariep	-	-	-	-
Total	273 812	215 228	-58 584	-21.4

Table 5.52 presents the years during which the private institutional pharmacy per population ratio for each district council of the province was at its highest and lowest. The year 2004 was the year during which the private institutional pharmacy per population ratio of the province was at its highest due to the fact that the total number of private institutional pharmacies in the province was lowest during that year. The pharmacy per population ratio of these pharmaceutical structures was lowest in 2007.

Table 5.52: Years with the highest and lowest private institutional pharmacy per population ratio for each district council of the Free State province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Lejweleputswa	2008	339 576	2005	328 991
Motheo	2004	183 414	2007	106 359
Northern Free State/ Fezile Dabi	2008	158 605	2005	153 661
Thabo Mofutsanyane	2008	750 364	-	-
Xhariep	-	-	-	-
Total	2004	302 968	2007	212 852

Tables D.1.2 and D.2.2 in part D of the Reference Manual present the results of the private institutional pharmacy per population ratio for each local municipality of the Free State province from 2003 to 2008. The ratio for those local municipalities which contained private institutional pharmacies in 2008 are presented in table 5.53 below. Furthermore, the local municipalities in table 5.53 are listed by order from local municipality with the lowest private institutional pharmacy per population ratio to the local municipality with the highest ratio for 2008.

Table 5.53: Ranking of local municipalities in the Free State by order from local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Mafube	59 563
2	Mangaung	95 313
3	Metsimaholo	119 871
4	Dihlabeng	133 258
5	Moghaka	173 558
6	Matjhabeng	210 972

5.4.2.3 Public Institutional Pharmacies

Consider table C.2.8 in part C of the Reference Manual, along with tables D.1.2 and D.2.2 in part D of the Reference Manual for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of registered public institutional pharmacies in the Free State province increased from one pharmacy per 66,783 people in 2003 to one pharmacy per 68,243 people in 2008. This is a result of the fact that the total number of public institutional pharmacies situated in the Free State remained the same for the years 2003 and 2008 (n=41) while the estimated population in the province continued to increase. The changes in the pharmacy per population ratio of the public institutional pharmacies in the province are illustrated by the graph in figure 5.6(d). When the graph is considered alongside the graph in figure 5.5(d), it becomes evident that the changes in the pharmacy per population ratio of public institutional pharmacies in the province are directly influenced by the changes in the total number of public institutional pharmacies in the province. The public institutional pharmacy per population ratio decreases

with an increase in the total number of pharmacies and decreases with an increase in the total number of pharmacies.

The changes in the pharmacy per population ratio of the public institutional pharmacies for each district council of the Free State, between 2003 and 2008, are presented in table 5.54. Table 5.54 also ranks the district councils of the province by order from district council with the lowest to the district council with the highest population per pharmacy ratio for the year 2008.

Table 5.54: Changes in the public institutional pharmacy per population ratio for each district council of the Free State province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Xhariep	34 204	46 603	+12 399	+36.3
Northern Free State/ Fezile Dabi	51 738	47 582	-4 156	-8.0
Thabo Mofutsanyane	73 432	68 215	-5 217	-7.1
Motheo	66 975	68 438	+1 463	+2.2
Lejweleputswa	94 946	113 192	+18 246	+19.2
Total	66 783	68 243	+1 460	+2.2

The Fezile Dabi and Thabo Mofutsanyane district councils are the only districts in the province that experienced a decrease in the population per pharmacy ratio, implying an improvement in the availability of the public institutional pharmacies to the population of these district councils.

Xhariep district council had the lowest pharmacy per population among the district councils of the province, throughout the study years despite the fact that it contained the smallest proportion of the public institutional pharmacies in the Free State. Lejweleputswa district council had the highest pharmacy per population ratio of all the district councils in the province throughout the study period.

The years during which the public institutional pharmacy per population ratio, for each district council, was at its highest and lowest, are presented in table 5.55. For the Free State province as a whole, the pharmacy per population ratio of these structures was highest in 2007 (n=1:69,177), the year when the total number of public institutional pharmacies in the province was lowest, and lowest pharmacy per population ratio is for the year 2006 (n=1:60,922), when

the total number of public institutional pharmacies in the province was at its highest. This is also illustrated by the high and low peaks in figure 5.6(d). The highest public institutional pharmacy per population ratio is, for each district council, observed for those years during which the total number of the pharmacies was at its lowest, of all the study years. The lowest public institutional pharmacy per population ratio is, for each district council, observed for the year during which the total number of the pharmacies situated in the district was at its highest, of all the study years.

Table 5.55: Years with the highest and lowest public institutional pharmacy per population ratios for each district council of the Free State province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Lejweleputswa	2008	113 192	2005	93 997
Motheo	2003	66 975	2006	56 741
Northern Free State/ Fezile Dabi	2003	51 738	2006	42 383
Thabo Mofutsanyane	2007	74 208	2008	68 215
Xhariep	2008	46 603	2005	33 862
Total	2007	69 177	2006	60 922

The results of the public institutional pharmacy per population ratio for each local municipality in the Free State from 2003 to 2008 are presented in tables D.1.2 and D.2.2 in part D of the Reference Manual. The results of the 2008 public institutional pharmacy per population ratio for each local municipality are presented in table 5.56.

Table 5.56 also ranks the local municipalities by order from the local municipality with the lowest to the local municipality with the highest public institutional pharmacy per population ratio in 2008. The public institutional pharmacies of the local municipality of Nala were more favourably available to the population of the municipality, this in comparison to the other local municipalities in the province, with a ratio of one public institutional pharmacy per 10,567 people in 2008. The local municipality of Matjhabeng, on the other hand, had the poorest availability of public institutional pharmacies to the population of the local municipality (n=1:140,648 people), in comparison to the other local municipalities in the province which contained registered public institutional pharmacies.

Table 5.56: Ranking of local municipalities in the Free State by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

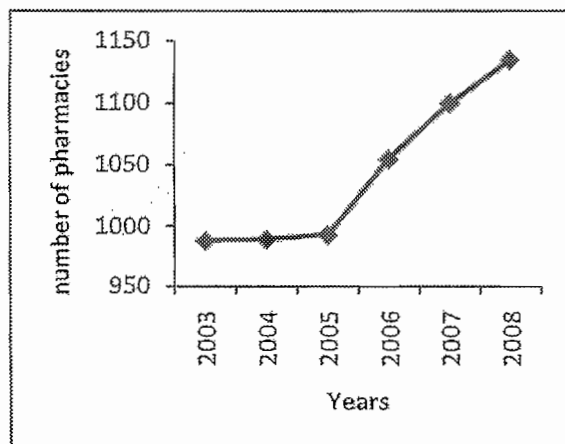
Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
	Nala	10 567		Mafube	59 563
	Mohokare	18 773		Metsimaholo	59 936
	Ngwathe	30 704		Nketoana	64 034
	Setso	31 834		Masilonyana	66 587
	Phumelela	52 616		Dihlabeng	66 629
	Tswelopele	55 506		Mangaung	66 719
	Mantsopa	57 221		Maluti a Phofung	124 314
	Kopanong	57 841		Matjhabeng	140 648
	Moghaka	57 853			

5.5 THE DISTRIBUTION OF THE REGISTERED DIRECT SERVICE PHARMACEUTICAL STRUCTURES WITHIN GAUTENG PROVINCE, 2003-2008

In this section, the results on both the geographic and per-population distribution of the registered direct service pharmaceutical structures among the district councils and local municipalities of the province of Gauteng, from 2003 to 2008, will be reported and discussed.

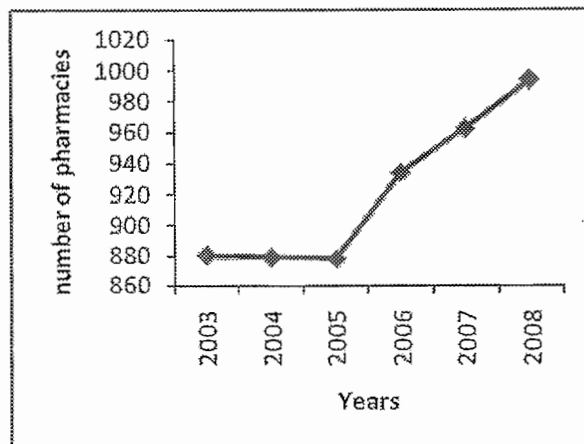
Consider tables C.3.1, C.3.2, C.3.3 and C.3.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

The province of Gauteng accumulated 146 direct pharmaceutical service structures between 2003 and 2008. This increase in the total number of direct service pharmaceutical structures, from 988 pharmacies in 2003 to a total of 1134 pharmacies in 2008, is illustrated in figure 5.5. As illustrated by the graph in the figure 5.7(a), the highest increase in the total number of the pharmaceutical structures took place between the years 2005 and 2006 ($n=+61$). Figure 5.5 further illustrates that the increase in the total number of the registered direct service pharmacies in the province occurred in different trends for each of the direct service pharmacy categories.



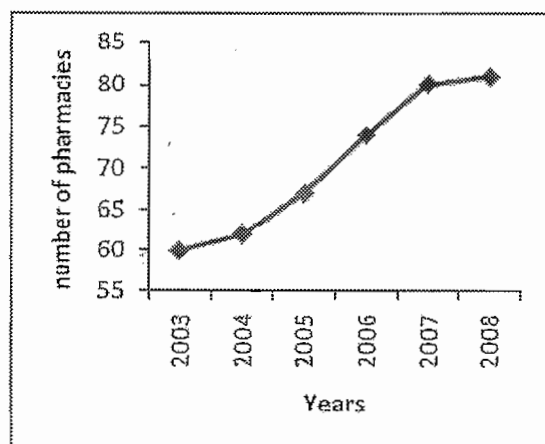
(a)

All registered pharmaceutical structures



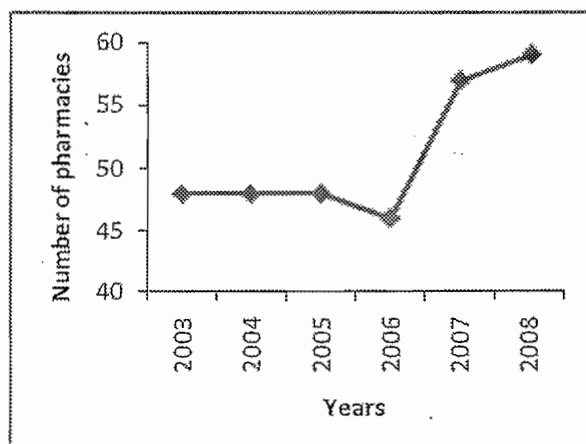
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.7: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of Gauteng, 2003 to 2008

The increase in the total number of the community pharmacies in the province, from a total of 880 pharmacies in 2003 to 994 pharmacies in 2008, is illustrated by the graph in figure 5.7(b). There is a minor decrease of one community pharmacy between the years 2003 and 2004, and then again between 2004 and 2005. The total number of the registered community pharmacies in the province increased considerably ($n=+56$) during the year interval 2005-2006, and continued to increase during the subsequent one-year intervals until 2008, although not in equally as large a quantity as that of the 2005-2006 year interval.

The 60 private institutional pharmacies registered in Gauteng for the year 2003, increased to 81 pharmacies for the year 2008. The increase in the total number of the pharmacies from 2003 to 2008 is illustrated by the graph in figure 5.7(c). The highest increase in the total number of the pharmacies ($n=+7$) occurred during the one-year interval 2005-2006.

5.5.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE PROVINCE OF GAUTENG

Consider table C.3.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

Throughout the entire study period, only one local municipality in the province of Gauteng did not contain a registered direct service pharmaceutical structure. The estimated total population of people living in that municipality, without a registered direct service pharmacy, increased from 6,064 people in 2003 to 6,753 people in 2008.

The results of the distribution of the registered direct service pharmaceutical structures, among the district councils and metropolitan municipalities of the province, from the year 2003 to 2008, are presented in table C.3.1 in part C of the Reference Manual. Table C.3.1 also indicates the number of municipalities in each district council and metropolitan municipality of the province which contained at least one registered direct service pharmacy.

The changes in the distribution of the registered direct service pharmacies in Gauteng, between 2003 and 2008, among the district councils and metropolitan municipalities of the province are

presented in table 5.57. The district councils and metropolitan municipalities are, in table 5.57, listed by decreasing rank order from district council or metropolitan municipality containing the highest to the district council or metropolitan municipality containing the lowest number of the registered direct service pharmacies in the province. The rank order of the district councils remained the same over the study period, in that, the City of Johannesburg metropolitan municipality remained to contain a larger proportion of the registered direct service pharmacies while Metsweding district council contained the smallest proportion of the pharmacies, throughout the study years.

Table 5.57: Changes in the total number of registered direct service pharmacies in Gauteng province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
City of Johannesburg metropolitan	335 (33.9%)	413 (36.4%)	+78	23.3
City of Tshwane metropolitan	268 (27.1%)	318 (28.0%)	+50	18.7
Ekurhuleni metropolitan	249 (25.2%)	267 (23.5%)	+18	7.2
Sedibeng district council	60 (6.1%)	68 (6.0%)	+8	13.3
West Rand district council	63 (6.4%)	55 (4.9%)	-8	12.7
Metsweding district council	13 (1.3%)	13 (1.1%)	0	0
Gauteng (Total)	988 (100%)	1134 (100%)	146	14.8

As is indicated in table 5.57, the direct service pharmaceutical structures in the province of Gauteng are concentrated in the province's three metropolitan municipalities (City of Johannesburg, City of Tshwane and Ekurhuleni). Of the direct service pharmacies in the province 88% were situated in the three metropolitan municipalities collectively in 2008. Furthermore, the three metropolitan municipalities each contained a percentage proportion more than 20% of the direct service pharmacies in the province, while Metsweding district, the district council with the lowest number of the pharmacies, had a proportion of less than 1.5% of the pharmacies situated within it, all throughout the study years.

The overall increase in the total number of the registered direct service pharmacies in Gauteng, illustrated by the graph in figure 5.7(a), did not take effect within each district council of the province. The total number of registered direct service pharmacies in Metsweding district council remained the same for 2003 and 2008 (n=13). The West Rand district council experienced a loss of eight direct service pharmacies between 2003 and 2008. The remaining district and metropolitan municipalities experienced an increase in the total number of the pharmacies situated within them. The most significant increase was observed for the City of Johannesburg metropolitan with a growth percentage of 23.3% (n=+78).

The results of the distribution of the registered direct service pharmacies in Gauteng, among the local and metropolitan municipalities of the province, from 2003 to 2008, are presented in tables D.1.3 and D.2.3 in part D of the Reference Manual. The year 2008 distribution of these pharmaceutical structures among the local municipalities of Gauteng is presented in table 5.58 below. Furthermore, the local municipalities are, in table 5.58, listed by order from the local municipality which contained the highest to the local municipality which contained the lowest number of the direct service pharmacies in the province for the year 2008.

Table 5.58: Ranking of local municipalities in Gauteng by order of local municipality with the highest number registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Johannesburg	413	7	Midvaal	9
2	City of Tshwane	318	8	Kungwini	8
3	Ekurhuleni	267	9	Lesedi	8
4	Emfuleni	51	10	Nokeng tsa taemane	5
5	Mogale city	37	11	Westonaria	3
6	Randfontein	15	12	West Rand	0

5.5.1.1 Community Pharmacies

Consider table C.3.2 in part C of the Reference Manual, along with tables B.28.2, B.29.2, B.30.2, B.31.2, B.32.2 and B.33.2 in part B of the Reference Manual, as well as tables D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

Throughout the entire study period, the province of Gauteng only had one municipality that did not contain a registered community pharmacy. Consequently, the total population of the

province living in municipalities without a registered community pharmacy increased only as a result of the estimated population growth in the municipality, from 6,064 people in 2003 to 6,753 people in 2008.

The results of the changes in the distribution of the registered community pharmacies in Gauteng, among the district councils of the province, between the years 2003 and 2008, are presented in table 5.59. Table 5.59 also ranks the district councils by order from the district council which contained the highest to the district council with the lowest number of the registered community pharmacies in 2008. The rank order of district and metropolitan municipalities as presented in table 5.59 remained the same throughout the entire study period.

Table 5.59: Changes in the total number of registered community pharmacies in Gauteng province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
City of Johannesburg metropolitan	301 (34.2%)	365 (36.7%)	64	21.2
City of Tshwane metropolitan	238 (27.0%)	275 (27.7%)	37	15.5
Ekurhuleni metropolitan	224 (25.5%)	244 (24.6%)	20	8.9
Sedibeng district council	55 (6.3%)	57 (5.7%)	2	3.6
West Rand district council	53 (6.0%)	44 (4.4%)	-9	-17.0
Metsweding district council	9 (1.0%)	9 (0.9%)	0	0
Gauteng (Total)	880 (100%)	994 (100%)	114	13.0

City of Johannesburg metropolitan remained the municipality with the highest number of the registered community pharmacies in the province while Metsweding district council remained with the lowest number of the community pharmacies in the province. The registered community pharmacies in Gauteng are also concentrated in the province's three metropolitan municipalities (City of Johannesburg, City of Tshwane and Ekurhuleni). In 2008, almost 90% of the community pharmacies in Gauteng were situated in the three metropolitan municipalities collectively. Furthermore, the three metropolitan municipalities in Gauteng each contained a proportion of

25% or more of the community pharmacies in the province. Metsweding district council, the district council in which the lowest number and proportion of the community pharmacies in the province were situated, contained one per cent or less of the total number of community pharmacies in the province.

Similarly to the direct service pharmacies in the province, the overall increase in the total number of community pharmacies situated in Gauteng, as illustrated by the graph in figure 5.7(b), did not take effect within each district council of the province. The total number of the registered community pharmacies in Metsweding district council remained the same for 2003 and 2008 (n=9). The West Rand district council experienced a loss of nine community pharmacies between 2003 and 2008. The remaining district council and metropolitan municipalities experienced an increase in the total number of community pharmacies situated within them. The highest increase was observed for the City of Johannesburg metropolitan municipality with a growth percentage of 21.2% (n=+64) on the total number of community pharmacies situated in it, over the study period.

Tables D.1.3 and D.2.3 in part D of the Reference Manual present the results of the distribution of the registered community pharmacies in Gauteng, among the local municipalities of the province, from 2003 to 2008. Table 5.60 presents the results of the distribution for the year 2008 of the community pharmacies among the local municipalities of the province. Table 5.60 furthermore ranks the local municipalities by order from local municipality with the highest to the local municipalities with the lowest number of registered community pharmacies situated therein.

Table 5.60: Ranking of local municipalities in Gauteng by order of local municipality with the highest number registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Johannesburg	365	7	Midvaal	8
2	City of Tshwane	275	8	Kungwini	7
3	Ekurhuleni	244	9	Lesedi	6
4	Emfuleni	43	10	Westonaria	3
5	Mogale city	28	11	Nokeng tsa taemane	2
6	Randfontein	13	12	West Rand	0

5.5.1.2 Private Institutional Pharmacies

Consider table C.3.3 in part C of the Reference Manual, along with tables B.28.3, B.29.3, B.30.3, B.31.3, B.32.3 and B.33.3 in part B of the Reference Manual, as well as tables D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

From 2003 to 2005, the total number of municipalities in Gauteng was 13. From 2006 to 2008, the total number of municipalities in Gauteng was 12. The registered private institutional pharmacies in the province were situated in nine of the local municipalities in the province throughout the study period. In 2003, an estimated 263,495 people were living in municipalities of the province that did not contain any registered private institutional pharmacy. The number decreased to 209,880 people in 2008.

The changes in the distribution of the registered private institutional pharmacies of Gauteng.. among the district councils and metropolitan municipalities of the province, between the years 2003 and 2008, are presented in table 5.61. Table 5.61 also lists the district councils and metropolitan municipalities by order from the district or metropolitan which contained the highest number to the district council or municipality that contained the lowest number of the registered private institutional pharmacies in the province.

The City of Johannesburg metropolitan contained the highest number of private institutional pharmacies in the province. In 2008, approximately 40% of the private institutional pharmacies in Gauteng were situated in the City of Johannesburg metro. Metsweding district council remained the district council in which the lowest number of the private institutional pharmacies in the province was situated.

As indicated in table 5.61, the total number of registered private institutional pharmacies in the Ekurhuleni metropolitan, West Rand and Metsweding district councils remained the same for the years 2003 and 2008. The most significant increase in total number of private institutional pharmacies, between the years 2003 and 2008, can be observed for the City of Johannesburg metropolitan municipality. This is where 71% of the total growth in the number of private institutional pharmacies occurred, within the study years.

Table 5.61: Changes in the total number of registered private institutional pharmacies in Gauteng province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
City of Johannesburg metropolitan	17 (28.3%)	32 (39.5%)	15	88.2
City of Tshwane metropolitan	19 (31.7%)	24 (29.6%)	5	26.3
Ekurhuleni metropolitan	14 (23.3%)	14 (17.3%)	0	0
West Rand district council	6 (10.0%)	6 (7.4%)	0	0
Sedibeng district council	2 (3.3%)	4 (4.9%)	2	50.0
Metsweding district council	2 (3.3%)	2 (2.5%)	0	0
Gauteng (Total)	60 (100%)	81 (100%)	21	35

The results of the distribution of the registered private institutional pharmacies in Gauteng, among the local municipalities of the province, from 2003 to 2008, are presented in tables D.1.3 and D.2.36 in part D of the Reference Manual. Table 5.62 below presents the results of the distribution of the pharmacies among the local municipalities of Gauteng for the year 2008. The local municipalities are, in table 5.62, ranked by order from local municipality which contained the highest to the local municipality with the lowest number of the pharmacies in 2008.

Table 5.62: Ranking of local municipalities in Gauteng by order of local municipality with the highest number registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Johannesburg	32	7	Lesedi	1
2	City of Tshwane	24	8	Randfontein	1
3	Ekurhuleni	14	9	Kungwini	0
4	Mogale city	4	10	Midvaal	0
5	Emfuleni	3	11	West Rand	0
6	Nokeng tsa taemane	1	12	Westonaria	0

5.5.1.3 Public Institutional Pharmacies

Consider table C.3.4 in part C of the Reference Manual, along with tables B.28.4, B.29.4, B.30.4, B.31.4, B.32.4 and B.33.4 in part B of the Reference Manual, as well as tables D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The registered public institutional pharmacies in Gauteng were situated in eight of the local municipalities in the province in 2003. The number of municipalities containing at least one registered public institutional pharmacy increased to nine in 2008. Consequently the estimated total number of people in municipalities without a registered public institutional pharmacy decreased from 401,022 people in 2003 to 259,725 people in 2008.

The changes in the distribution of the public institutional pharmacies in Gauteng, among the district councils and metropolitan municipalities of the province, between the year 2003 and 2008, are presented in table 5.63 below. The district councils and metropolitan municipalities in table 5.63 are listed by decreasing order from district council or local municipality which contained the highest number to the district council or metropolitan with the lowest number of the registered public institutional pharmacies in the province, for the year 2008.

Table 5.63: Changes in the total number of registered public institutional pharmacies in Gauteng province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
City of Tshwane metropolitan	11 (22.9%)	19 (32.2%)	8	72.7
City of Johannesburg metropolitan	17 (35.4%)	16 (27.1%)	-1	5.9
Ekurhuleni metropolitan	11 (22.9%)	9 (15.3%)	-2	-18.2
Sedibeng district council	3 (6.3%)	7 (11.9%)	4	133.3
West Rand district council	4 (8.3%)	6 (10.2%)	2	50.0
Metsweding district council	2 (4.2%)	2 (3.4%)	0	0
Gauteng (Total)	48 (100%)	59 (100%)	11	22.9

In 2003, the City of Johannesburg metropolitan contained the highest number of the public institutional pharmacies in the province. Due to the significant increase in the total number of public institutional pharmacies in City of Tshwane metropolitan over the study years, the City of Tshwane then became the metropolitan with the highest number of public institutional pharmacies in 2008. The percentage proportion of public institutional pharmacies situated in the three metropolitan municipalities of the province was 75% in 2008. Metsweding remained the district council with the lowest number of the registered public institutional pharmacies in the province.

As indicated in table 5.63, the increase in the total number of public institutional pharmacies in the province took effect within the City of Tshwane metropolitan as well as Sedibeng and West Rand district councils only. The remaining metropolitan municipalities (City of Johannesburg and Ekurhuleni) experienced a decrease in the total number of the public institutional pharmacies situated within them. The total number of public institutional pharmacies in Metsweding district council remained constant (n=2) over the entire study period.

The results of the distribution of the public institutional pharmacies in the province of Gauteng, among the local municipalities of the province, from 2003 to 2008, are presented in tables D.1.3 and D.2.3 in part D of the Reference Manual. The results for the year 2008 of the distribution of the pharmacies among the local municipalities of the province are presented in table 5.64 below. The table 5.64 furthermore ranks the local municipalities of the province by order from the municipality with the highest to the municipality with the lowest number of the public institutional pharmacies in the province.

Table 5.64: Ranking of local municipalities in Gauteng by order of local municipality with the highest number registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Tshwane	19	7	Kungwini	1
2	City of Johannesburg	16	8	Lesedi	1
3	Ekurhuleni	9	9	Midvaal	1
4	Emfuleni	5	10	Randfontein	1
5	Mogale city	5	11	West Rand	0
6	Nokeng tsa taemane	2	12	Westonaria	0

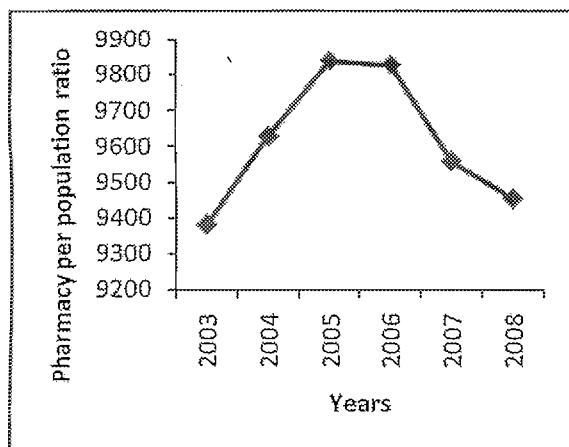
5.5.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN GAUTENG

Consider tables C.3.5, C.3.6, C.3.7 and C.3.8 in part C of the Reference Manual, as well as D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The estimated total population of the province of Gauteng increased over the study years from 9,267,189 people in 2003 to 10,720,299 people in 2008. The estimated total population of the province of Gauteng for all the study years, from 2003 to 2008, as well as the estimated population in each district council and metropolitan municipality of the province, from 2003 to 2008, is included in table C.3.5 in part C of the Reference Manual. The results of the estimated total population of each local municipality of the province of Gauteng, are included in tables D.1.3 (for the year 2003 to 2005) and D.2.3 (for the year 2006 to 2008) in part D of the Reference Manual.

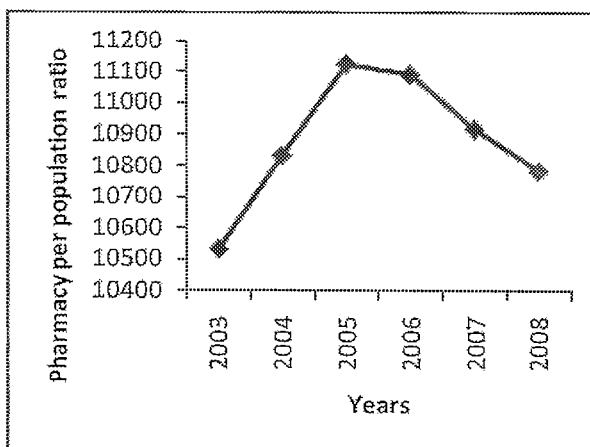
The changes in the pharmacy per population ratio of the registered direct service pharmaceutical structures in Gauteng, from 2003 to 2008, are illustrated in figure 5.8. The figure 5.8 should be considered alongside figure 5.7 to determine the influence of the change in the total number of the registered direct service pharmaceutical structures in Gauteng, on the changes in the pharmacy per population ratio of the structures.

The pharmacy per population ratio of the direct service pharmacies in Gauteng slightly increased from one pharmacy per 9,380 people in 2003 to one pharmacy per 9,453 people in 2008. The graph in figure 5.8(a) explicitly illustrates the changes in the pharmacy per population ratio of the direct service pharmacies in Gauteng over the study period. The implication of the increase in the pharmacy per population ratio of the structures is that the availability of the structures to the population of the province declined over the study period. This is despite the significant increase in the total number of registered direct service pharmacies ($n=+146$) in the province, over the study period.



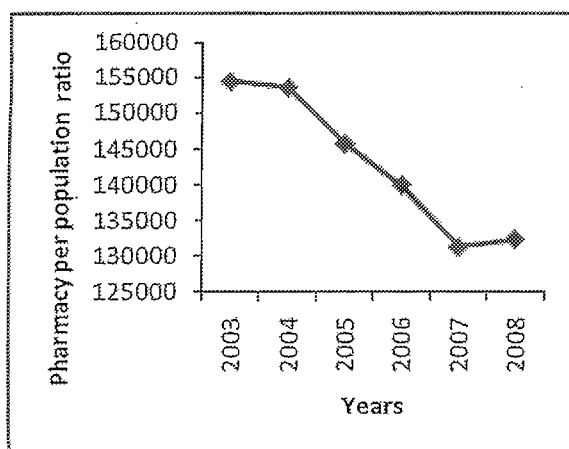
(a)

All registered pharmaceutical structures



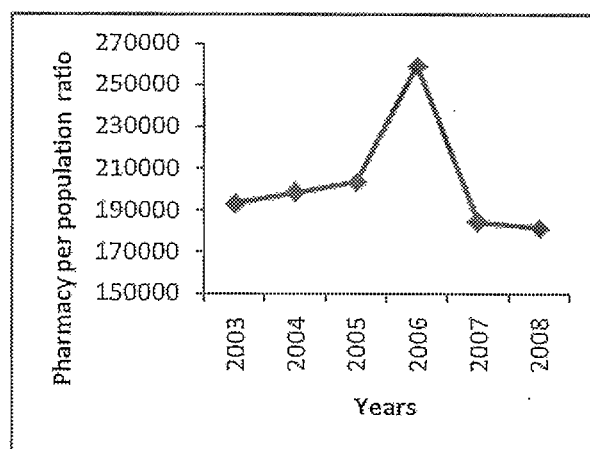
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.8: Changes in the pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of Gauteng, 2003 to 2008

As further illustrated by the graph in figure 5.8(a), there is a significant increase in the pharmacy per population ratio of the direct service pharmacies observed during the initial study period, from 2003 to 2005. This suggests that the increase in the total number of the pharmaceutical structures observed for that time period was insignificant to yield an improvement in the availability of the pharmaceutical structures to the population of the province. During the subsequent periods from 2005 to 2008, the pharmacy per population ratio of the structures decreased. The most significant decrease in the pharmacy per population ratio of the structures was observed for the one-year interval 2006-2007. Interestingly, the most significant increase in the total number of the registered direct service pharmacies, however, was observed for the one-year interval 2005-2006.

The results of the pharmacy per population ratio of each district council in the province of Gauteng from 2003 to 2008 are included in table C.3.5 in part C of the Reference Manual. Table 5.65 below presents the results and changes in the pharmacy per population ratio of each district council and metropolitan municipality between the years 2003 and 2008. The district councils and metropolitan municipalities are, in table 5.65 listed by decreasing rank order from district council or metropolitan municipality with the lowest pharmacy per population ratio to that with the highest pharmacy per population ratio, for the year 2008.

Table 5.65: Changes in the pharmacy per population ratio of the registered direct service pharmaceutical structures in each district council of Gauteng, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
City of Tshwane Metropolitan	5 975	7 386	+1 411	+23.6
City of Johannesburg Metropolitan	10 098	9 121	-977	-9.7
Ekurhuleni metropolitan	10 545	10 848	+303	+2.9
West Rand district	11 369	11 331	-38	-0.3
Sedibeng district	13 887	13 645	-242	-1.7
Metsweding district	10 199	14 363	+4 164	+40.8
Total (Gauteng)	9 380	9 454	+74	+0.8

As indicated by table 5.65, the overall increase in the province's pharmacy per population ratio, from 2003 to 2008, applies to the City of Tshwane and Ekurhuleni metropolitan municipalities as well as the Metsweding district council. The increase in the pharmacy per population ratio of Tshwane and Ekurhuleni metropolitan municipalities is despite the total increase in the total number of registered direct service pharmaceutical structures situated in the two metropolitan municipalities (refer to table 5.57). This may suggest that the total increase in the total number of the pharmacies was not significant enough to yield an improvement in the availability of the structures, given the estimated population growth over the years. The total number of direct service pharmacies in Metsweding district council remained the same for 2003 and 2008. In the presence of the total increase in the estimated population of that district council (Metsweding), the pharmacy per population ratio of the district therefore increased during the study period.

From the table 5.65, it is furthermore evident that the availability of the direct service pharmacies in the city of Johannesburg metropolitan as well as the West Rand and Sedibeng district councils, to the population of those districts and metropolitan, improved between the two years. Interestingly, the total number of registered direct service pharmacies in the West Rand district council decreased from 2003 to 2008. The decrease in the pharmacy per population ratio of the district council (West Rand) may be attributed to the decrease in the total estimated population of the district between the two years.

The results in table 5.65 also indicate that the direct service pharmacies in the City of Tshwane metropolitan are more favourably available to the population of the metropolitan, in comparison to the other metropolitan and district councils of the province, throughout the entire study period. The Metsweding district council remains the district council with the highest pharmacy per population ratio in Gauteng, throughout the study period.

In the event that the pharmacy per population ratio of direct service pharmacies in the province is used as the benchmark ratio, and should the direct service pharmacies be evenly distributed among the population of the district councils and metropolitans of the province, it becomes evident from table 5.65 that the pharmacies in the province are unevenly distributed. Only the City of Johannesburg and Tshwane Metropolitan municipalities have pharmacy per population ratios below (lower than) this benchmark ratio. This implies a skewed distribution of the pharmacies which is favourable to the population of the two metropolitan municipalities.

The table 5.66 indicates the results for the years during which the pharmacy per population ratio of each of the district councils and metropolitan municipalities of the province, was at its highest and lowest, of the study years. The highest pharmacy per population ratio of the province was

identified for the year 2005 and the lowest pharmacy per population ratio for the province was for the year 2003. These have also been demonstrated by the high and low peak in the graph in figure 5.8(a).

Table 5.66: Years with the highest and lowest pharmacy per population ratio for the registered direct service pharmacies in each district council of Gauteng province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
City of Johannesburg metropolitan	2005	10 246	2008	9 121
City of Tshwane metropolitan	2006	7 518	2003	5 975
Ekurhuleni metropolitan	2005	11 190	2003	10 545
Metsweding district	2006	15 032	2003	10 199
Sedibeng district	2005	15 408	2008	13 645
West Rand district	2005	12 376	2008	11 331
Total (Gauteng)	2005	9 837	2003	9 380

Tables D.1.3 and D.2.3, in part D of the Reference Manual, contain the results of the pharmacy per population ratio for the direct service pharmacies of each local and metropolitan municipality of the province of Gauteng, from the year 2003 to 2008.

The results of the direct service pharmacy per population ratio of each local and metropolitan municipality in the province, for the year 2008, are included in table 5.67 below. The table 5.67 furthermore ranks the local municipalities in the province which contained direct pharmaceutical structures by order from local or metropolitan municipality with the lowest pharmacy per population ratio (indicating more favourable availability of the pharmacies to the population) to the highest pharmacy per population ratio (indicating a least favourable availability of the pharmacies in the local or metropolitan municipality, to the population). As indicated by the table 5.67, the pharmacy per population ratio of the local and metropolitan municipalities of the province, range from one direct service pharmacy per 7,293 people (Tshwane metropolitan municipality) to a high ratio of one direct service pharmacy per 42,533 people (Westonaria local municipality).

Table 5.67: Ranking of local municipalities in Gauteng by order from local municipality with the lowest to the highest pharmacy per population ratio for the registered direct service pharmacies, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
	City of Tshwane	7 293		Ekurhuleni	10 848
	Midvaal	8 385		Nokeng tsa Taemane	12 280
	City of Johannesburg	9 121		Emfuleni	15 076
	Mogale city	9 144		Kungwini	15 664
	Randfontein	10 030		Westonaria	42 553
	Lesedi	10 443			

5.5.2.1 Community Pharmacies

Consider table C.3.6 in part C of the Reference Manual, as well as D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The changes in the pharmacy per population ratio of the registered community pharmacies situated in Gauteng, as of 2003 to 2008, have been illustrated by the graph in figure 5.8(b). The graph illustrates a slight increase in the community pharmacy per population ratio in the province, from one community pharmacy per 10,531 people in the year 2003, to one community pharmacy per 10,785 people for the year 2008. This may suggest that the increase in the total number of community pharmacies in the province, from 2003 to 2008, was not significant enough to yield an improvement in the availability of the pharmacies to the population of the province, given also the population growth over the years.

As is further illustrated by the graph in figure 5.8(b), the initial period from the year 2003 to 2005, is characterised by an increase in the pharmacy per population ratio of the province. This may be attributed to the decrease in the total number of registered community pharmacies in the province during those years. This period is then followed by periods of decrease in the community pharmacy per population ratio of the province (implying improved availability of the community pharmacies to the population of the province) from 2006 to 2008. This period (2006 to 2008) is accompanied also by an increase in the total number of registered community pharmacies situated in the province (refer to the graph in figure 5.7(b)).

The changes in the community pharmacy per population ratio of each district council and metropolitan municipality of the province, between 2003 and 2008, are indicated in table 5.68.

The district councils and metropolitan municipalities are, in table 5.68, listed by decreasing order from district council or metropolitan with the lowest to that with the highest community pharmacy per population ratio for the year 2008.

Table 5.68: Changes in the community pharmacy per population ratio for each district council of the province of Gauteng, 2003 and 2008

District council	Pharmacy population ratio in 2003	Pharmacy population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
City of Tshwane metropolitan	6 728	8 433	+1 705	+25.3
City of Johannesburg metropolitan	11 239	10 321	-918	-8.2
Ekurhuleni metropolitan	11 611	11 870	+259	+2.2
West Rand district	13 514	14 163	+649	+4.8
Sedibeng district	15 150	16 278	+1 128	+7.4
Metsweding district	14 732	20 746	+6 014	+40.8
Total (Gauteng)	10 531	10 785	+254	+2.4

The rank order of the district councils and metropolitan municipalities of the province as presented in table 5.68 remains the same throughout the study years. The City of Tshwane metropolitan remained to contain the most favourable community pharmacy per population ratio of the district councils and the metropolitan municipalities in the province, while Metsweding district council contained the highest pharmacy per population ratio.

Table 5.68 furthermore indicates that the pharmacy per population ratio of all the district councils and metropolitan municipalities in the province, except the City of Johannesburg metropolitan, increased between 2003 and 2008. It should be noted that the City of Johannesburg metropolitan municipality was the municipality containing the highest number of the community pharmacies in the province, over the study years, and experienced the highest growth (21.2%) in the number of community pharmacies, among the municipalities of the province, between 2003 and 2008 (refer to table 5.59). The City of Tshwane metropolitan municipality, on the other hand, experienced the second highest growth (15.5%) in the number of community pharmacies situated in it between 2003 and 2008 (refer to table 5.59) but has the

highest increase in the community pharmacy per population ratio, in the province. This may suggest that for the City of Tshwane metropolitan, along with the Sedibeng district council which also experienced a growth in the total number of community pharmacies situated therein over the years, the increase in the total number of community pharmacies situated in them was not significant enough to yield an improvement in the availability of the structures to the population, given also the total estimated population growth over the years. The increase in the community pharmacy per population ratio observed for the West Rand district council may be attributed to the negative growth in the total number of community pharmacies situated in the district, in the presence of an increase in the total estimated population of the district. The total number of community pharmacies situated in the Metsweding district council remained the same for 2003 and 2008, therefore producing an increase in the community pharmacy per population ratio between 2003 and 2008.

From the table 5.68 it also becomes evident that the community pharmacies in the province of Gauteng are unevenly distributed among the population of the district councils and metropolitan municipalities of the province. The evaluation is done using the provincial community pharmacy per population ratio as a benchmark, in the event that the community pharmacies in the province are evenly distributed among the district councils and metropolitan municipalities. For the year 2003, only the City of Tshwane metropolitan municipality had a community pharmacy per population ratio (1:6,728 people) above (lower than) the benchmark ratio (1:10,531). However, in 2008, the community pharmacy per population ratio of the City of Tshwane (1:8,433 people) and the City of Johannesburg (10,321 people) were just above (lower than) the benchmark ratio of one community pharmacy per 10,785 people. On the other hand, the community pharmacy per population ratio of Metsweding district council (1:20,746 people) was almost twice that of the benchmark in 2008. The distribution of the community pharmacies is therefore skewed in favour of the metropolitan municipalities of the province.

Table 5.69 presents the years during which the community pharmacy per population ratio for each district council and metropolitan municipality of the province was at its highest and lowest. For the province as a whole, the community pharmacy per population ratio was highest in 2005 (1:11,125) and lowest in the year 2003 (1:10,531). This is also evident from the high and low peaks demonstrated by the graph in figure 5.8(b).

Table 5.69: Years with the highest and lowest community pharmacy per population ratio for each district council of Gauteng

District council	Highest		Lowest	
	Year	ratio	Year	ratio
City of Johannesburg metropolitan	2005	11 428	2008	10 321
City of Tshwane metropolitan	2006	8 584	2003	6 728
Ekurhuleni metropolitan	2004	12 259	2003	11 611
Metsweding district	2006	22 547	2003	14 732
Sedibeng district	2005	17 221	2003	15 150
West Rand district	2005	14 803	2003	13 514
Total (Gauteng)	2005	11 125	2003	10 531

The results of the community pharmacy per population ratio of each local and metropolitan municipality of the province of Gauteng, from the year 2003 to 2008, are included in tables D.1.3 and D.2.3 in part D of the Reference Manual.

The table 5.70 below includes the results of community pharmacy per population ratio of each local and metropolitan municipality of the province for the year 2008 only. The local and metropolitan municipalities in table 5.70 are listed by rank order from the local or metropolitan municipality with the lowest to the highest community pharmacy per population ratio for the year 2008. It is evident from table 5.70 that the community pharmacy per population ratio of the local and metropolitan municipalities in the province ranges from a low ratio of one pharmacy per 8,433 people (City of Tshwane metropolitan) to a high ratio of one community pharmacy per 42,553 people (Westonaria).

Table 5.70: Ranking of local municipalities in Gauteng by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	City of Tshwane	8 433	7	Lesedi	13 924
2	Midvaal	9 433	8	Emfuleni	17 881
3	City Johannesburg	10 321	9	Kungwini	17 902
4	Randfontein	11 573	10	Nokeng tsa Taemane	30 700
5	Ekurhuleni	11 870	11	Westonaria	42 553
6	Mogale City	12 083			

5.5.2.2 Private Institutional Pharmacies

Consider table C.3.7 in part C of the Reference Manual, as well as D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of private institutional pharmacies in Gauteng is one pharmacy per 132,349 people in 2008. This is a decrease from the 2003 ratio (1:154,453 people), indicating an improvement in the availability of the structures to the population of the province throughout the study period. These changes in the private institutional pharmacy per population ratio of the province from 2003 to 2008 are illustrated by the graph in figure 5.8(c).

When the graph in figure 5.8(c) is viewed alongside the graph in figure 5.7(c), which indicates the change in the total number of private institutional pharmacies in the province from 2003 to 2008, it is evident that the trend in the changes in the total number of private institutional pharmacies situated in the province, has a direct influence on the changes in the pharmacy per population ratio of the structures, in the province. The pharmacy per population ratio of the registered private institutional pharmacies decreases with an increase in the total number of registered private institutional pharmacies situated in the province. This is true for all the year intervals of the study years, excluding the final interval from 2007 to 2008 where the total number of private institutional pharmacies increases with only one pharmacy, which results in a slight increase in the pharmacy per population ratio of the pharmacies.

The results of the private institutional pharmacy per population ratio of all the district councils and metropolitan municipalities of the province of Gauteng, from 2003 to 2008, are included in table C.3.7 in part C of the Reference Manual.

Table 5.71 includes the results for the private institutional pharmacy per population ratio of all the district councils and metropolitan municipalities of the province of Gauteng for the years 2003 and 2008 only. The table also presents the changes in the pharmacy per population ratio of the structures between the two years. The district councils and metropolitan municipalities in table 5.71 are listed by decreasing rank order from district council or metropolitan with the lowest to the district council or metropolitan with the highest private institutional pharmacy per population ratio for the year 2008.

Table 5.71: Changes in the private institutional pharmacy per population ratio for each district council of Gauteng province, 2003 and 2008

District council	Pharmacy population ratio in 2003	Pharmacy population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Metsweding district	66 292	93 356	+27 064	+40.8
City of Tshwane metropolitan	84 282	96 632	+12 350	+14.7
City of Johannesburg metropolitan	198 989	117 719	-81 270	-40.8
West Rand district	119 373	124 637	+5 264	+4.4
Ekurhuleni metropolitan	185 783	206 883	+21 100	+11.4
Sedibeng district	416 620	231 968	-184 652	-44.3
Total (Gauteng)	154 453	132 349	-22 104	-14.3

As evident from the rank order of district and metropolitan municipalities presented in table 5.71, the private institutional pharmacies in the Metsweding district council remained most favourably available to the population of the district, in relation to the other district councils and metropolitan municipalities of the province of Gauteng. This is despite the fact that the district council contains the lowest number of registered private institutional pharmacies in the province throughout the study period. The City of Johannesburg metropolitan (with the highest number of registered private institutional pharmacies in the province) is ranked second in table 5.71 therefore and contains the second lowest private institutional pharmacy per population ratio of the district councils and metropolitan municipalities in the province. The district council of Sedibeng contained the highest private institutional pharmacy per population ratio for both the years.

According to the results of the changes in the private institutional pharmacy per population ratio for each district council and metropolitan municipality of the province, as presented in table 5.71, the City of Johannesburg and Sedibeng district councils were the only district councils with an improvement in the availability of the structures to the population of the population. This may be attributed to the high growth percentages, 88.2% and 50.0% respectively, of the total number of private institutional pharmacies in the metropolitan municipality and district council (refer to table 5.61). The private institutional pharmacy per population ratio for the City of Tshwane metropolitan increased between the year 2003 and 2008. This suggests that the growth (26.3%) in total number of private institutional pharmacies situated in the City of Tshwane metropolitan,

was not significant enough to yield an improvement in the availability of the structures to the population of the metropolitan. The increase in the private institutional pharmacy per population ratio in the West Rand district council and Ekurhuleni metropolitan, may be attributed to the fact that the total number of registered private institutional pharmacies in the district and metropolitan remained the same for 2003 and 2008, in the presence of an increase in the total estimated population of the district and metropolitan municipality.

In table 5.72, the years during which the private institutional pharmacy per population ratio of each district council and metropolitan municipality of the province, was at its highest and lowest are presented. The highest private institutional pharmacy per population ratio for the province as a whole (1:154,453 people) was observed for the year 2003 and the lowest private institutional pharmacy per population ratio (1:131,292 people) was observed for the year 2007. This is also demonstrated by the high and low peaks evident from the graph in figure 5.8(c).

Table 5.72: Years with the highest and lowest private institutional pharmacy per population ratio for each district council of Gauteng province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
City of Johannesburg metropolitan	2003	198 989	2008	117 719
City of Tshwane metropolitan	2008	96 632	2005	76 721
Ekurhuleni metropolitan	2008	206 883	2005	182 764
Metsweding district	2008	93 356	2003	66 292
Sedibeng district	2006	298 800	2007	227 273
West Rand district	2006	150 511	2003	119 373
Total (Gauteng)	2003	154 453	2007	131 292

The results of the private institutional pharmacy per population ratio of the local and metropolitan municipalities in the province of Gauteng, from 2003 to 2008, are included in tables D.1.3 and D.2.3 of part D of the Reference Manual.

The table 5.73 presents the results of the private institutional pharmacy per population ratio of the local and metropolitan municipalities in Gauteng for the year 2008 only. Table 5.73 furthermore provides a ranking of the local and metropolitan municipalities in the province by order from the local or metropolitan municipality with the lowest pharmacy per population ratio

(implying a more favourable availability of the structures to the population) to the local or metropolitan municipality with the highest private institutional pharmacy per population ratio (implying a less favourable availability of the pharmaceutical structures to the population). From table 5.73, it is evident that the private institutional pharmacy per population ratio within the province of Gauteng ranged from a low of one private institutional pharmacy per 61,399 people (Nokeng tsa Taemane local municipality) to a high of one private institutional pharmacy per 256,288 people (Emfuleni local municipality).

Table 5.73: Ranking of local municipalities in Gauteng by order from local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Nokeng tsa Taemane	61 399	5	City Johannesburg	117 719
2	Lesedi	83 541	6	Randfontein	150 445
3	Mogale City	84 581	7	Ekurhuleni	206 883
4	City of Tshwane	96 632	8	Emfuleni	256 288

5.5.2.3 Public Institutional Pharmacies

Consider table C.3.8 in part C of the Reference Manual, as well as D.1.3 and D.2.3 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The changes in the pharmacy per population ratio of the public institutional pharmacies in the province of Gauteng, from 2003 to 2008 are illustrated by the graph in figure 5.8(d). As is observed from the graph in figure 5.8(d), the public institutional pharmacy per population ratio of the province decreased from one public institutional pharmacy per 193,066 people in 2003 to one public institutional pharmacy per 181,700 people in 2008. This implies an improvement on the availability of the public institutional pharmacies to the population of Gauteng, over the study period.

The changes in the public institutional pharmacy per population ratio, as illustrated by the graph in figure 5.8(d), were directly influenced by the changes in the total number of public institutional pharmacies situated in the province (illustrated by the graph in figure 5.7(d)). During the initial period of the study years, from 2003 to 2005, the public institutional pharmacy per population

ratio increased from 1:193,066 in 2003 to 1:198,374 in 2005. This may be attributed to the fact that the total number of public institutional pharmacies in the province, remained fairly constant during this period, as the total estimated population continued to increase. This was followed by a period (2005-2006) of more significant increase in the pharmacy per population ratio of public institutional pharmacies, due to a decrease in the total number of pharmacies situated in the province. It may therefore be said that the availability of the registered public institutional pharmacies to the population of Gauteng province declined from 2003 to 2006. From 2006 to 2008, the availability of the structures improved as the public institutional pharmacy per population ratio decreased due to an increase in the total number of registered public institutional pharmacies in the province.

The results of the public institutional pharmacy per population ratio for each district council and metropolitan municipality of the province of Gauteng, from 2003 to 2008, are included in Table C.3.8 in part C of the Reference Manual.

Table 5.74 below presents the results of the changes in the public institutional pharmacy per population ratio of each district council and metropolitan municipality of the province of Gauteng between the years 2003 and 2008. The table furthermore ranks the district councils and metropolitan municipalities of the province by order from the district or metropolitan with the lowest to the district or metropolitan municipality with the highest public institutional pharmacy per population ratio for the year 2008.

Table 5.74: Changes in the public institutional pharmacy per population ratio for each district council of Gauteng province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the availability ratio 2003 to 2008	
			n	%
Metsweding district	66 292	93 356	+27 064	+40.8
West Rand district	179 060	103 864	-75 196	-42.0
City of Tshwane metropolitan	145 577	122 061	-23 516	-16.2
Sedibeng district	294 413	132 553	-161 860	-55.0
City of Johannesburg metropolitan	198 989	235 437	+36 448	+18.3
Ekurhuleni metropolitan	236 451	321 818	+85 367	+36.1
Total (Gauteng)	193 066	181 700	-11 366	-5.9

As is evident from the rank order presented in table 5.74, Metsweding district council remained the district with the lowest public institutional pharmacy per population ratio and thus also a more favourable availability of public institutional pharmacies to the population of the district, relative to the other district councils and metropolitan municipalities in the province. This is despite the fact that the district council of Metsweding contained the lowest number of registered public institutional pharmacies among the district councils and metropolitan municipalities of the province. The Ekurhuleni metropolitan municipality was ranked last in table 5.73, as it contained the highest pharmacy per population ratio for the year 2008.

From table 5.74, it is furthermore evident that the overall decrease in the public institutional pharmacy per population ratio, observed for the entire province, took effect within the West Rand and Sedibeng district councils along with the City of Tshwane metropolitan municipality only. These are also the district councils and metropolitan municipalities that experienced an increase in the total number of registered public institutional pharmacies situated within them between 2003 and 2008 (refer to table 5.63). The decrease in the public institutional pharmacy per population ratio in Metsweding district council may be attributed to the fact that the total number of registered public institutional pharmacies in the district remains the same for 2003 and 2008 in the presence of an increase in the total estimated population of the district. The City of Johannesburg and Ekurhuleni metropolitan municipalities, on the other hand, experienced an increase in the pharmacy per population ratio of the pharmaceutical structures due to a decrease in the total number of public institutional pharmacies situated within them between 2003 and 2008, in the presence of an increase in the total estimated population of the two metropolitans.

Table 5.74 also indicates that the highest improvement in the availability of public institutional pharmacies between 2003 and 2008 was observed for the Sedibeng district council which was also the district council with the highest growth percentage (133.3%) in the total number of registered public institutional pharmacies (refer to table 5.62).

From table 5.74, it is also evident that the public institutional pharmacies in Gauteng were unevenly distributed to the population of the district councils and metropolitan municipalities of the province; where the provincial public institutional pharmacy per population ratio for the year 2008 (1:181,700 people) is used as a benchmark ratio, should the public institutional pharmacies in the province be evenly distributed among the population of the district councils and metropolitan municipality in the province. As is evident from the table 5.74, the City of Johannesburg and Ekurhuleni metropolitan municipalities had pharmacy per population ratios

higher than the benchmark ratio, with the ratio observed for Ekurhuleni municipality, almost twice that of the benchmark.

The years during which the public institutional pharmacy per population ratio, of each of the district councils and metropolitan municipalities in the province of Gauteng, was at its highest and lowest, throughout the study period, are presented in table 5.75. For the Gauteng province as a whole, the highest public institutional pharmacy per population ratio was observed for the year 2006 (1:258,917 people) when the total number of public institutional pharmacies in the province was also at its lowest, and the lowest public institutional pharmacy per population ratio was observed for the year 2008 (1:181,700 people), when the total number of public institutional pharmacies was also at its highest.

Table 5.75: Years with the highest and lowest public institutional pharmacy per population ratio for each district council of Gauteng province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
City of Johannesburg metropolitan	2008	235 437	2003	198 989
City of Tshwane metropolitan	2006	186 709	2008	122 061
Ekurhuleni metropolitan	2008	321 818	2003	236 451
Metsweding district	2008	93 356	2003	66 292
Sedibeng district	2006	298 800	2007	129 870
West Rand district	2006	200 682	2007	101 761
Total (Gauteng)	2006	258 917	2008	181 700

The results of the pharmacy per population ratio of the public institutional pharmacies for each of the local and metropolitan municipalities in the province, from 2003 to 2008, are included in tables D.1.3 and D.2.3 in part D of the Reference Manual.

The table 5.76 presents the results of the public institutional pharmacy per population ratio of each of the local and metropolitan municipalities in Gauteng, which contained registered public institutional pharmacies, for the year 2008 only. The table 5.76 also provides a ranking of the local and metropolitan municipalities of the province from the local or metropolitan municipality with the lowest pharmacy per population ratio (implying a more favourable availability of the public institutional pharmacies to the population) to the highest public institutional pharmacy per population ratio (implying a least favourable availability of the pharmacies to the population).

The range of the public institutional pharmacy per population ratio in the province of Gauteng, as evidenced in table 5.76, is from a low of one public institutional pharmacy per 30,700 people (Nokeng tsa Taemane local municipality) to a high of one public institutional pharmacy per 321,818 people (Ekurhuleni metropolitan municipality).

Table 5.76: Ranking of local municipalities in Gauteng by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

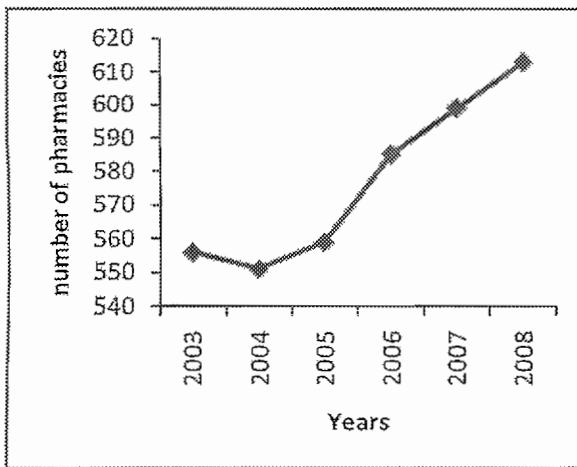
Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Nokeng tsa Taemane	30 700	6	Kungwini	125 313
2	Mogale City	67 665	7	Randfontein	150 445
3	Midvaal	75 467	8	Emfuleni	153 773
4	Lesedi	83 541	9	City Johannesburg	235 437
5	City of Tshwane	122 061	10	Ekurhuleni	321 818

5.6 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN KWAZULU-NATAL PROVINCE, 2003-2008

This section presents and reports the results on both the geographic and per-population distribution of registered direct service pharmaceutical structures across the district councils and local municipalities of the province of KwaZulu-Natal for 2003 to 2008.

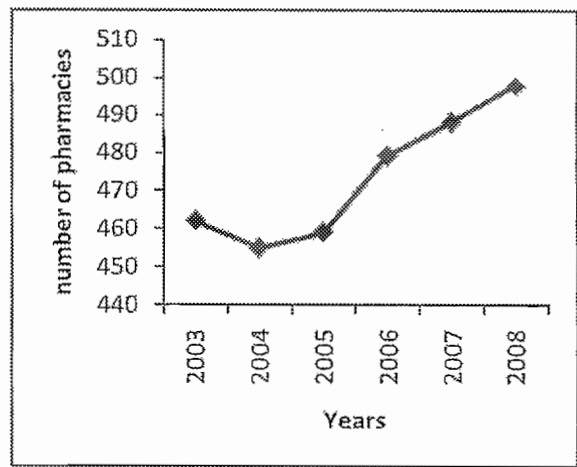
Consider tables C.4.1, C.4.2, C.4.3 and C.4.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

Figure 5.9 illustrates the changes in the total number of the registered direct service pharmacies in the province of KwaZulu-Natal, from the year 2003 to 2008. As illustrated by figure 5.9(a), the total number of the registered direct service pharmacies in the province increased from 556 pharmacies in 2003 to total 613 pharmacies in 2008.



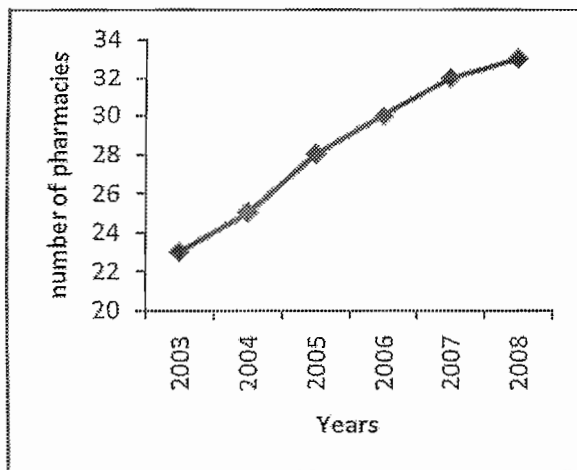
(a)

All registered pharmaceutical structures



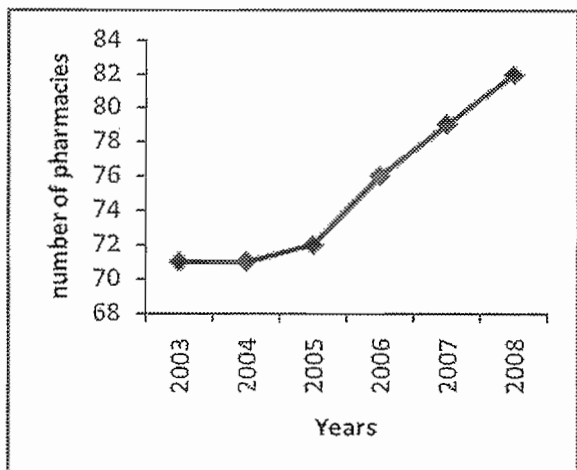
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.9: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of KwaZulu-Natal, 2003 to 2008

The growth trend as demonstrated by the graph in figure 5.9(a), showed that the total number of the pharmacies initially decreased during the period from the year 2003 to 2004 ($n=-5$) and then continued with an increase in the total number of pharmacies in the province. The highest increase ($n=+26$) took place during the one-year interval 2005-2006.

In the province of KwaZulu-Natal, 81% of the registered direct service pharmacies in the province of KwaZulu-Natal were community pharmacies in 2008. The changes in the total number of the registered community pharmacies in the province are illustrated by the graph in figure 5.9(b). As indicated by the figure 5.9, the growth trend for the community pharmacies imitated that of the total number of direct service pharmaceutical structures in the province. There was an initial decrease in the total number of community pharmacies in the province ($n=-7$) from 2003 to 2004, from where the total number of the pharmacies increased, with the highest increase taking place between the years 2005 and 2006 ($n=+20$).

The changes in the total number of registered private institutional pharmacies in the province are illustrated by the graph in figure 5.9(c). The total number of the pharmacies increased from 23 pharmacies in 2003 to a total of 33 pharmacies in 2008 with increments of two pharmacies between each on-year interval of the study period, with the exception of the year intervals 2004-2005 ($n=+3$) and 2007-2008 ($n=+1$).

The total number of registered public institutional pharmacies in the province of KwaZulu-Natal increased from 71 pharmacies in 2003 to 82 pharmacies in 2008. The change in the total number of the registered public institutional pharmacies in the province as of 2003 to 2008 is illustrated by the graph in figure 5.9(d). For the years 2003 and 2004 the total number of these pharmacies remained the same ($n=71$). The total number of public institutional pharmacies therefore began to increase as of the year 2004, with the highest increase taking place during the period 2005-2006 ($n=+6$).

5.6.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE PROVINCE OF KWAZULU-NATAL

Consider table C.4.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The registered direct service pharmacies in the province of KwaZulu-Natal were, in 2003, situated in 36 of the province's municipalities. In 2008, the number of municipalities in the province which contained at least one registered direct service pharmacy had increased to 39. As a result, the percentage population of the province's population living in municipalities without registered direct services decreased from 16% (n=1,561,342 people) in 2003 to 13% (n=1,226,312 people) in 2008.

The results of the distribution of the province's direct service pharmacies among the district councils in the province, from 2003 to 2008, are presented in table C.4.1 in part C of the Reference Manual. The table C.4.1 in the Reference Manual also provides an indication of the number of municipalities, within each district council, which contained at least one direct service pharmacy, over the entire study period.

Table 5.77 below shows the changes in the distribution of the province's direct service pharmacies among the district councils and metropolitan municipalities of the province, between the years 2003 and 2008. The district councils are, in table 5.77, listed by decreasing rank order from the district council which contained the highest to the district council with the lowest number of direct service pharmacies, during the year 2008.

The rank order of the province's district councils as presented in table 5.77 does not apply to all other study years, from 2003 to 2008. However, the province's metropolitan municipality of eThekweni remains to contain the majority of the province's direct service pharmacies, during all the study years. In 2008, the metropolitan municipality contained 55% of the direct service pharmacies in the province. Most of the district councils in the province of KwaZulu-Natal contained a percentage proportion below four per cent of the direct service pharmacies situated in the province.

The overall increase in the total number of direct service pharmacies situated in the province which took place over the entire study period did not take effect within each district council of the province. As indicated in table 5.77, district councils which experienced a decrease in the total number of direct service pharmacies situated within them were Uthukela (n=-1) and Sisonke (n=-3) district councils. The total number of direct service pharmacies situated within Umzinyathi district council remained the same for the years 2003 and 2008. All other district councils in KwaZulu-Natal experienced an increase in the total number of direct service pharmacies situated within them. The most significant increase in total number of direct service pharmacies was observed for the eThekwini metropolitan municipality (n=+33).

Table 5.77: Changes in the total number of registered direct service pharmacies in KwaZulu-Natal province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
eThekwini metropolitan	302 (54.3%)	335 (54.6%)	+33	10.9
Umgungundlovu district	77 (13.8%)	78 (12.7%)	+1	1.3
Uthungulu district	37 (6.7%)	43 (7.0%)	+6	16.2
Ugu district	35 (6.3%)	37 (6.0%)	+2	5.7
iLembe district	16 (2.9%)	23 (3.8%)	+7	43.8
Uthukela district	22 (4.0%)	21 (3.4%)	-1	-4.5
Amajuba district	19 (3.4%)	21 (3.4%)	+2	10.5
Zululand district	16 (2.9%)	20 (3.3%)	+4	25.0
Umkhanyakude district	8 (1.4%)	14 (2.3%)	+6	75.0
Umzinyathi district	11 (2.0%)	11 (1.8%)	0	0
Sisonke district	13 (2.3%)	10 (1.6%)	-3	23.1
KwaZulu-Natal (Total)	556 (100%)	613 (100%)	57	10.3

Tables D.1.4 and D.2.4 in part D of the Reference Manual present the results of the distribution of the direct service pharmacies in the province among the province's local municipalities, from 2003 to 2008.

The distribution of the direct service pharmacies in the province among the local municipalities of the province, for the year 2008, is presented in table 5.78. The table 5.78 furthermore ranks the local municipalities of the province accordingly from the local municipality which contained the highest to the local municipality with the lowest number of registered direct service pharmacies for the year 2008. As evident from the table 5.78, nine of the 39 local municipalities which contained registered direct service pharmacies, during the year 2008, only contained one registered direct service pharmacy. On the other hand, 77% of the direct service pharmacies in the province were situated in the first five local municipalities as presented by table 5.78 (eThekweni metropolitan, Msundudzi, uMhlathuze, Hibiscus coast and Newcastle).

Table 5.78: Ranking of local municipalities in KwaZulu-Natal by order of local municipality with the highest number of registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	eThekweni	335	28	Mthonjaneni	2
2	Msundudzi	61	29	Nqutu	2
3	uMhlathuze	30	30	Nkandla	2
4	Hibiscus coast	27	31	Dannhauser	1
5	Newcastle	19	32	Emadlangeni	1
6	KwaDukuza	17	33	Mtubatuba	1
7	Abaqulusi	11	34	Kwa Sani	1
8	Emnambiti/ Ladysmith	10	35	The Big Five false bay	1
9	uMngeni	9	36	Mbonambi	1
10	uMlalazi	8	37	eDumbe	1
11	Umtshezi	7	38	uPhongolo	1
12	Umdoni	7	39	Ndwendwe	1
13	Hlabisa	6	40	Sisonke	0
14	Jozini	6	41	Impendle	0
15	Mandeni	5	42	Mooi Mpofana	0
16	Umvoti	5	43	uMgungundlovu	0
17	Greater Kokstad	4	44	Ezingoleni	0
18	Endumeni	4	45	Umxumbe	0
19	Okhahlamba	4	46	Vulamehlo	0
20	Ulundi	4	47	Umhlabuyalingana	0
21	Ubuhlebezwe	3	48	Umkhanyakude	0
22	Richmond	3	49	Msinga	0
23	Nongoma	3	50	Imbabazane	0
24	uMshwathi	3	51	Indaka	0
25	uMuziwabantu	3	52	Uthukela	0
26	Ingwe	2	53	Ntambanana	0
27	Mkhambathini	2	54	Maphumulo	0

5.6.2.1 Community Pharmacies

Consider table C.4.2 in part C of the Reference Manual, along with tables B.28.2, B.29.2, B.30.2, B.31.2, B.32.2 and B.33.2 in part B of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total number of municipalities in KwaZulu-Natal in which the registered community pharmacies of the province were situated increased from 33 municipalities (60% of municipalities in the province) in 2003 to 35 municipalities (64% of municipalities in the province) in the year 2008. Twenty-one per cent of the province's population (n=2,006,083 people) was situated in municipalities without registered community pharmacies in 2003. The percentage of the population decreased to 16% (n=1,623,673 people) in 2008.

The results of the distribution of the registered community pharmacies in KwaZulu-Natal among the district councils and metropolitan municipality of the province, as of 2003 to 2008, are presented in table C.4.2 in part C of the Reference Manual. The table C.4.2 also includes an indication of the number of municipalities in each district council which contained at lowest one registered community pharmacy.

Table 5.79 presents the changes in the distribution of the registered community pharmacies in the province, among the province's district councils and metropolitan municipality, between the year 2003 and 2008. The district councils are, in table 5.79, listed by decreasing rank order from district council with the highest to the district council which contained the least number of registered community pharmacies for the year 2008.

As was the case for the registered direct service pharmacies in the province, the rank order of the district councils presented in table 5.79 does not apply to all other study years, from 2003 to 2007. However, the registered community pharmacies of the province remained concentrated within the province's metropolitan municipality, eThekweni. The metropolitan municipality contained almost 60% of the registered community pharmacies in the province during the year 2008. As indicated in table 5.79, most of the district councils in the province contained a percentage proportion of less than 3.5% of the total number of registered community pharmacies situated in the province of KwaZulu-Natal.

Table 5.79: Changes in the total number of registered community pharmacies in KwaZulu-Natal province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
eThekweni metropolitan	266 (57.6%)	293 (58.8%)	+27	10.1
Umgungundlovu district	63 (13.6%)	59 (11.8%)	-4	6.3
Uthungulu district council	27 (5.8%)	32 (6.4%)	+5	18.5
Ugu district council	29 (6.3%)	31 (6.2%)	+2	6.9
Uthukela district council	18 (3.9%)	17 (3.4%)	-1	5.6
iLembe district council	14 (3.0%)	17 (3.4%)	+3	21.4
Amajuba district council	15 (3.2%)	16 (3.2%)	+1	6.7
Zululand district council	12 (2.6%)	13 (2.6%)	+1	8.3
Umkhanyakude district council	5 (1.1%)	9 (1.8%)	+4	80.0
Umzinyathi district council	5 (1.1%)	6 (1.2%)	+1	20.0
Sisonke district council	8 (1.7%)	5 (1.0%)	-3	-37.5
KwaZulu-Natal (Total)	462 (100%)	498 (100%)	+36	7.8

The results of the distribution of the registered community pharmacies in KwaZulu-Natal among the local municipalities of the province, from 2003 to 2008, are presented in tables D.1.4 and D.2.4 in part D of the Reference Manual.

Table 5.80 below presents the results of the distribution of the community pharmacies in the province among the province's local municipalities for the year 2008. Table 5.80 furthermore lists the local municipalities in the province accordingly from the local municipality with the highest to the local municipality which contained the lowest number of the registered community pharmacies in the province. As presented in table 5.80, thirteen of the province's local municipalities contained only one registered community pharmacy while more than 80% of the community pharmacies in the province were situated among the top five local municipalities as presented by table 5.80 (eThekweni, Msundudzi, uMhlathuze, Hibiscus coast and Newcastle). Interestingly, the top five municipalities as presented in table 5.80 are in the same order as

those in table 5.78 which ranked the local municipalities by order from local municipality with the highest number of the registered direct service pharmacies to the lowest.

Table 5.80: Ranking of local municipalities in KwaZulu-Natal by order of local municipality with the highest number of registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	eThekweni	293	28	Nqutu	1
2	Msundudzi	49	29	Mbonambi	1
3	uMhlathuze	24	30	Mthonjaneni	1
4	Hibiscus coast	23	31	Nkandla	1
5	Newcastle	15	32	Ulundi	1
6	KwaDukuza	14	33	uPhongolo	1
7	Abaqulusi	9	34	Mtubatuba	1
8	Emnambiti/ Ladysmith	8	35	The Big Five false bay	1
9	uMngeni	7	36	Emadlangeni	0
10	Umtshezi	6	37	Ingwe	0
11	Umdoni	6	38	Sisonke	0
12	Hlabisa	5	39	Impendle	0
13	uMlalazi	5	40	Mooi Mpofana	0
14	Endumeni	3	41	uMgungundlovu	0
15	Okhahlamba	3	42	Ezingoleni	0
16	Mandeni	3	43	Umxumbe	0
17	Greater Kokstad	2	44	Vulamehlo	0
18	Ubuhlebezwe	2	45	Umhlabuyalingana	0
19	uMuziwabantu	2	46	Umkhanyakude	0
20	Jozini	2	47	Msinga	0
21	Umvoti	2	48	Imbabazane	0
22	Nongoma	2	49	Indaka	0
23	Dannhauser	1	50	Uthukela	0
24	Kwa Sani	1	51	Ntambanana	0
25	Mkhambathini	1	52	eDumbe	0
26	uMshwathi	1	53	Maphumulo	0
27	Richmond	1	54	Ndwendwe	0

5.6.2.2 Private Institutional Pharmacies

Consider table C.4.3 in part C of the Reference Manual, along with tables B.28.3, B.29.3, B.30.3, B.31.3, B.32.3 and B.33.3 in part B of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The majority of the municipalities in the province of KwaZulu-Natal did not contain registered private institutional pharmacies, over the study years. However, with the increase in the total

number of private institutional pharmacies in the province, the percentage proportion of municipalities which did not contain private institutional pharmacies decreased from 87% (n=48 municipalities) in 2003 to 81% (n=44 municipalities) in 2008. The estimated population of the municipalities without at least one registered private institutional pharmacy was 4,612,764 people (46% of the province's population) in 2008.

The results of the distribution of the registered private institutional pharmacies in KwaZulu-Natal among the province's district councils and metropolitan municipality, from the year 2003 to 2008, are presented in table C.4.3 in part C of the Reference Manual. The table C.4.3 also includes an indication of the number of municipalities within each district council which contained at least one registered private institutional pharmacy.

Table 5.81 below presents the changes in the distribution of the private institutional pharmacies in KwaZulu-Natal for each district council and metropolitan municipality of the province. The district councils and metropolitan municipality are, in table 5.81, listed by decreasing order from the district council with the highest to the district council with the lowest number of the registered private institutional pharmacies for the year 2008.

In 2003, five of the province's district councils (Sisonke, iLembe, Umkhanyakude, Umzinyathi and Zululand district council) did not contain any registered private institutional pharmacies. As indicated in table 5.81, the number had been reduced to three district councils (Umkhanyakude, Umzinyathi and Zululand district council) in the year 2003. Although Uthungulu, Ugu, Amajuba and Uthukela district councils contained registered private institutional pharmacies throughout the entire study period, the total number of the private institutional pharmacies situated in these districts remained the same for the year 2003 and 2008. Furthermore, 50% of the increase in the total number of registered private institutional pharmacies in the province took place in the province's metropolitan municipality of eThekweni.

Table 5.81: Changes in the total number of registered private institutional pharmacies in KwaZulu-Natal province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
eThekweni metropolitan	14 (60.9%)	19 (57.6%)	+5	35.7
Umgungundlovu district council	2 (8.7%)	5 (15.2%)	+3	150.0
Uthungulu district council	3 (13.0%)	3 (9.1%)	0	0
Ugu district council	2 (8.7%)	2 (6.1%)	0	0
Amajuba district council	1 (4.3%)	1 (3.0%)	0	0
Uthukela district council	1 (4.3%)	1 (3.0%)	0	0
Sisonke district council	0 (0.0%)	1 (3.0%)	+1	-
iLembe district council	0 (0.0%)	1 (3.0%)	+1	-
Umkhanyakude district council	0 (0.0%)	0 (0.0%)	0	0
Umzinyathi district council	0 (0.0%)	0 (0.0%)	0	0
Zululand district council	0 (0.0%)	0 (0.0%)	0	0
KwaZulu-Natal (Total)	23 (100%)	33 (100%)	+10	43.5

The results of the distribution of the registered private institutional pharmacies in KwaZulu-Natal, among the local municipalities of the province, from the years 2003 to 2008, are included in tables D.1.4 and D.2.4 in part D of the Reference Manual.

The local municipalities which contained registered private institutional pharmacies during the year 2008 as well as the total number of the pharmacies contained by these local municipalities are presented in table 5.82 below. The table 5.82 also ranks the local municipalities by order from the local municipality with the highest to the local municipality with the lowest number of registered community pharmacies for the year 2008. As indicated in table 5.82, the majority (60%) of these local municipalities contained only one registered private institutional pharmacy, while the remaining local municipalities contained more than 80% of the registered private institutional pharmacies in the province.

Table 5.82: Ranking of local municipalities in KwaZulu-Natal by order of local municipality with the highest number of the registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	eThekweni	19	6	Newcastle	1
2	uMhlathuze	3	7	Greater Kokstad	1
3	Msundudzi	3	8	Richmond	1
4	Hibiscus coast	2	9	uMngeni	1
5	Emnambiti/ Ladysmith	1	10	KwaDukuza	1

5.6.2.3 Public Institutional Pharmacies

Consider table C.4.4 in part C of the Reference Manual, along with tables B.28.4, B.29.4, B.30.4, B.31.4, B.32.4 and B.33.4 in part B of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, the registered public institutional pharmacies in the province of KwaZulu-Natal were situated in 54.5% of the municipalities in the province. In 2008, the percentage municipalities containing at least one registered public institutional pharmacy had increased to 61.1%. The percentage municipalities in the province which contained at least one registered public institutional pharmacy in 2008 is comparable to the percentage municipalities which contained at least one registered community pharmacy for the year (64%), despite the fact that the total number of community pharmacies in the province was approximately six times that of the registered public institutional pharmacies in the province. The total estimated population of the municipalities without any registered public institutional pharmacy in the year 2008 was 1,623,673 people (16.3% of the province's population). This estimated total population was an improvement from the 2,026,503 people (21.1% of the province's population) observed for the year 2003.

The results of the distribution of the registered public institutional pharmacies in KwaZulu-Natal, among the district councils and metropolitan municipality of the province, from 2003 to 2008, are included in table C.4.4 in part C of the Reference Manual. The table C.4.4 also presents the

number of municipalities in each district council and metropolitan municipality of the province which contained at least one registered pharmacy from the year 2003 to 2008.

Table 5.83 below presents the results of the distribution of the registered public institutional pharmacies among the district councils and metropolitan municipality of the province for the years 2003 and 2008; along with the changes in the distribution of the pharmaceutical structures that occurred between the year 2003 and 2008. The table 5.83 furthermore ranks the district councils and metropolitan municipalities by decreasing order from district council or metropolitan municipality with the highest to the lowest number of registered public institutional pharmacies situated within them, for the year 2008.

Table 5.83: Changes in the total number of registered public institutional pharmacies in KwaZulu-Natal province, per district council, 2003 to 2008

District council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			n	%
eThekweni metropolitan	22 (31.0%)	23 (28.0%)	+1	4.5
Umgungundlovu district council	12 (16.9%)	14 (17.0%)	+2	16.7
Uthungulu district council	7 (9.9%)	8 (9.6%)	+1	14.2
Zululand district council	4 (5.6%)	7 (8.5%)	+3	75.0
Umzinyathi district council	6 (8.5%)	5 (6.1%)	-1	16.7
Umkhanyakude district council	3 (4.2%)	5 (6.1%)	+2	66.7
iLembe district council	2 (2.8%)	5 (6.1%)	+3	150.0
Sisonke district council	5 (7.0%)	4 (4.9%)	-1	-20.0
Ugu district council	4 (5.6%)	4 (4.9%)	0	0
Amajuba district council	3 (4.2%)	4 (4.9%)	+1	+33.3
Uthukela district council	3 (4.2%)	3 (3.7%)	0	0
KwaZulu-Natal (Total)	71 (100%)	82 (100%)	+11	15.5

As is evident from table 5.83, the province's metropolitan municipality of eThekweni contained the highest number of the registered public institutional pharmacies in the province throughout the study years. This was followed by the Umgungundlovu district council. The district council with the lowest number of registered public institutional pharmacies for the year 2003 was iLembe district council. However, for the year 2008, the Uthukela district council contained the lowest number of registered public institutional pharmacies, due to the increase in pharmacies situated in the iLembe district council.

From the table 5.83, it is furthermore evident that, although the total number of public institutional pharmacies in the province increased between 2003 and 2008, the total number of the pharmacies in the district councils of Umzinyathi, Sisonke, Ugu, Amajuba and Uthukela did not increase. The highest increase in total number of pharmacies was observed for the Zululand and iLembe district councils with an addition of three public institutional pharmacies in each of the district councils, between 2003 and 2008.

The results of the distribution of the registered public institutional pharmacies in KwaZulu-Natal, among the local municipalities and metropolitan municipality of the province are included in tables D.1.4 and D.2.4 in part D of the Reference Manual.

The distribution of the registered public institutional pharmacies in KwaZulu-Natal among the local municipalities of the province, for the year 2008, is presented by table 5.84. The table also ranks the local municipalities and metropolitan municipality by order from local or metropolitan municipality containing the highest to the lowest number of public institutional pharmacies. From the table 5.84, it is evident that of the 32 local municipalities which contain public institutional pharmacies, for the year 2008, only 60% contained one registered public institutional pharmacy. Furthermore, 40% of the public institutional pharmacies in the province were situated in two municipalities (eThekweni metropolitan and Msundudzi local municipality), as presented by the table 5.84.

Table 5.84: Ranking of local municipalities in KwaZulu-Natal by order of local municipality with the highest number of registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	eThekweni	23	28	Mthonjaneni	1
2	Msundudzi	9	29	Nkandla	1
3	Jozini	4	30	Nongoma	1
4	Umvoti	3	31	eDumbe	1
5	uMhlathuze	3	32	Ndwendwe	1
6	uMlalazi	3	33	Dannhauser	0
7	Ulundi	3	34	Kwa Sani	0
8	Newcastle	3	35	Sisonke	0
9	Ingwe	2	36	Impendle	0
10	Hibiscus coast	2	37	Mooi Mpofana	0
11	Abaqulusi	2	38	uMgungundlovu	0
12	KwaDukuza	2	39	uMshwathi	0
13	Mandeni	2	40	Ezingoleni	0
14	Emadlangeni	1	41	Umxumbe	0
15	Greater Kokstad	1	42	Vulamehlo	0
16	Ubuhlebezwe	1	43	Mtubatuba	0
17	Mkhambathini	1	44	The Big Five false bay	0
18	Richmond	1	45	Umhlabyalingana	0
19	uMngeni	1	46	Umkhanyakude	0
20	Umdoni	1	47	Msinga	0
21	uMuziwabantu	1	48	Imbabazane	0
22	Hlabisa	1	49	Indaka	0
23	Endumeni	1	50	Uthukela	0
24	Nqutu	1	51	Mbonambi	0
25	Emnambiti/ Ladysmith	1	52	Ntambanana	0
26	Okhahlamba	1	53	uPhongolo	0
27	Umtshezi	1	54	Maphumulo	0

5.6.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN KWAZULU-NATAL

Consider tables C.4.5, C.4.6, C.4.7 and C.4.8 in part C of the Reference Manual, as well as D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

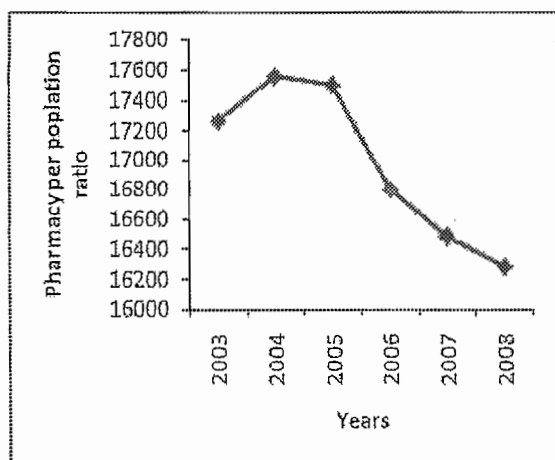
The total estimated population of the province of KwaZulu-Natal increased from 9,600,825 people in the year 2003 to 9,981,789 people in the year 2008. The total estimated population of the province as well as the estimated population in each district council and metropolitan municipality of the province, from the year 2003 to 2008, is included in table C.4.5 in part C of

the Reference Manual. The results of the estimated population of each of the local municipalities of the province are presented in tables D.1.4 (for the years 2003 to 2005) and D.2.4 (for the years 2006 to 2008).

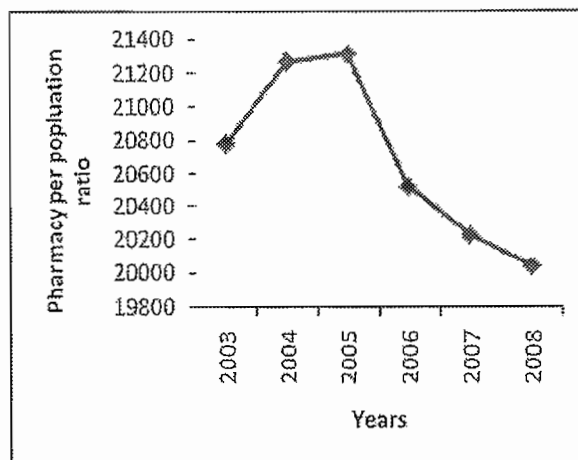
The changes in the pharmacy per population ratio for the direct service pharmaceutical structures situated in the province of KwaZulu-Natal, from the year 2003 to 2008, are illustrated by figure 5.10. To determine the influence of the changes in the total number of the registered direct service pharmacies in the province over the study years, on the changes in the pharmacy per population ratio of the pharmacies, the figure 5.9 should be considered alongside figure 5.10.

The pharmacy per population ratio of the direct service pharmacies in the province of KwaZulu-Natal was one pharmacy per 17,268 people in 2003. For the year 2008, the ratio had decreased to one pharmacy per 16,283 people. This implies an overall improvement in the availability of the registered direct service pharmacies to the population of the KwaZulu-Natal, over the study period. From the figure 5.10, it is evident that the overall improvement in the availability of the registered direct service pharmacies in the province, applied to all the categories of direct service pharmacies (i.e. community pharmacies, private institutional and public institutional pharmacies).

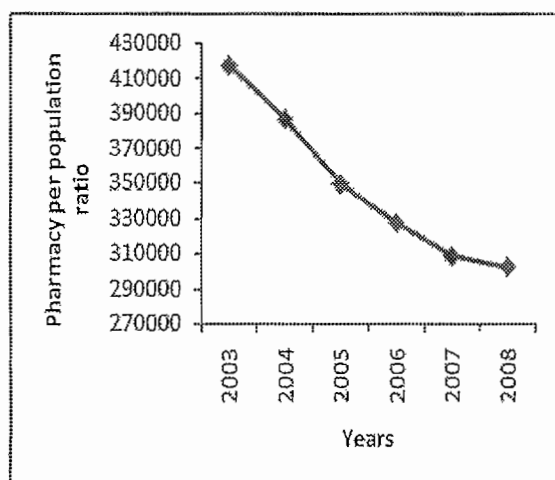
The graph in figure 5.10(a) specifically illustrates the trend for the changes in the pharmacy per population ratio of the direct service pharmacies in the province, from 2003 to 2008. As evident from the graph, the initial period from 2003 to 2004 was characterised by an increase in the pharmacy per population ratio of the direct service pharmacies in the province. This may be attributed to the decrease in the total number of direct service pharmacies in the province during that period (refer to the graph in figure 5.9(a)). The availability of the direct service pharmaceutical structures to the population of KwaZulu-Natal then continuously improved from the year 2004 to 2008 following an increase in the total number of the pharmacies in that time period. As further illustrated by the graph in figure 5.10(a), the highest improvement in the availability of the direct service pharmacies in the province was observed for the one-year interval 2005-2006 which was also observed as the one-year interval with the highest increase in the total number of registered direct service pharmacies situated in the province (as illustrated by the graph in figure 5.9(a)).



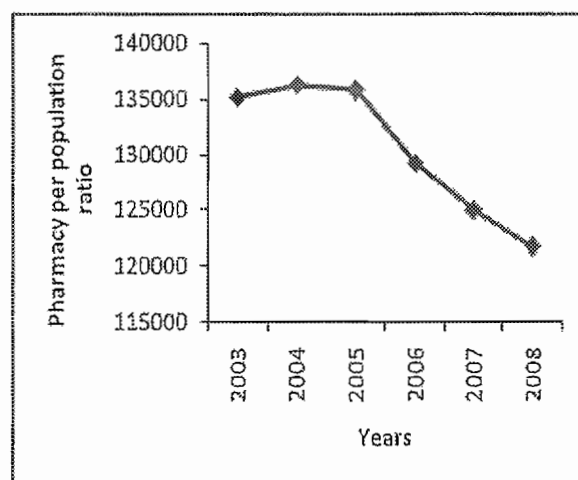
(a)
All registered pharmaceutical structures



(b)
Registered community pharmacies



(c)
Registered private institutional pharmacies



(d)
Registered public institutional pharmacies

Figure 5.10: Changes in the pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of KwaZulu-Natal, 2003 to 2008

The results of the pharmacy per population ratio for the direct service pharmacies in each district council and metropolitan municipality of KwaZulu-Natal, from the year 2003 to 2008, are presented in table C.4.5 in part C of the Reference Manual. Table 5.85 below contains the results of the pharmacy per population ratio for the direct service pharmacies for each district council and metropolitan municipality of the province for the years 2003 and 2008 only. The district councils and metropolitan municipalities are, in table 5.85, listed by decreasing rank order from the district council or metropolitan municipality with the lowest to the highest direct service pharmacy per population ratio for the year 2008.

Table 5.85: Changes in the pharmacy per population ratio of the registered direct service pharmacies in each district council of KwaZulu-Natal province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
eThekweni Metropolitan	10 422	9 785	-637	-6.1
Umgungundlovu District	12 274	12 619	+345	2.8
Ugu District	20 488	20 184	-304	-1.5
Uthungulu District	24 390	21 857	-2 533	-10.4
Amajuba District	25 092	23 643	-1 449	-5.8
iLembe District	35 674	25 846	-9 828	-27.5
Sisonke District	23 380	29 933	+6 553	28.0
Uthukela District	30 418	33 188	+2 770	9.1
Zululand District	51 207	42 665	-8 542	-16.7
Umkhanyakude District	72 992	43 440	-29 552	-40.5
Umzinyathi District	42 268	44 021	+1 753	4.1
Total (KwaZulu-Natal province)	17 268	16 283	-985	-5.7

From the table 5.85, it is evident that the rank order of district councils and metropolitan municipality as applicable to the year 2008 did not apply to the year 2003 and all other study years. Despite this however, the metropolitan municipality of eThekweni and the district council of Umgungundlovu remained to contain the lowest and the second lowest direct service pharmacy per population ratio, respectively, all throughout the study years. This implied that the availability of the direct service pharmacies remained most favourable to the population of

eThekwini metropolitan and Umgungundlovu district council, throughout the study period, relative to the other district councils of the province. For the year 2008, the least favourable availability of direct service pharmacies, relative to the other district councils of the province, was observed for the Umzinyathi (1:44,021 people) and Umkhanyakude (1:43,440 people) district councils.

Table 5.85 also presents the changes in the pharmacy per population ratio of each district council and metropolitan municipality of the province of KwaZulu-Natal, between the years 2003 and 2008. As indicated by the table 5.85, an improvement in the pharmacy per population ratio of direct service pharmacies was observed for the eThekwini metropolitan as well as Uthungulu, Amajuba, iLembe Umkhanyakude and Zululand district councils. From table 5.76 it is evident that these were also the district council for which an increase (above 10%) in the total number of registered direct service pharmacies situated within them between the year 2003 and 2008 occurred. For the Umgungundlovu and Ugu district councils, an increase in the total number of registered direct service pharmacies was also observed, however, the increase was insignificant (1.3% for Umgungundlovu district and 5.7% for Ugu district) to yield an improvement in the availability of the direct service pharmacies situated in the two districts. The best improvement in the availability of direct service pharmacies, as observed in table 5.85, was for the Umkhanyakude district council (40.5%). The district council of Umkhanyakude was also the district council which experienced the highest percentage increase (75%) in the total number of the direct service pharmacies situated in it, relative to other district councils of the province. The increase in the pharmacy per population ratio of the Umzinyathi district council, may be attributed to the fact that there was no change in the total number of registered direct service pharmacies situated in the district, while the district's estimated population continued to increase. As was evident from table 5.77, Uthukela and Sisonke district council were the only district councils which experienced a decrease in the total number of registered direct service pharmacies within them, between the years 2003 and 2008. From table 5.85, it is evident that the two district councils (Uthukela and Sisonke) experienced a decrease in the availability of direct service pharmacies to their population between the years 2003 and 2008.

Using the provincial pharmacy per population ratio of 2008 (n= 1:16,283 people) as the benchmark ratio, in the event that the direct service pharmacies of the province are evenly distributed to the population of each district council and metropolitan municipality of the province, it is evident from table 5.85 that, during the year 2008, the direct service pharmacies in the province were unevenly distributed. Only the eThekwini metropolitan municipality and the Umgungundlovu district councils had a pharmacy per population ratio (n=1:9,785 people and

1:12,619 people respectively) lower than the benchmark. This suggested a skewed distribution of the registered direct service pharmacies in KwaZulu-Natal, in favour of the population in the eThekweni metropolitan and Umgungundlovu district council. On the other hand, the district with the highest direct service pharmacy per population ratio, for the year 2008, Umzinyathi district council, had a ratio almost three times higher than the benchmark (n=1:44,021 people).

Table 5.86 presents the years during which the direct service pharmacy per population ratio of each district council and metropolitan municipality of KwaZulu-Natal was at its highest and lowest of the study years. For the entire province, the direct service pharmacy per population ratio was highest in 2004 (n= 1:17,553 people) and lowest in 2007 (n= 1:16,283 people). This is also demonstrated by the high and low peaks illustrated by the graph in figure 5.10(a).

The results of the direct service pharmacy per population ratio for each local and metropolitan municipality of KwaZulu-Natal are presented in tables D.1.4 (for the year 2003 to 2005) and D.2.4 (for the year 2006 to 2008) in part D of the Reference Manual.

Table 5.86: Years with the highest and lowest pharmacy per population ratio of the registered direct service pharmacies in each district council of KwaZulu-Natal province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Amajuba District	2005	26 987	2007	23 382
eThekweni Metropolitan	2004	10 680	2008	9 785
Sisonke District	2008	29 933	2005	20 647
Umgungundlovu District	2005	12 671	2004	12 210
Ugu District	2007	21 102	2008	20 184
Umkhanyakude District	2005	74 375	2008	43 440
Umzinyathi District	2008	44 021	2005	39 480
Uthukela District	2008	33 188	2003	30 418
Uthungulu District	2004	25 260	2007	21 615
Zululand District	2005	52 178	2007	853 301
iLembe District	2003	35 674	2008	25 846
Total (KwaZulu-Natal province)	2004	17 559	2008	16 283

Table 5.87 presents the results of the direct service pharmacy per population ratio in each local and metropolitan municipality of the province of KwaZulu-Natal, which contained direct service pharmacies, for the year 2008 only. The table 5.87 furthermore ranks the local and metropolitan municipalities of the province by order from the local or metropolitan municipality with the lowest to the highest direct service pharmacy per population ratio in the year 2008.

Table 5.87: Ranking of local municipalities in KwaZulu-Natal by order from local municipality with the lowest to the highest direct service pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	uMngeni	8 708	22	Mkhambathini	31 328
2	Hibiscus Coast	8 571	23	Jozini	32 541
3	Umtshezi	9 082	24	uMuziwabantu	32 644
4	Umdoni	9 441	25	The Big Five False Bay	33 001
5	Msunduzi	9 620	26	Emadlangeni	34 247
6	eThekweni	9 784	27	Ubuhlezwe	36 052
7	KwaDukuza	9 895	28	Okhahlamba	36 474
8	uMhlathuze	10 226	29	Mtubatuba	37 322
9	Endumeni	13 554	30	uMshwathi	38 208
10	Greater Kokstad	14 993	31	Ulundi	56 477
12	Kwa Sani	16 243	32	Ingwe	57 047
13	Abaqulusi	18 421	33	Nongoma	70 166
14	Newcastle	18 591	34	Nkandla	70 868
15	Umvoti	19 583	35	Nqutu	76 922
16	Richmond	22 356	36	eDumbe	87 234
17	Emnambithi/ Ladysmith	23 916	37	Dannhauser	109 030
18	Mthonjaneni	26 718	38	Mbonambi	113 446
19	Mandeni	27 299	39	uPhongolo	127 028
20	uMlalazi	29 315	40	Ndwendwe	161 784
21	Hlabisa	31 276			

From the rank order presented in the table, it is evident that the five local municipalities with the most favourable availability of the registered direct service pharmacies were uMngeni (n=1:8,708 people), Hibiscus coast (n=1:8,571 people), Umtshezi (n=1:9,082 people), Umdoni (n=1:9,441 people) and Msunduzi (n=1:9,620 people). Hibiscus Coast and Msunduzi municipalities were the only local municipalities which appeared among the top five rank order of local municipalities containing the highest number of registered direct service pharmacies, as presented by table 5.78. Four of the province's local municipalities had pharmacy per population ratio indicating one pharmacy for more than 100 000 people for the year 2008. The local

municipality with the highest pharmacy per population ratio was Ndwendwe, with one direct service pharmacy per 161,784 people.

Of the local municipalities in the province which did not contain any registered direct service pharmacies in the year 2008, six contained an estimated population of over 100 000 people. These are Uzumbe (205,548 people), Umhlabuyalingana (149,527 people), Msinga (178,255 people), Imbabazane (127,226 people), Indaka (120,547 people) and Maphumolo (127,953 people).

5.6.2.1 Community Pharmacies

Consider tables C.4.6 in part C of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the community pharmacies in the province of KwaZulu-Natal decreased from one community pharmacy per 20,781 people in 2003 to one community pharmacy per 20,044 people in 2008. The changes in the community pharmacy per population ratio of the province, from 2003 to 2008, are illustrated by the graph in figure 5.10(b). The graph in figure 5.10(b) should be viewed alongside the graph in figure 5.9(b) to determine the influence of the changes in the total number of the registered community pharmacies in the province, on the changes in the community pharmacy per population ratio of the province. From the graph in figure 5.10(b), it is evident that the initial study periods from 2003 to 2005 were characterised by an increase in the pharmacy per population ratio of the community pharmacies. This implied a decline in the availability of community pharmacies to the population of the province in that period, and may be attributed to the decrease in the total number of registered community pharmacies in that period (illustrated by the graph in figure 5.9(b)). From the years 2005 to 2008, the community pharmacy per population ratio of the province continually to decreases (implying an improvement in the availability of community pharmacies to the population) with a continued increase in the total number of community pharmacies in the province. The best improvement in the availability of community pharmacies in the province was observed for the one-year interval 2005-2006, which was also the period with the highest increase in the total number of community pharmacies in the province.

The results of the community pharmacy per population ratio for each district council and metropolitan municipality of the province of KwaZulu-Natal, from the years 2003 to 2008, are presented in table C.4.6 in part C of the Reference Manual. Table 5.88 below contains the results of the community pharmacy per population ratio for each district council and metropolitan municipality of the KwaZulu-Natal for the years 2003 and 2008 only. The district councils and metropolitan municipality are, in table 5.88, listed by decreasing rank order from the district council or metropolitan municipality with the lowest to the highest community pharmacy per population ratio for the year 2008.

Table 5.88: Changes in the community pharmacy per population ratio for each district council of the province of KwaZulu-Natal, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
eThekweni Metropolitan	11 832	11 188	-644	-5.4
Umgungundlovu District	15 001	16 682	+1 681	+11.2
Ugu District	24 727	24 091	-636	-2.5
Uthungulu District	33 423	29 370	-4 053	-12.1
Amajuba District	31 783	31 032	-751	-2.4
iLembe District	40 770	34 968	-5 802	-14.2
Uthukela District	37 177	40 997	+3 820	+10.3
Sisonke District	37 993	59 866	+21 873	+57.6
Zululand District	68 277	65 639	-2 638	-3.9
Umkhanyakude District	116 787	67 573	-49 214	-42.1
Umzinyathi District	92 989	80 705	-12 193	-13.1
Total (KwaZulu-Natal province)	20 781	20 044	-737	-3.5

As indicated by table 5.88, the 2008 community pharmacy per population ratio of the district councils and metropolitan municipality of the province of KwaZulu-Natal ranged from one community pharmacy per 11,188 people (eThekweni metropolitan) to one community pharmacy per 80,705 people (Umzinyathi district council). The rank order of district councils and metropolitan municipalities presented in table 5.87, as applicable to the ratio of the year 2008, did not apply to the year 2003 and all other district councils. However, the eThekweni

metropolitan municipality remained to contain the lowest community pharmacy per population ratio, relative to the other district councils of the province, throughout the entire study period. This was followed by the Umgungundlovu and Ugu district councils respectively.

Table 5.88 also presents the changes in the community pharmacy per population ratio of each district council and metropolitan municipality of the province of KwaZulu-Natal, between the years 2003 and 2008. As evident from the table, an improvement in the availability of the community pharmacies within the district councils and metropolitan municipality of the province, was observed for the eThekweni metropolitan as well as the Uthungulu, Ugu, Amajuba, iLembe, Zululand, Umkhanyakude and the Umzinyathi district councils. These were also the district councils in the province which experienced an increase in the total number of community pharmacies situated within them between the years 2003 and 2008 (refer to table 5.79). The best improvement in availability of community pharmacies was observed for the Umkhanyakude district council, with the highest percentage change. Umkhanyakude district council was also the district council with the highest percentage increase in total number of community pharmacies, as evident from table 5.79. The availability of community pharmacies in the remaining three district councils of the province, Umgungundlovu, Uthukela and Sisonke district council, declined over the study years as a result of the decrease in the total number of registered community pharmacies situated within them.

Using the provincial community pharmacy per population ratio of 2008 ($n=1:20,044$ people) as a benchmark ratio for the case where the community pharmacies in the province are evenly distributed to the population of the district councils and metropolitan municipality of the province, table 5.88 furthermore highlights the disparities in the distribution of community pharmacies in the province. Only the eThekweni metropolitan and Umgungundlovu district council had a community pharmacy per population ratio lower than the benchmark ratio ($n=1:11,188$ people and $1:16,682$ people respectively) which suggested a skewed distribution of the community pharmacies in KwaZulu-Natal in favour of the population in the metropolitan and district municipality. The remaining district councils had a community pharmacy per population ratio higher than the benchmark ratio, with Umzinyathi district council having a ratio four times higher than the benchmark.

The years during which the community pharmacy per population ratio for each district council and metropolitan municipality of the province of KwaZulu-Natal was at its highest and lowest, are presented in table 5.89. As evident from table 5.89, the community pharmacy per population ratio of the entire province was highest in 2005 ($n=1:21,313$ people) and lowest in the year 2008

(n=1:20,044 people). This is also demonstrated by the high and low peaks illustrated by the graph in figure 5.10(b).

Table 5.89: Years with the highest and lowest community pharmacy per population ratio for each district council of KwaZulu-Natal province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Amajuba District	2005	34 698	2007	30 689
eThekweni Metropolitan	2004	12 199	2008	11 188
Sisonke District	2008	59 866	2004	34 032
Umgungundlovu District	2008	16 682	2003	15 001
Ugu District	2007	25 468	2008	24 091
Umkhanyakude District	2005	119 000	2007	66 827
Umzinyathi District	2004	93 706	2006	68 100
Uthukela District	2008	40 997	2003	37 177
Uthungulu District	2004	34 976	2007	29 046
Zululand District	2006	70 003	2007	64 944
iLembe District	2003	40 770	2008	34 968
Total (KwaZulu-Natal province)	2005	21 313	2008	20 044

The results of the community pharmacy per population ratio for each local and metropolitan municipality of KwaZulu-Natal, from the year 2003 to 2008, are presented in tables D.1.4 (for the years 2003 to 2005) and D.2.4 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.90 presents the results of the community pharmacy per population ratio for each local and metropolitan municipality in the province, which contained community pharmacies, for the year 2008 only. The table furthermore provides a ranking of the local municipalities in the province by order from local municipality with the lowest pharmacy per population ratio (implying a more favourable availability of community pharmacies to the population of the local municipality) to the highest pharmacy per population ratio (implying a less favourable availability of the community pharmacies to the population of the local municipality). As indicated in table 5.90, the community pharmacy per population ratio of 2008, for the local and metropolitan

municipalities in the province, ranged from one community pharmacy per 10,061 people (Hibiscus Coast local municipality) to one community pharmacy per 225,910 people (Ulundi local municipality). As further evident from table 5.90, ten of the province's local municipalities (Hibiscus Coast, Umtshezi, Umdoni, eThekwini, uMngeni, Msunduzi, KwaDukuza, uMhlathuze, Kwa Sani and Endumeni) had a community pharmacy per population ratio lower than the provincial pharmacy per population ratio for the year 2008 (1:20,044 people). This suggested a skewed distribution of community pharmacies in the province, in favour of the population in these ten local municipalities. On the other hand, eight of the local municipalities in the province had one community pharmacy available for more than 100 000 people. These were Nongoma (1:105,249 people), Dannhauser (1:109,030 people), Mbonambi (1:113,446 people), uMshwathi (1:114,625 people), uPhongolo (1:127,028 people), Nkandla (1:141,736 people), Nqutu (1:153,843 people) and Ulundi (1:225,910 people).

Table 5.90: Ranking of local municipalities in KwaZulu-Natal by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Hibiscus Coast	10 061	19	uMlalazi	46 904
2	Umtshezi	10 595	20	Okhahlamba	48 632
3	Umdoni	11 014	21	Umvoti	48 957
4	eThekwini	11 188	22	uMuziwabantu	48 965
5	uMngeni	11 196	23	Mthonjaneni	53 436
6	Msunduzi	11 979	24	Ubuhlezwe	54 078
7	KwaDukuza	12 016	25	Mkhambathini	62 655
8	uMhlathuze	12 783	26	Richmond	67 068
9	Kwa Sani	16 243	27	Jozini	97 324
10	Endumeni	18 072	28	Nongoma	105 249
11	Abaqulusi	22 515	29	Dannhauser	109 030
12	Newcastle	23 549	30	Mbonambi	113 446
13	Emnambithi/ Ladysmith	29 895	31	uMshwathi	114 625
14	Greater Kokstad	29 986	32	uPhongolo	127 028
15	The Big Five False Bay	33 001	33	Nkandla	141 736
16	Hlabisa	37 276	34	Nqutu	153 843
17	Mtubatuba	37 322	35	Ulundi	225 910
18	Mandeni	45 499			

5.6.2.2 Private Institutional Pharmacies

Consider tables C.4.7 in part C of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered private institutional pharmacies in KwaZulu-Natal decreased from one private institutional pharmacy per 417,427 people to one private institutional pharmacy per 302,478 people. This implies an improvement in the availability of the registered private institutional pharmacies situated in the province, over the study period.

The graph in figure 5.10(c) specifically illustrates the changes in the pharmacy per population ratio of the private institutional pharmacies in the province of KwaZulu-Natal, from 2003 to 2008. The graph, in figure 5.10(c), should be viewed alongside the graph in figure 5.9(c) to determine the influence of the changes in the total number of registered private institutional pharmacies situated in the province, on the changes in the pharmacy per population ratio of the pharmaceutical structures, over the study period. As observed from the two graphs, the change in total number of private institutional pharmacies had a direct influence on the change in the private institutional pharmacy per population ratio. As the total number of private institutional pharmacies continually increased from 2003 to 2008, the pharmacy per population ratio continually decreased from 2003 to 2008.

The results of the private institutional pharmacy per population ratio for each district council and metropolitan municipality of the province, from the year 2003 to 2008, are presented in table C.4.7 in part C of the Reference Manual. The table 5.91 below presents the results of the private institutional pharmacy per population ratio for each district council and metropolitan municipality of the province for the years 2003 and 2008 only. Table 5.91 furthermore ranks the district councils and metropolitan municipality of the province by decreasing order from district council or metropolitan municipality with the lowest to the highest private institutional pharmacy per population ratio for the year 2008.

As indicated in table 5.91, the private institutional pharmacy per population ratio for the district councils and metropolitan municipality of the province, for the year 2008, ranged from a low ratio of one private institutional pharmacy per 172,524 people, to a high of one private institutional pharmacy per 696,943 people. This was with the exception of district councils of Umkhanyakude (608,154 people), Umzinyathi (484,228 people) and Zululand (853,301 people) which did not contain any registered private institutional pharmacies available for their

population. The rank order presented in table 5.90, applicable to the year 2008, did not apply for the year 2003 and all other study years. Noticeable differences observed included that of the Sisonke and iLembe district councils which had no registered private institutional pharmacies available for their population in 2003 and contained at least one registered private institutional pharmacy in the year 2003.

Table 5.91: Changes in the private institutional pharmacy per population ratio for each district council of KwaZulu-Natal, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
eThekweni Metropolitan	224 815	172 524	-52 291	-23.3
Umgungundlovu District	472 531	196 851	-275 680	-58.3
Sisonke District	-	299 329	299 329	-
Uthungulu District	300 804	313 280	+12 476	+4.1
Ugu District	358 540	373 410	+14 870	+4.1
Amajuba District	476 739	496 512	+19 773	4.1
iLembe District	-	594 456	594 456	-
Uthukela District	669 189	696 943	+27 754	+4.1
Umkhanyakude District	-	-	-	-
Umzinyathi District	-	-	-	-
Zululand District	-	-	-	-
Total (KwaZulu-Natal province)	417 427	302 478	-114 949	-27.5

Table 5.91 also shows the changes in the private institutional pharmacy per population ratio for each district council and metropolitan municipality of the province of KwaZulu-Natal. As evident from table 5.91, the district councils which experienced an improvement in the availability of the private institutional pharmacies to the population situated within them, were eThekweni metropolitan, Umgungundlovu, Sisonke and iLembe district councils. The decreased availability observed for the Uthungulu, Ugu, Amajuba and Uthukela district councils was due to the fact that the total number of registered private institutional pharmacies situated in those district councils remained constant for the year 2003 and 2008, in the presence of an estimated population growth between the study years (refer to table 5.80 in page 124).

The results presented in table 5.91 furthermore offer an evaluation of the distribution of the private institutional pharmacies in the province to the population of each district council and metropolitan municipality for the year 2008. Using the provincial pharmacy per population ratio of 2008 (n=1:302,478 people) as the benchmark ratio for the case that the private institutional pharmacies in the province are evenly distributed to the population of the district councils and metropolitan municipality of the province, it became evident that the private institutional pharmacies in the province were unevenly distributed to the population of the district councils and metropolitan municipality, in favour of the eThekweni metropolitan as well as the Umgungundlovu and Sisonke district councils.

The years during which the pharmacy per population ratio of the district councils and metropolitan municipality was at its highest and lowest, are presented in table 5.92. The continuous decrease in the pharmacy per population ratio of the province, as illustrated by the graph in figure 5.10(c), entails the private institutional pharmacy per population ratio to be highest in the year 2003 (n=1:417,427 people) and lowest in 2008 (n=1:302478 people).

Table 5.92: Years with the highest and lowest private institutional pharmacy per population ratio for each district council of KwaZulu-Natal province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Amajuba District	2008	496 512	2003	476 739
eThekweniMetropolitan	2003	224 815	2008	172 524
SisonkeDistrict	-	-	2006	294 678
UmgungundlovuDistrict	2003	472 531	2006	193 793
Ugu District	2008	373 410	2003	358 540
Umkhanyakude District	-	-	-	-
Umzinyathi District	-	-	-	-
Uthukela District	2008	696 943	2003	669 189
UthunguluDistrict	2008	313 280	2003	300 804
Zululand District	-	-	-	-
iLembeDistrict	-	-	2007	587 894
Total (KwaZulu-Natal province)	2003	417 427	2008	302 478

The results of the private institutional pharmacy per population ratio for each local and metropolitan municipality of the province of KwaZulu-Natal, from the year 2003 to 2008, are

included in table D.1.4 (for the years 2003 to 2005) and D.2.4 (for the years 2005 to 2008) in part D of the Reference Manual.

Table 5.93 presents the results of the private institutional pharmacy per population ratio for each local and metropolitan municipality of the province, which contained a registered private institutional pharmacy, for the year 2008 only. As evident from the table, the private institutional pharmacy per population ratio of the local municipalities in the province ranged from one private institutional pharmacy per 59,971 people to one private institutional pharmacy per 353,235 people.

Table 5.93: Ranking of local municipalities in KwaZulu-Natal by order from the local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Greater Kokstad	59 971
2	Richmon	67 068
3	uMngeni	78 374
4	uMhlathuze	102 263
5	Hibiscus Coast	115 705
6	KwaDukuza	168 222
7	eThekwini	172 524
8	Msundudzi	195 614
9	Emnambithi/ Ladysmith	239 163
10	Newcastle	353 235

5.6.2.3 Public Institutional Pharmacies

Consider tables C.4.8 in part C of the Reference Manual, as well as tables D.1.4 and D.2.4 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

As according to the results, the public institutional pharmacy per population ratio for the province of KwaZulu-Natal decreased over the study period, from one public institutional pharmacy per 135,223 people in the year 2003 to one public institutional pharmacy per 121,729 people in the year 2008. This implies an improvement in the availability of the pharmaceutical structures to the population of the province, over the study period.

The changes in the public institutional pharmacy population ratio of the entire province, throughout the study years, are illustrated by the graph in figure 5.10(d). Viewed alongside the graph in figure 5.9(d), it is evident that the changes in the total number of registered public institutional pharmacies situated in the province had a direct influence on the changes in the public institutional pharmacy per population ratio of the province. The initial period from the year 2003 to 2004, was characterised by a slight increase in the public institutional pharmacy per population ratio of the province, due to the fact that the total number of public institutional pharmacies in the province remained constant in the presence of an increasing estimated population for that time period. The subsequent periods from 2004 to 2008 were characterised by a decrease in the public institutional pharmacy per population ratio of the province due to an increase in the total number of public institutional pharmacies situated in the province, during that period. The availability of the registered public institutional pharmacies to the population of KwaZulu-Natal therefore only improved as of the year 2004. The highest improvement in the availability of the public institutional pharmacies in the province was observed for the one-year interval 2005-2006.

The results of the public institutional pharmacy per population ratio for each district council and the metropolitan municipality of the province of KwaZulu-Natal, from the year 2003 to 2008, are presented in table C.4.8 in part C of the Reference Manual.

Table 5.94 below presents the results of the public institutional pharmacy per population ratio for each district council and the metropolitan municipality of the province for the years 2003 and 2008 only. The table furthermore ranks the district councils and metropolitan municipality of the province of KwaZulu-Natal by decreasing order from district council or metropolitan municipality with the lowest to the highest pharmacy per population ratio for the year 2008. The rank order presented in table 5.94 did not apply to the year 2003 and other study years. As evident from the rank order presented in table 5.94, the district council of Umgungundlovu had the lowest public institutional pharmacy per population ratio ($n=1:70,304$ people) and the district council of Uthukela had the highest ratio ($n=1:232,314$ people) for the year 2008. Interestingly, the metropolitan municipality was ranked ninth in the table, as opposed to the rank order presented for the availability of the other direct service pharmacies where the metropolitan municipality was ranked first.

Table 5.94 furthermore presents the changes in the public institutional pharmacy per population ratio for each district council and the metropolitan municipality of the province, between the years 2003 and 2008. As evident from the table 5.94, Sisonke, Umzinyathi, Ugu and Uthukela

district councils were the only district councils in which the overall improvement in the availability of public institutional pharmacies, observed for the province as a whole, did not take effect. This could be attributed to either a decrease in the total number of public institutional pharmacies in the district (Sisonke and Umzinyathi) or that the total number of public institutional pharmacies in the district remained constant (Ugu and Uthukela districts) in the presence of an increasing estimated population. The remaining district councils experienced an improvement in the availability of public institutional pharmacies situated within them to the population, following an increase in the total number of the pharmaceutical structures over the study years.

Table 5.94: Changes in the public institutional pharmacy per population ratio for each district council of KwaZulu-Natal province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the availability ratio 2003 to 2008	
			n	%
Umgungundlovu District	78 755	70 304	-8 451	-10.7
Sisonke District	60 789	74 832	+14 043	+23.1
Umzinyathi District	77 491	96 846	+19 355	25.0
Uthungulu District	128 916	117 480	-11 436	-8.9
iLembe District	285 392	118 891	-166 501	-58.3
Umkhanyakude District	194 645	121 631	-73 014	-37.5
Zululand District	204 830	121 900	-82 930	-40.5
Amajuba District	158 913	124 128	-34 785	-21.9
eThekweni Metropolitan	143 064	142 520	-544	-0.4
Ugu District	179 270	186 705	+7 435	+4.1
Uthukela District	223 063	232 314	+9 251	+4.1
Total (KwaZulu-Natal province)	135 223	121 729	-13 494	-10.0

The public institutional pharmacies in the province of KwaZulu-Natal were unevenly distributed to the population of the district councils and metropolitan municipality of the province, for the year 2008. This is evident where the provincial public institutional pharmacy per population ratio of 2008 (n=1:121,729 people) is used as the benchmark ratio for the event that the public institutional pharmacies in the province are evenly distributed to the population of the district councils and metropolitan municipality of the province. As evident from table 5.94 the public

institutional pharmacy per population ratio of six of the provinces district councils were lower than the benchmark ratio. This implies that although there were disparities in the distribution of the public institutional pharmacies to the population of the district councils in the province, the distribution was more favourable for more than half the district councils in the province.

The results of the years during which the public institutional pharmacy per population ratio of each of the district councils in the province was at its highest and lowest, are presented in table 5.95 below. The public institutional pharmacy per population ratio of the province of KwaZulu-Natal was highest in the year 2004 (n=1:136,266 people) and lowest in the year 2008 (n=1:121,729 people).

Table 5.95: Years with the highest and lowest public institutional pharmacy per population ratio for each district council of KwaZulu-Natal province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Amajuba District	2006	162 923	2007	122 758
eThekweni Metropolitan	2005	145 775	2006	140 305
Sisonke District	2008	74 832	2005	51 617
Umgungundlovu District	2007	81 116	2008	70 304
Ugu District	2008	186 705	2003	179 270
Umkhanyakude District	2005	198 334	2008	121 631
Umzinyathi District	2008	96 846	2003	77 491
Uthukela District	2003	669 189	2004	224 784
Uthungulu District	2006	132 177	2007	116 183
Zululand District	2005	208 712	2007	120 554
iLembe District	2005	290 800	2006	117 044
Total (KwaZulu-Natal province)	2004	136 266	2008	121 729

The results of the public institutional pharmacy per population ratio for each local and metropolitan municipality of the province of KwaZulu-Natal, from the year 2003 to 2008, are included in tables D.1.4 (for the year 2003 to 2005) and D.2.4 (for the year 2006 to 2008) in part D of the Reference Manual.

Table 5.96 below presents the results of the public institutional pharmacy per population ratio for each of the local and metropolitan municipalities of the province of KwaZulu-Natal, for the year 2008 only. Moreover, the municipalities are, in table 5.96, ranked by order from

municipality with the lowest to the highest public institutional pharmacy per population ratio for the year 2008. As indicated by the table, the public institutional pharmacy per population ratio of the province ranged from one public institutional pharmacy per 32,638 people (Umvoti local municipality) to one public institutional pharmacy per 239,163 people (Emnambithi/ Ladysmith local municipality). Furthermore, eight of the province's local municipalities had public institutional pharmacy per population ratio higher than the provincial ratio.

Table 5.96: Ranking of local municipalities in KwaZulu-Natal by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Umvoti	32 638	18	KwaDukuza	84 111
2	Emadlangeni	34 247	19	eDumbe	87 234
3	Jozini	48 812	20	uMuziwabantu	97 931
4	Mthonjaneni	53 436	21	uMhlathuze	102 263
5	Endumeni	54 216	22	Abaqulusi	101 316
6	Ingwe	57 047	23	Ubuhlezwe	108 157
7	uMshwathi	57 313	24	Hibiscus Coast	115 705
8	Greater Kokstad	59 971	25	Newcastle	117 745
9	Mkhambathini	62 655	26	Nkandla	141 736
10	Umtshezi	63 571	27	eThekwini	142 520
11	Msunduzi	65 205	28	Okhahlamba	145 895
12	Umdoni	66 085	29	Nqutu	153 843
13	Richmond	67 068	30	Ndwendwe	161 784
14	Mandeni	68 248	31	Hlabisa	187 655
15	Ulundi	75 303	32	Nongoma	210 499
16	uMlalazi	78 174	33	Emnambithi/ Ladysmith	239 163
17	uMngeni	78 374			

5.7 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN LIMPOPO PROVINCE, 2003-2008

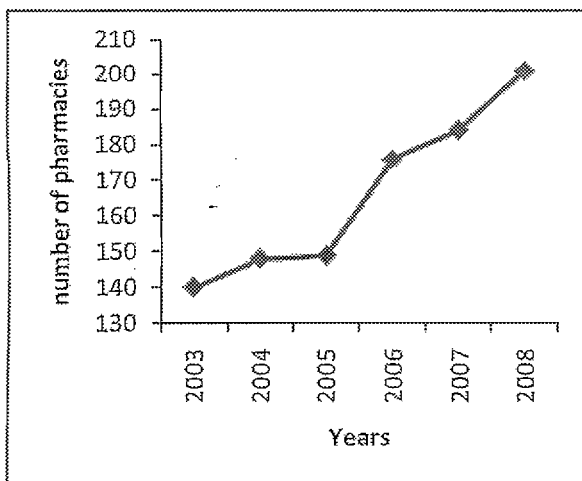
In this section, the results on the both the geographic and per-population distribution of registered direct service pharmaceutical structures among the district councils and local municipalities of the province of Limpopo, for the years 2003 to 2008, will be reported and discussed. It should again be emphasised, that the distribution of pharmaceutical structures, as well as the percentage population situated in the province of Limpopo between the years 2003 and 2008 had been influenced by the restructuring of provincial boundaries between the years 2005 and 2006.

Consider tables C.5.1, C.5.2, C.5.3 and C.5.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

The total number of the registered direct service pharmacies in the province of Limpopo increased from 140 pharmacies in 2003 to 201 pharmacies in 2008. The change in the total number of these pharmaceutical structures is illustrated in figure 5.11. As evident from the graph in figure 5.11(a), there was an increase in the total number of the pharmacies during each one-year interval of the study periods, with 2005-2006 being the one-year interval in which the highest increase took place ($n=+27$).

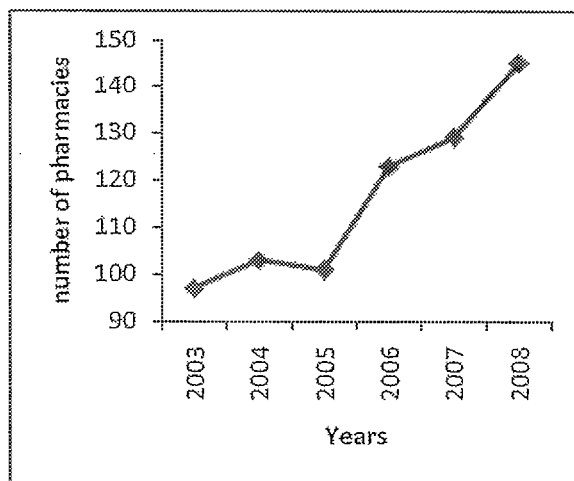
As previously mentioned, it should be noted that the total number of the registered pharmaceutical structures in the province of Limpopo between 2005 and 2006 may have been influenced by the restructuring of the provincial borders of the province in 2006.

The total number of the registered community pharmacies in the province increased from 97 pharmacies in 2003 to 145 pharmacies in 2008. This change in the total number of the pharmacies, over the study years, is illustrated by the graph in figure 5.11(b). As is evident from the growth trend illustrated by the graph 5.11(b), there was a slight decrease in the total number of the registered community pharmacies in the province ($n=-2$) between the years 2004-2005, which is followed by a significant increase during the period 2005-2006.



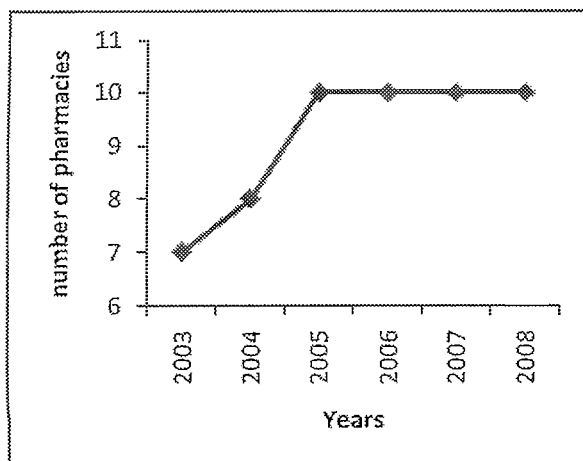
(a)

All registered pharmaceutical structures



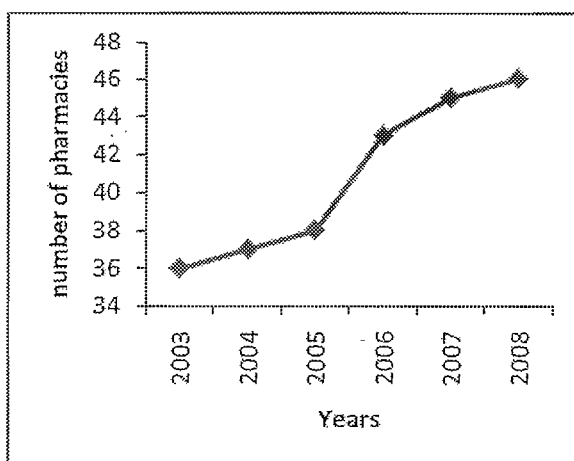
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.11: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of Limpopo, 2003 to 2008

The graph in figure 5.11(c), specifically illustrates the change in the total number of the registered private institutional pharmacies situated in Limpopo over the study period. In 2003, the province only had seven private institutional pharmacies situated in it. The total number of the pharmacies then increased to 10 pharmacies in 2005 and remained as such until the year 2008.

Public institutional pharmacies situated in the province of Limpopo increased from 36 pharmacies in 2003 to 46 pharmacies in 2008. The highest increase took place during the one-year interval 2005-2006 ($n=+5$), while during all other one-year intervals, the total number of the pharmacies increased by one public institutional pharmacy. This change has been illustrated by the graph in figure 5.7(d).

5.7.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE PROVINCE OF LIMPOPO

Consider table C.5.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In the year 2003, the direct service pharmaceutical structures of the Limpopo province were situated in 77.8% of the municipalities. The total estimated population of the municipalities without any registered direct service pharmacies amounted to 16% of the province's population. For the year 2008, the percentage municipalities in the province with registered direct service pharmacies was 84% and the total estimated population of the municipalities without any registered direct service pharmacy amounted to 5.6% of the province's population.

The results of the distribution of the registered direct service pharmaceutical structures among the district councils of the province of Limpopo, from the year 2003 to 2008, are presented in table C.5.1 in part C of the Reference Manual. Table C.5.1 also includes an indication of the number of municipalities, within each district council of the province, which contained registered direct service pharmacies.

Table 5.97 below presents the results of the distribution of the registered direct service pharmacies among the district councils of the province, for the years 2003 and 2008 only. The district councils are, in table 5.97, listed by decreasing rank order from the district council with the highest to that containing the smallest proportion of the registered direct service pharmacies in the province, for both 2003 and 2008.

For the year 2003, the Waterberg district council contained the highest number of the registered direct service pharmacies in the province (n=38, 27.1%). As further indicated by table 5.97, the district council with the lowest proportion of the registered direct service pharmacies in the province was the Sekhukhune Cross Boundary district council with only 2.1% of the province's direct service pharmacies situated in it.

The range of the distribution of the registered direct service pharmacies among the district councils of the province observed for the year 2008 was smaller than that for the year 2003. The Mopani district council with 27.9% of the registered direct service pharmacies in the province contained the highest number of the pharmacies (n=56) while the Greater Sekhukhune district council with 13.9% of the province's registered direct service pharmacies contained the lowest number of direct service pharmacies (n=28).

Table 5.97: Total number of registered direct service pharmacies within the district councils of the Limpopo province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Waterberg	38 (27.1%)	Mopani	56 (27.9%)
Capricorn	37 (26.4%)	Capricorn	47 (23.4%)
Mopani	34 (24.3%)	Waterberg	41 (20.4%)
Vhembe	23 (16.4%)	Vhembe	29 (14.4%)
Bohlabela	5 (3.6%)	Greater Sekhukhune	28 (13.9%)
Sekhukhune Cross Boundary	3 (2.1%)		
Total (Limpopo province)	140 (100%)	Total (Limpopo province)	201 (100%)

The results of the distribution of the registered direct service pharmacies in the province of Limpopo, among the local municipalities of the province, from the year 2003 to 2008 are presented in tables D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.98 below presents the results of the distribution of the direct service pharmacies in the province among the local municipalities in the province for the year 2008. The table furthermore ranks the local municipalities by order from the local municipality with the highest to the local municipality with the lowest number of registered direct service pharmacies for the year. As evident from table 5.98, Polokwane local municipality contained the highest number of the registered direct service pharmacies in the province (n=35) followed by the Greater Tzaneen (n=23), Makhado (n=14), Ba-Phalaborwa (n=12), Greater Giyani (n=12) and Greater Tubatse (n=12) local municipalities. The six municipalities collectively contained approximately 60% of the direct service pharmacies in the province. Only two local municipalities (Makhuduthamaga and Mookgopong) in the province contained only one registered direct service pharmacy. The three local municipalities of the province without any registered community pharmacy for the year 2008 were Fetakgomo, Mutale and Molemole.

Table 5.98: Ranking of local municipalities in Limpopo by order of local municipality with the highest number of the registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Polokwane	35	14	Maruleng	5
2	Greater Tzaneen	23	15	Greater Marble Hall	4
3	Makhado	14	16	Greater Letaba	4
4	Ba-Phalaborwa	12	17	Musina	4
5	Greater Giyani	12	18	Bela-Bela	4
6	Greater Tubatse	12	19	Aganang	3
7	Elias Motsoaledi	11	20	Blouberg	3
8	Mogalakwena	11	21	Makhuduthamaga	1
9	Thulamela	11	22	Mookgopong	1
10	Thabazimbi	11	23	Fetakgomo	0
11	Lephalale	9	24	Mutale	0
12	Lepele-Nkumpi	6	25	Molemole	0
13	Modimolle	5			

5.7.1.1 Community Pharmacies

Consider table C.5.2 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

Registered community pharmacies in the province of Limpopo were, in the year 2003, distributed within 74% of the province's municipalities. The percentage of municipalities in the province which contained registered community pharmacies increased to 87% in the year 2008. The estimated percentage population of those municipalities without any registered community pharmacy therefore decreased from 12.76% in the year 2003 to 5.6% in the year 2008.

The results of the distribution of the community pharmacies among the district councils of the province of Limpopo, from the years 2003 to 2008, are presented in table C.5.2 in part C of the Reference Manual. Table C.5.2 also presents the number of municipalities within each district council of the province containing registered community pharmacies.

Table 5.99 presents the results of the distribution of the community pharmacies in the province, among the district councils of the province for the years 2003 and 2008 only. The district councils in the province of Limpopo are, in table 5.99, listed by order from the district council with the highest to that which containing the lowest number of registered community pharmacies in both years.

For the year 2003, the district councils with the highest number of community pharmacies were the Capricorn and Waterberg district councils (n=26). The two district councils collectively contained more than half (54.6%) of the community pharmacies in the province for that year. The Sekhukhune Cross Boundary district council, with a proportion of only 1% of the province's community pharmacies, contained the lowest number of community pharmacies. The range in distribution of the community pharmacies in Limpopo, among the district councils of the province, improved in the year 2008. The total number of registered community pharmacies among the district councils of the Limpopo province ranged from the 38 community pharmacies (Mopani district council) to 22 community pharmacies in the Greater Sekhukhune and Vhembe district councils.

Table 5.99: Total number of registered community pharmacies within each district council of the Limpopo province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Capricorn District	26 (26.8%)	Mopani District	38 (26.2%)
Waterberg District	26 (26.8%)	Capricorn District	35 (24.1%)
Mopani District	22 (22.7%)	Waterberg District	28 (19.3%)
Vhembe District	18 (18.6%)	Greater Sekhukhune	22 (15.2%)
Bohlabela District	4 (4.1%)	Vhembe District	22 (15.2%)
Sekhukhune Cross Boundary District	1 (1.0%)		
Total (Limpopo province)	97 (100%)	Total (Limpopo province)	145 (100%)

The results of the distribution of the community pharmacies among the local municipalities of the Limpopo province, from the year 2003 to 2008, are included in table D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.100 presents the results of the distribution of the province's community pharmacies among the local municipalities in the province for the year 2008. Table 5.100 also ranks the local municipalities of that year by order from the local municipality with the highest to the local municipality with the lowest number of registered community pharmacies. The highest number of community pharmacies was situated in the Polokwane local municipality (n=30). This local municipality (Polokwane) contained 86% of the community pharmacies situated in the Capricorn district council. The local municipality is followed by the Greater Tzaneen (n=15), Makhado (n=10), Ba-Phalaborwa (n=9), Elias Motsoaledi (n=9) and Thulamela (n=9) local municipalities respectively and collectively contain 56.6% of the community pharmacies situated in the province.

From table 5.100, it is furthermore evident that three of the province's local municipalities in 2008, Blouberg, Makhuduthamaga and Mookgopong, contained only one registered community pharmacy. The local municipalities of the province without any registered community pharmacy were Fetakgomo, Molemole and Mutale.

Table 5.100: Ranking of local municipalities in Limpopo by order of local municipality with the highest number of the registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Polokwane	30	14	Modimolle	4
2	Greater Tzaneen	15	15	Musina	3
3	Makhado	10	16	Aganang	2
4	Ba-Phalaborwa	9	17	Lepele-Nkumpi	2
5	Elias Motsoaledi	9	18	Greater Letaba	2
6	Thulamela	9	19	Bela-Bela	2
7	Greater Tubatse	8	20	Blouberg	1
8	Greater Giyani	8	21	Makhuduthamaga	1
9	Mogalakwena	8	22	Mookgopong	1
10	Thabazimbi	7	23	Fetakgomo	0
11	Lephalale	6	24	Molemole	0
12	Greater Marble Hall	4	25	Mutale	0
13	Maruleng	4			

5.7.1.2 Private Institutional Pharmacies

Consider tables C.5.3 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

Only 18.5% of the municipalities in Limpopo province contained registered private institutional pharmacies for the year 2003. In the year 2008, the percentage increased to 28% of the province's municipalities. The total estimated population of the municipalities without any registered private institutional pharmacies was 75.7% of the province's population in the year 2003 and 63.35% of the province's population in the year 2008.

The results of the distribution of the registered private institutional pharmacies in Limpopo, among the district councils of the province, from the year 2003 to 2008, are presented in table C.5.3 in part C of the Reference Manual, along with an indication of the number of municipalities in each district council of the province, with registered private institutional pharmacies.

Table 5.101 below presents the results of the distribution of the private institutional pharmacies among the district councils in Limpopo province for the years 2003 and 2008 only. The district councils are, in table 5.101, listed by decreasing rank order from the district council with the highest to the district council containing the lowest number of private institutional pharmacies for both years.

In the year 2003, the Bohlabela, Sekhukhune Cross Boundary as well as the Vhembe district councils contained no registered private institutional pharmacies and the highest number of private institutional pharmacies was situated in the Waterberg district council (n=4). For the year 2008, the only district council without any registered private institutional pharmacy was the Greater Sekhukhune district council while the Waterberg district council contained the highest number of the registered private institutional pharmacies in the province (n=5).

Table 5.101: Total number of registered private institutional pharmacies within the district councils of Limpopo province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Waterberg District	4 (57.1%)	Waterberg District	5 (50.0%)
Mopani District	2 (28.6%)	Mopani District	3 (30.0%)
Capricorn District	1 (14.3%)	Capricorn District	1 (10.0%)
Bohlabela District	0 (0.0%)	Vhembe District	1 (10.0%)
Sekhukhune Cross Boundary District	0 (0.0%)	Greater Sekhukhune	0 (0.0%)
Vhembe District	0 (0.0%)		
Total (Limpopo province)	7 (100%)	Total (Limpopo province)	10 (100%)

The distribution of the private institutional pharmacies among the local municipalities of the province of Limpopo, for the years 2003 to 2008, is included in tables D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.102 ranks the local municipalities in the Limpopo province that contained registered direct service pharmacies, in the year 2008, by order from the local municipality with the highest number of private institutional pharmacies to the local municipality that contained the lowest number of private institutional pharmacies in the province. From table 5.102, it is evident that the Thabazimbi local municipality (in the Waterberg district council) contained the highest number of private institutional pharmacies (n=3). This was followed by the Greater Tzaneen local municipality (in Mopani district council) with two private institutional pharmacies. The two

local municipalities of the province contained 50% of the private institutional pharmacies in the province. The remaining five local municipalities each contained only one private institutional pharmacy.

Table 5.102: Ranking of local municipalities in Limpopo by order of local municipality with the highest number of the registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies
1	Thabazimbi	3
2	Greater Tzaneen	2
3	Bela-Bela	1
4	Greater Giyani	1
5	Lephalale	1
6	Makhado	1
7	Polokwane	1

5.7.1.3 Public Institutional Pharmacies

Consider table C.5.4 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The public institutional pharmacies of the Limpopo province, registered in the year 2003, were situated in 66.7% of the province's municipalities. In 2008, the percentage municipalities in the province which contained registered public institutional pharmacies had increased to 76%. The total estimated population of those municipalities without registered public institutional pharmacies decreased from 14.2% in 2003, to 13.9% in 2008.

The results of the distribution of the registered public institutional pharmacies in the province of Limpopo, among the province's district councils, from the year 2003 to 2008, are presented in table C.5.4 in part C of the Reference Manual. Table C.5.4 also includes an indication of the number of municipalities within each district council which contained registered public institutional pharmacies.

The 2003 and 2008 results for the distribution of the pharmaceutical structures among the district councils of the Limpopo province are presented in table 5.103 below. The district

councils are, in table 5.103, listed by decreasing rank order from the district council which contained the highest to the district council with the lowest number of the registered public institutional pharmacies in the province for both years.

For the year 2003, the district councils with the highest number of public institutional pharmacies were the Capricorn and Mopani district councils with 10 pharmacies each. Bohlabela district council, with the lowest number of public institutional pharmacies, contained only 2.8% (n=1) of the province's public institutional pharmacies. For the year 2008, the total number of public institutional pharmacies in each district council of the province ranged from the 15 pharmacies in Mopani district council, to eight pharmacies in Waterberg district council. For both 2003 and 2008, more than half of the public institutional pharmacies in the province were situated in the Capricorn and Mopani district councils.

Table 5.103: Total number of registered Public institutional pharmacies within the district councils of Limpopo province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Capricorn District	10 (27.8%)	Mopani District	15 (32.6%)
Mopani District	10 (27.8%)	Capricorn District	11 (23.9%)
Waterberg District	8 (22.2%)	Greater Sekhukhune	6 (13.0%)
Vhembe District	5 (13.9%)	Vhembe District	6 (13.0%)
Sekhukhune Cross Boundary District	2 (5.6%)	Waterberg District	8 (17.4%)
Bohlabela District	1 (2.8%)		
Total (Limpopo province)	36 (100%)	Total (Limpopo province)	46 (100%)

The results of the distribution of the registered public institutional pharmacies among the local municipalities of the Limpopo province, from the year 2003 to 2008, are included in tables D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.104 below presents the distribution of the province's public institutional pharmacies among the local municipalities in the province for the year 2008. The local municipalities are, in table 5.104, listed by rank order from the local municipality with the highest to that containing the lowest number of registered public institutional pharmacies for that year. As is evident from table 5.103, 31.6% of the local municipalities in the province containing registered community pharmacies, contained only one community pharmacy.

Table 5.104: Ranking of local municipalities in Limpopo by order of local municipality with the highest number of the registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Greater Tzaneen	6	14	Aganang	1
2	Greater Tubatse	4	15	Bela-Bela	1
3	Lepele-Nkumpi	4	16	Maruleng	1
4	Polokwane	4	17	Modimolle	1
5	Ba-Phalaborwa	3	18	Musina	1
6	Greater Giyani	3	19	Thabazimbi	1
7	Mogalakwena	3	20	Fetakgomo	0
8	Makhado	3	21	Greater Marble Hall	0
9	Blouberg	2	22	Makhuduthamaga	0
10	Elias Motsoaledi	2	23	Molemole	0
11	Greater Letaba	2	24	Mookgopong	0
12	Lephalale	2	25	Mutale	0
13	Thulamela	2			

5.7.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN LIMPOPO

Consider tables C.5.5, C.5.6, C.5.7 and C.5.8 in part C of the Reference Manual, as well as D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total estimated population of the Limpopo province for the year 2003 was 5,373,150 people. For the year 2008, the estimated total population of the province was 5,278,513 people. The results of the total estimated population of Limpopo province as a whole, as well as the

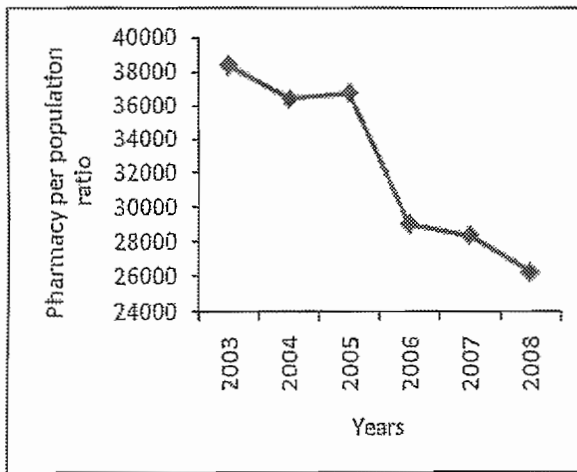
estimated population for each district council of the province, for the years 2003 to 2008, are included in tables C.5.5, C.5.6, C.5.7 and C.5.8 in part C of the Reference Manual. The results of the estimated total population for the local municipalities in Limpopo province, from the year 2003 to 2008, are presented in tables D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

It should be noted that there was a decrease in the total estimated population of the province between the years 2005 and 2006, from an estimated 5,477,111 people in the year 2005 to an estimated 5,114,038 people in the year 2006. This may be due to the restructuring of provincial boundaries which took place during that time period. As a result, the total estimated population of the province from the year 2006 to 2008, was lower than the estimated population for the years 2003 to 2005. This influenced the results of the pharmacy per population ratio as it decreased the demand (denominator) for the pharmaceutical structures.

In the year 2003, the pharmacy per population ratio of the direct service pharmacies was 1: 38,380 people. The ratio decreased to one direct pharmacy per 26,261 people for the year 2008, indicating an improvement in the availability of direct service pharmacies situated in Limpopo province between the two years.

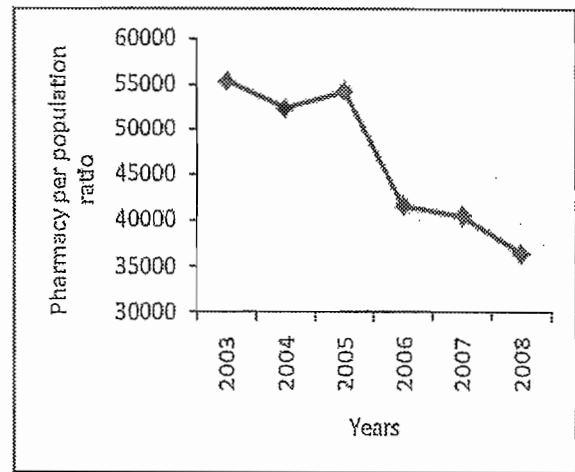
The figure 5.12 illustrates the changes in the pharmacy per population ratio of the direct service pharmacies situated in the province of Limpopo, from the year 2003 to 2008. Figure 5.12 should be considered alongside figure 5.11 to determine the effects of the changes in the total number of direct service pharmacies situated in the province, on the changes in the pharmacy per population ratio of the pharmacies in the province.

The graph in figure 5.12(a) specifically illustrates the trend in changes in the pharmacy per population ratio of the direct service pharmacies in the province, from the year 2003 to 2008. The direct service pharmacy per population ratio of the province decreased during each one year interval of the study years except for the interval 2004-2005. The slight increase in the pharmacy per population ratio of the province between 2004 and 2005 may be attributed to the fact that the increase in the total number of registered direct service pharmacies situated in the province during that period ($n=+1$) is not significant enough to yield an improvement in the availability of direct service pharmacies in the province, given the estimated population growth. The highest improvement in the availability of the pharmaceutical structures was observed for the period 2005-2006, which was also the period with the highest increase in the total number of registered direct service pharmacies.



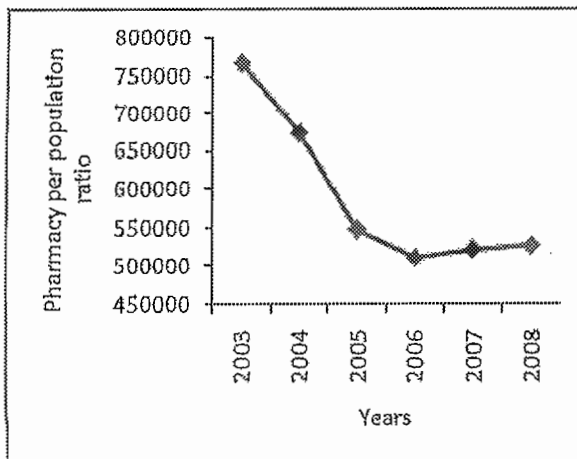
(a)

All registered pharmaceutical structures



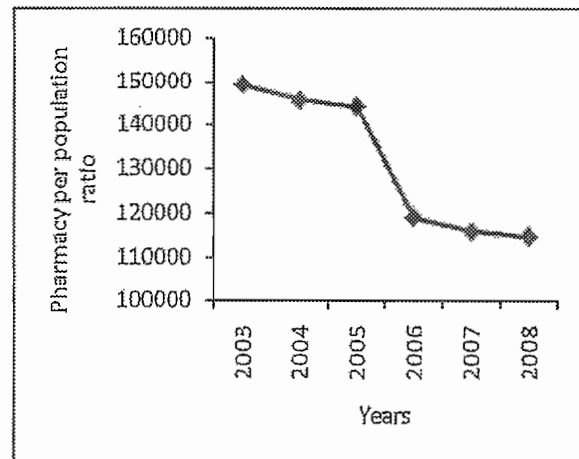
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.12: Changes in the pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of Limpopo, 2003 to 2008

The results of the pharmacy per population ratio for the direct service pharmacies within each district council of the Limpopo province, from 2003 to 2008, are presented in table C.5.5 in part C of the Reference Manual. Table 5.105 below presents the results of the pharmacy per population ratio for the direct service pharmacies of each district council of the province, for the years 2003 and 2008 only. The district councils are, in table 5.105, listed by decreasing rank order from the district council with the lowest pharmacy per population ratio (implying a more favourable availability of the direct service pharmacies) to the district council with the highest pharmacy per population ratio (implying a less favourable availability of the direct service pharmacies), for both years.

Table 5.105: Pharmacy per population ratio of registered direct service pharmacies within the district councils of the Limpopo province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Waterberg District	24 065	Waterberg District	15 830
Mopani District	28 895	Capricorn District	25 965
Capricorn District	31 797	Greater Sekhukhune	36 508
Vhembe District	53 153	Vhembe District	43 727
Bohlabela District	121 292	Mopani District	79 979
Sekhukhune Cross Boundary District	253 192		
Limpopo province	38 380	Limpopo province	26 261

According to table 5.105, the Waterberg district council had the most favourable availability of direct service pharmacies for the year 2008 (n=1:15,830 people). This was followed by the Capricorn district council with one direct service pharmacy per 25,965 people. In contrast the Mopani district council contained the lowest pharmacy per population ratio (n=1:79,979 people), implying the least favourable availability of direct service pharmacies of the district councils in the province.

Table 5.105 also shows how the direct service pharmacies in the Limpopo province were unevenly distributed to the population of the province in the year 2008. This is established by

using the provincial pharmacy per population ratio of the year (n=1:26,261 people) as the benchmark ratio for the event that the direct service pharmacies in the province are evenly distributed to the population of the province. As is evident from table 5.105, the Waterberg and Capricorn district councils were the only district councils of the province with a pharmacy per population ratio lower than the benchmark. This implies a distribution of the direct service pharmacies in the province, in favour of the population in the two district councils.

The results of the pharmacy per population ratio of the direct service pharmacies for each local municipality of the Limpopo province, from the year 2003 to 2008, are presented in tables D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.106 below presents the direct service pharmacy per population ratio for each local municipality of the province for the year 2008, along with a ranking of the local municipalities in the province by order from the local municipality with the lowest pharmacy per population ratio (implying a more favourable availability of the pharmaceutical structures) to the local municipality with the highest (implying a less favourable availability of the pharmaceutical structures) for the year 2008.

Table 5.106: Ranking of local municipalities in Limpopo by order from local municipality with the lowest to the highest direct service pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Thabazimbi	6 140	12	Greater Tubatse	23 793
2	Musina	10 386	13	Mogakwena	28 674
3	Lephalale	11 284	14	Greater Marble Hall	32 056
4	Ba-Phalaborwa	11 544	15	Mookgopong	32 500
5	Bela-Bela	13 771	16	Makhado	37 524
6	Polokwane	15 348	17	Lepele-Nkumpi	40 157
7	Modimolle	15 386	18	Aganang	52 025
8	Greater Tzaneen	17 258	19	Thulamela	56 164
9	Maruleng	19 951	20	Blouberg	56 828
10	Greater Giyani	20 912	21	Greater Letaba	58 161
11	Elias Motsoaledi	21 210	22	Makhuduthamaga	277 876

As is evident from the table 5.106, the pharmacy per population ratio of the local municipalities in the province ranged from one direct service pharmacy per 6,140 people (Thabazimbi local municipality) to one direct service pharmacy per 277,876 people (Makhuduthamaga local

municipality). Nine of the local municipalities in the province (Mogakwena, Greater Marble Hall, Mookgopong, Makhado, Lepele-Nkumpi, Aganang, Thulamela, Blouberg Greater Letaba and Makhuduthamaga) contained a pharmacy per population ratio higher than the benchmark ratio (n=1:26,261 people) for the year 2008.

5.7.2.1 Community Pharmacies

Consider table C.5.6 in part C of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the community pharmacies in Limpopo province decreased significantly from a ratio of one community pharmacy per 55,393 people in the year 2003, to one community pharmacy per 36,404 people in the year 2008. This implies a significant improvement in the availability of registered community pharmacies situated in the province of Limpopo, over the study years.

The graph in figure 5.12(b) illustrates the changes in the pharmacy per population ratio of community pharmacies in the province of Limpopo, from 2003 to 2008. The changes follow a trend similar to that observed for the direct service pharmacies in the province, in that, the initial period from 2003 to 2004 was characterised by a decrease in the community pharmacy per population ratio, followed by a period of increase in the community pharmacy per population ratio, between 2004 and 2005. This increase in the community pharmacy per population ratio may be attributed to the fact that the total number of community pharmacies situated in the province decreased between the years 2004 and 2005, in the presence of an increasing estimated population growth. The period from 2005 to 2008 was characterised by a continued decrease in the community pharmacy per population ratio of the province, following a continued increase in the total number of registered community pharmacies situated in the province between those years. The period with the most significant improvement in the availability of the community pharmacies to the population in the province, was between 2005 and 2006, which was also the period with the most significant increase in the total number of community pharmacies situated in the province, and a decrease in the estimated population of the province.

The results of the community pharmacy per population ratio for each district council of the province of Limpopo, from the year 2003 to 2008, are contained in table C.5.6 in part C of the

Reference Manual. Table 5.107 below presents the results of the community pharmacy per population ratio for each district council of the province, for the years 2003 and 2008 only. The district councils are, in table 5.107, listed by decreasing rank order from the district council with the lowest to that with the highest community pharmacy per population ratio, for both years.

As is evident from table 5.107, the Waterberg district council was the district council in the province with the most favourable availability of community pharmacies, for the year 2008, with a ratio of 1:23,179 people. In contrast, the Vhembe district council, with the lowest pharmacy per population ratio (n=1:57,641 people) had the least favourable availability of community pharmacies in the province.

Table 5.107: The community pharmacy per population ratio for the district councils of Limpopo province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Waterberg District	24 065	Waterberg District	23 179
Mopani District	44 656	Mopani District	29 442
Capricorn District	45 249	Capricorn District	34 867
Vhembe District	67 917	Greater Sekhukhune	46 465
Bohlabela District	151 616	Vhembe District	57 641
Sekhukhune Cross Boundary District	759 576		
Limpopo province	55 393	Limpopo province	36 404

The results of the community pharmacy per population ratio for each local municipality of the Limpopo province, from the year 2003 to 2008, are included in table D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.108 presents the results of the community pharmacy per population ratio for each local municipality of the province for the year 2008. Furthermore, the local municipalities are, in table 5.108, ranked by order from the local municipality with the lowest to that with the highest community pharmacy per population ratio for that year. As evident from the table, the community pharmacy per population ratio of the local municipalities ranged from one community

pharmacy per 9,648 people (Thabazimbi local municipality) to a ratio of one community pharmacy per 277,876 people (Makhuduthamaga local municipality).

Table 5.108: Ranking of local municipalities in Limpopo by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Thabazimbi	9 648	12	Greater Marble Hall	32 056
2	Musina	13 848	13	Mookgopong	32 500
3	Ba-Phalaborwa	15 392	14	Greater Tubatse	35 689
4	Lephalale	16 926	15	Mogakwena	39 427
5	Polokwane	17 906	16	Makhado	52 534
6	Modimolle	19 233	17	Thulamela	68 645
7	Maruleng	24 938	18	Aganang	78 038
8	Elias Motsoaledi	25 923	19	Greater Letaba	116 322
9	Greater Tzaneen	26 463	20	Lepele-Nkumpi	120 471
10	Bela-Bela	27 542	21	Blouberg	170 484
11	Greater Giyani	31 367	22	Makhuduthamaga	277 876

5.7.2.2 Private Institutional Pharmacies

Consider table C.5.7 in part C of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The province of Limpopo contained one private institutional pharmacy per 767,593 people in the year 2003, and one private institutional pharmacy per 527,851 people in the year 2008. This indicates an improvement in the availability of the private institutional pharmacies situated in Limpopo, to the population of the province.

The changes in the pharmacy per population ratio for the private institutional pharmacies in the province, from the year 2003 to 2008, are illustrated by the graph in figure 5.12(c). As indicated by the graph, the pharmacy per population ratio of the private institutional pharmacies in the province decreased between from the year 2003 to 2005. This is a result of the increase in the total number of private institutional pharmacies situated in the province during the period. Between the years 2005 and 2006, the total number of private institutional pharmacies situated in the province remained constant, however, the pharmacy per population ratio continued to decrease. This may be attributed to the decrease in the total estimated population in the

province of Limpopo between the two years (2005 and 2006). From the years 2006 to 2008, the pharmacy per population ratio of the registered private institutional pharmacies then increased as a result of the fact that the total number of private institutional pharmacies situated in the province, during that time period, remained constant, while the estimated total population of the province increased.

The results of the private institutional pharmacy per population ratio for each district council of Limpopo, from the year 2003 to 2008, are presented in table C.5.7 in part C of the Reference Manual. Table 5.108 below presents the private institutional pharmacy per population ratio for each district council of the province, for the years 2003 and 2008 only. The district council are, in table 5.109, listed by decreasing rank order from the district council with the lowest to that with the highest private institutional pharmacy per population ratio for both years.

Table 5.109: Private institutional pharmacy per population ratio for the district councils of Limpopo province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Waterberg District	156 423.24	Waterberg District	129 805
Mopani District	491 213.71	Mopani District	372 937
Capricorn District	1 176 477.05	Capricorn District	1 220 344
Bohlabela District	-	Vhembe District	1 268 098
Sekhukhune Cross Boundary District	-	Greater Sekhukhune	-
Vhembe District	-		
Limpopo province	767 593	Limpopo province	527 851

The results of the private institutional pharmacy per population ratio for each local municipality of Limpopo, from the year 2003 to 2008, are included in tables D.1.5 (for the years 2003 to 2008) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.110 below presents the private institutional pharmacy per population ratio for the seven local municipalities which contained private institutional pharmacies in 2008. The table also

provides a ranking of the local municipalities by order from the local municipality with the lowest to that with the highest private institutional pharmacy per population ratio.

Table 5.110: Ranking of local municipalities in Limpopo by order from the local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Thabazimbi	22 512
2	Bela-Bela	55 085
3	Lephalale	101 559
4	Greater Tzaneen	198 471
5	Greater Giyani	250 939
6	Makhado	525 349
7	Polokwane	537 179

5.7.2.3 Public Institutional Pharmacies

Consider table C.5.7 in part C of the Reference Manual, as well as tables D.1.5 and D.2.5 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, the province of Limpopo contained one public institutional pharmacy per 149,254 people. The ratio decreased to one public institutional pharmacy per 114,750 people in the year 2008, indicating an improvement in the availability of public institutional pharmacies situated in the province, to the population of the province.

The changes in the pharmacy per population ratio of the public institutional pharmacies in Limpopo, from 2003 to 2008, are illustrated by the graph in figure 5.12(d). As demonstrated by the trend in the graph, the pharmacy per population ratio of the pharmaceutical structures continually decreased from the year 2003 to 2008, following a continued increase in the total number of public institutional pharmacies situated in the province over the time period. The most significant improvement in the availability of the public institutional pharmacies to the population of the province, was observed for the period 2005-2006, which was also the period with the highest increase in the total number of public institutional pharmacies situated in the province, accompanied by the decrease in the total estimated population of the province. The

decrease in the total estimated population may be attributed to the boundary changes between the two years.

The results of the public institutional pharmacy per population ratio for each district council of the province of Limpopo, from the year 2003 to 2008, are presented in table C.5.8 in part C of the Reference Manual. Table 5.111 below presents the public institutional pharmacy per population ratio for each district council of the province for the years 2003 and 2008 only.

Table 5.111: Public institutional pharmacy per population ratio for the district councils of Limpopo province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Waterberg District	78 212	Waterberg District	81 128
Mopani District	98 243	Mopani District	74 587
Capricorn District	117 648	Capricorn District	110 940
Vhembe District	244 503	Greater Sekhukhune	170 373
Sekhukhune Cross Boundary District	379 788	Vhembe District	211 350
Bohlabela District	606 463		
Limpopo province	149 254	Limpopo province	114 750

As is evident from the table 5.111, the public institutional pharmacy per population ratio of the district councils in Limpopo, for the year 2008, ranged from one public institutional pharmacy per 81,128 people (Waterberg district council) to one public institutional pharmacy per 308,901 people (Thulamela district council). District councils with a pharmacy per population ratio higher than the provincial public institutional pharmacy per population ratio for the year 2008, were the Greater Sekhukhune and Vhembe district councils.

The results of the public institutional pharmacy per population ratio for each local municipality of the province of Limpopo, for the years 2003 to 2008, are included in tables D.1.5 (for the years 2003 to 2005) and D.2.5 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.112 presents a ranking of the local municipalities of Limpopo, in 2008, by order from the local municipality with the lowest to that with the highest public pharmacy per population ratio. As evident from the table, the local municipality of Musina contained the most favourable availability of public institutional pharmacies to the population (n=1:41,543 people) while the Thulamela local municipality contained the least favourable availability of public institutional pharmacies to the population (n=1:308,901 people).

Table 5.112: Ranking of local municipalities in Limpopo by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Musina	41 543	11	Modimolle	76 930
2	Ba-Phalaborwa	46 177	12	Greater Giyani	83 646
3	Maruleng	99 753	13	Blouberg	85 242
4	Makhado	175 116	14	Mogakwena	105 138
5	Lephalale	50 779	15	Greater Letaba	116 322
6	Bela-Bela	55 085	16	Elias Motsoaledi	116 655
7	Lepele-Nkumpi	60 236	17	Polokwane	134 295
8	Thabazimbi	67 535	18	Aganang	156 076
9	Greater Tzaneen	66 157	19	Thulamela	308 901
10	Greater Tubatse	71 379			

5.8 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN MPUMALANGA PROVINCE, 2003-2008

In this section, the results on both the geographic and per-population distribution of registered direct service pharmaceutical structures among the district councils and local municipalities of the province of Mpumalanga, for 2003 to 2008, will be presented and discussed. It must be emphasised that the results of the distribution of the pharmaceutical structures, as well as the estimated population situated in the Mpumalanga province between the years 2003 and 2008, have been influenced by the restructuring of Mpumalanga's provincial boundaries, which took place between 2005 and 2006. Due to the effects of the changes in the provincial boundaries of Mpumalanga, this report will mainly focus on the distribution of the pharmaceutical structures for the year 2008.

Consider tables C.6.1, C.6.2, C.6.3 and C.6.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

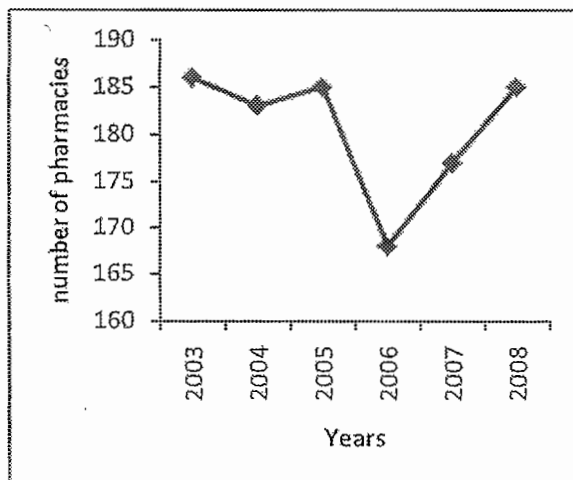
Figure 5.13 illustrates the change in the total number of the registered direct service pharmaceutical structures in Mpumalanga. In 2003, the province contained 186 direct service pharmacies and, 185 registered direct service pharmacies were situated in the province in 2008. The graph in figure 5.13(a) illustrates the changes in the total number of the pharmacies throughout the study years. As is evident from the graph, the one-year interval 2005-2006 was a period of significant decrease in the total number of the pharmacies ($n=-17$) and was followed by periods wherein the total number of the pharmacies increased.

It should be noted that as was the case with the province of Limpopo, the changes in the total number of registered direct service pharmaceutical structures situated in the province of Mpumalanga for the years 2005 and 2006 was influenced by the restructuring of the provincial borders in 2006.

The total number of community pharmacies situated in the province remained the same for 2003 and 2008 ($n=144$). The growth trend of the pharmacies, from 2003 to 2008, is illustrated by the graph in figure 5.13(b) and follows a pattern similar to that of the total direct service pharmacies. There was initially a loss in the total number of community pharmacies situated in the province during the period 2003-2004 ($n=-5$). During the period 2005-2006, the total number of community pharmacies in the province again decreased by 12 pharmacies; this was followed by periods in which the total number of the pharmacies increased.

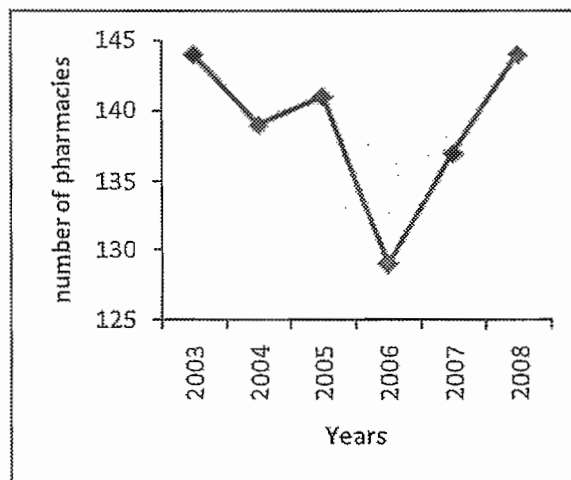
In 2003, eight registered private institutional pharmacies were situated in the province. As illustrated by the graph in figure 5.13(c), the total number of these pharmacies, in the province, either increased or remained the same during each one-year interval of the study years to total 13 pharmacies in 2008.

The total number of registered public institutional pharmacies in the province decreased from 34 pharmacies in 2003 to 28 pharmacies in 2008. The change in the total number of the pharmacies throughout the study years is illustrated by the graph in figure 5.13(d). From the figure, it is evident that the total number of the pharmacies in the province remained constant from 2003 to 2005, from where the total number of the pharmacies began to decrease. The interval 2007-2008 is the period during which the number of the pharmacies increased, although only one pharmacy was added.



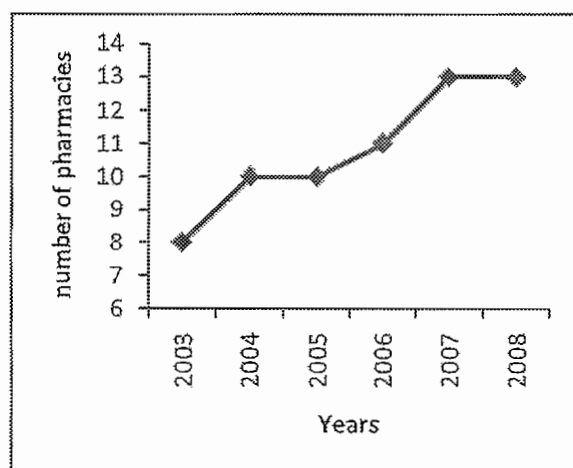
(a)

All registered pharmaceutical structures



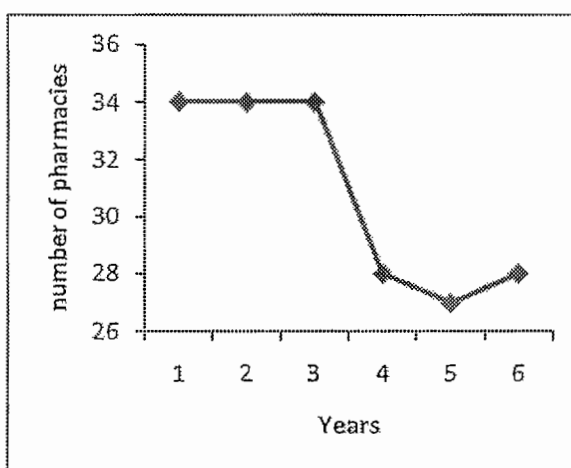
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.13: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of Mpumalanga, 2003 to 2008

5.8.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE PROVINCE OF MPUMALANGA

Consider table C.6.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The registered direct service pharmacies in the province of Mpumalanga were, in 2008, distributed across 89.5% of the province's municipalities. The percentage of municipalities with the pharmaceutical structures was 76.9% in the year 2003. The estimated percentage population of the municipalities without any registered direct service pharmacy was 7.35% in 2008, a decrease from the 8.94% in the year 2003

The results of the distribution of the registered direct service pharmacies among the district councils of the province of Mpumalanga, from the year 2003 to 2008, are presented in table C.6.1 in part C of the Reference Manual, along with an indication of the number of municipalities containing registered direct service pharmacies, in each district council of the province.

Table 5.113 presents the results of the distribution of the registered direct service pharmacies among the province's district councils, for the years 2003 and 2008 only. The table lists the district councils by decreasing order from the district council with the highest, to that with the lowest number of registered direct service pharmacies for both years.

For the year 2003, the direct service pharmacies in the province were unevenly distributed to the district councils of the province. More than 60% of the pharmacies were situated in two of the six district councils (Nkangala and Govan Mbeki) and Metsweding district council contained no registered direct service pharmacies. For the year 2008, the pharmaceutical structures were more evenly distributed among the district councils of the province, where each of the three district council contained more than 30% of the province's direct service pharmacies.

Table 5.113: Total number of registered direct service pharmacies within the district councils of Mpumalanga province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Nkangala	61 (32.8%)	Nkangala	64 (34.6%)
Govan Mbeki	56 (30.1%)	Ehlanzeni District	62 (33.5%)
Ehlanzeni	46 (24.7%)	Gert Sibande	59 (31.9%)
Sekhukhune Cross Boundary	21 (11.3%)		
Bohiabela District	2 (1.1%)		
Metsweding District	0 (0.0%)		
Total (Mpumalanga province)	186 (100%)	Total (Mpumalanga province)	185 (100%)

The results of the distribution of the direct service pharmaceutical structures among the local municipalities of the province of Mpumalanga, from 2003 to 2008, are presented in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.114 presents the distribution of the direct service pharmaceutical structures among the local municipalities of the province, for the year 2008, along with a ranking of the local municipalities in the province from the local municipality with the highest to that containing the lowest number of registered direct service pharmacies.

Table 5.114: Ranking of local municipalities in Mpumalanga by order of local municipality with the highest number of the registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mbombela	33	11	Nkomazi	6
2	Emalahleni	32	12	Seme	5
3	Govan Mbeki	22	13	Delmas	4
4	Steve Tshwete	20	14	Emakhazeni	4
5	Msukaligwa	11	15	Thembisile	4
6	Thaba Chweu	10	16	Umjindi	4
7	Bushbuckridge	9	17	Dipaleseng	2
8	Lekwa	7	18	Dr JS Moroka	0
9	Albert Luthuli	6	19	Ehlanzeni	0
10	Mkhondo	6			

5.8.1.1 Community Pharmacies

Consider table C.6.2 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

As with the distribution of the registered direct service pharmacies, the community pharmacies of Mpumalanga province were situated in 76.9% of the province's municipalities in 2003 and 89.5% in 2008. The estimated percentage population of the municipalities without community pharmacies also decreased from 8.9% in the year 2003 to 7.4% in 2008.

The results of the distribution of the province's community pharmacies among the district councils of the province, from the year 2003 to 2008, are presented in table C.6.2 in part C of the Reference Manual, along with an indication of the total number of municipalities, within each district council, containing registered community pharmacies.

Table 5.115 presents the results of the distribution of the community pharmacies among the province's district councils for the years 2003 and 2008 only. Furthermore, the district councils are, in table 5.115, listed by decreasing rank order from the district council with the highest to that containing the lowest number of the registered community pharmacies in the province for both years.

The results of the distribution of the province's community pharmacies among the local municipalities of the province, from the year 2003 to 2008, are included in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.115: Total number of registered community pharmacies within the district councils of Mpumalanga province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Nkangala	51 (35.4%)	Nkangala	50 (34.7%)
Govan Mbeki	44 (30.6%)	Ehlanzeni	49 (34.0%)
Ehlanzeni	33 (22.9%)	Gert Sibande	45 (31.3%)
Sekhukhune Cross Boundary	15 (10.4%)		
Bohlabela District	1 (0.7%)		
Metsweding District	0 (0.0%)		
Total (Mpumalanga province)	144 (100%)	Total (Mpumalanga province)	144 (100%)

Table 5.116 (on page 298) presents the results of the distribution of the community pharmacies among the province's local municipalities, for the year 2008 only, along with a ranking of the local municipalities from the local municipality containing the highest to that with the lowest number of registered community pharmacies. The Mbombela local municipality contained the highest number of community pharmacies (n=28) followed by the Emalahleni (n=27) and Govan Mbeki (n=17) local municipalities respectively. These three local municipalities collectively contained 50% of the community pharmacies in the province.

Table 5.116: Ranking of local municipalities in Mpumalanga by order of local municipality with the highest number of the registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mbombela	28	11	Nkomazi	4
2	Emalahleni	27	12	Delmas	3
3	Govan Mbeki	17	13	Seme	3
4	Steve Tshwete	16	14	Thembisile	3
5	Msukaligwa	9	15	Dipaleseng	2
6	Thaba Chweu	8	16	Umjindi	2
7	Bushbuckridge	7	17	Emakhazeni	1
8	Lekwa	6	18	Dr JS Moroka	0
9	Albert Luthuli	4	19	Ehlanzeni	0
10	Mkhondo	4			

5.8.1.2 Private Institutional Pharmacies

Consider table C.6.3 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, only 19.2% of the municipalities in Mpumalanga contained registered private institutional pharmacies. For the year 2008, the percentage of municipalities in the province, with private institutional pharmacies was 36.8%. The estimated total population of the municipalities without any registered private institutional pharmacies was 65.8% of the province's population in 2003 and 60.3% of the province's population for the year 2008.

The results of the distribution of the registered private institutional pharmacies in the province, among the district councils of the provinces, from the year 2003 to 2008, are presented in table C.6.3 in part C of the Reference Manual. Table C.6.3 also includes the number of municipalities, within each district council of Mpumalanga, which contained registered private institutional pharmacies, from the year 2003 to 2008.

Table 5.117 presents the distribution of the private institutional pharmacies of the Mpumalanga, among the district councils of the province, for the years 2003 and 2008 only. The district councils are, in table 5.117, listed by decreasing rank order from the district council with the highest to that with the lowest number of the registered private institutional pharmacies in the province, for both years.

As is evident from table 5.117, half of the province's district councils did not contain any registered private institutional pharmacies in the year 2003. Moreover, 50% of the private institutional pharmacies in the provinces for that year were situated in one district council (Ehlanzeni). For the year 2008, all three district councils contained registered private institutional pharmacies with Nkangala district council containing the proportion (46.1%) of the private institutional pharmacies in the province.

Table 5.117: Total number of registered private institutional pharmacies within the district councils of Mpumalanga province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Ehlanzeni	4 (50.0%)	Nkangala	6 (46.1%)
Govan Mbeki	2 (20.0%)	Gert Sibande	4 (30.8%)
Nkangala	2 (20.0%)	Ehlanzeni District	3 (23.1%)
Bohlabela District	0 (0.0%)		
Metsweding District	0 (0.0%)		
Sekhukhune Cross Boundary	0 (0.0%)		
Total (Mpumalanga province)	8 (100%)	Total (Mpumalanga province)	13 (100%)

The results of the distribution of the private institutional pharmacies among the local municipalities in the province, from the year 2003 to 2008, are included in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual. Table 5.118 presents the seven local municipalities which, in the year 2008, contained registered private institutional pharmacies, and ranks them by order from the local municipality with the highest to that with the lowest number of the registered private institutional pharmacies in the province.

Table 5.118: Ranking of local municipalities in Mpumalanga by order of local municipality with the highest number of registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies
1	Emalahleni	3
2	Govan Mbeki	3
3	Mbombela	2
4	Steve Tshwete	2
5	Emakhazeni	1
6	Msukaligwa	1
7	Umjindi	1

5.8.1.3 Public Institutional Pharmacies

Consider table C.6.4 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The public institutional pharmacies in Mpumalanga province were distributed across 73.1% of the province's municipalities in 2003. In 2008, the percentage municipalities with the pharmaceutical structures had increased to 84.2%. The total estimated population of the municipalities without registered public institutional pharmacies was 10.2% of the province's population in the year 2003, and 8.5% of the province's population on 2008.

The results of the distribution of the public institutional pharmacies among the district council of Mpumalanga province, from the year 2003 to 2008, are presented in table C.6.4 in part C of the Reference Manual. Table C.6.4 also includes an indication of the number of municipalities, within each district council of the province, containing registered public institutional pharmacies.

Table 5.119 presents the results of the distribution of the public institutional pharmacies in the province among the district councils of the province for the years 2003 and 2008 only. The district councils are, in table 5.119, listed by decreasing rank order from the district council with the highest to that with the lowest number of the registered pharmaceutical structures for both years.

Table 5.119: Total number of registered public institutional pharmacies within the district councils of Mpumalanga province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Bohlabela District	1 (2.9%)	Ehlanzeni District	10 (35.7%)
Ehlanzeni	9 (26.5%)	Gert Sibande	10 (35.7%)
Govan Mbeki	10 (29.4%)	Nkangala	8 (28.6%)
Metsweding District	0 (0.0%)		
Nkangala	8 (23.5%)		
Sekhukhune Cross Boundary	6 (17.6%)		
Total (Mpumalanga province)	34 (100%)	Total (Mpumalanga province)	28

The results of the distribution of the public institutional pharmacies among the local municipalities in Mpumalanga are included in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.120 presents the distribution of the pharmaceutical structures among the province's local municipalities for the year 2008, along with a ranking of the local municipalities by order, from the local municipality with the highest to that with the lowest number of public institutional pharmacies. As evident from table 5.120, most of the local municipalities in the province (62.5%) which contained public institutional pharmacies, contained two public institutional pharmacies.

Table 5.120: Ranking of local municipalities in Mpumalanga by order of local municipality with the highest number of the registered public institutional pharmacies, 2008

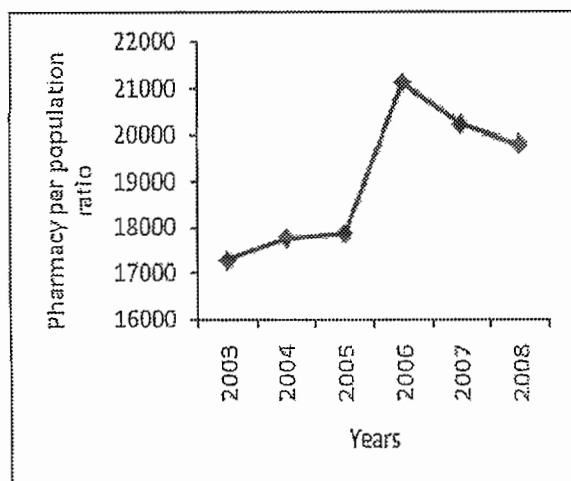
Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mbombela	3	11	Thaba Chweu	2
2	Albert Luthuli	2	12	Delmas	1
3	Bushbuckridge	2	13	Lekwa	1
4	Emalahleni	2	14	Msukaligwa	1
5	Emakhazeni	2	15	Thembisile	1
6	Govan Mbeki	2	16	Umjindi	1
7	Mkhondo	2	17	Dipaleseng	0
8	Nkomazi	2	18	Dr JS Moroka	0
9	Seme	2	19	Ehlanzeni	0
10	Steve Tshwete	2			

5.8.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN MPUMALANGA

Consider tables C.6.5, C.6.6, C.6.7 and C.6.8 in part C of the Reference Manual, as well as D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

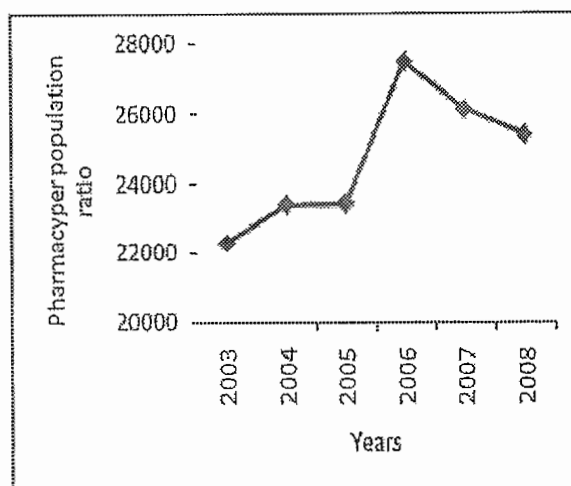
The total estimated population of the province of Mpumalanga was 3,211,182 people in 2003 and increased to 6,659,430 people for the year 2008. The results of the total estimated population of the province of Mpumalanga, as well as the estimated population for each district council of the province, from 2003 to 2008, are included in tables C.6.5, C.6.6, C.6.7 and C.6.8 in part C of the Reference Manual. The results of the estimated total population for each local municipality in the province, from the year 2003 to 2008, are included in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual.

The pharmacy per population of the direct service pharmaceutical structures in Mpumalanga increased from a ratio of one direct service pharmacy per 17,264 people in the year 2003, to a ratio of one direct service pharmacy per 19,781 people for the year 2008. This implies a decline in the availability of the direct service pharmacies in Mpumalanga to the population of the province.



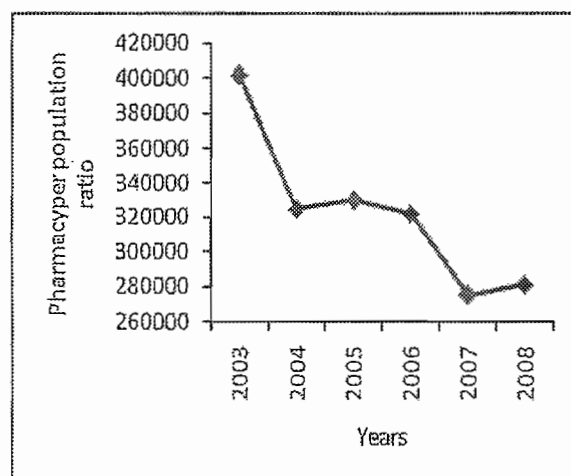
(a)

All registered pharmaceutical structures



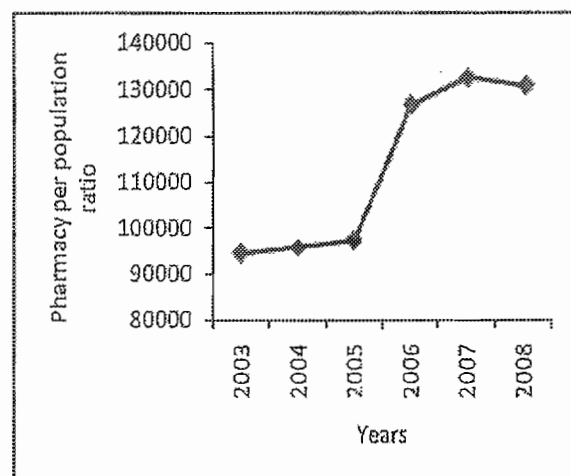
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.14: Changes in the total pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the province of Mpumalanga, 2003 to 2008

Figure 5.14 illustrates the changes in the pharmacy per population ratio of the direct service pharmacies in the province of Mpumalanga, from 2003 to 2008. The figure 5.14 should be considered alongside figure 5.13 to determine the influence of the changes in the total number of direct service pharmacies in the province, on the pharmacy per population ratio.

The graph in figure 5.14(a) specifically illustrates the trend of change in the pharmacy per population ratio of the direct service pharmacies situated in Mpumalanga. From 2003 to 2006, the pharmacy per population ratio of the direct service pharmacies in Mpumalanga increased, following a decrease in the total number of direct service pharmacies situated in the province. The highest increase in pharmacy per population ratio was observed for the period 2005-2006, which was also the period with the greatest decrease in the total number of direct service pharmacies situated in the province. From 2006 to 2008, the availability of the pharmaceutical structures then began to improve, following an increase in the number of direct service pharmacies.

As demonstrated by the high and low peaks of the graph in figure 5.14(a), the availability of the direct service pharmacies in Mpumalanga was poorest in the year 2006 and most favourable in the year 2003 of the study years.

The results of the pharmacy per population ratio of the direct service pharmacies for each district council of the Mpumalanga province, from the year 2003 to 2008, are presented in table C.6.5 in part C of the Reference Manual. Table 5.121 below presents the pharmacy per population ratio of the direct service pharmacies in each district council of the province, for the years 2003 and 2008 only. The district councils are, in table 5.121, listed by decreasing rank order from the district council with the lowest pharmacy per population ratio (implying a more favourable availability of the direct service pharmacies to the population), to the district council with the highest pharmacy per population ratio (implying a less favourable availability of the direct service pharmacies to the population).

As is evident from table 5.121, the direct service pharmacy per population ratio of the district councils, for the year 2003, ranged from 1:1,304 people (Bohlabela district) to 1:21,116 people (Ehlanzeni district council). For the year 2008, the direct service pharmacies in the Gert Sibande district council were most favourable to the population, relative to the other district councils in the province, with a ratio of one direct service pharmacy per 16,571 people.

Table 5.121: Pharmacy per population ratio of the registered direct service pharmacies for district councils of the Mpumalanga province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Bohlabela District	1 304	Gert Sibande	16 571
Sekhukhune Cross Boundary	10 856	Nkangala	17 324
Govan Mbeki	16 525	Ehlanzeni District	25 371
Nkangala	17 204		
Ehlanzeni	21 116		
Metsweding District	-		
Total (Mpumalanga province)	17 264	Total (Mpumalanga province)	19 781

The results of the direct service pharmacy per population ratio for each local municipality of the province of Mpumalanga, from 2003 to 2008, are presented in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual. Table 5.122 presents the direct service pharmacy per population ratio for each of the local municipalities in the province which contained registered direct service pharmacies, for the year 2008, along with a ranking of the local municipalities by order from the local municipality with the lowest pharmacy per population ratio (implying a more favourable availability of the pharmaceutical structures to the population) to the local municipality with the highest pharmacy per population ratio (implying the least favourable availability of the pharmaceutical structures to the population).

Table 5.122: Ranking of local municipalities in Mpumalanga by order from local municipality with the lowest to the direct service highest pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Steve Tshwete	7 755	10	Lekwa	16 969
2	Thaba Chweu	8 823	11	Seme	17 541
3	Emalahleni	9 384	12	Dipaleseng	20 974
4	Govan Mbeki	10 950	13	Mkhondo	25 870
5	Emakhazeni	11 682	14	Albert Luthuli	34 027
6	Msukaligwa	12 326	15	Bushbuckridge	60 314
7	Umjindi	14 594	16	Nkomazi	60 549
8	Delmas	15 264	17	Thembisile	70 306
9	Mbombela	15 630			

5.8.2.1 Community Pharmacies

Consider table C.6.6 in part C of the Reference Manual, as well as D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, Mpumalanga province contained one community pharmacy per 22,300 people. The ratio increased to one community pharmacy per 25,413 people in the year 2008, implying a decline in the availability of community pharmacies situated in the province over the study period.

The graph in figure 5.14(b) illustrates the changes in the community pharmacy per population ratio of the province, over the study years. As with the trend demonstrated for the direct service pharmacies, the period from 2003 to 2006 was characterised by a decline in the availability of the community pharmacies to the population of the province. This is a result of the decrease in the total number of community pharmacies situated in the province between 2003 and 2006. The greatest decline in availability of the pharmacies was observed during the period 2005-2006 which was also the period with the highest decrease in the total number of community pharmacies situated in it. From 2006 to 2008, the availability of the pharmacies to the population then improved slightly.

As demonstrated by the high and low peaks of the graph in figure 5.14(b), the availability of community pharmacies situated in Mpumalanga was poorest in the year 2006 and most favourable in the year 2003 of the study years.

The results of the community pharmacy per population ratio for each district council of the province, from the year 2003 to 2008, are presented in table C.6.6 in part C of the Reference Manual. Table 5.123 below presents the community pharmacy per population ratio for each district council of the province, for the years 2003 and 2008. The district councils are, in table 5.123 ranked by decreasing order from the district with the lowest to that with the highest pharmacy per population ratio, for both years.

Table 5.123: Community pharmacy per population ratio for the district councils of Mpumalanga province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Bohlabela District	2 608	Gert Sibande	21 727
Sekhukhune Cross Boundary	15 198	Nkangala	22 174
Nkangala	20 577	Ehlanzeni District	32 102
Govan Mbeki	21 032		
Ehlanzeni	29 435		
Metsweding District	-		
Total (Mpumalanga province)	22 300	Total (Mpumalanga province)	25 413

The results of the community pharmacy per population ratio for each local municipality of Mpumalanga, from the year 2003 to 2008, are included in tables D.1.6 (for the years 2003 to 2005) and D.2.6 (for the years 2006 to 2008) in part D of the Reference Manual. Table 5.124 presents the community pharmacy per population ratio for each of the local municipalities in the province, for the year 2008 only, along with a ranking of the local municipalities by order from the local municipality with the lowest to that with the highest community pharmacy per population ratio for that year. As evident from the table 5.124, the local municipalities in the province with the most favourable availability of community pharmacies was Steve Tshwete (n=1:9,694 people), while the community pharmacies situated in Thembisile local municipality were least favourably available to the population (n=1:93,741 people).

Table 5.124: Ranking of local municipalities in Mpumalanga by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Steve Tshwete	9 694	10	Umjindi	29 187
2	Thaba Chweu	11 029	11	Seme	29 234
3	Emalaheni	11 122	12	Mkhondo	38 805
4	Govan Mbeki	14 171	13	Emakhazeni	46 730
5	Msukaligwa	15 065	14	Albert Luthuli	51 041
6	Mbombela	18 421	15	Bushbuckridge	77 547
7	Lekwa	18 696	16	Nkomazi	90 824
8	Delmas	20 352	17	Thembisile	93 741
9	Dipaleseng	20 974			

5.8.2.2 Private Institutional Pharmacies

Consider table C.6.7 in part C of the Reference Manual, as well as D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The province of Mpumalanga contained, in 2003, one private institutional pharmacy per 401,398 people. The availability of these pharmaceutical structures to the population of the province improved over the study years, given that the private institutional pharmacy per population ratio for 2008 was 1:281,495 people.

The changes in the pharmacy per population ratio of the registered private institutional pharmacies in the province, from the year 2003 to 2008, are illustrated by the graph in figure 5.14(c). The trend demonstrated by the graph indicates an improvement in the availability of the structures from the year 2003 to 2007, following the increase in the total number of registered private institutional pharmacies in the province during that period. Between 2007 and 2008, the availability of the structures slightly declined as a result of the total number of private institutional pharmacies in the province remaining constant in whereas the total estimated population of the province continued to increase.

The results of the private institutional pharmacy per population ratio for the district councils of Mpumalanga, from 2003 to 2008, are presented table C.6.7 in part C of the Reference Manual. Table 5.125 below presents the 2003 and 2008 results of the private institutional pharmacy per population ratio for each of the district councils in the province. Furthermore, the district councils are, in table 5.125 listed by decreasing rank order from the district council with the lowest to that containing the highest pharmacy per population ratio, for both years.

The results of the private institutional pharmacy per population ratio for each local municipality of Mpumalanga, from the year 2003 to 2008, are included in tables D.1.6 and D.2.6 in part D of the Reference Manual. Table 5.126 below presents the private institutional pharmacy per population ratio of the local municipalities which contained private institutional pharmacies, for the year 2008. The table also ranks the local municipalities by order from the municipality with the lowest to that with the highest private institutional pharmacy per population ratio for the year 2008.

Table 5.125: Private institutional pharmacy per population ratio for the district councils of Mpumalanga province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Ehlanzeni	242 839	Nkangala	184 786
Govan Mbeki	462 709	Gert Sibande	244 425
Nkangala	524 714	Ehlanzeni District	524 338
Bohlabela District	-		
Metsweding District	-		
Sekhukhune Cross Boundary	-		
Total (Mpumalanga province)	401 398	Total (Mpumalanga province)	281 495

Table 5.126: Ranking of local municipalities in Mpumalanga by order from local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Emakhazeni	46 730
2	Umjindi	58 375
3	Steve Tshwete	77 549
4	Govan Mbeki	80 300
5	Emalahleni	100 101
6	Msukaligwa	135 589
7	Mbombela	257 895

5.8.2.3 Public Institutional Pharmacies

Consider table C.6.8 in part C of the Reference Manual, as well as tables D.1.6 and D.2.6 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered public institutional pharmacies in Mpumalanga increased from a ratio of one public institutional pharmacy per 94,447 people in 2003 to a ratio of one public institutional pharmacy per 130,694 people in 2008. This indicated

decline in the availability of registered public institutional pharmacies to the population of the province, over the study period.

The changes in the availability of the public institutional pharmacies in the province, from 2003 to 2008, are illustrated by the graph in figure 5.14(d). The graph illustrates a continuous decline in the availability of the structures, from the year 2003 to 2007, evident from the increasing pharmacy per population ratio over that period. The period 2005-2006 was the period during which the highest decline in the availability of the public institutional pharmacies to the population took place. The public institutional pharmacy per population ratio of the province then slightly decreased between 2007 and 2008, as a result of the slight increase in the total number of registered public institutional pharmacies situated in the province.

The results of the public institutional pharmacy per population ratio for the district councils in Mpumalanga, from the year 2003 to 2008, are presented in table C.6.8 in part C of the Reference Manual. Table 5.127 below presents the 2003 and 2008 results of the public institutional pharmacy per population ratio for each of the district councils in the province. The district councils are, in table 5.127, listed by decreasing order from the district council with the lowest to that with the highest pharmacy per population ratio, for both years.

Table 5.127: Public institutional pharmacy per population ratio for district councils of the Mpumalanga province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Bohlabela District	2 608	Gert Sibande	97 770
Sekhukhune Cross Boundary	3 737	Nkangala	138 590
Govan Mbeki	92 542	Ehlanzeni District	157 301
Ehlanzeni	107 928		
Nkangala	131 179		
Metsweding District	-		
Total (Mpumalanga province)	94 447	Total (Mpumalanga province)	130 694

As is evident from table 5.127, the public institutional pharmacy per population ratio for the district councils in the province, for the year 2003, ranged from 1:2,608 people (Bohlabela

district) to 1:131,179 people (Nkangalaa district). For the year 2008, the public institutional pharmacies in the Gert Sibande district council were more favourably available to the population of the district (n=1:97,770 people).

The results of the public institutional pharmacy per population ratio for each local municipality in Mpumalanga, from the year 2003 to 2008, are included in tables D.1.6 and D.2.6 in part D of the Reference Manual. The 2008 results of the public institutional pharmacy per population ratio for each local municipality of the province are presented in table 5.128, along with a ranking of the local municipalities from the municipality with the lowest to that containing the highest public institutional pharmacy per population ratio for the year 2008. The public institutional pharmacy per population ratio, as indicated in table 5.128, ranged from a ratio of 1:23,365 people (Emakhazeni local municipality) to a ratio of 1:281,223 people (Thembisile local municipality).

Table 5.128: Ranking of local municipalities in Mpumalanga by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Emakhazeni	23 365	9	Lekwa	112 178
2	Seme	43 852	10	Govan Mbeki	120 449
3	Thaba Chweu	44 117	11	Msukaligwa	135 589
4	Umjindi	58 375	12	Emalahleni	150 152
5	Delmas	61 055	13	Mbombela	171 930
6	Steve Tshwete	77 549	14	Nkomazi	181 648
7	Mkhondo	77 610	15	Bushbuckridge	271 414
8	Albert Luthuli	102 081	16	Thembisile	281 223

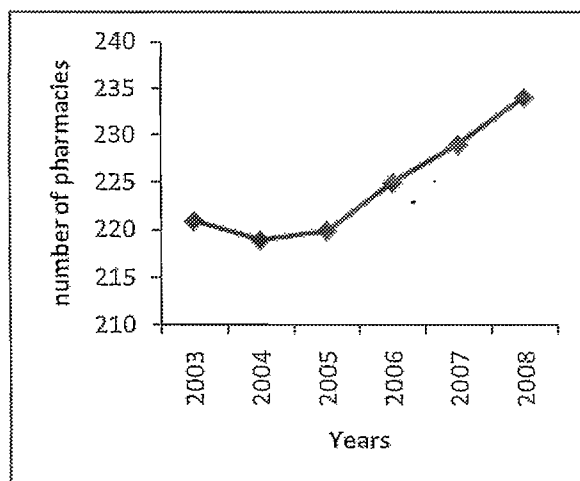
5.9 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN THE NORTH WEST PROVINCE, 2003-2008

In this section, the results on both the geographic and per-population distribution of registered direct service pharmaceutical structures among the district councils and local municipalities of the North West province, for 2003 to 2008, will be reported and discussed. It must also be emphasised that the distribution of the pharmaceutical structures, as well as the estimated population in the North West Province, between the years 2003 and 2008, was influenced by the restructuring of the province's boundaries in 2005 and 2006. Due to the effects of the changes in the provincial boundaries of the North West province, the results as presented in this section will mainly focus on the distribution of the pharmaceutical structures for the year 2008.

Consider tables C.7.1, C.7.2, C.7.3 and C.7.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

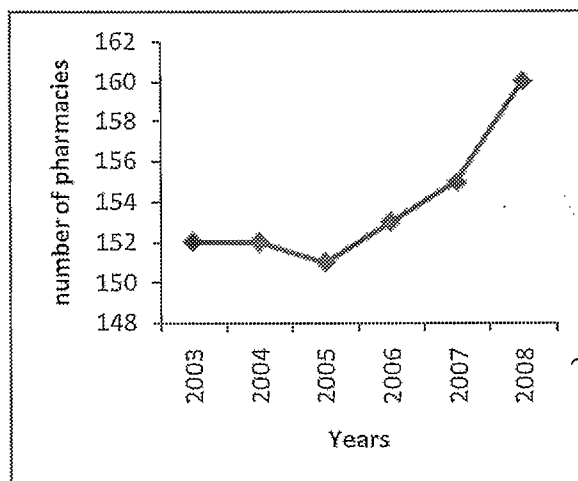
Figure 5.15 illustrates the growth trends in the number of pharmacies situated in the North West province throughout the study years. The graph in figure 5.15(a) illustrates the growth trend for the direct service pharmacies in the province. As demonstrated by the figure, the number of direct service pharmacies in the province initially decreased during the period 2003-2004; this was then followed by periods in which the total number of the pharmacies increased. Consequently, the total number of registered direct service pharmacies in the North West province increased from 221 pharmacies in 2003 to a total of 234 pharmacies in 2008.

The change in the total number of registered community pharmacies in the North West province, as of 2003 to 2008, is illustrated by the graph in figure 5.15(b). As is evident from the figure, the distribution remained constant for 2003 and 2004, followed by a decrease of one pharmacy between 2004 and 2005. The total number of the pharmacies began to increase as of the year 2006 resulting in an overall increase of the pharmacies from a total of 152 in 2003 to 160 pharmacies in 2008.



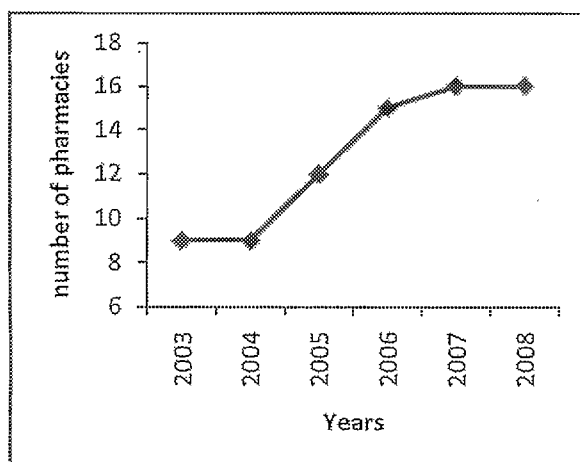
(a)

All registered pharmaceutical structures



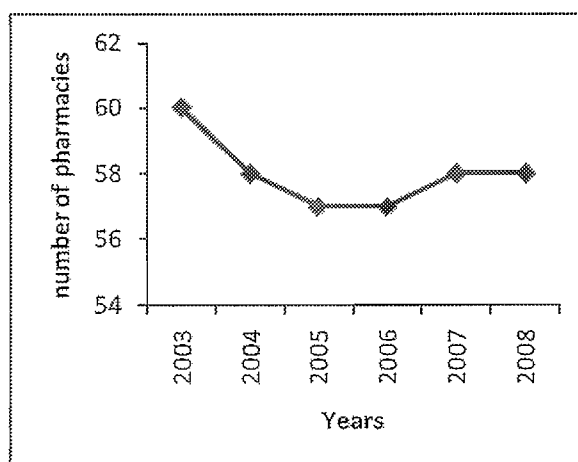
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.15: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the North West province, 2003 to 2008

As illustrated by the graph in figure 5.15(c), the total number of the registered private institutional pharmacies situated in the North West province remained constant for the years 2003 and 2004 (n=9). An increase in the number of private institutional pharmacies in the province occurred as of the period 2004-2005, reaching a total of 16 pharmacies for the years 2007 and 2008.

There was an overall decrease in the total number of public institutional pharmacies in the province from 60 pharmacies in 2003 to 58 pharmacies in 2008. The only period, throughout the study years, in which an increase in the total number of the pharmacies occurred was 2006-2007, although only one pharmacy was added. The change in the total number of the pharmacies in the province, throughout the study years, is illustrated by the graph in figure 5.15(d).

5.9.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE NORTH WEST PROVINCE

Consider table C.7.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.7 and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The direct service pharmaceutical structures of the North West province were situated in 80.8% of the province's municipalities in 2003 and 86.4% of the province's municipalities in the year 2008. The estimated population of the municipalities without any registered direct service pharmacy was 6% of the province's population in 2003, and decreased to 3.5% of the province's population in the year 2008.

The results of the distribution of the direct service pharmaceutical structures in the North West province among the district councils of the province, from the year 2003 to 2008, are presented in table C.7.1 in part C of the Reference Manual. The table C.7.1 also includes an indication of the number of municipalities, within each district council of the province, containing registered direct service pharmaceutical structures, for the entire study period.

Table 5.129 presents the distribution of the direct service pharmacies among the district councils of the North West province for the years 2003 and 2008. The district councils are, in

table 5.129, listed by decreasing rank order from the district council with the highest, to that containing the lowest number of registered direct service pharmacies for both years. for the year 2008, approximately 38% of the direct service pharmacies in the province were situated in the Kenneth Kaunda district council alone, while the district council with the lowest number of direct service pharmacies was Bophirima, with 11.5% of the province's direct service pharmaceutical structures situated in it.

Table 5.129: Total number of registered direct service pharmacies within the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Bojanala District	66 (29.9%)	Kenneth Kaunda District (southern)	88 (37.6%)
Southern District	63 (28.5%)	Bojanala District	74 (31.6%)
Central District	41 (18.6%)	Ngaka Modiri Molema District (central)	45 (19.2%)
Bophirima District	28 (12.7%)	Bophirima District	27 (11.5%)
City of Tshwane Metropolitan	18 (8.1%)		
West Rand District	4 (1.8%)		
Kgalagadi District	1 (0.5%)		
Frances Baard District	0 (0.0%)		
Total (North West province)	221 (100%)	Total (North West province)	234 (100%)

The results of the distribution of the direct service pharmaceutical structures in the North West province, among the province's local municipalities, from the year 2003 to 2008, are presented in tables D.1.7 (for the years 2003 to 2005) and D.2.7 (for the years 2006 to 2008) in part D of the Reference Manual. Table 5.130 below presents the results for the year 2008 only, along with a ranking of the local municipalities by order from the local municipality with the highest, to that containing the lowest number of registered direct service pharmacies.

As indicated in table 5.130, the Rustenburg local municipality contained the highest number of the direct service pharmacies in the province (n=43) for the year 2008. This was followed by the local municipalities, City of Matlosana (n=37), City of Tlokwe (n=24), Madibeng(n=21) and Merafong City (n=21). Collectively, these five local municipalities contained a proportion of 62.4% of the total direct service pharmacies situated in the province.

Table 5.130: Ranking of local municipalities in the North West province by order of local municipality with the highest number of the registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Rustenburg	43	12	Lekwa-Teemane	6
2	City of Matlosana	37	13	Moses Kotane	5
3	City of Tlokwe	24	14	Kgetlengrivier	4
4	Madibeng	21	15	Mamusa	4
5	Merafong City	21	16	Maquassi Hills	4
6	Mafikeng	19	17	Greater Taung	3
7	Ditsobotla	10	18	Ventersdorp	2
8	Naledi	8	19	Moretele	1
9	Ramotshere Moiloa	8	20	Molopo	0
10	Tswaing	8	21	Pilansberg National Park	0
11	Kagisano	6	22	Ratlou	0

5.9.1.1 Community Pharmacies

Consider table C.7.2 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.7 and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

Community pharmacies in the North West province were distributed within 65.4% of the province's municipalities in 2003. This increased to 72.7% of the province's municipalities for the year 2008. The estimated percentage population of municipalities without any registered community pharmacy therefore decreased from 20% of the province's population in 2003, to 17.9% for the year 2008.

The results of the distribution of the registered community pharmacies in the North West province, among the district councils in the province, from the year 2003 to 2008, are presented

in table C.7.2 in part C of the Reference Manual, along with an indication of the number of municipalities within each district council, containing registered community pharmacies.

For the year 2003, the Frances Baard and Kgalagadi district councils did not contain any registered community pharmacies. The district council with the highest number of community pharmacies was the Southern district council, which contained about 35% of the province's community pharmacies. In the year 2008, the Kenneth Kaunda district council was the district council with the highest number community pharmacies (n=69) while the Bophirima district council contained the lowest number of community pharmacies (n=10). The total number of community pharmacies situated within each district council of the North West province, for both the year 2003 and 2008, are presented in table 5.131. The district councils are, in table 5.131, listed by decreasing rank order from the district council with the highest to that with the lowest number of community pharmacies, for both years.

Table 5.131: Total number of registered community pharmacies within the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Southern District	53 (34.9%)	Kenneth Kaunda District (southern)	69 (43.1%)
Bojanala District	49 (32.2%)	Bojanala District	57 (35.6%)
Central District	24 (15.8%)	Ngaka Modiri Molema District (central)	24 (15.0%)
City of Tshwane Metropolitan	13 (8.6%)	Bophirima District	10 (6.3%)
Bophirima District	10 (6.6%)		
West Rand District	3 (2.0%)		
Frances Baard District	0 (0.0%)		
Kgalagadi District	0 (0.0%)		
Total (North West province)	152 (100%)	Total (North West province)	160 (100%)

The distribution of community pharmacies among the province's local municipalities from the year 2003 to 2008, are included in tables D.1.7 (for the years 2003 to 2005) and D.2.7 (for the year 2006 to 2008) in part D of the Reference Manual.

For the year 2008, the local municipality with the highest number of community pharmacies was Rustenburg (n=35), followed by the local municipalities City of Matlosana (n=30), City of Tlokwe (n=20), Madibeng (n=18) and Merafong City (n=15) respectively. These collectively made up about 74% of the community pharmacies in the North West Province. The total number of community pharmacies situated within each local municipality of the North West province, for the year 2008, are presented in table 5.132 below, along with a ranking of the local municipalities from that containing the highest to that with the lowest number of the pharmaceutical structures.

Table 5.132: Ranking of local municipalities in the North West province by order of local municipality with the highest number of the registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Rustenburg	35	12	Maquassi Hills	3
2	City of Matlosana	30	13	Ramotshere Moiloa	3
3	City of Tlokwe	20	14	Kgetlengrivier	2
4	Madibeng	18	15	Moses Kotane	2
5	Merafong City	15	16	Ventersdorp	1
6	Mafikeng	10	17	Greater Taung	0
7	Ditsobotla	7	18	Kagisano	0
8	Naledi	4	19	Molopo	0
9	Tswaing	4	20	Moretele	0
10	Lekwa-Teemane	3	21	Pilansberg National Park	0
11	Mamusa	3	22	Ratlou	0

5.9.1.2 Private Institutional Pharmacies

Consider table C.7.3 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.7 and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The private institutional pharmacies in the North West province were situated in only 19.2% of the province's municipalities in the year 2003, leaving an estimated 58.3% of the province's

population in municipalities without registered private institutional pharmacies. In the year 2008, the percentage municipalities with private institutional pharmacies had increased to 31.8%, consequently decreasing the estimated population of municipalities without private institutional pharmacies to 45.3% of the province's population, in that year.

The results of the distribution of the private institutional pharmacies in the North West province, among the province's district councils, from the year 2003 to 2008, are presented in table C.7.3 in part C of the Reference Manual. Table C.7.3 also includes an indication of the number of municipalities, within each district council, containing registered private institutional pharmacies, for the entire study period. Table 5.133 presents the total number of registered private institutional pharmacies situated within each district council of the North West province, for the years 2003 and 2008.

Table 5.133: Total number of registered private institutional pharmacies within the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Bojanala District	5 (55.6%)	Kenneth Kaunda District (southern)	7 (43.8%)
Bophirima District	1 (11.1%)	Bojanala District	6 (37.5%)
Central District	1 (11.1%)	Ngaka Modiri Molema District (central)	2 (12.5%)
City of Tshwane Metropolitan	1 (11.1%)	Bophirima District	1 (6.3%)
Southern District	1 (11.1%)		
Frances Baard District	0 (0.0%)		
Kgalagadi District	0 (0.0%)		
West Rand District	0 (0.0%)		
Total (North West province)	9 (100%)	Total (North West province)	16 (100%)

As indicated by the table 5.133, three of the province's district councils did not contain registered private institutional pharmacies, in the year 2003. Furthermore, four of the districts

contained only one registered private institutional pharmacy, while most of the private institutional pharmacies (n=5; 55.6%), for the year 2003, were situated in the Bojanala district council. The district councils are, in table 5.133, listed by decreasing order from the district council with the highest, to that containing the lowest number of private institutional pharmacies in the province. In the year 2008, as evident from table 5.133, the district council with the highest number of the pharmaceutical structures was Kenneth Kaunda district council, with a proportion of 43.8% (n=7) of the private institutional pharmacies in the province situated in it.

The results of the distribution of the private institutional pharmacies in the North West province, among the local municipalities of the province, from the year 2003 to 2008, are included in tables D.1.7 (for the years 2003 to 2005) and D.2.7 (for the years 2006 to 2008) in part D of the Reference Manual. The table 5.134 below presents those local municipalities which, in the year 2008, contained private institutional pharmacies, ranked by order from the local municipality with the highest to that with the lowest number of private institutional pharmacies.

Table 5.134: Ranking of local municipalities in the North West province by order of local municipality with the highest number of the registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies
1	Rustenburg	5
2	Merafong City	3
3	City of Matlosana	2
4	City of Tlokwe	2
5	Mafikeng	2
6	Madibeng	1
7	Naledi	1

5.9.1.3 Public Institutional Pharmacies

Consider table C.7.4 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.7 and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, the public institutional pharmacies in the North West province were situated within 80.8% of the municipalities in the province, leaving an estimated 6.1% of the province's total

population living in municipalities without registered public institutional pharmacy. For the year 2008, the percentage municipalities in the province with registered direct service pharmacies had increased to 86.3% with an estimated 3.6% of the province's population in municipalities without public institutional pharmacies.

The results of the distribution of the public institutional pharmacies in the province, among the district councils of the province, from the year 2003 to 2008, are presented in table C.7.4 in part C of the Reference Manual. Table C.7.4 also presents the number of municipalities, within each district council, containing public institutional pharmacies.

Table 5.135 below presents the results of the distribution of the public institutional pharmacies in the province, among the district councils of the province, for the years 2003 and 2008. The district councils are, in table 5.135, listed by order from the district council with the highest, to that containing the lowest number of public institutional pharmacies for both years.

Table 5.135: Total number of registered public institutional pharmacies within the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Total number of pharmacies	District council	Total number of pharmacies
Bophirima District	17 (28.3%)	Ngaka Modiri Molema District (central)	19 (32.8%)
Central District	16 (26.7%)	Bophirima District	16 (27.6%)
Bojanala District	12 (20.0%)	Kenneth Kaunda District (southern)	12 (20.7%)
Southern District	9 (15.0%)	Bojanala District	11 (19.0%)
City of Tshwane Metropolitan	4 (6.7%)		
Kgalagadi District	1 (1.7%)		
West Rand District	1 (1.7%)		
Frances Baard District	0 (0.0%)		
Total (North West province)	60 (100%)	Total (North West province)	58 (100%)

The results of the distribution of the public institutional pharmacies in the North West province, among the local municipalities of the province, from the year 2003 to 2008, are included in tables D.1.7 (for the years 2003 to 2005) and D.2.7 (for the years 2006 to 2008) in part C of the Reference Manual.

The local municipality of Mafikeng contained the highest number of registered public institutional pharmacies (n=7) for the year 2008. This was followed by the Kagiso (n=6), City of Matlosana (n=5), Ramotshere Moiloa (n=5) and Tswaing (n=4) local municipalities, respectively. The total number of public institutional pharmacies situated within each local municipality of the North West province, for the year 2008, is presented in table 5.136 below, which ranks the local municipalities in the province by order from the local municipality with the highest, to that containing the lowest number of the pharmaceutical structures.

Table 5.136: Ranking of local municipalities in the North West province by order of local municipality with the highest number of the registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Mafikeng	7	12	Rustenburg	3
2	Kagisano	6	13	City of Tlokwe	2
3	City of Matlosana	5	14	Kgetlengrivier	2
4	Ramotshere Moiloa	5	15	Madibeng	2
5	Tswaing	4	16	Mamusa	1
6	Ditsobotla	3	17	Maquassi Hills	1
7	Greater Taung	3	18	Moretele	1
8	Lekwa-Teemane	3	19	Ventersdorp	1
9	Merafong City	3	20	Molopo	0
10	Moses Kotane	3	21	Pilansberg National Park	0
11	Naledi	3	22	Ratlou	0

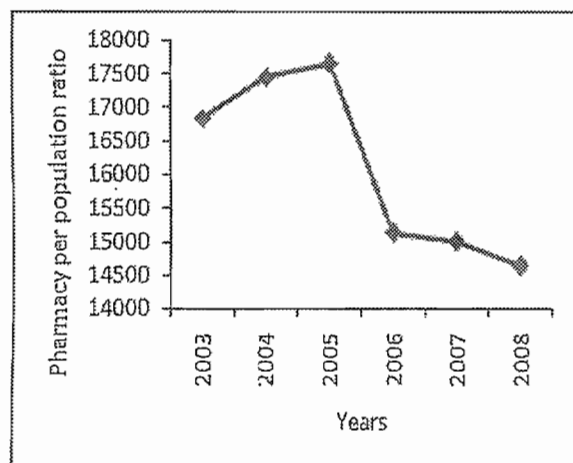
5.9.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE NORTH WEST PROVINCE

Consider tables C.7.5, C.7.6, C.7.7 and C.7.8 in part C of the Reference Manual, as well as D.1.7. and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

There was an overall decrease in the total estimated population of the North West province from 720,478 people in the year to an estimated 3,425,236 people for the year 2008. The results of the total estimated population of the North West province, as well as the total estimated population for each district council of the province, from 2003 to 2008, are included in tables C.7.5, C.7.6, C.7.7 and C.7.8 in part C of the Reference Manual. The results of the total estimated population for each local municipality of the North West province, from the year 2003 to 2008, are presented in tables D.1.7 (for the years 2003 to 2005) and D.1.7 (for the years 2006 to 2008) in part D of the Reference Manual.

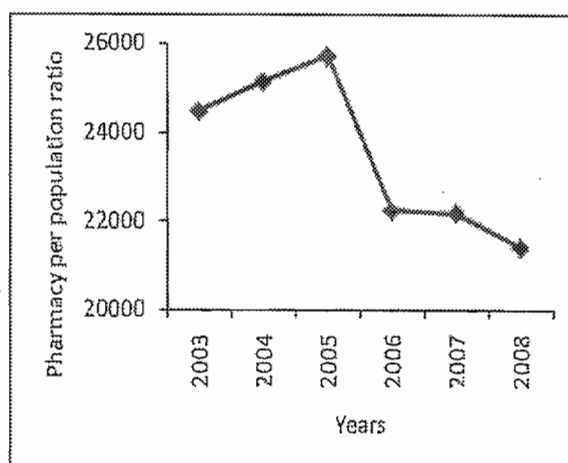
It should be noted that from the year 2003 to 2005, the estimated population of the province increased from 3,720,478 people in 2003 to 3,881,162 people for the year 2005. The decrease in the estimated population of the province occurred between 2005 and 2006, and the estimated population of the province decreased to 3,403,818 people for the year 2006. This increase in the total estimated population of the province, between 2005 and 2006, may be a result of the restructuring of provincial boundaries which took place between 2005 and 2006. The estimated total population of the province then increased again from the year 2006 to 3,435,814 people in the year 2007 and then again decreased to total an estimated 3,425,236 people for the year 2008.

The pharmacy per population ratio of the direct service pharmacies situated in the North West province was one direct service pharmacy per 16,834 people in the year 2003. The ratio decreased to one direct service pharmacy per 14,638 people in 2008, indicating an improvement in the availability of the registered direct service pharmacies to the population of the province over the study period.



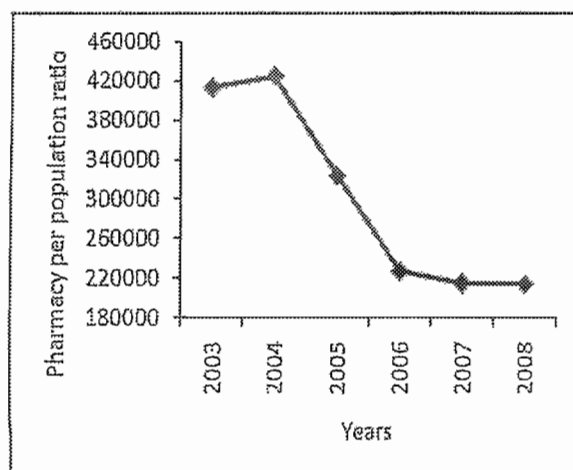
(a)

All registered pharmaceutical structures



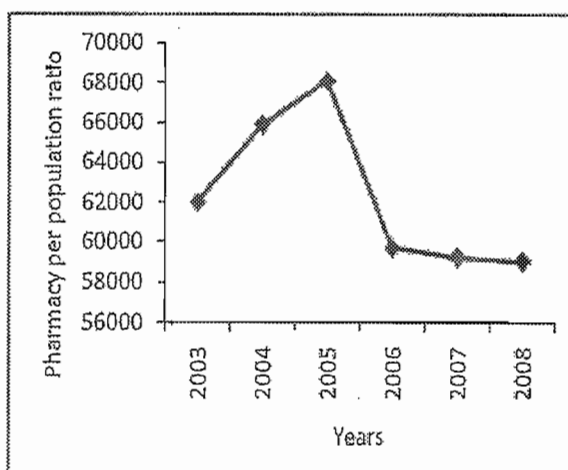
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.16: Changes in the pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the North West province, 2003 to 2008

The changes in the pharmacy per population ratio of the direct service pharmacies situated in the North West province, from 2003 to 2008, are illustrated in figure 5.16. The figure, 5.16, should be considered alongside figure 5.15 to determine the influence of the changes in the total number of registered direct service pharmacies in the province, on the changes in the pharmacy per population ratio.

The graph in figure 5.16(a) specifically demonstrates the change in the pharmacy per population ratio of the direct service pharmacies in the province, from 2003 to 2008. As indicated by the trend in the graph, the initial period from 2003 to 2005 is characterised by a decline in the availability of the pharmaceutical structures to the population, as a result of the decrease in the total number of registered direct service pharmacies situated in the province during that period. From 2005 to 2008, the pharmacy per population ratio continually decreased, indicating an improvement in the availability of the pharmaceutical structures to the population. The highest improvement was observed for the period 2005-2006 which was the period during which the highest increase in the total number of the registered direct service pharmacies situated in the province occurred, in the presence of the decrease in the estimated population of the province.

The results of the direct service pharmacy per population ratio for each district council of the North West province, from the year 2003 to 2008, are presented in table C.7.5 in part C of the Reference Manual. The 2003 and 2008 results of the direct service pharmacy per population ratio for each of the province's district councils are presented in table 5.13. The district councils are, in table 5.137, listed by decreasing rank order from the district council with the lowest pharmacy per population ratio (implying a more favourable availability of the direct service pharmacies to the population) to the that with the highest pharmacy per population ratio (implying the least favourable availability of the pharmaceutical structures to the population).

As indicated in table 5.137, the pharmacy per population ratio of the direct service pharmacies, in each district council of the province, ranged from a ratio of 1:9,651 people (Southern district council) to a ratio of 1:141,989 people (Kgalagadi district council) for the year 2003. The Frances Baard district council, which in 2003 did not contain any registered direct service pharmacies, contained an estimated 608,024 people. For the year 2008, the pharmacy per population ratio ranged from 1:9,680 people (Kenneth Kaunda district) to 1:18,159 people (Ngaka Modiri Molema district).

Table 5.137: Pharmacy per population ratio for direct service pharmacies within the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Southern District	9 651	Kenneth Kaunda District (southern)	9 860
West Rand District	15 497	Bojanala District	17 155
Bophirima District	15 922	Bophirima District	17 441
Bojanala District	18 210	Ngaka Modiri Molema District (central)	18 159
Central District	18 869		
City of Tshwane Metropolitan	25 852		
Kgalagadi District	141 989		
Frances Baard District	-		
Total (North West province)	16 835	Total (North West province)	14 638

From the table 5.137, it is also evident that the direct service pharmacies in the North West province were, in 2008, unevenly distributed to the population of each district councils of the province. This was established by using the provincial pharmacy per population ratio for the year 2008 ($n=1:14,638$) as the benchmark ratio for the event that the direct service pharmacies in the province are evenly distributed to the population of the province. Only the Kenneth Kaunda district council contained a pharmacy per population ratio lower than the benchmark ratio, indicating an uneven distribution of the pharmaceutical structures in favour of the district council.

The results of the pharmacy per population ratio for the direct service pharmacies in the each local municipality of the North West province, from 2003 to 2008, are presented in tables D.1.7 (for the years 2003 to 2005) and D.2.7 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.138 below presents the year 2008 results of the direct service pharmacy per population ratio for each local municipality in the province which contained registered direct service pharmacies. Table 5.18 also includes a ranking of the local municipalities in the province by order from the local municipality with the lowest pharmacy per population ratio (implying a more favourable availability of the structures) to that with the highest pharmacy per population ratio

(implying the least favourable availability of the direct service pharmacies to the population). As is evident from table 5.138, the City of Tlokwe local municipality contained the most favourable availability for direct service pharmacies (n=1:5,728 people) while the direct service pharmacies in Moretele local municipalities were the least favourably available to the population (n=1:190,546 people).

Table 5.138: Ranking of local municipalities in the North West province by order from local municipality with the lowest to the highest direct service pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	City of Tlokwe	5 728	11	Ditsobotla	15 807
2	Lekwa-Teemane	7 668	12	Kagisano	17 205
3	Naledi	7 778	13	Madibeng	17 251
4	Kgetlengrivier	9 766	14	Ramotshere Moiloa	18 400
5	Rustenburg	9 852	15	Maquassi Hills	18 489
6	City of Matlosana	10 397	16	Ventersdorp	23 066
7	Merafong City	10 735	17	Greater Taung	65 037
8	Mamusa	12 950	18	Moses Kotane	126 843
9	Mafikeng	14 627	19	Moretele	190 546
10	Tswaing	15 281			

5.9.2.1 Community Pharmacies

Consider table C.7.6 in part C of the Reference Manual, as well as tables D.1.7. and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the community pharmacies situated in the North West province decreased from a ratio of one community pharmacy per 24,477 people in the year 2003, to a ratio of one community pharmacy per 21,408 people in the year 2008. This implies an improvement in the availability of the registered community pharmacies to the population of the province.

The changes in the pharmacy per population ratio of the community pharmacies in the province are illustrated by the graph in figure 5.16(b). The trend demonstrated a decline in the availability of community pharmacies between the years 2003 and 2008, following the slight decrease in the total number of community pharmacies situated in the province, in the presence of an

increasing estimated population. From 2005 to 2008, the availability of community pharmacies in the province improved as a result of both the increase in the total number of community pharmacies situated in the province and the decrease in the estimated total population of the province. The availability of the registered community pharmacies to the population of the province was therefore poorest in the year 2005 and most favourable in the year 2008 of the study years.

The results of the community pharmacies per population ratio for each district council of the North West province, from the year 2003 to 2008, are presented in table C.7.6 in part C of the Reference Manual. Table 5.139 below presents the 2003 and 2008 community pharmacy per population ratio for each of the district councils in the province. The district councils are, in table 5.139, listed by decreasing order from the district council with the lowest, to that with the highest community pharmacy per population ratio for both years.

Table 5.139: Community pharmacy per population ratio for the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Southern District	11 472	Kenneth Kaunda District (southern)	12 575
West Rand District	20 663	Bojanala District	22 272
Bojanala District	24 528	Ngaka Modiri Molema District (central)	34 049
City of Tshwane Metropolitan	35 796	Bophirima District	47 089
Bophirima District	44 580		
Central District	322 234		
Frances Baard District	-		
Kgalagadi District	-		
Total (North West province)	24 477	Total (North West province)	21 408

As is evident from table 5.139, the year 2003 community pharmacy per population ratio for the district councils in the province, ranged from one community pharmacy per 11,472 people (Southern district) to one community pharmacy per 322,234 people (Central district). For the year 2008, the Kenneth Kaunda district council contained the most favourable availability for

community pharmacies to the population (n=1:12,575), while the community pharmacies in the Bophirima district council were less favourably available (n=1:47,089 people).

In 2008, the community pharmacies in the North West province were unevenly distributed to the population of the district councils in the province. This was established by using the provincial pharmacy per population ratio of the year 2008 (n=1:21,408 people) as a benchmark ratio, where, only the Kenneth Kaunda district council contained a community pharmacy per population ratio lower than the benchmark. This suggests that the availability of the community pharmacies in the province was in favour of the population in the Kenneth Kaunda district council.

The results of the community pharmacy per population ratio for each local municipality of the North West province, from the year 2003 to 2008, are included in tables D.1.7 (for the years 2003 to 2005) and D.2.7 (for the years 2006 to 2008) in part D of the Reference Manual. The results of the community pharmacy per population ratio for the year 2008 are presented in table 5.140 below, along with a ranking of the local municipalities in the province by order from the municipality with the lowest to that with the highest community pharmacy per population ratio for that year. As is evident from the table, the community pharmacies in the City of Tlokwe local municipality were most favourably available to the population (n=1:6,873 people), followed by the community pharmacies situated in the Rustenburg (n=1:12,103 people) and City of Matlosana (n=1:12,823 people) local municipalities respectively.

Table 5.140: Ranking of local municipalities in the North West province by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	City of Tlokwe	6 873	9	Madibeng	20 126
2	Rustenburg	12 103	10	Ditsobotla	22 582
3	City of Matlosana	12 823	11	Maquassi Hills	24 652
4	Merafong City	15 028	12	Mafikeng	27 791
5	Lekwa-Teemane	15 335	13	Tswaing	30 562
6	Naledi	15 556	14	Ventersdorp	46 132
7	Mamusa	17 266	15	Ramotshere Moiloa	49 065
8	Kgetlengrivier	19 532	16	Moses Kotane	126 843

5.9.2.2 Private Institutional Pharmacies

Consider table C.7.7 in part C of the Reference Manual, as well as tables D.1.7. and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In 2003, the North West province contained one private institutional pharmacy per 413,387 people. The ratio of private institutional pharmacy per population in the North West province decreased to one private institutional pharmacy per 214,077 people in the year 2008, implying an overall improvement in the availability of the private institutional pharmacies to the population of the North West province.

The changes in the private institutional pharmacy per population ratio of the province, from the year 2003 to 2008, are illustrated by the graph in figure 5.16(c). The initial period between 2003 and 2004 was characterised by a decline in the availability of the pharmaceutical structures to the population of the province, due to the fact that the total number of registered private institutional pharmacies in the province remained constant, during that time period, in the presence of an increase in the estimated total population of the province. From the year 2003 to 2008, the availability of the private institutional pharmacies in the province improved. The availability of the private institutional pharmacies to the population in the North West province was therefore poorest in the year 2004 and most favourable in the year 2008.

The results of the private institutional pharmacy per population ratio for each district council of the North West province, from the year 2003 to 2008, are presented in table C.7.7 in part C of the Reference Manual. Table 5.141 presents the year 2003 and 2008 results for the private institutional pharmacy per population ratio for each district council of the province. The district councils are, in table 5.141 listed by decreasing rank order from the district council with the lowest to that with the highest private institutional pharmacy per population ratio for both years. As is evident from table 5.141, the district council with the most favourable availability of the private institutional pharmacies to the population was the Bojanala district council for (n=1:240,371 people) the year 2003, and Kenneth Kaunda district (n=123,953 people) for the year 2008.

Table 5.141: Private institutional pharmacy per population ratio for the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Bojanala District	240 371	Kenneth Kaunda District (southern)	123 953
Bophirima District	445 802	Bojanala District	211 584
City of Tshwane Metropolitan	465 344	Ngaka Modiri Molema District (central)	408 583
Southern District	608 024	Bophirima District	470 895
Central District	773 321		
Frances Baard District	-		
Kgalagadi District	-		
West Rand District	-		
Total (North West province)	413 387	Total (North West province)	214 077

The results of the private institutional pharmacy per population ratio for each local municipality of the North West province, from the year 2003 to 2008, are included in tables D.1.7 and D.2.7 in part D of the Reference Manual. Table 5.142 below presents the private institutional pharmacy per population ratio for the local municipalities in the province which contained private institutional pharmacies, for the year 2008, along with a ranking of these local municipalities from the municipality with the lowest to that with the highest private institutional pharmacy per population ratio.

Table 5.142: Ranking of local municipalities in the North West province by order from local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Naledi	62 227
2	City of Tlokwe	68 730
3	Merafong City	75 142
4	Rustenburg	84 724
5	Mafikeng	138 954
6	City of Matlosana	192 350
7	Madibeng	362 268

5.9.2.3 Public Institutional Pharmacies

Consider table C.7.8 in part C of the Reference Manual, as well as tables D.1.7. and D.2.7 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The North West province contained one public institutional pharmacy per 62,008 people for the year 2003 and one public institutional pharmacy per 59,056 people in the year 2008. This implies an overall improvement in the availability of the registered public institutional pharmacies to the population of the province over the study years.

The graph in figure 5.16(d) illustrates the changes in the pharmacy per population ratio of the public institutional pharmacies situated in the province from 2003 to 2008. From the year 2003 to 2005, the availability of the public institutional pharmacies to the population of the province declined, due to both the decrease in the total number of public institutional pharmacies situated in the province and the increase in the estimated population of the province during that period. From the year 2005, the availability of the pharmaceutical structures to the population of the province improved significantly due mainly to the decrease in the estimated population of the province during that period.

The results of the public institutional pharmacy per population ratio for each district council in the North West province, from 2003 to 2008, are presented in table C.7.8 in part C of the Reference Manual.

The 2003 and 2008 results of the public institutional pharmacy per population ratio for each district council of the province, are presented in table 5.143. The district councils are, in table 5.143 listed by decreasing rank order from the district council with the lowest to that with the highest public institutional pharmacy per population ratio for both years. As is evident from the table 5.143, the district council with the most favourable availability of public institutional pharmacies, for both 2003 and 2008, was the Bophirima district council (n=1:26,224 people for 2003, n=1:29,431 people for 2008).

a

Table 5.143: Public institutional pharmacy per population ratio for the district councils of the North West province, 2003 and 2008

2003		2008	
District council	Pharmacy per population ratio	District council	Pharmacy per population ratio
Bophirima District	26 224	Bophirima District	29 431
Central District	48 351	Ngaka Modiri Molema District (central)	43 009
West Rand District	61 989	Kenneth Kaunda District (southern)	72 306
Southern District	67 558	Bojanala District	115 409
Bojanala District	100 155		
City of Tshwane Metropolitan	116 336		
Kgalagadi District	141 989		
Frances Baard District	-		
Total (North West province)	62 008	Total (North West province)	59 056

The results of the public institutional pharmacy per population ratio for each of the local municipalities of the North West province, from the year 2003 to 2008, are included in tables D.1.7 and D.2.7 in part D of the Reference Manual.

Table 5.144 presents a ranking of the local municipalities in the province, which in 2008 contained registered public institutional pharmacies, by order from the municipality with the lowest to that with the highest pharmacy per population ratio for 2008. The pharmacy per population ratio for the local municipalities in the province ranged from a more favourable availability of one public institutional pharmacy per 19,532 people (Kgetlengrivier municipality) to a less favourable availability of one public institutional pharmacy per 190,546 people (Moretele municipality).

Table 5.144: Ranking of local municipalities in the North West province by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

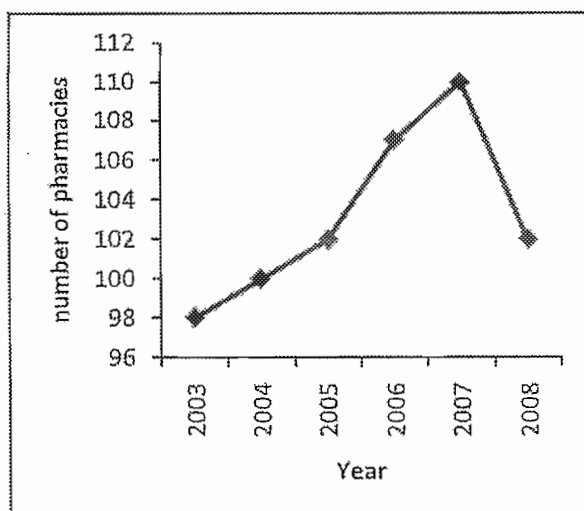
Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Kgetlengrivier	19 532	11	Rustenburg	141 207
2	Naledi	20 742	12	Greater Taung	65 037
3	Lekwa-Teemane	15 335	13	City of Tlokwe	68 730
4	Kagisano	17 205	14	Maquassi Hills	73 955
5	Ramotshere Moiloa	29 439	15	Merafong City	75 142
6	Tswaing	30 562	16	City of Matlosana	76 940
7	Mafikeng	39 701	17	Moses Kotane	84 562
8	Ventersdorp	46 132	18	Madibeng	181 134
9	Mamusa	51 799	19	Moretele	190 546
10	Ditsobotla	52 691			

5.10 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN THE NORTHERN CAPE PROVINCE, 2003-2008

This section presents and discusses the results on the both the geographic and per-population distribution of the registered direct pharmaceutical structures in the district councils and local municipalities of the Northern Cape province for 2003 to 2008.

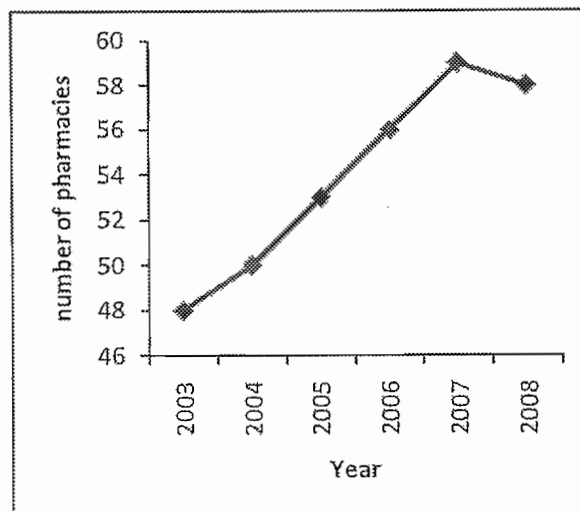
Consider tables C.8.1, C.8.2, C.8.3 and C.8.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

In 2008, a total of 102 direct service pharmaceutical structures were registered in the Northern Cape province. The change in the total number of registered direct service pharmaceutical structures situated in the Northern Cape province, throughout the study years, is illustrated in figure 5.17. The graph in figure 5.17(a) specifically demonstrates the changes in the total number of direct service pharmacies in the province from 2003 to 2008. As is evident from the figure, the province only accumulated four pharmacies between the years 2003 and 2008 where the total number of the pharmacies increased from 98 in 2003 to 102 pharmacies in 2008. However, the total number of the pharmacies peaked in 2007, with a total of 110 pharmacies.



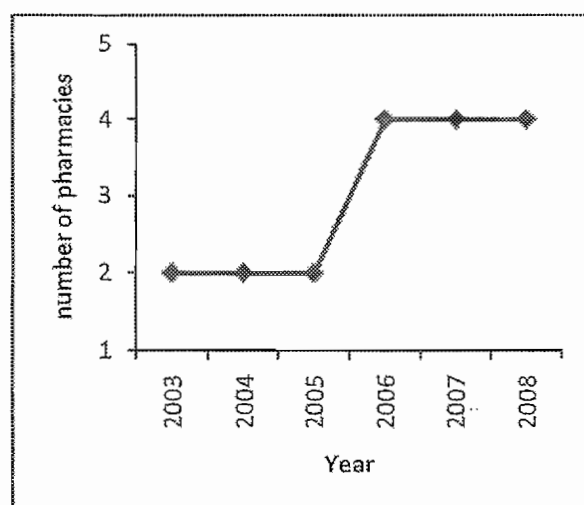
(a)

All registered pharmaceutical structures



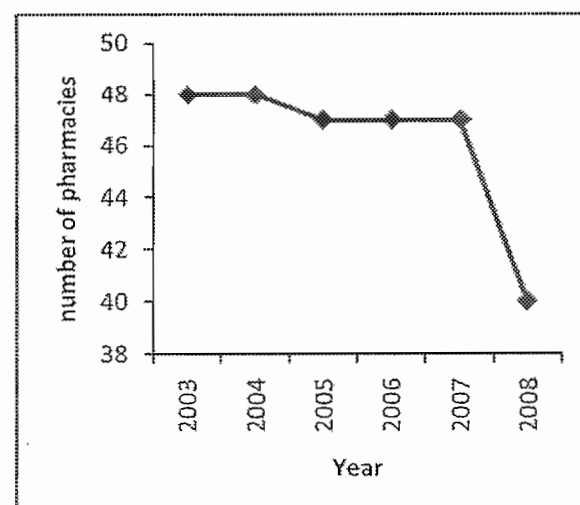
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.17: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Northern Cape province, 2003 to 2008

Forty-nine percent of the direct service pharmaceutical structures in the Northern Cape province were community pharmacies in 2003. In 2008, however, the percentage of direct service pharmacies which were community pharmacies had increased to 57%. The graph in figure 5.17(b) illustrates the change in the total number of the registered community pharmacies situated in the province, over the study years. The total number of registered community pharmacies in the country increased from a total of 48 in 2003 to 59 pharmacies in 2007, after which the province experienced a loss of one pharmacy to total 58 registered community pharmacies in 2008.

From the year 2003 to 2005, the Northern Cape province contained only two registered private institutional pharmacies. This number increased to four pharmacies in 2006 and remained as such until the year 2008. This change in total number of the private institutional pharmacies in the province is illustrated by the graph in figure 5.17(c).

The public institutional pharmacies in the Northern Cape province were the only registered direct service pharmaceutical structures which decreased over the study period. In 2003, the total number of the registered public institutional pharmacies in the province was equal to the total number of the registered community pharmacies in the province ($n = 48$). The province lost eight public institutional pharmacies over the study period to total 40 pharmacies in 2008. This change in total number of registered public institutional pharmacies in the province is illustrated by the graph in figure 5.17(d). As illustrated by the graph, the highest decrease in the total number of public institutional pharmacies situated in the province, occurred between the years 2007 and 2008 ($n = -7$).

5.10.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE NORTHERN CAPE PROVINCE

Consider table C.8.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The percentage municipalities in the Northern Cape province in which at least one registered direct service pharmaceutical structure was situated, decreased from 81% in the year 2003 to

75% in the year 2008. Consequently, the estimated total population of those municipalities which did not contain any registered direct service pharmacies increased considerably from only 36,192 people in 2003 to 135,142 people in the year 2008.

The results of the distribution of the registered direct service pharmacies in the among the district councils of the Northern Cape province, from the year 2003 to 2008, are presented in table C.8.1 in part C of the Reference Manual. The number of municipalities in each district council of the Northern Cape province, containing at least one registered direct service pharmacy, from the year 2003 to 2008, is also provided for in table C.8.1.

Table 5.145 below indicates the total number of registered direct service pharmacies in each district council of the Northern Cape province for the years 2003 and 2008 only, along with the changes in the number of the pharmaceutical structures situated within each district council of the province for, between the two years. The district councils are, in table 5.145, listed by decreasing rank order from the district council with the highest to the district council containing the lowest number of the registered direct service pharmacies in the province for the year 2008. The rank order of the district councils in the province, as presented in table 5.145, applicable to the year 2008, does not apply to the year 2003 and other study years. However, Frances Baard district council remained the district council containing the highest number of the registered direct service pharmacies (n=32 for 2003; n=37 for 2008) and Kgalagadi district council remained the district council containing the lowest number of the registered direct service pharmacies in the province (n=5 for 2003; n=8 for 2008) for all study years.

Table 5.145: Changes in the total number of registered direct service pharmaceutical strictures in each district council of the Northern Cape province, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
Frances Baard	32 (32.7%)	37 (36.3%)	+5	+15.6
Siyanda	21 (21.4%)	25 (24.5%)	+4	+19.0
Karoo/ Pixley ka Seme	22 (22.4%)	23 (22.5%)	+1	+4.5
Namakwa	18 (18.4%)	9 (8.8%)	-9	-50.0
Kgalagadi	5 (5.1%)	8 (7.8%)	+3	+60.0
Northern Cape (Total)	98 (100%)	102 (100%)	+4	+4.1

From table 5.145, it is furthermore evident that all district councils of the Northern Cape province, excluding Namakwa district council, experienced an increase in the total number of registered direct service pharmacies situated within them, between the years 2003 and 2008. The highest increase was observed for the Frances Baard district council (n=+5), followed by Siyanda (n=+4) and Kgalagadi (n=+3) district councils respectively. The total number of registered direct service pharmaceutical structures situated in Namakwa district council decreased by half from a total of 18 direct service pharmacies in 2003 to only nine in 2008.

The results of the distribution of the registered direct service pharmacies among the local municipalities of the Northern Cape province, from the year 2003 to 2008, are presented in table D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.146 presents the distribution of the registered direct service pharmacies in the Northern Cape province, among the local municipalities of the province for the year 2008 only. The local municipalities are, in table 5.146, ranked by order of local municipality containing the highest number of registered direct service pharmacies. As indicated in table 5.146, 30% of the province's direct service pharmacies were situated in only one local municipality (Sol Plaatjie). Furthermore, four of the local municipalities (Magareng, Kamiesburg, Ubuntu and !Kheis) contained only one registered direct service pharmacy.

Table 5.146: Ranking of local municipalities in the Northern Cape province by order of local municipality with the highest number of the registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Sol Plaatjie	30	17	Mier	2
2	Khara Hais	9	18	Richtersveld	2
3	Emthanjeni	5	19	Siyathemba	2
4	Kai !Garib	5	20	Thembelihle	2
5	Tsantsabane	5	21	Magareng	1
6	Umsobomvu	5	22	Kamiesberg	1
7	Ga-Segonyana	4	23	Ubuntu	1
8	Gamagara	4	24	!Kheis	1
9	Nama Khoi	4	25	Frances Baard	0
10	Phokwane	4	26	Kalahari	0
11	Kgatelopele	3	27	Karoo Hoogland	0
12	Renosterberg	3	28	Khai-Ma	0
13	Siyancuma	3	29	Moshaweng	0
14	Dikgatleng	2	30	Namakwa	0
15	Hantam	2	31	Pixley ka Seme	0
16	Kareeberg	2	32	Siyanda	0

5.10.1.1 Community Pharmacies

Consider table C.8.2 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The registered community pharmacies in the Northern Cape province were, in 2003, situated such that 45% of the province's municipalities were without any registered community pharmacy. With the increase in the total number of community pharmacies in the province between the years 2003 and 2008, the percentage municipalities in the province without community pharmacies slightly decreased to 44% in the year 2008. However, there was a significant increase in the total estimated population of the municipalities in the province without any registered community pharmacy, from 139,826 people in 2003 to 219,691 people in the year 2008.

The results of the distribution of the registered community pharmacies in the Northern Cape province, among the district councils of the province, from the year 2003 to 2008, are presented in table C.8.2 in part C of the Reference Manual. Table C.8.2 also includes the results of the total number of municipalities, within each district council of the Northern Cape province, containing at least one registered community pharmacy.

The changes in the distribution of the registered community pharmacies within each district council of the province, between the years 2003 and 2008, are summarised in table 5.147 below. Table 5.147 furthermore ranks the district councils in the Northern Cape province by decreasing order from district council with the highest to district council with the lowest number of registered community pharmacies for the year 2008. As indicated in table 5.147, Frances Baard remained the district council with the highest proportion of the community pharmacies in the province for both study years. In 2003, the lowest number of community pharmacies was situated in Kgalagadi district council. Following the increase in the total number of community pharmacies in the district council of Kgalagadi, table 5.147 indicates that the district council of Namakwa contained the lowest number of registered community pharmacies in the province for the year 2008.

Table 5.147: Changes in the total number of registered community pharmacies in the Northern Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
Frances Baard	21 (43.8%)	25 (43.1%)	+4	+19.0
Siyanda	10 (20.8%)	13 (22.4%)	+3	+30.0
Karoo/ Pixley ka Seme	8 (16.7%)	9 (15.5%)	+1	+12.5
Kgalagadi	4 (8.3%)	6 (10.3%)	+2	+50.0
Namakwa	5 (10.4%)	5 (8.6%)	0	0
Northern Cape (Total)	48 (100%)	58 (100%)	+10	+20.8

According to the results as presented in table 5.147, there was an increase in the total number of registered community pharmacies situated in each district council of the Northern Cape province, between 2003 and 2008, except for the Namakwa district council for which the total number of registered community pharmacies remained the same. The district council with the highest increase in the total number of community pharmacies was Frances Baard (n=+4). The highest percentage growth was observed for the Kgalagadi district council with a 50% growth in the total number of community pharmacies situated in it, between 2003 and 2008.

The results of the distribution of the registered community pharmacies in the Northern Cape province among the local municipalities of the province, from the year 2003 to 2008, are included in table D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.148 presents the distribution of the community pharmacies in the province among the province's local municipalities for the year 2008 only, with a rank order of the local municipalities by order from local municipality with the highest to the local municipality with the lowest number of community pharmacies. The Sol Plaatje local municipality contained the highest number of community pharmacies (n=22) which made up almost 38% of the community pharmacies in the province. Furthermore, six of the 18 local municipalities in the province which contained community pharmacies only contained one community pharmacy.

Table 5.148: Ranking of local municipalities in the Northern Cape province by order of local municipality with the highest number of the registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Sol Plaatje	22	17	Siyathemba	1
2	Khara Hais	6	18	Thembelihle	1
3	Gamagara	4	19	Frances Baard	0
4	Tsantsabane	3	20	Khai-Ma	0
5	Umsobomvu	3	21	Kalahari	0
6	Emthanjeni	2	22	Kamiesberg	0
7	Ga-Segonyana	2	23	Karoo Hoogland	0
8	Kai !Garib	2	24	Kareeberg	0
9	Kgatelopele	2	25	Magareng	0
10	Nama Khoi	2	26	Mier	0
11	Phokwane	2	27	Moshaweng	0
12	Richtersveld	2	28	Namakwa	0
13	Dikgatleng	1	29	Pixley ka Seme	0
14	Hantam	1	30	Siyanda	0
15	Renosterberg	1	31	Ubuntu	0
16	Siyancuma	1	32	!Kheis	0

5.10.1.2 Private Institutional Pharmacies

Consider table C.8.3 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The two registered private institutional pharmacies in the Northern Cape province, from 2003 to 2005, were situated in two municipalities of the province. With the increase in the total number of registered private institutional pharmacies in the province in 2006, the total number of municipalities in which these were situated increased to three. The total estimated people living in municipalities without any registered private institutional pharmacies was 724,146 people (85.6% of the province's population) in 2003 and 691,669 people (67.5% of the province's population) in 2008.

In 2008, only the Frances Baard, Namakwa and Siyanda district councils of the province contained registered private institutional pharmacies. The distribution of the registered private institutional pharmacies within these three district councils of the province, from the year 2003 to 2008, is presented in table C.8.3 in part C of the Reference Manual, along with the total

number of municipalities in each of the district councils which contained the private institutional pharmacies.

Table 5.149 shows the changes in the total number of the registered private institutional pharmacies situated in each district council of the Northern Cape province, between the year 2003 and 2008. As indicated in the table, the two registered private institutional pharmacies in the province in the year 2003, were situated, one in the Namakwa and the other in the Siyanda district council. The total number of private institutional pharmacies in these two district councils remained constant throughout the study years. As further indicated by table 5.149, Frances Baard district council contained no registered private institutional pharmacies in the year 2003, and contained two private institutional pharmacies in 2008.

Table 5.149: Changes in the total number of registered private institutional pharmacies in the Northern Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
Frances Baard	0 (0.0%)	2 (50.0%)	+2	-
Namakwa	1 (50%)	1 (25.0%)	0	0
Siyanda	1 (50%)	1 (25.0%)	0	0
Karoo/ Pixley ka Seme	0 (0.0%)	0 (0.0%)	0	0
Kgalagadi	0 (0.0%)	0 (0.0%)	0	0
Northern Cape (Total)	2 (100%)	4 (100%)	+2	100

The distribution of the private institutional pharmacies within the local municipalities of the Northern Cape province, from 2003 to 2008, is included in table D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual. From the year 2003 to 2005, the two registered private institutional pharmacies were situated in the Nama Khoi (n=1) and || Khara Heis (n=1) local municipalities. The two additional private institutional pharmacies, as of 2006 to 2008, were located in the Sol Plaatjie local municipality.

5.10.1.3 Public Institutional Pharmacies

Consider table C.8.4 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The public institutional pharmacies registered in the Northern Cape province were distributed such that, in 2003, only seven municipalities were without any registered public institutional pharmacies. The number of municipalities without public institutional pharmacies increased to 10 in the year 2008, following a decrease in the total number of registered public institutional pharmacies situated in the province. The total estimated population of the municipalities without any registered public institutional pharmacies, consequently increased from 52,827 people for the year 2003, to 162,531 people for the year 2008.

The results of the distribution of the registered public institutional pharmacies in the Northern Cape province, among the district councils of the province, from the year 2003 to 2008, are presented in table C.8.4 in part C of the Reference Manual, along with the total number of municipalities, within each district council of the province, containing public institutional pharmacies, for all the study years.

Table 5.150 presents the results of the distribution of the public institutional pharmacies in the province among the district councils of the province, for the years 2003 and 2008 only. The district councils are, in table 5.150, listed by decreasing order from the district council containing the highest to district council with the lowest number of registered public institutional pharmacies in the province.

From the table 5.150, it is evident that, although the rank order of the district councils presented in the table, as applicable to the year 2008, is not applicable to the year 2003, Pixely ka Seme remained the district council containing the highest number of public institutional pharmacies for both years ($n=14$) and Kgalagadi district council remained the district council with the lowest number of registered public institutional pharmacies for both years ($n=1$ for 2003 and $n=2$ for 2008). Disparities in the distribution of the public institutional pharmacies of the province among the district councils of the province, for the year 2008, are evident in that Pixely ka Seme district council contained a portion of 35% of the public institutional pharmacies in the province, while Kgalagadi district council contained only 5%.

Table 5.150: Changes in the total number of registered public institutional pharmacies in the Northern Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
Karoo/ Pixley ka Seme	14 (29.2%)	14 (35.0%)	0	0
Siyanda	10 (20.8%)	11 (27.5%)	+1	+10.0
Frances Baard	11 (22.9%)	10 (25.0%)	-1	-9.1
Namakwa	12 (25.0%)	3 (7.5%)	-9	-75.0
Kgalagadi	1 (2.1%)	2 (5.0%)	+1	100
Northern Cape (Total)	48 (100%)	40 (100%)	-8	-16.7

Table 5.150 also shows the changes in the total number of registered public institutional pharmacies situated within each district council of the province, between the year 2003 and 2008. The decrease in the total number of public institutional pharmacies in the province took effect within the Frances Baard (n=-1) and Namakwa (n=-9) district councils only. the total number of registered public institutional pharmacies in the Pixely ka Seme district council remained constant throughout the study years and there was an increase, of one public institutional pharmacy each, in the total number of the pharmacies in the Siyanda and Kgalagadi district councils, between the two years.

The results of the distribution of the registered public institutional pharmacies among the local municipalities of the Northern Cape province, from the year 2003 to 2008, are included in table D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.151 presents the distribution of the public institutional pharmacies in the Northern Cape province among the local municipalities of the province, for the year 2008 only. The table furthermore provides a ranking of the local municipalities in the province by order from the local municipality with the highest to the local municipality with the lowest number of the registered public institutional pharmacies in the province. Sol Plaatjie local municipality contained the highest number of registered public institutional pharmacies (n=6), followed by the Emthanjeni (n=3) and Kai !Garib (n=3) local municipalities. The total number of public institutional

pharmacies contained by these three local municipalities constituted 30% of the public institutional pharmacies in the province. From table 5.151, it is furthermore evident that 45% of the local municipalities in the province, which contained public institutional pharmacies, only had one registered public institutional pharmacy situated in it.

Table 5.151: Ranking of local municipalities in the Northern Cape province by order of local municipality with the highest number of the registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	Sol Plaatje	6	17	Magareng	1
2	Emthanjeni	3	18	Nama Khoi	1
3	Kai !Garib	3	19	Siyathemba	1
4	Ga-Segonyana	2	20	Thembelihle	1
5	Kareeberg	2	21	Ubuntu	1
6	Mier	2	22	!Kheis	1
7	Phokwane	2	23	Frances Baard	0
8	Renosterberg	2	24	Gamagara	0
9	Siyancuma	2	25	Kalahari	0
10	Tsantsabane	2	26	Karoo Hoogland	0
11	Khara Hais	2	27	Khai-Ma	0
12	Umsobomvu	2	28	Moshaweng	0
13	Dikgatleng	1	29	Namakwa	0
14	Hantam	1	30	Pixley ka Seme	0
15	Kgatelopele	1	31	Richtersveld	0
16	Kamiesberg	1	32	Siyanda	0

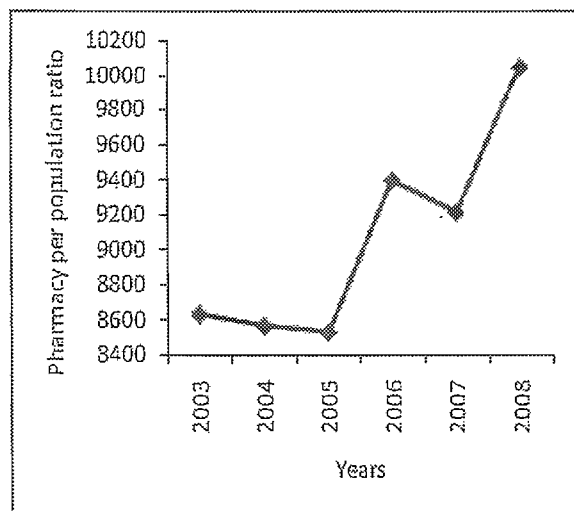
5.10.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE NORTHERN CAPE PROVINCE

Consider tables C.8.5, C.8.6, C.8.7 and C.8.8 in part C of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total population of the Northern Cape province was estimated to be 846,009 people in the year 2003, and 1,024,788 people for the year 2008. The results of the estimated total population of the Northern Cape province, estimated population of each district council in the province, from the year 2003 to 2008, are included in tables C.8.5, C.8.6, C.8.7 and C.8.8 in part C of the Reference Manual. The results of the estimated total population of each local municipality of the Northern Cape province, are presented in tables D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

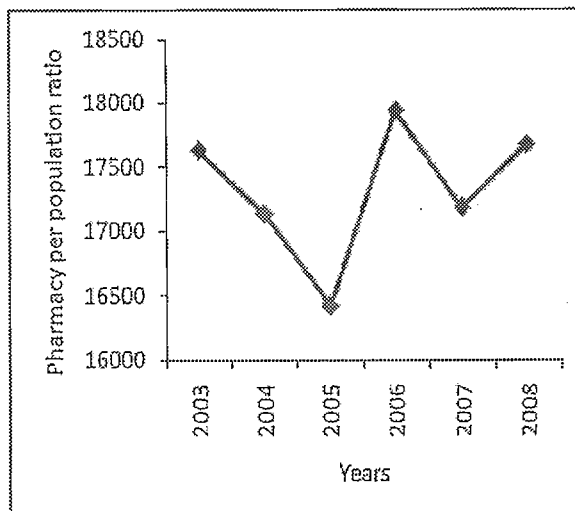
The changes in the pharmacy per population ratio of the direct service pharmacies in the Northern Cape province, from the year 2003 to 2008, are illustrated in figure 5.18. The figure 5.18 should be viewed alongside figure 5.17 in order to determine the influence of the changes in the total number of registered direct service pharmacies in the province, from 2003 to 2008, on the changes in the pharmacy per population ratio of the province.

The graph in figure 5.18(a) specifically demonstrates the growth trend of the pharmacy per population ratio of the direct service pharmacies from 2003 to 2008. From the graph in figure 5.18(a), it is evident that there was an overall increase in the pharmacy per population ratio of the direct service pharmacies in the Northern Cape province, from one direct pharmacy per 8,632 people in 2003 to one direct service pharmacy per 10,047 people in the year 2008. This implies an overall decrease in the availability of the registered direct service pharmacies in the Northern Cape province to the population of the province, between the years 2003 and 2008. This is despite the observed overall increase in the total number of direct service pharmacies situated in the province between the years 2003 and 2008.



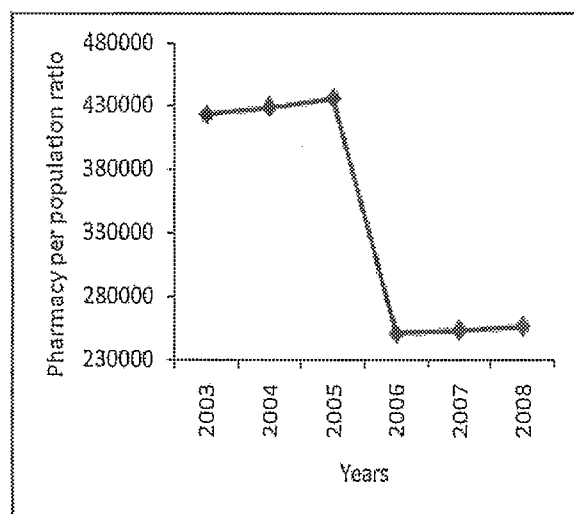
(a)

All registered pharmaceutical structures



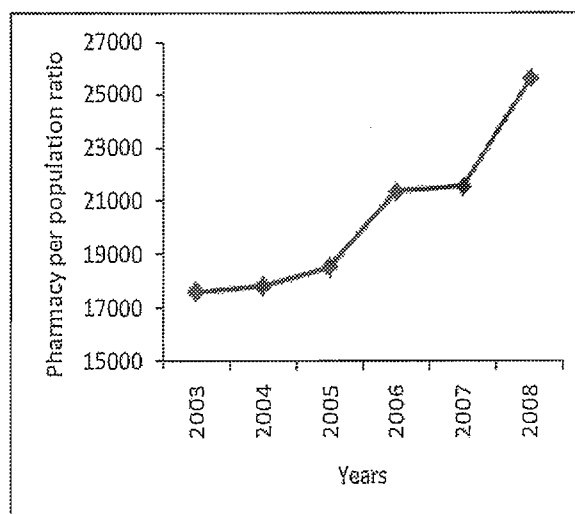
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.18: Changes in the pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Northern Cape province, 2003 to 2008

The growth trend of the pharmacy per population ratio of the direct service pharmacies in the province, as illustrated by the graph in figure 5.18(a), indicates an initial decrease in the pharmacy per population ratio of the direct service pharmacies from one direct service pharmacy per 8,632 people in 2003 to one direct service pharmacy per 8,532 people in 2005. From the year 2005, the pharmacy per population ratio increased significantly to one direct service pharmacy per 9,393 people in the year 2006. This is despite the continued increase in the total number of registered direct service pharmacies in the province between the two years. The increase in the pharmacy per population ratio of the direct service pharmacies in the province is attributed to the significant increase in the total estimated population of the province between the two years (2005 and 2006). The pharmacy per population ratio then decreased to one direct service pharmacy per 9,213 people in the year 2007, following the increase in the total number of direct service pharmacies situated in the province, between the two years. The increase in the pharmacy per population ratio of the direct service pharmacies observed between the years 2007 and 2008 is a result of the decrease in the total number of registered direct service pharmacies between the two years.

The results of the pharmacy per population ratio of the direct service pharmacies within each district council of the Northern Cape province, from the year 2003 to 2008, are presented in table C.8.5 in part C of the Reference Manual. The 2003 and 2008 results of the pharmacy per population ratio of the direct service pharmacies for each district council of the province are included in table 5.152 below, which presents the changes in the direct service pharmacy per population ratio of each district council of the Northern Cape province between the two years. Table 5.152 also lists the district councils of the Northern Cape province by decreasing order from the district council with the lowest pharmacy per population ratio (implying the most favourable availability of the pharmaceutical structures to the population) to the district council with the highest pharmacy per population ratio (implying the least favourable availability of the pharmaceutical structures to the population) for the year 2008.

The rank order of the province's district councils, as presented in table 5.152 and applicable to the year 2008, is not applicable to the year 2003. The Pixely ka Seme district council, however, remained the district council with the lowest pharmacy per population ratio for the two years (n=1:7,696 people for the year 2003 and n=1:7,453 people for 2008). Interestingly, the Pixely ka Seme district was the district council containing the third largest proportion of the direct service pharmacies in the province, for the year 2008. On the other hand, the Frances Baard district council containing the highest proportion of the direct service pharmacies in the country was ranked third in the table 5.152. Kgalagadi district council, containing the lowest number of

registered direct service pharmacies also had the poorest favourable availability of direct service pharmacies to the population, for the year 2008.

Table 5.152: Changes in the direct service pharmacy per population ratio for each district council of the Northern Cape province, 2003 and 2008

District council	Pharmacy population in 2003	per ratio	Pharmacy population in 2008	per ratio	Change in the availability ratio 2003 to 2008	
					n	%
Karoo District/ Pixley ka Seme	7 696		7 453		-243	-3.2
Siyanda District	10 277		8 740		-1 537	-15.0
Frances Baard District	9 744		9 139		-605	-6.2
Namakwa District	6 176		12 505		+6 329	+102.5
Kgalagadi District	7 585		23 023		+15 438	+203.5
Northern Cape (Total)	8 633		10 047		+1 414	+16.4

The decrease in the direct service pharmacy per population ratio of the Pixely ka Seme, Siyanda and Frances Baard district councils between the years 2003 ad 2008, as indicated in table 5.152, implies an improvement in the availability of registered direct service pharmacies situated in those districts to the population of these districts. This is a result of the increase in the total number of direct service pharmacies situated within these district councils (refer to table 5.145). The most significant improvement in availability of the pharmaceutical structures was observed for the Siyanda district council which was also the district council with the highest percentage increase in the total number of direct service pharmacies situated in it between the years 2003 and 2008 (refer to table 5.145). The total number of direct service pharmacies situated in the Kgalagadi district council also increased between the year 2003 and 2008, however, given the significant growth in the total estimated population of the district council, the increase in the total number of direct service pharmacies situated in the province was not significant enough to effect an improvement in the availability of the structures to the population of the district. The direct service pharmacy per population ratio of the Namakwa district council increased between the years 2003 and 2008, due to a decrease in the total number of pharmacies situated in the district council, and thus declined the level of availability of the pharmaceutical structures to the population of the district.

For the year 2008, the direct service pharmacies in the Northern Cape province were unevenly distributed to the population of each district council of the province. This was established by using the provincial direct service pharmacy per population ratio (n=1:10,047 people) as the benchmark ratio for the case that the direct service pharmacies in the Northern Cape are evenly distributed to the population of each district council in the province. As evident from table 5.152, the Pixely ka Seme, Frances Baard and Siyanda district councils contained a pharmacy per population ratio lower than the benchmark ratio, implying a skewed distribution of the pharmaceutical structures in favour of the population of these three district councils. On the other hand, the pharmacy per population ratio of the Kgalagadi district council was more than twice that of the benchmark ratio.

Table 5.153 below presents the years during which the direct service pharmacies per population ratio of each district council of the Northern Cape province was at its highest (implying the year during which the availability of the direct service pharmacies was least favourable) and lowest (implying the year of the study years during which the availability of the direct service pharmacies was most favourable). For the Northern Cape province as a whole, the highest pharmacy per population ratio was observed for the year 2008 (n=1:10,047 people) and lowest for the year 2005 (n=1:8,532 people). This is also demonstrated by the high and low peak illustrated by the graph in figure 5.18(a).

Table 5.153: Years with the highest and lowest pharmacy per population ratio of all the registered direct service pharmacies in each district council of the Northern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Frances Baard District	2003	9 744	2006	8 654
Karoo District/ Pixley ka Seme	2004	8 163	2007	7 371
Kgalagadi District	2008	23 023	2005	6 502
Namakwa District	2008	12 505	2003	6 176
Siyanda District	2003	10 277	2007	8 644
Northern Cape (Total)	2008	10 047	2005	8 532

The results of the pharmacy per population ratio of the direct service pharmacies for each local municipality of the Northern Cape province, for the years 2003 to 2008, are presented in tables

D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.154 below presents the direct service pharmacy per population ratio of each local municipality in the Northern Cape province and which contained registered direct service pharmacies for the year 2008 only. The table furthermore ranks the local municipalities of the Northern Cape province containing registered direct service pharmacies, by order from the local municipality with the lowest to that with the highest pharmacy per population ratio for the year 2008. The direct service pharmacy per population ratio of the local municipalities in the Northern Cape province, ranged from one direct service pharmacy per 3,148 people (Renosterburg local municipality) to one direct service pharmacies per 22,689 people (Magareng local municipality). The pharmacy per population ratio of eleven of the province's municipalities was higher than the provincial pharmacy per population ratio.

Table 5.154: Ranking of local municipalities in the Northern Cape province by order from local municipality with the lowest to the highest direct service pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Renosterberg	3 148	13	Siyathemba	9 121
2	Mier	3 557	14	Hantam	10 314
3	Gamagara	4 210	15	Kamiesberg	11 202
4	Umsobomvu	4 923	16	Nama-Khoi	11 643
5	Kareeberg	4 939	17	Kai !Garib	12 012
6	Richtersveld	5 273	18	Siyancuma	12 431
7	Kgatelopele	5 358	19	Phokwane	15 959
8	Tsantsabane	6 457	20	!Kheis	16 684
9	Sol Plaatje	6 991	21	Ubuntu	17 040
10	Thembelihle	7 282	22	Dikgatleng	18 619
11	Emthanjeni	7 406	23	Ga-Segonyana	18 322
12	Khara Hais	8 335	24	Magareng	22 689

5.10.2.1 Community Pharmacies

Consider tables C.8.6 in part C of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the community pharmacies in the Northern Cape province increased from one community pharmacy per 17,625 people in 2003 to one community pharmacy per 17,669 people in the year 2008. This implies a decline in the availability of community pharmacies to the population of the Northern Cape province over the study years.

The graph in figure 5.18(b) illustrates the changes in the pharmacy per population ratio of the community pharmacies in the Northern Cape province, from the year 2003 to 2008. The graph in figure 5.118(b) should be considered alongside the graph in figure 5.17(b) to determine the influence of the changes in the total number of registered community pharmacies in the province, on the changes in the pharmacy per population ratio of the community pharmacies in the province.

As illustrated by the graph in figure 5.18(b), the growth trend of the pharmacy per population ratio of the community pharmacies in the province was similar to that observed for the direct service pharmacies discussed in the previous section. The initial period from 2003 to 2005 was characterised by a decrease in the pharmacy per population ratio of the community pharmacies from one direct service pharmacy per 17,625 people in 2003 to one direct service pharmacy per 16,420 people in the year 2005. From the year 2005, the pharmacy per population ratio increased significantly to one direct service pharmacy per 17,929 people in the year 2006. This was despite the continued increase in the total number of registered direct service pharmacies in the province between the two years. The increase in the pharmacy per population ratio of the direct service pharmacies in the province must be attributed to the significant increase in the total estimated population of the province between the two years (2005 and 2006). The pharmacy per population ratio then decreased to one direct service pharmacy per 17,178 people in the year 2007, following the increase in the total number of direct service pharmacies situated in the province, between the two years. The increase in the pharmacy per population ratio of the direct service pharmacies observed between the years 2007 and 2008, calculated as one registered community pharmacy per 17,669 people in 2008, and is a result of the decrease in the total number of registered direct service pharmacies between the two years.

The results of the community pharmacy per population ratio for each district council of the Northern Cape province, from the year 2003 to 2008, are presented in table C.8.6 in part C of the Reference Manual. Table 5.155 below presents the results of the community pharmacy per population ratio of each district council of the Northern Cape province for the years 2003 and 2008 only, along with the changes in the community pharmacy per population ratio of each district council of the province, between the two years. The district councils of the provinces are, in table 5.155 listed by decreasing rank order from the district with the lowest (implying a more

favourable availability of the community pharmacies to the population) to that with the highest pharmacy per population ratio (implying a less favourable availability of the community pharmacies to the population) for the year 2008.

The rank order of the district councils in the Northern Cape province, as presented in table 5.155 and applicable to the year 2008, does not apply to the year 2003. In the year 2003, the district council with the most favourable availability of community pharmacies to the population, relative to the other district councils in the province, was Kgalagadi (n=1:9,842). For the year 2008, the community pharmacies in the Kgalagadi district council were the least favourably available to the population, relative to the other district councils of the province, and the Frances Baard district council had the most favourable availability of community pharmacies to the population.

Table 5.155: Changes in the community pharmacy per population ratio in each district council of the Northern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Frances Baard District	14 848	13 525	-1 323	-8.9
Siyanda District	21 581	16 808	-4 773	-22.1
Karoo District/ Pixley ka Seme	21 164	19 047	-2 117	-10.0
Namakwa District	22 232	22 510	+278	+1.2
Kgalagadi District	9 842	30 697	+20 855	+211.9
Northern Cape (Total)	17 625	17 669	+44	+0.25

From the changes in the community pharmacy per population ratio of each district council, presented in table 5.155, it is evident that only the Frances Baard, Siyanda and Pixely ka Seme district councils experienced an improvement in the availability of the community pharmacies, situated within them. The improvement in availability of community pharmacies in these district councils may be attributed to the increase in the total number of registered community pharmacies situated within them. Although the total number of community pharmacies in the Kgalagadi district council increased between the years 2003 and 2008, there was a decline in the availability of the community pharmacies situated in the province over the years, due to the significant growth in the total estimated population of the district council. The number of

community pharmacies situated in Namakwa district council remained the same for the years 2003 and 2008. The availability of the community pharmacies situated in the Namakwa district council, to the population of the district, therefore declined as a result of the increase in the estimated total population of the district over the study years.

In 2008, the community pharmacies in the Northern Cape province were unevenly distributed to the population within each district council of the province. This was established by using the provincial community pharmacy per population ratio of 2008 (n=1:17,669 people) as the benchmark ratio for the case that the community pharmacies are evenly distributed to the population of each district council in the province.

The table 5.156 presents the years during which the community pharmacy per population ratio of the district councils in the Northern Cape province was at its highest and lowest. For the Northern Cape province as a whole, the highest community pharmacy per population ratio was observed for the year 2006 (n=1:17,929 people) and the lowest was for the year 2005 (n=1:165,421 people). This was also evident from the high and low peaks in the graph in figure 5.18(b).

Table 5.156: Years with the highest and lowest community pharmacy per population ratio in each district council of the Northern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Frances Baard District	2003	14 848	2006	13 251
Karoo District/ Pixley ka Seme	2004	24 489	2007	18 837
Kgalagadi District	2008	30 697	2005	7 803
Namakwa District	2005	28 588	2006	22 054
Siyanda District	2003	21 581	2007	15 435
Northern Cape (Total)	2006	17 929	2005	16 421

The results of the community pharmacy per population ratio for each of the local municipalities which contained registered community pharmacies in the Northern Cape province, from the years 2003 to 2008, are presented in table D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.157 below presents the community pharmacy per population ratio of each local municipality in the Northern Cape province which contained registered community pharmacies

for the year 2008 only. The table furthermore ranks the local municipalities of the province by order from the municipality with the lowest community pharmacy per population ratio (implying a more favourable availability of the community pharmacies to the population) to that with the highest community pharmacy per population ratio (implying a less favourable availability of the community pharmacies to the population). The local municipality of Gamagara had the most favourable availability of community pharmacies to the population with a ratio of one community pharmacy per 4,210 people, and the local municipality of Siyancuma had the least favourable availability of community pharmacies to the population with a pharmacy per population ratio of one community pharmacy per 37,292 people.

Table 5.157: Ranking of local municipalities in the Northern Cape province by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Gamagara	4 210	10	Thembelithle	14 564
2	Richtersveld	5 273	11	Emthanjeni	18 514
3	Kgatelopele	8 038	12	Hantam	20 629
4	Umsobomvu	8 204	13	Nama-Khoi	23 285
5	Siyathemba	9 121	14	Kai !Garib	30 029
6	Renosterberg	9 443	15	Phokwane	31 918
7	Sol Plaatjie	9 533	16	Ga-Segonyana	36 645
8	Tsantsabane	10 761	17	Dikgatleng	37 237
9	!Khara Hais	12 802	18	Siyancuma	37 292

5.10.2.2 Private Institutional Pharmacies

Consider table C.8.7 in part C of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

In the year 2003, the pharmacy per population ratio for the private institutional pharmacies in the Northern Cape province was one private institutional pharmacy per 423,005 people. This decreased to one private institutional pharmacy per 256,197 people in the year 2008. This implies an improvement in the availability of the pharmaceutical structures to the population of

the province, following an increase in the total number of the pharmacies situated in the province over the study period.

The graph in figure 5.18(c) illustrates the growth trend of the pharmacy per population ratio of the private institutional pharmacies in the Northern Cape province over the study years. When considered alongside the graph in figure 5.17(c), it is evident that the change in the total number of registered private institutional pharmacies situated in the province had a direct influence on the change in the pharmacy per population ratio of the pharmaceutical structures. From the year 2003 to 2005, the total number of registered private institutional pharmacies situated in the province remained the same. The pharmacy per population ratio therefore slightly increased due to the total estimated population growth of the province between those years. The increase in the total number of registered private institutional pharmacies between the year 2005 and 2006 effected an improvement in the availability of the structures to the population of the province. Given that the total number of registered private institutional pharmacies in the province remained the same from the years 2006 to 2008, the availability of the structures to the population again slightly decreased during that interval.

The results of the private institutional pharmacy per population ratio for each district council of the Northern Cape province, from the year 2003 to 2008, are presented in table C.8.7 in part C of the Reference Manual.

Table 5.158 presents the changes in the private institutional pharmacy per population ratio for each district council between the two years. The availability of the pharmaceutical structures in the Namakwa and Siyanda district councils decreased due to the fact that the total number of private institutional pharmacies in the district remained the same in the presence of an increasing estimated population of the districts between the two years. The availability of these pharmaceutical structures in the Frances Baard district council naturally increased resulting from the presence of private institutional pharmacies in the district in 2008, where in the year 2003 there had been none.

Table 5.158: Changes in the private institutional pharmacy per population ratio in each district council of the Northern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Namakwa District	111 161	112 548	+1 387	+1.2
Frances Baard District	-	169 066	-	-
Siyanda District	215 809	218 501	+2 692	+1.2
Karoo District/ Pixley ka Seme	-	-	-	-
Kgalagadi District	-	-	-	-
Northern Cape (Total)	423 005	256 197	-166 808	-39.4

The years during which the private institutional pharmacy per population ratio of the districts was at its highest and at its lowest are presented in table 5.159 below. The private institutional pharmacy per population ratio of the Northern Cape province was highest in the year 2005 (n=1:435,145 people) and lowest in the year 2006 (n=1:251,009 people).

Table 5.159: Years with the highest and lowest private institutional pharmacy per population ratio in each district council of the Northern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Frances Baard District	-	-	2006	165 643
Karoo District/ Pixley ka Seme	-	-	-	-
Kgalagadi District	-	-	-	-
Namakwa District	2005	114 352	2006	110 269
Siyanda District	2005	222 003	2006	214 077
Northern Cape (Total)	2005	435 145	2006	251 009

The results of the private institutional pharmacy per population ratio of each local municipality in the Northern Cape province, from the year 2003 to 2008, are also included in tables D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual. The results of the private institutional pharmacy per population ratio for the three local municipalities in the province which contained private institutional pharmacies in the year 2008 are presented in table 5.160 below. The three municipalities are, in table 5.160, ranked by order

from the local municipality with the lowest to that with the highest private institutional pharmacy per population ratio for that year.

Table 5.160: Ranking of local municipalities in the Northern Cape province by order from local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Nama Khoi	46 570
2	Khara Hais	76 813
3	Sol Plaatje	104 868

5.10.2.3 Public Institutional Pharmacies

Consider table C.8.8 in part C of the Reference Manual, as well as tables D.1.8 and D.2.8 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered public institutional pharmacies in the Northern Cape province for the year 2008 (n=1:25,620 people), showed an increase from the ratio of one public institutional pharmacy per 17,625 people in the year 2003. This indicated a decline in the availability of the registered public institutional pharmacies in the Northern Cape province, to the population of the province resulting from the decrease in the total number of public institutional pharmacies situated in the province over the study period.

The changes in the pharmacy per population ratio of the public institutional pharmacies in the Northern Cape province, from 2003 to 2008, are illustrated by the graph in figure 5.18(d). If the graph is considered alongside the graph in figure 5.17(d), it is evident that the changes in the total number of registered public institutional pharmacies in the province over the study period had a direct influence on the changes in the pharmacy per population ratio of the pharmaceutical structures. As the total number of public institutional pharmacies in the province continually decreased over the study period, so also the pharmacy per population ratio of the pharmaceutical structures continually increased over the study period; indicating a continuous decline in the availability of the pharmaceutical structures to the population of the province. The highest decline in the availability of the public institutional pharmacies was observed for the

period between 2007 and 2008, for which also the highest decrease in the total number of the pharmaceutical structures in the province was observed.

The results of the public institutional pharmacy per population ratio of each district council of the Northern Cape province, from the year 2003 to 2008, are presented in table C.8.8 in part C of the Reference Manual. Table 5.161 below summarises the changes of the public institutional pharmacy per population ratio for each district council of the province between the year 2003 and 2008. Furthermore, the district councils of the Northern Cape province are, in table 5.161 below listed by decreasing rank order from the district council with the lowest to that with the highest public institutional pharmacy per population ratio for 2008.

Table 5.161: Changes in the public institutional pharmacy per population ratio in each district council of the Northern Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Karoo District/ Pixley ka Seme	12 094	12 244	+150	+1.2
Siyanda District	21 581	19 864	-1 717	-7.9
Frances Baard District	28 346	33 813	+5 467	19.3
Namakwa District	9 263	37 516	+28 253	+305.0
Kgalagadi District	37 926	92 092	+54 166	+142.8
Northern Cape (Total)	17 625	25 620	+7 995	45.4

As indicated in table 5.161, the public institutional pharmacy per population ratio of the year 2008 for each district council ranged from one public institutional pharmacy per 12,244 people (Pixely ka Seme district council) to one public institutional pharmacy per 92,092 people (Kgalagadi district council).

The changes in the pharmacy per population ratio of each district council of the province, as presented in table 5.161, indicated an improvement in the availability of public institutional pharmacies situated in the Siyanda district council only. The Siyanda and Kgalagadi district councils were the only district councils which experienced an increase in the total number of registered public institutional pharmacies within them. However, for the Kgalagadi district council, the estimated population growth was significant such that the increase in the total number of the pharmaceutical structures could not effect an improvement in their availability to

the population of the district. For the remaining district councils, the decline in availability of registered direct service pharmacies to their population may be attributed to the decrease in the total number of the registered public institutional pharmacies situated within them, in the presence of an increasing estimated total population between the study years.

From table 5.161, it is also evident that the public institutional pharmacies in the Northern Cape province, for the year 2008, are unevenly distributed to the population of the province. This was established by using the provincial public institutional pharmacy per population ratio of 2008 (n=1:25,620 people) as the benchmark ratio should the pharmaceutical structures be evenly distributed to the population of each district council in the province. From table 5.161, it is evident that the distribution of the pharmaceutical structures was skewed in favour of the Pixely ka Seme and Siyanda district councils as they contained pharmacy per population ratio lower than the benchmark ratio. The Kgalagadi district council public institutional pharmacy per population ratio (n=1:92,092 people) was more than three times higher than the benchmark ratio.

The results of the years during which the public institutional pharmacy per population ratio for each district council of the Northern Cape province was at its highest and lowest, are presented in table 5.162 below. The Northern Cape public institutional pharmacy per population ratio was highest in the year 2008 (n=1:25,620) and lowest in the year 2003 (n=1:17,625), following the continuous increase in the pharmacy per population ratio, from 2003 to 2008, illustrated by the graph in figure 5.18(d).

Table 5.162: Years with the highest and lowest public institutional pharmacy per population ratio in each district council of the Northern Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Frances Baard District	2008	33 813	2003	28 346
Karoo District/ Pixley ka Seme	2005	12 441	2006	11 996
Kgalagadi District	2008	92 092	2003	37 926
Namakwa District	2008	37 516	2003	9 263
Siyanda District	2005	22 200	2008	19 864
Northern Cape (Total)	2008	25 620	2003	17 625

The results of the public institutional pharmacy per population ratio for each local municipality of the Northern Cape province, from the year 2003 to 2008, are included in tables D.1.8 (for the years 2003 to 2005) and D.2.8 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.163 presents the results of the public institutional pharmacy per population ratio of each local municipality which contained registered public institutional pharmacy for the year 2008 only. Table 5.163 also provides a ranking of these local municipalities by order from the local municipality with the lowest to that with the highest public institutional pharmacy per population ratio. As presented in the table, the local municipality with the most favourable availability of public institutional pharmacies to the population was Mier (n=1:3,557 people), followed by the Kareeberg (n=1:4,393 people) and Renosterberg (n=1:4,722 people) local municipalities respectively. The pharmacy per population ratio of the remaining local municipalities was one public pharmacy for more than 10 thousand people with the highest being that of Nama Koi local municipality (n=1:46,570 people).

Table 5.163: Ranking of local municipalities in the Northern Cape province by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Mier	3 557		Siyathemba	18 243
2	Kareeberg	4 393		Siyancuma	18 646
3	Renosterberg	4 722		Kai !Garib	20 019
4	Kamiesberg	11 202		Hantam	20 629
5	Umsobomvu	12 306		Magareng	22 689
6	Emthanjeni	12 343		Phokwane	31 918
7	Thembelihle	14 564		Sol Plaatjie	34 956
8	Kgatelopele	16 075		Ga-Segonyana	36 645
9	Tsantsabane	16 142		Dikgatleng	37 237
10	IKheis	16 684		!Khara Hais	38 406
11	Ubuntu	17 040		Nama-Khoi	46 570

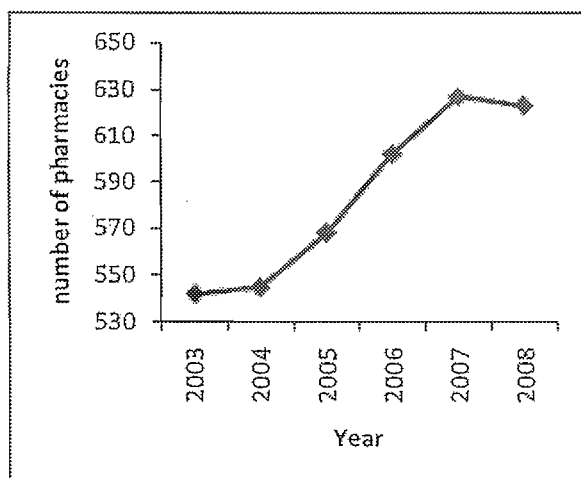
5.11 THE DISTRIBUTION OF THE REGISTERED PHARMACEUTICAL STRUCTURES WITHIN THE WESTERN CAPE PROVINCE, 2003-2008

In this section the results of the geographic and per-population of the registered direct pharmaceutical structures among the district councils and local municipalities of the Western Cape province, for 2003 to 2008, will be reported and discussed.

Consider tables C.9.1, C.9.2, C.9.3 and C.9.4 in Reference Manual C for the comprehensive results of the discussion which follows below.

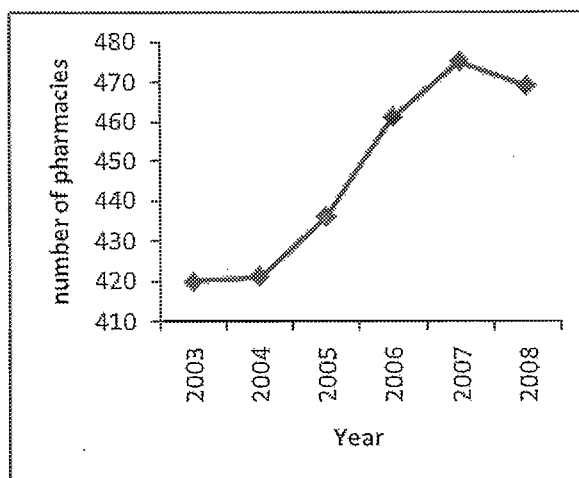
The change in the total number of registered direct service pharmaceutical structures situated in the Western Cape province, from 2003 to 2008, is illustrated by figure 5.19. The total number of the registered direct service pharmacies in the province increased from 542 pharmacies in 2003 to total 623 pharmacies in 2008. The graph in figure 5.19(a) demonstrates the growth trend for these pharmacies in the province. As evident from the graph, the total number of the pharmacies increased during each one-year interval of the study periods and reached a peak in 2007 with a total number of 627 pharmacies. This was followed by a period of decrease ($n=-4$) in the total number of direct service pharmacies, from 2007 to total 623 registered direct institutional pharmacies for the year 2008.

The total number of registered community pharmacies in the Western Cape province increased from 420 in the year 2003, to a total of 469 community pharmacies in 2008. The graph in figure 5.19(b) illustrates the changes in the total number of the registered community pharmacies situated in the province as of the year 2003 to 2008. As evident from the graph, the growth trend of the community pharmacies in the province was similar to that of the direct service pharmacies in the province. The total number of community pharmacies in the province increased slightly between 2003 and 2004 ($n=+1$). This was followed by more significant increases during the periods 2004-2005 ($n=+15$), 2005-2006 ($n=+25$) and 2006-2007 ($n=+13$), to a point where the total number of community pharmacies peaked at 475 pharmacies in the year 2007. The province then experiences a loss in registered community pharmacies between the years 2007 and 2007 ($n=-6$). Furthermore, community pharmacies constituted 75% of the direct service pharmaceutical structures in the province for the year 2008.



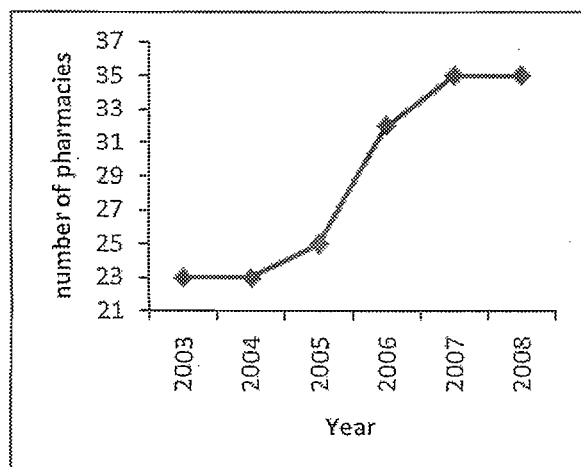
(a)

All registered pharmaceutical structures



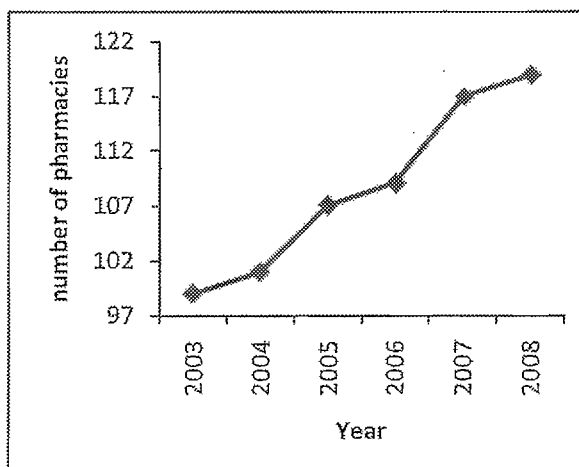
(b)

Registered community pharmacies



(c)

Registered private institutional pharmacies



(d)

Registered public institutional pharmacies

Figure 5.19: Changes in the total number of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Western Cape province, 2003 to 2008

The total number of registered private institutional pharmacies situated in the province increased from 23 pharmacies in 2003 to 35 pharmacies in 2008. The change in the total number of the pharmacies in the province throughout the study years is demonstrated by the graph in figure 5.19(c). There were no periods wherein the total number of the pharmacies decreased, throughout the study period and, the highest increase took place during the interval 2005-2006.

The Western Cape province contained the highest proportion of public institutional pharmacies in comparison to other provinces. The change in the total number of the public institutional pharmacies situated in the province, from 2003 to 2008, is illustrated by the graph in figure 5.19(d). As is evident from the graph, there were no periods in which the total number of the pharmacies decreased. As a result, the total number of public institutional pharmacies situated in the province increased continually over the study period from 99 pharmacies in 2003 to 119 pharmacies in 2008.

5.11.1 THE GEOGRAPHICAL DISTRIBUTION OF DIRECT SERVICE PHARMACEUTICAL STRUCTURES IN THE WESTERN CAPE PROVINCE

Consider table C.9.1 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The direct service pharmacies in the Western Cape province were situated in all but six municipalities of the province, throughout the entire study period. The estimated total population of the municipalities without any registered direct service pharmacy remained to constitute a proportion less than 1% of the province total population, at 40,314 people for the year 2003 and 44,659 people for the year 2008.

The results of the distribution of the registered direct service pharmacies in the Western Cape, among the district councils and metropolitan municipality of the province, from the year 2003 to 2008, are presented in table C.9.1 in part C of the Reference Manual. The table C.9.1 also shows the total number of municipalities, within each district council of the province, containing registered direct service pharmacies.

Table 5.164 presents the distribution of the registered direct service pharmacies in the Western Cape province for the years 2003 and 2008, among the district councils and metropolitan municipality of the province, along with the changes in the total number of direct service pharmacies situated within each district council and metropolitan municipality, between the two years. The district councils and metropolitan municipality are, in table 5.164, listed by decreasing rank order from the district council or metropolitan municipality with the highest to containing the lowest number of the registered direct service pharmacies in the province, as applicable to all the study years. From table 5.164, it is evident that the direct service pharmacies in the Western Cape were concentrated in the province's metropolitan municipality, City of Cape Town, throughout the entire study period, with a proportion of more than 66% for both 2003 and 2008. The Central Karoo district council contained the lowest number of the registered direct service pharmacies in the province throughout the entire study period, and contained only 1% of the direct service pharmacies in the province, for the years 2003 and 2008.

Table 5.164: Changes in the total number of registered direct service pharmaceutical structures in the Western Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
City of Cape Town metropolitan	362 (66.7%)	415 (66.6%)	+53	+14.6
Eden	65 (12.0%)	80 (12.8%)	+15	+23.1
Boland District/ Cape Winelands	59 (10.9%)	64 (10.3%)	+5	+8.5
West Coast	28 (5.2%)	30 (4.8%)	+2	+7.1
Overberg	23 (4.2%)	28 (4.5%)	+5	+21.7
Central Karoo	5 (0.9%)	6 (1.0%)	+1	20.0
Western Cape (Total)	542 (100%)	623 (100%)	+81	+14.9

There was an increase in the total number of registered direct service pharmacies situated within each district council and metropolitan municipality of the Western Cape province, between the years 2003 and 2008. This is indicated in table 5.164. The highest increase in total number of registered direct service pharmacies was observed for the City of Cape Town metropolitan municipality (n=+53) followed by the Eden district council (n=+15).

The results of the distribution of the direct service pharmacies in the Western Cape among the local and metropolitan municipalities of the province, from the year 2003 to 2008, are presented in table D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.165 presents the distribution of the direct service pharmacies in the province among the local and metropolitan municipalities of the province for the year 2008, along with a ranking of the municipalities in the province by order from local or metropolitan municipality containing the highest to the lowest number of the registered direct service pharmacies in the province for the year 2008.

Table 5.165: Ranking of local municipalities in the Western Cape province by order of local municipality with the highest number of the registered direct service pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Cape Town	415	16	Swartland	7
2	George	26	17	Bergrivier	5
3	Breede valley	18	18	Cederberg	5
4	Drakenstein	17	19	Beaufort West	4
5	Mossel Bay	16	20	Cape Agulhas	4
6	Stellenbosch	14	21	Matzikama	4
7	Overstrand	12	22	Swellendam	4
8	Knysna	11	23	Kannaland	2
9	Bitou	9	24	Prince Albert	2
10	Saldanha bay	9	25	Cape Winelands	0
11	Hessequa	8	26	Central Karoo	0
12	Oudtshoorn	8	27	Eden	0
13	Theewaterskloof	8	28	Laingsburg	0
14	Witzenberg	8	29	Overberg	0
15	Breede River/ winelands	7	30	West Coast	0

The City of Cape Town metropolitan municipality contained the highest number of the registered direct service pharmacies in the province (n=415) followed by George (n=26), Breede valley (n=18), Drakenstein (n=17) and Mossel Bay (n=16) municipalities, respectively. The five municipalities alone collectively contained 79% of the registered direct service pharmacies in the Western Cape for the year 2008.

5.11.1.1 Community Pharmacies

Consider table C.9.2 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

As with the distribution trend of the direct service pharmacies in the Western Cape province, the community pharmacies in the province were situated in all but six of the municipalities in the province, throughout the entire study period. The estimated population of the municipalities without any registered community pharmacy increased from 40,314 people in the year 2003 to 44,659 people in the year 2008 but remained at 0.85% of the province's population for both 2003 and 2008.

The results of the distribution of the registered community pharmacies in the Western Cape among the district councils and metropolitan municipalities of the province, from the year 2003 to 2008, are presented in table C.9.2 in part C of the Reference Manual. The table C.9.2 also provides an indication of the number of municipalities, within each district council of the province, containing at least one registered community pharmacy.

Table 5.166 below presents the distribution of the registered community pharmacies in the Western Cape province, among the province's district councils and metropolitan municipality, for the years 2003 and 2008 only. Table 5.166 furthermore ranks the district councils and metropolitan municipality of the Western Cape province by decreasing order from the district council or metropolitan with the highest to that containing the lowest number of community pharmacies, for the year 2008. This rank order of the district councils and metropolitan as presented in table 5.166 is applicable to all other study years. The province's metropolitan municipality, City of Cape Town, contained most of the registered community pharmacies in the province, with 67.1% of the province's community pharmacies in 2003 and 68.4% of these in

the year 2008. This was followed by the Boland and Eden district councils respectively. The Central Karoo district council remained the district council with the lowest number of the registered community pharmacies in the province, with a proportion of less than 1% of the province's community pharmacies situated in it, throughout the entire study period.

Table 5.166: Changes in the total number of registered community pharmacies in the Western Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
City of Cape Town metropolitan	282 (67.1%)	321 (68.4%)	+39	+13.8
Eden	50 (11.9%)	56 (11.9)	+6	+27.7
Boland District/ Cape Winelands	46 (11.0%)	48 (10.2%)	+2	+4.3
West Coast	21 (5.0%)	21 (4.5%)	0	0
Overberg	18 (4.3%)	20 (4.3%)	+2	+11.1
Central Karoo	3 (0.7%)	3 (0.6%)	0	0
Western Cape (Total)	420 (100%)	469 (100%)	+49	+11.7

Table 5.166 also shows the changes in the total number of registered community pharmacies situated within each district council and metropolitan municipality of the province, between the year 2003 and 2008. As evident from table 5.166, the overall increase in the total number of community pharmacies, observed for the entire province, took effect within all the district councils and the metropolitan municipality, except for the West Coast and the Central Karoo district councils. The total number of community pharmacies situated in these district councils (West Coast and Central Karoo) remained the same for the years 2003 and 2008. The highest increase in total number of community pharmacies is observed for the City of Cape Town municipality which accumulated 39 community pharmacies between the two years.

The results of the distribution of the registered community pharmacies in the Western Cape, among the province's local and metropolitan municipalities, for the years 2003 to 2008, are

included in table D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.167 below presents the distribution of the province's registered community pharmacies among the local and metropolitan municipalities of the province, for the year 2008 only. The table 5.167, also provides a ranking of the local municipalities and metropolitan municipality by order from the local or metropolitan municipality with the highest to that containing the lowest number of the registered community pharmacies in the province.

Table 5.167: Ranking of local municipalities in the Western Cape province by order of local municipality with the highest number of the registered community pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Cape Town	321	16	Witzenberg	5
2	George	17	17	Bergrivier	3
3	Breede valley	15	18	Cederberg	3
4	Drakenstein	12	19	Matzikama	3
5	Mossel Bay	12	20	Beaufort West	2
6	Stellenbosch	11	21	Cape Agulhas	2
7	Overstrand	10	22	Swellendam	2
8	Knysna	9	23	Kannaland	1
9	Bifou	7	24	Prince Albert	1
10	Saldanha bay	7	25	Cape Winelands	0
11	Theewaterskloof	6	26	Central Karoo	0
12	Breede River/ winelands	5	27	Eden	0
13	Hessequa	5	28	Laingsburg	0
14	Oudtshoorn	5	29	Overberg	0
15	Swartland	5	30	West Coast	0

The City of Cape Town metropolitan municipality contained the highest number of community pharmacies (n=321) of the municipalities in the province, followed by the George (n=17), Breede Valley (n=15), Drakenstein (n=12) and Mossel Bay (n=12) local municipalities, respectively. These five municipalities collectively contained proportion of 80% of the community pharmacies registered in the Western Cape province. The remaining 20% of the community pharmacies in the province were situated in the 19 remaining municipalities which contained registered community pharmacies in the year 2008. Two of the local municipalities containing registered community pharmacies, Kannaland and Prince Albert local municipality, contained only one registered community pharmacy each.

5.11.1.2 Private Institutional Pharmacies

Consider table C.9.3 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The 35 registered private institutional pharmacies in the Western Cape, for the year 2008, were situated in nine of the province municipalities. This was an increase from the total of six municipalities in which the private institutional pharmacies of the province were situated in the year 2003. Following the increase in the total number of municipalities wherein the registered private institutional pharmacies of the province were situated, the estimated population of the municipalities without any registered private institutional pharmacy decreased from 1,294,420 people in the year 2003, to 998,902 people in the year 2008.

The distribution of the registered private institutional pharmacies in the Western Cape, among the province's district councils and metropolitan municipality, from the year 2003 to 2008, is presented in table C.9.3 in part C of the Reference Manual. The table C.9.3 also provides an indication of the number of municipalities, within each district council, containing at least one registered private institutional pharmacy, for all the study years.

Table 5.168 below presents the results of the distribution of the registered private institutional pharmacies among the district councils and metropolitan municipality of the province, for the years 2003 and 2008 only; along with the changes in the total number of private institutional pharmacies in each district council and metropolitan municipality of the province, between the two years. Furthermore, the district councils are, in table 5.168, listed by decreasing rank order from the district council or metropolitan municipality with the highest number of private institutional pharmacies, to that containing the lowest number of the pharmaceutical structures.

As evident from the table 5.168, all district councils, excluding the Central Karoo district council, contained registered private institutional pharmacies. For the year 2008, as much as 77% of the private institutional pharmacies were situated in the province's metropolitan municipality, City of Cape Town. The City of Cape Town metropolitan remained as containing most of the private institutional pharmacies in the province throughout the entire study period. For the year 2008, the remaining district councils 8.6% (Boland and Cape Winelands district councils) and 2.9% (Overberg and West Coast district councils) of the total number of private institutional pharmacies situated in the province.

From the changes in the total number of private institutional pharmacies situated within each district council and the metropolitan municipality of the province, as indicated in table 5.168, it is evident that the private institutional pharmacies situated in the Overberg, West Coast and Central Karoo district councils did not change between the two years. On the other hand, the private institutional pharmacies in the City of Cape Town metropolitan municipality as well as the Eden and Cape Winelands district councils increased between the two years. The highest increase was observed for the City of Cape Town municipality (n=+9).

Table 5.168: Changes in the total number of registered private institutional pharmacies in the Western Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
City of Cape Town metropolitan	18 (78.3%)	27 (77.1%)	+9	+50.0
Eden	2 (8.7%)	3 (8.6%)	+1	+50.0
Boland District/ Cape Winelands	1 (4.3%)	3 (8.6%)	+2	+200
Overberg	1 (4.3%)	1 (2.9%)	0	0
West Coast	1 (4.3%)	1 (2.9%)	0	0
Central Karoo	0 (0.0%)	0 (0.0%)	0	0
Western Cape (Total)	23 (100%)	35 (100%)	+12	+52.2

The results of the distribution of the registered private institutional pharmacies in the Western Cape, among the province's local and metropolitan municipalities, are included in table D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.169 below presents the nine municipalities, in the Western Cape province which contained at least one private institutional pharmacy for the year 2008. The table furthermore ranks these municipalities by order from the local municipality with the highest to that containing the lowest number of the private institutional pharmacies in the province, for the year 2008.

From the table 5.169, it was evident that the City of Cape Town metropolitan municipality contained the highest number of private institutional pharmacies (n=27). The remaining eight municipalities, Bitou, Drakenstein, George, Outshoorn, Overstrand, Saldanha Bay, Stellenbosch and Witzenberg, contained only one private institutional pharmacy each.

Table 5.169: Ranking of local municipalities in the Western Cape by order of local municipality with the highest number of the registered private institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies
1	City of Cape Town	27
2	Bitou	1
3	Drakenstein	1
4	George	1
5	Oudtshoorn	1
6	Overstrand	1
7	Saldanha bay	1
8	Stellenbosch	1
9	Witzenberg	1

5.11.1.3 Public Institutional Pharmacies

Consider table C.9.4 in part C of the Reference Manual, along with tables B.28.1, B.29.1, B.30.1, B.31.1, B.32.1 and B.33.1 in part B of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The public institutional pharmacies of the Western Cape province were distributed such that the total number of municipalities without any of the registered pharmaceutical structures decreased from eight in the year 2003 to six in the year 2008. The total estimated population of those municipalities without any registered public institutional pharmacy also decreased from 76,471 people in the year 2003 to total 44,659 people for the year 2008.

The distribution of the public institutional pharmacies among the district councils and the metropolitan municipality of the province, from the year 2003 to 2008, is presented in table C.9.4 in part C of the Reference Manual. Table C.9.4 in part C of the Reference Manual also includes the total number of municipalities, within each district council and the metropolitan municipality of the province, containing at least one registered public institutional pharmacy for the study years.

The results of the distribution of the public institutional pharmacies in the Western Cape, for the years 2003 and 2008, are presented in table 5.170 below. Table 5.170 ranks the district councils and metropolitan municipality by decreasing order from the district council or metropolitan municipality with the highest to that with the lowest number of the registered public institutional pharmacies for the year 2008 only. The rank order of district councils presented in table 5.170 is applicable to all other study years.

Throughout the entire study period, most of the public institutional pharmacies in the Western Cape remained situated in the province's metropolitan municipality, City of Cape Town. As evident from the table 5.170 however, the percentage proportion of the public institutional pharmacies situated in the province decreased from 63% in the year 2003 to 56% in the year 2008. The Eden district council followed with the second highest number of registered public institutional pharmacies in the province with a percentage of 13% and 17.6% of the province's total number of public institutional pharmacies, for the years 2003 and 2008 respectively (n=13 for 2003 and n=21 for 2008). The Central Karoo district council remained the district council containing the lowest number of public institutional pharmacies in the province.

Table 5.170: Changes in the total number of registered public institutional pharmacies in the Western Cape province per district council, 2003 and 2008

District Council	Total number pharmacies 2003	Total number pharmacies 2008	Change in the number of Pharmacies from 2003 to 2008	
			N	%
City of Cape Town metropolitan	62 (62.6%)	67 (56.3%)	+5	+8.1
Eden	13 (13.1%)	21 (17.6%)	+8	+61.5
Boland District/ Cape Winelands	12 (12.1%)	13 (10.9%)	+1	+8.3
West Coast	6 (6.1%)	8 (6.7%)	+2	+33.3
Overberg	4 (4.0%)	7 (5.9%)	+3	+75.0
Central Karoo	2 (2.0%)	3 (2.5%)	+1	+50.0
Western Cape (Total)	99 (100%)	119 (100%)	+20	+20.2

Table 5.170 also shows the changes in the total number of registered public institutional pharmacies situated within each district council and metropolitan municipality of the Western Cape, between the years 2003 and 2008. The public institutional pharmacies situated in each district council and the metropolitan municipality of the Western Cape increased between the years 2003 and 2008. The highest increase in the total number of the public institutional pharmacies was observed for the Eden district council (n=+8) followed by the City of Cape Town metropolitan municipality (n=+5).

The results of the distribution of the registered public institutional pharmacies in the Western Cape, among the province's local municipalities, from the year 2003 to 2008, are included in table D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.171 below presents the results of the distribution of public institutional pharmacies, among the municipalities of the province, for the year 2008 only. The municipalities are, in table 5.171, ranked by order from the municipality with the highest to the municipality containing the lowest number of the registered public institutional pharmacies in the province, for the year 2008.

Table 5.171: Ranking of local municipalities in the Western Cape province by order of local municipality with the highest number of the registered public institutional pharmacies, 2008

Rank	Local Municipality	Total number pharmacies	Rank	Local Municipality	Total number pharmacies
1	City of Cape Town	67	16	Swartland	2
2	George	8	17	Theewaterskloof	2
3	Drakenstein	4	18	Witzenberg	2
4	Mossel Bay	4	19	Bitou	1
5	Breede valley	3	20	Kannaland	1
6	Hessequa	3	21	Matzikama	1
7	Beaufort West	2	22	Overstrand	1
8	Bergervier	2	23	Prince Albert	1
9	Breede River/ winelands	2	24	Saldanha bay	1
10	Cape Agulhas	2	25	Cape Winelands	0
11	Cederberg	2	26	Central Karoo	0
12	Knysna	2	27	Eden	0
13	Oudtshoorn	2	28	Laingsburg	0
14	Stellenbosch	2	29	Overberg	0
15	Swellendam	2	30	West Coast	0

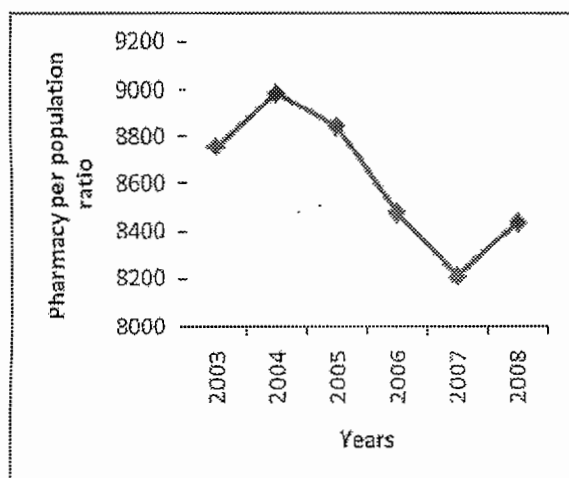
From table 5.171, it is again evident that more than half (56.3%) of the public institutional pharmacies in the Western Cape province were situated in the province's metropolitan municipality, City of Cape Town. The metropolitan municipality contained the highest number of public institutional pharmacies in the province, followed by the local municipalities George (n=8), Drakenstein (n=4), Mossel Bay (n=4) and Breede Valley (n=3). These five municipalities of the province collectively contained 72.3% of the public institutional pharmacies in the province. Six of the municipalities in the province only contained one registered public institutional pharmacy in the year 2008.

5.11.2 THE POPULATION VERSUS PHARMACEUTICAL STRUCTURE DISTRIBUTION OF THE DIRECT SERVICE INSTITUTIONAL STRUCTURES IN THE WESTERN CAPE PROVINCE

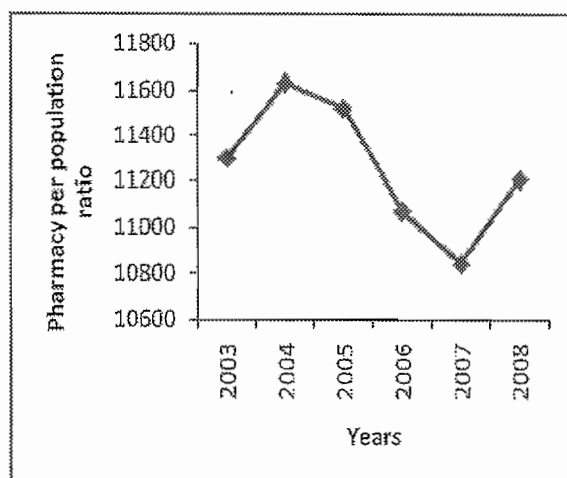
Consider tables C.9.5, C.9.6, C.9.7 and C.9.8 in part C of the Reference Manual, as well as D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The total estimated population of the Western Cape province increased from 4,744,047 people in the year 2003 to total 5,255,368 people in the year 2008. The results of the estimated population of the Western Cape province as well as for each district council and the metropolitan municipality of the province, from the year 2003 to 2008, are presented in tables C.9.5, C.9.6, C.9.7 and C.9.8 in part C of the Reference Manual. The results of the estimated total population of each local municipality of the Western Cape province, from the year 2003 to 2008, are presented in table D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual.

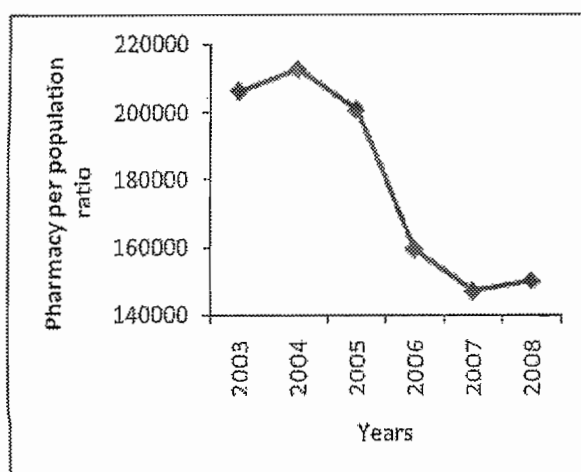
In the year 2003, the Western Cape contained one direct service pharmaceutical structure per 8,752 people. This ratio decreased to one direct service pharmaceutical structure per 8,436 people in the year 2008, indicating an improvement in the availability of the pharmaceutical structures to the population of the province, over the study period.



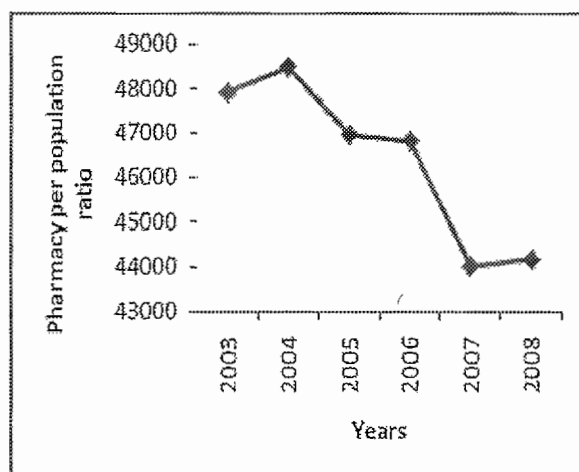
(a)
All registered pharmaceutical structures



(b)
Registered community pharmacies



(c)
Registered private institutional pharmacies



(d)
Registered public institutional pharmacies

Figure 5.20: Changes in the pharmacy per population ratio of (a) all registered pharmaceutical structures, (b) community pharmacies, (c) private institutional pharmacies and (d) public institutional pharmacies in the Western Cape province, 2003 to 2008

The changes in the pharmacy per population ratio of the direct service pharmaceutical structures in the Western Cape over the entire study period are illustrated by the figure 5.20. The figure 5.20 may be considered alongside figure 5.19, in order to determine the influence of the changes in the total number of direct service pharmaceutical structures situated in the province, on the changes in the pharmacy per population ratio of the structures in the province.

The trend in the changes in the pharmacy per population ratio of the direct service pharmacies in the province over the study years is specifically illustrated by the graph in figure 5.20(a). During the initial period from 2003 to 2004, the pharmacy per population ratio of the direct service pharmacies increased despite the slight increase in the total number of direct service pharmacies situated in the province during that period. This suggests that the increase in the number of direct service pharmacies in the province during that period was not enough to improve the availability of the structures to the population of the province.

From the year 2004 to 2007, the pharmacy per population ratio of the direct pharmaceutical structures in the province decreased, following an increase in the total number of the structures situated in the province, therefore indicating an improvement in the availability of the structures to the province's population. From the year 2007 to 2008, the availability of the direct service pharmacies in the province, to the population of the province, then declined as a result of the decrease in the total number of registered direct service pharmacies in the province during that time period.

The results of the pharmacy per population ratio of the direct service pharmacies for each district council and the metropolitan municipality of the Western Cape province, from the year 2003 to 2008, are presented in table C.9.5 in part C of the Reference Manual. Table 5.172 presents the changes in the pharmacy per population ratio, of the direct service pharmacies, for each district council and metropolitan municipality of the province, between the years 2003 and 2008. The table 5.172 also ranks the district councils and metropolitan municipality of the province by decreasing order from the district council or metropolitan with the lowest pharmacy per population ratio (implying a more favourable availability of the pharmaceutical structures to the population) to that with the highest pharmacy per population ratio (implying a less favourable availability of the pharmaceutical structures to the population, relative to the other district councils in the province) for the year 2008. The rank order of district councils is, however, also applicable to all other study years.

Table 5.172: Changes in the direct service pharmacy per population ratio for each district council of the Western Cape province, 2003 and 2008

District council	Pharmacy population per ratio in 2003	Pharmacy population per ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Eden District	7 339	6 606	-733	-10,0
City of Cape Town	8 380	8 098	-282	-3,4
Overberg District	9 278	8 443	-835	-9,0
West Coast District	9 622	10 946	+1 324	+13,8
Boland/ Cape Winelands	11 187	11 425	+238	+2,1
Central Karoo	12 679	11 705	-974	-7,7
Total (Western Cape)	8 753	8 436	-317	-3,6

As indicated in table 5.172, the district council and metropolitan municipality pharmacy per population ratio, for the year 2008, ranged from one direct service pharmacy per 6,606 people (Eden district council) to one direct service pharmacy per 11,705 people (Central Karoo district council). This was an improvement from the range in 2003 which spanned from one direct service pharmacy per 7,339 people (Eden district council) to one direct service pharmacy per 12,679 people (Central Karoo district council).

The changes in pharmacy per population ratio, as presented in table 5.172, indicate an improvement in the availability of the direct service pharmacies in the City of Cape Town metropolitan as well as the Eden, Overberg and Central Karoo district councils only. This is despite that the total number of registered direct service pharmacies within each district council and the metropolitan municipality increased between the years 2003 and 2008. It therefore remains to be said that the increase in the total number of pharmacies in the Boland and West Coast district councils was not significant enough to effect an improvement in the availability of the pharmaceutical structures to the population of those district councils.

The years during which the pharmacy per population ratio of the direct service pharmacies situated in each district council and the metropolitan municipality of the province, was at its highest and lowest are presented in table 5.173. As also illustrated by the graph in figure 5.20(a), the highest pharmacy per population ratio for the Western Cape was observed for the year 2004 where there was one direct service pharmacy per 8,985 people in the province. The lowest ratio was observed for the year 2007 with one direct service pharmacy per 8,212 people.

Table 5.173: Years with the highest and lowest direct service pharmacy per population ratio for each district council of the Western Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Boland/ Cape Winelands	2008	11 425	2006	10 919
Central Karoo	2006	13 634	2007	11 469
City of Cape Town	2004	8 602	2007	7 896
Eden District	2004	7 575	2007	6 314
Overberg District	2005	9 823	2007	8 443
West Coast District	2006	11 805	2003	9 622
Total (Western Cape)	2004	8 985	2007	8 212

The results of the pharmacy per population ratio of the direct service pharmaceutical structures for each local municipality of the Western Cape province, from the year 2003 to 2008, are presented in tables D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual. Table 5.174 below presents the results of the direct service pharmacy per population ratio for each local municipality of the province which contained a registered direct service pharmacy, the year 2008. The table also presents a ranking of the municipalities by order from the municipality with the lowest pharmacy per population ratio to that with the highest pharmacy per population ratio.

Table 5.174: Ranking of local municipalities in the Western Cape province by order from local municipality with the lowest to the highest direct service pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Bitou	3 770	13	Breede Valley	9 424
2	Mossel Bay	5 190	14	Stellenbosch	9 765
3	Overstrand	5 395	15	Bergervier	10 766
4	Knysna	5 436	16	Beaufort West	10 775
5	George	6 049	17	Swartland	11 968
6	Prince Albert	6 105	18	Witzenberg	12 135
7	Hessequa	6 408	19	Oudtshoorn	12 296
8	Cape Agulhas	7 606	20	Drakenstein	13 284
9	City of Cape Town	8 098	21	Breede River/ Winelands	13 484
10	Swellendam	8 152	22	Theewaterskloof	13 543
11	Saldanha Bay	9 091	23	Kannaland	13 923
12	Cederberg	9 136	24	Matzikama	14 580

As is evident from table 5.174, the direct service pharmacy per population ratio, of the local municipalities in the province, ranged from one direct service pharmacy per 3,770 people (Bitou local municipality) to the local municipality of Matzikama with one direct service pharmacy per 14,580 people.

5.11.1.1 Community Pharmacies

Consider table C.9.6 in part C of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the registered community pharmacies in the Western Cape decreased from one community pharmacy per 11,295 people in 2003, to one community pharmacy per 11, 205 people in the year 2008. This implies a slight improvement in the availability of community pharmacies situated in the Western Cape, to the population of the province over the study period.

The changes in the pharmacy per population ratio for the community pharmacies in the province are illustrated by the graph in figure 5.20(b). It is evident from the figure 5.20 that growth trend of the community pharmacy per population ratio in the province, was similar to that of the total direct service pharmacies situated in the province. The availability of the registered community pharmacies in the province declined between the year 2003 and 2004. This suggests that the increase in the total number of community pharmacies in the province, by one community pharmacy, was not sufficient to invoke an improvement in the availability of the pharmaceutical structures, given the estimated population growth in the province during that period. The period 2004 to 2007 was characterised by an improvement in the availability of the community pharmacies to the population of the province, following a continuous increase in the total number of community pharmacies situated in the province within that time period. The best improvement in the availability of community pharmacies was observed for the period 2005-2006, which was also the period during which the highest increase in the total number of registered community pharmacies in the province took place. From 2007 to 2008, the availability of the community pharmacies to the population then declined, following a decrease in the total number of registered community pharmacies in the province between the two years.

The results of the pharmacy per population ratio of the community pharmacies for each district council and the metropolitan municipality of the Western Cape province, from the year 2003 to 2007, are presented in table C.9.6 in part C of the Reference Manual.

The changes in the community pharmacy per population ratio for each district council and the metropolitan municipality of the province, between the years 2003 and 2008, are presented in table 5.175, along with the results of the community pharmacy per population ratio of the district councils and metropolitan municipality for the years 2003 and 2008. The district councils and metropolitan municipality are, in table 5.175, listed by decreasing rank order from the district council or metropolitan with the lowest to that with the highest community pharmacy per population ratio for the year 2008. Although the rank order of the district councils and metropolitan municipality as presented in table 5.175 does not apply to the year 2003, the Eden district council remained the district council that contains the lowest community pharmacy per population ratio for both years (n=1:9,541 people in 2003, n=1:9,437 for 2008), followed by the City of Cape Town metropolitan (n=1:10,758 people for 2003, n=1:10,469 people for 2008) and Overberg district council (n=1:11,856 people in 2003, n=1:11,820 people in 2008). The Central Karoo district council remained to contain the highest community pharmacy per population ratio for both years.

Table 5.175: Changes in the community pharmacy per population ratio in each district council of the Western Cape province, 2003 and 2008

District council	Pharmacy population in 2003	per ratio	Pharmacy population in 2008	per ratio	Change in the population ratio 2003 to 2008	
					n	%
Eden District	9 541		9 437		-104	-1.1
City of Cape Town	10 758		10 469		-289	-2.7
Overberg District	11 856		11 820		-36	-0.3
Boland/ Cape Winelands	14 349		15 233		+884	+6.2
West Coast District	12 830		15 637		+2 807	+21.9
Central Karoo	21 132		23 410		+2 278	+10.8
Total (Western Cape)	11 295		11 205		-90	-0.8

An improvement in the availability of community pharmacies to the population between the two years was observed for the Eden and Overberg district councils, along with the City of Cape

Town metropolitan municipality only. These were also the district and metropolitan which experienced an increase in the total number of community pharmacies situated within them between the year 2003 and 2008. The Cape Winelands district council experienced a growth percentage of 4.3% in the total number of community pharmacies situated within it. This was not sufficient to induce an improvement in the availability of community pharmacies to the population of the district council. The decline in the availability of community pharmacies in the West Coast and Central Karoo district councils may be attributed to the fact that the total number of community pharmacies in these district councils remained the same for 2003 and 2008, while the total estimated population continued to increase thus increasing the demand for the community pharmacies.

The highest community pharmacy per population ratio for the Western Cape as a whole was observed for the year 2004 where one community pharmacy was available for 11,631 people. The lowest community pharmacy per population ratio was observed for the year 2007 with one community pharmacy per 10,840 people. The years during which the community pharmacy per population ratio for each district council and the metropolitan municipality of the Western Cape province was at its highest and lowest are presented in table 5.176 below.

Table 5.176: Years with the highest and lowest community pharmacy per population ratio for each district council of the Western Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Boland/ Cape Winelands	2008	15 233	2005	14 260
Central Karoo	2008	23 410	2003	21 132
City of Cape Town	2004	10 987	2007	10 163
Eden District	2004	10 258	2006	8 844
Overberg District	2005	13 290	2007	11 582
West Coast District	2006	15 937	2003	12 830
Total (Western Cape)	2004	11 631	2007	10 840

The results of the community pharmacy per population ratio for each local municipality in the Western Cape, for the years 2003 to 2008, are included in tables D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008).

Table 5.177 below presents the results of the community pharmacy per population ratio for each municipality of the Western Cape which contains a registered community pharmacy for the year 2008 only. Table 5.177 also includes a ranking of the municipalities by order from the municipality with the lowest to that with the highest community pharmacy per population ratio.

The municipality with the most favourable availability of community pharmacies to the population, relative to other municipalities in the province, was Bitou (n=1:4,847 people) followed by the local municipalities Overstrand (n=1:6,474 people), Knysna (n=1:6,644 people), Mossel Bay (n=1:6,920 people) and George (n=1:9,251 people) respectively. The community pharmacy per population ratio of the remaining municipalities in the province were higher than one community pharmacy per 10,000 people, the highest being that of the Kannaland local municipality (n=1:27,845 people). The City of Cape Town municipality, which contained 68.4% of the province's community pharmacies, was ranked seventh of the local municipalities with the most favourable availability of community pharmacies to the population.

Table 5.177: Ranking of local municipalities in the Western Cape province by order from local municipality with the lowest to the highest community pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Bitou	4 847	13	Cederberg	15 227
2	Overstrand	6 474	14	Swellendam	16 304
3	Knysna	6 644	15	Swartland	16 755
4	Mossel Bay	6 920	16	Bergervier	17 944
5	George	9 251	17	Theewaterskloof	18 057
6	Hessequa	10 252	18	Drakenstein	18 819
7	City of Cape Town	10 470	19	Breede River/ Winelands	18 877
8	Breede Valley	11 308	20	Witzenberg	19 416
9	Saldanha Bay	11 689	21	Matzikama	19 440
10	Prince Albert	12 209	22	Oudtshoorn	19 673
11	Stellenbosch	12 428	23	Beaufort West	21 551
12	Cape Agulhas	15 211	24	Kannaland	27 845

5.11.1.2 Private Institutional Pharmacies

Consider table C.9.7 in part C of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the private institutional pharmacies in the Western Cape was one private institutional pharmacy per 150,153 people in 2008. This was a significant decrease from the ratio in 2003 which stood at one private institutional pharmacy per 206,263 people. The availability of the private institutional pharmacies in the Western Cape, to the population of the province, therefore improved significantly over the study years.

The changes in the private institutional pharmacy per population ratio for the province are illustrated in by the graph in figure 5.20(c). The trend indicates an improvement in the availability of private institutional pharmacies to the population of the province, following an increase in the total number of the private institutional pharmacies situated in the province. This is true except for the periods 2003-2004 and 2007-2008 wherein the availability of the pharmaceutical structures decreased due to the fact that the total number of the pharmacies in the provinces remained the same, between the two years.

The results of the private institutional pharmacy per population ratio for each district council and the metropolitan municipality of the Western Cape province, from the year 2003 to 2008m, are presented in table C.9.7 in part C of the Reference Manual.

Table 5.178 below presents the changes in the private institutional pharmacy per population ratio for each district council, and the metropolitan municipality, between the years 2003 and 2008, along with the results of the pharmacy per population ratio for each district council for the two years. The district councils and metropolitan municipality of the province are, in table 5.178, listed by decreasing rank order from the district council with the lowest to that with the highest private institutional pharmacy per population ratio.

Table 5.178: Changes in the private institutional pharmacy per population ratio in each district council of the Western Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
City of Cape Town	168 541	124 471	-44 070	-26.1
Eden District	238 519	176 151	-62 368	-26.1
Overberg District	213 406	236 408	+23 002	+10.8
Boland/ Cape Winelands	660 042	243 727	-416 315	-63.1
West Coast District	296 427	328 376	+31 949	+10.8
Central Karoo	-	-	-	-
Total (Western Cape)	206 263	150 153	-56 110	-27.2

The City of Cape Town metropolitan had the most favourable availability of private institutional pharmacies to the population with a ratio of one private institutional pharmacy per 124,471 people in 2008. The highest ratio was observed for the West Coast district council with a ratio of one private institutional pharmacy per 328,376 people. The Central Karoo district council, which did not contain any registered private institutional pharmacy, had an estimated total population of 70,230 people for the year 2008.

The changes in the private institutional pharmacy per population ratio of the district councils and metropolitan municipality of the province indicated an improvement in the availability of the private institutional pharmacies situated in the City of Cape Town metropolitan, Eden district council and the Cape Winelands district council only. These were also the only district councils in which an increase in the number of private institutional pharmacies situated within them occurred between the years 2003 and 2008.

The private institutional pharmacy per population ratio of the Western Cape was highest in the year 2004 (n=1:212,896 people) and lowest in the year 2007 with a ratio of one private institutional pharmacy per 147,121 people. This was also illustrated by the high and low peaks in the graph in figure 5.20(c). Table 5.179 below presents the years during which the private institutional pharmacy per population ratio of each district council, and the metropolitan municipality, was at its highest and lowest, over the study period.

Table 5.179: Years with the highest and lowest private institutional pharmacy per population ratio of in each district council of the Western Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Boland/ Cape Winelands	2005	698 761	2006	177 436
Central Karoo	-	-	-	-
City of Cape Town	2004	195 706	2008	124 471
Eden District	2003	238 519	2004	123 095
Overberg District	2008	236 408	2003	213 406
West Coast District	2008	328 376	2003	296 427
Total (Western Cape)	2004	212 896	2007	147 121

The results of the private institutional pharmacy per population ratio for each municipality of the Western Cape, for the years 2003 to 2008, are included in tables D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2009) in part D of the Reference Manual.

The private institutional pharmacy per population ratio, for those local municipalities which contained registered private institutional pharmacies in the year 2008, are presented in table 5.180 below. Table 5.180 furthermore ranks the municipalities in the province by order from the municipality with the lowest to that with the highest private institutional pharmacy per population ratio for the year 2008. Notably, the City of Cape Town metropolitan municipality was ranked sixth in table 5.180, regardless of the high percentage proportion private institutional pharmacies (77.1%) situated within the metropolitan.

Table 5.180: Ranking of local municipalities in the Western Cape province by order from local municipality with the lowest to the highest private institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio
1	Bitou	33 928
2	Overstrand	64 740
3	Saldanha Bay	81 826
4	Witzenberg	97 082
5	Oudtshoorn	98 365
6	City of Cape Town	124 471
7	Stellenbosch	136 713
8	George	157 271
9	Drakenstein	225 822

5.11.1.3 Public Institutional Pharmacies

Consider table C.9.8 in part C of the Reference Manual, as well as tables D.1.9 and D.2.9 in part D of the Reference Manual, for the comprehensive results of the discussion which follows below.

The pharmacy per population ratio of the public institutional pharmacies situated in the Western Cape decreased from one public institutional pharmacy per 47,920 people in the year 2003 to one public institutional pharmacy per 44,163 people for the year 2008. This implies an improvement in the availability of the public institutional pharmacies in the Western Cape, to the population of the province.

The changes in the pharmacy per population ratio of the public institutional pharmacies in the Western Cape are illustrated by the graph in figure 5.20(d). Initially, during the period from 2003 to 2004, the availability of the public institutional pharmacies to the population declined, despite the slight (n=+2) increase in the total number of public institutional pharmacies in the province during that period. Between the years 2004 and 2007, the availability of the public institutional pharmacies in the province improved as a result of the continued increase in the total number of the pharmaceutical structures in the province during the period. The highest improvement in availability was observed for the period 2006-2007 from a ratio of one public institutional pharmacy per 46,801 people in 2006, to a ratio of one public institutional pharmacy per 44,010 people in the year 2007. This period (2006-2007) was also the period during which the highest increase in the total number of registered public institutional pharmacies in the province occurred. During the period 2007-2008, there was a decline in the availability of the public institutional pharmacies despite the slight increase (n=+2) in the total number of the pharmacies situated in the province during that time period.

The results of the public institutional pharmacy per population ratio for each district council and the metropolitan municipality of the Western Cape province, from the year 2003 to 2008, are presented in table C.9.8 in part C of the Reference Manual.

Table 5.181 below contains the 2003 and 2008 results of the public institutional pharmacy per population ratio for each district council and the metropolitan municipality of the province, along with the changes in the ratio between the two years. The table 5.181 furthermore lists the district councils and metropolitan municipality of the Western Cape by order from the district council or metropolitan with the lowest ratio to that with the highest ratio for the year 2008.

According to table 5.181, the public institutional pharmacy per population ratio for the district councils in the province ranged from 1:23,410 people (Central Karoo district council) to 1:56,245 people (Cape Winelands district council) for the year 2008. The rank order of the district council as presented in table 5.181 and applicable to the year 2008, does not apply for the year 2003. However, the public institutional pharmacies in the Central Karoo district council were most favourably available to the population of the district, relative to the other district council in the province, for both 2003 and 2008 and the Cape Winelands district council contained the least favourable availability of the public institutional pharmacies to the population for both years. Notably, the Central Karoo district council was the district council with the lowest proportion of the registered public institutional pharmacies in the province for the year 2008 (2.5%).

Table 5.181: Changes in the public institutional pharmacy per population ratio in each district council of the Western Cape province, 2003 and 2008

District council	Pharmacy per population ratio in 2003	Pharmacy per population ratio in 2008	Change in the population ratio 2003 to 2008	
			n	%
Central Karoo	31 698	23 410	-8 288	-26.1
Eden District	36 695	25 164	-11 531	-31.4
Overberg District	53 352	33 772	-22 580	-42.3
West Coast District	44 904	41 047	-3 857	-8.6
City of Cape Town	48 931	50 160	+1 229	+2.5
Boland/ Cape Winelands	55 003	56 245	+1 242	+2.2
Total (Western Cape)	47 920	44 163	-3 757	-7.8

The overall improvement in the availability of the public institutional pharmacies between the year 2003 and 2008, observed for the province as a whole, took effect within the Central Karoo, Eden, West Coast and Overberg district councils only. This was despite the fact that there was an increase in the total number of registered public institutional pharmacies situated in all district councils of the province between 2003 and 2008. This suggests that the 8.1% growth in the total number of public institutional pharmacies in the City of Cape Town metropolitan, and the 8.3% growth in the total number of public institutional pharmacies in the Cape Winelands district council, were not significant to effect an improvement in the availability of the structures to the population of the district council and the metropolitan municipality.

The public institutional pharmacies in the Western Cape were, in 2008, unevenly distributed to the population of the district councils and metropolitan municipality in the province. This was established by using the provincial pharmacy per population ratio of the year 2008 (n=1:44,163 people) as the benchmark ratio, should the public institutional pharmacies in the province be evenly distributed to the population of each district council and metropolitan municipality in the province.

Throughout the entire study period, the availability of the public institutional pharmacies in the Western Cape was most favourable in the year 2007, with a ratio of one public institutional pharmacy per 44,010 people, and least favourable in the year 2004, with a ratio of one public institutional pharmacy per 48,481 people. The years during which the public institutional

pharmacy per population ratio for each district council, and the metropolitan municipality of the Western Cape province, was at its highest and lowest, are presented in table 5.182 below.

Table 5.182: Years with the highest and lowest public institutional pharmacy per population ratio for each district council of the Western Cape province

District council	Highest		Lowest	
	Year	ratio	Year	ratio
Boland/ Cape Winelands	2006	59 145	2003	55 003
Central Karoo	2006	34 085	2007	22 937
City of Cape Town	2008	50 160	2005	48 662
Eden District	2004	37 875	2007	24 656
Overberg District	2003	53 352	2008	33 772
West Coast District	2006	53 125	2007	40 218
Total (Western Cape)	2004	48 481	2007	44 010

The results of the public institutional pharmacy per population ratio for each municipality of the Western Cape, from 2003 to 2008, are included in tables D.1.9 (for the years 2003 to 2005) and D.2.9 (for the years 2006 to 2008) in part D of the Reference Manual.

Table 5.183 presents the public institutional pharmacy per population ratio for each municipality of the Western Cape province which contained registered public institutional pharmacies for the year 2008. These local municipalities are, in table 5.183, ranked by order from the local municipality with the lowest to that with the highest public institutional pharmacy per population ratio for the year 2008.

The public institutional pharmacy per population ratio for the municipalities of the province, ranged from a low of one public institutional pharmacy per 12,209 people (Prince Albert local municipality) to a ratio of one public institutional pharmacy per population ratio per 81,826 people (Saldanha Bay local municipality). The public institutional pharmacy per population ratio of eleven of the local municipalities in the province which contained registered public institutional pharmacies was higher than the provincial pharmacy per population ratio for the year 2008.

Table 5.183: Ranking of local municipalities in the Western Cape province by order from local municipality with the lowest to the highest public institutional pharmacy per population ratio, 2008

Rank	Local Municipality	Pharmacy per population ratio	Rank	Local Municipality	Pharmacy per population ratio
1	Prince Albert	12 209	13	Swartland	41 889
2	Cape Agulhas	15 211	14	Breede River/ Winelands	47 193
3	Swellendam	16 304	15	Witzenberg	48 541
4	Hessequa	17 087	16	Oudtshoorn	49 183
5	George	19 659	17	City of Cape Town	50 160
6	Mossel Bay	20 759	18	Theewaterskloof	54 172
7	Beaufort West	21 551	19	Breede Valley	56 541
8	Cederberg	22 840	20	Drakenstein	56 456
9	Bergervier	26 916	21	Matzikama	58 319
10	Kannaland	27 845	22	Overstrand	64 740
11	Knysna	29 898	23	Stellenbosch	68 357
12	Bitou	33 928	24	Saldanha Bay	81 826

It should be noted that as a guideline to establish the need for a community pharmacy in a particular area, the Department of Health requires community pharmacy per population ratio to be no less than 1:5000 people in the area (refer to section 3.3.3). The community pharmacy per population ratio in Gamagara in the Northern Cape province (n=1:4210 people) and Bitou in the Western Cape province (n=1:4847), are less than this ratio. The ratio of all other district councils and local municipalities in the country represent a need for community pharmacies in the area. This, aspect however, requires further investigation.

5.12 EVALUATION OF THE AVAILABILITY OF REGISTERED COMMUNITY PHARMACIES IN SOUTH AFRICA: AN ILLUSTRATION OF EXISTING VS EXPECTED COMMUNITY PHARMACIES ACCORDING TO ESTIMATED POPULATIONS

In this section, the results on the availability of registered community pharmacies, for the years 2003 and 2008, will be evaluated by way of comparison between the existing and expected total number of community pharmacies according to the estimated populations of a particular region. This is done based on the principle that pharmaceutical services should be evenly distributed within the country or, rather, that of horizontal equity, which refers to a mathematical division of available facilities equally among a given population (refer to section 2.4.2).

The methodology for calculating the expected number of community pharmacies is as explained in section 4.6.2. The results presented in this section are therefore an illustration according to the model used. It should be noted that the term 'expected' as used in this section may also refer to the 'needed' or 'required' number of community pharmacies in a particular area.

The comprehensive results on evaluating the availability and distribution of community pharmacies in South Africa, for the years 2003 and 2008 are contained in part E of the Reference Manual.

In the year 2008, approximately 52% (n=134) of the local municipalities in South Africa were in possible undersupply of community pharmacies. This was an increase from the 48% (n=131) observed for the year 2003. The percentage of district councils in the country, possibly undersupplied with community pharmacies, increased from 57% (n=34 of 60 district councils) in the year 2003 to 65% (n=34 of 52 district councils) in the year 2008. This indicates an uneven distribution of the community pharmacies according to the population distribution of South Africa, which worsened between the years 2003 and 2008.

According to table 5.184, which presents the total number of existing and expected community pharmacies within each province of South Africa for the years 2003 and 2008, the provinces Gauteng, KwaZulu-Natal and the Western Cape were the only provinces in the country which were possibly oversupplied with community pharmacies. The total number of registered

community pharmacies situated within each of the remaining six provinces was less than the calculated expected number of community pharmacies. This suggests that the uneven distribution of the community pharmacies in South Africa is skewed in favour of the population in the Gauteng, KwaZulu-Natal and Western Cape provinces, for both 2003 and 2008. Moreover, the availability of the community pharmacies in South Africa has been more favourable to the population of these three provinces, for the years 2003 and 2008.

Table 5.184: Total existing and the expected number of community pharmacies in each province of South Africa, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Eastern Cape	193	198	202	206
Free State	134	137	141	142
Gauteng	880	770	994	880
KwaZulu-Natal	462	446	498	483
Limpopo	97	116	145	165
Mpumalanga	144	148	144	148
North West	152	157	160	166
Northern Cape	48	59	58	65
Western Cape	420	382	469	425

The province of Gauteng contained 110 more community pharmacies than the expected number thereof in the year 2003, which increased to 114 more community pharmacies in the year 2008. For the Western Cape province, the total number of community pharmacies was 38 more than the calculated expected number of community pharmacies in the province in 2003, and it increased to 44 more than the expected number of community pharmacies in the province for the year 2008. For that reason, it may be said that the skewed distribution of community pharmacies continued to favour the population of these two provinces between 2003 and 2008. On the other hand, the number of community pharmacies registered in the KwaZulu-Natal

province for the year 2003 was 16 more than the expected number of pharmacies and 15 more than the registered community pharmacies for the year 2008.

Of the six provinces with less than the expected number of community pharmacies, the province of Limpopo had the highest difference between the existing and expected number of pharmacies for both 2003 (n=19) and 2008 (n=20). The availability of the community pharmacies in South Africa was therefore least favourable for the population of the province of Limpopo relative to the other provinces in the country, for both 2003 and 2008.

The Intra-provincial results on the evaluation of the availability and distribution of the community pharmacies in the country, for the years 2003 and 2008, will be further discussed as per the respective provinces.

5.12.1. EASTERN CAPE PROVINCE

Consider tables E.1.1 and E.1.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

The percentage municipalities in the province with less than the expected number of community pharmacies, as calculated, increased from 51% in the year 2003 to 56% for the year 2008. This suggests a relatively poor availability of community pharmacies for the population of most of the local municipalities in the province for both years. The percentages also indicate an uneven distribution of the community pharmacies in the Eastern Cape province which worsened slightly between the years 2003 and 2008.

The uneven distribution of community pharmacies to the population of the Eastern Cape is also presented in table 5.185, which shows the total number of registered community pharmacies and the expected number of community pharmacies, for each district council of the province, for both the years 2003 and 2008. As evident from the table, the province's metropolitan municipality, Nelson Mandela, contained a possible oversupply of community pharmacies to the population for both years. In the year 2008, the total number of community pharmacies in the Cacadu district council was also higher than the expected number of community pharmacies for the district. The availability of community pharmacies in the Eastern Cape province was therefore more favourable for the population in the Nelson Mandela metropolitan and Cacadu district councils of the province, in the year 2008 (refer also to table 5.28).

Table 5.185: Total existing and expected number of community pharmacies in each district council of the Eastern Cape province, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Alfred Nzo	1	7	3	9
Amatole	39	46	46	51
Cacadu	23	24	23	20
Chris Hani	17	20	15	21
Nelson Mandela	94	63	94	65
O.R. Tambo	10	28	14	31
Umkhahlamba	9	10	7	9
Total (Eastern Cape Province)	193	198	202	206

Table E.1.1 as well as E.1.2 in part E of the Reference Manual contain the results of the total number of community pharmacies expected for each local municipality of the province for both 2003 and 2008. From table E.1.2, which shows the results for the year 2008, it is evident that four of the municipalities in the province were oversupplied with community pharmacies. These were the Nelson Mandela metropolitan, as well as Buffalo City, Kouga and Maletswai local municipalities. The availability of community pharmacies in the province was therefore favourable for the population of these local municipalities.

From table E.1.2, it is also evident that six of the local municipalities in the province should have contained community pharmacies but contained no registered community pharmacy for the year 2008. Of these, the Nyandeni local municipality had the highest number of expected community pharmacies (n=5), followed by the Mhlontlo (n=3), Emalahleni (n=2), Ngqushwa (n=2), Ntabankulu (n=2) and Great Kei (n=1) local municipalities respectively.

5.12.2 FREE STATE PROVINCE

Consider tables E.2.1 and E.2.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

In the year 2003 a percentage of 33.3% of the local municipalities in the Free State province were possibly undersupplied with community pharmacies. The percentage local municipalities in the province with less than the expected number of community pharmacies increased to 42.9% for the year 2008. Although the percentage proportion of local municipalities in the province with an undersupply of local municipalities is relatively low, the increase in this proportion between the years 2003 and 2008 suggests that the distribution of the community pharmacies among the population of the province worsened between the two years.

For both the years 2003 and 2008, only two district councils, Thabo Mofutsanyane and Xhariep district council, were in undersupply of community pharmacies. The results of the total number of registered and expected number of community pharmacies within each district council of the Free State for the years 2003 and 2008 are presented in table 5.186 below.

Table 5.186: Total existing and expected number of community pharmacies in each district council of the Free State province, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Northern Free State	30	28	32	29
Lejweleputswa	34	34	35	35
Mptheo district council	42	41	47	45
Thabo Mfutsanyane	23	28	23	28
Xhariep district council	5	6	4	5
Total (FREE STATE Province)	134	137	141	142

Table E.2.1, in part E of the Reference Manual, presents the results of the total number of registered and the calculated expected number for each local municipality of the Free State province for the year 2003 and table E.2.2 presents the results for the year 2008. According to

table E.2.2, four of the local municipalities in the Free State province had a possible oversupply of community pharmacies. The Mangaung local municipality had the highest possible oversupply of community pharmacies (n=4) followed by Matjhabeng (n=3) and Metsimaholo (n=2) and Ngwathe (n=20) local municipalities respectively.

From table E.2.2, it is furthermore evident that for the year 2008, the Tokologo and Naledi local municipalities contained no registered community pharmacies however, should the community pharmacies be evenly distributed to the population of the province, these local municipalities should contain at least one community pharmacy. The local municipality of Maluti a Phofung had the highest undersupply of community pharmacies in the province since only seven registered community pharmacies were situated in it, as opposed to the 12 expected community pharmacies calculated.

5.12.3 GAUTENG PROVINCE

Consider tables E.3.1 and E.3.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

Most of the municipalities in the province of Gauteng were possibly oversupplied with community pharmacies in both 2003 and 2008. However, the percentage municipalities in the province with more than the calculated expected number of community pharmacies decreased from 69.2% in the year 2003 to 53.8% in the year 2008.

Table 5.187 below presents the result of the total number of registered versus the expected number of community pharmacies within each metropolitan municipality and district council of the province of Gauteng. As evident from the table, all three metropolitan municipalities of the province were oversupplied with community pharmacies for both 2003 and 2008. For the year 2008, the City of Tshwane metropolitan had the highest oversupply of community pharmacies with 60 more community pharmacies than expected. The City of Johannesburg metropolitan contained 50 more community pharmacies than expected and the Ekurhuleni metropolitan contained 16 more community pharmacies than expected. Table 5.186 furthermore indicates that the three district councils of the province were undersupplied with community pharmacies for the year 2008.

Table 5.187: Total existing and expected number of community pharmacies in each district council of the Gauteng province, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Johannesburg metropolitan	301	237	365	315
City of Tshwane metropolitan	238	212	275	215
Ekurhuleni metropolitan	224	203	244	228
Metsweding district	9	9	9	13
Sedibeng district	55	58	57	62
West Rand district	53	51	44	47
Total (GAUTENG Province)	880	770	994	880

Tables E.3.1 and E.3.2 in part E of the Reference Manual present the results of the total number of registered community pharmacies versus the expected number of community pharmacies, as calculated, within each local municipality of the province, for both 2003 and 2008. According to table E.3.2, which shows the results of the year 2008, the municipalities Midvaal, Mogale City and Randfontein also contained an oversupply of community pharmacies in the year 2008 in addition to the three metropolitan municipalities of the province. Local municipalities with poor availability of community pharmacies were Kungwini, Nokeng tsa Taemane, Emfuleni, West Rand and Westonaria, given that the total number of registered community pharmacies situated within them was less than the expected number of community pharmacies.

5.12.4 KWAZULU-NATAL PROVINCE

Consider tables E.4.1 and E.4.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

The majority of municipalities in the KwaZulu-Natal province were undersupplied with community pharmacies for both 2003 and 2008. This follows that in 2003, 60% of the municipalities in the province contained less than the expected number of community pharmacies. This percentage increased to 64.8% of the local municipalities in the year 2008.

The increase in the percentage municipalities in the province with an undersupply of community pharmacies, between the year 2003 and 2008, implies that the mal-distribution of the community pharmacies in the province has worsened over the years.

Table 5.188 presents the total number of registered community pharmacies situated within each district council and the metropolitan municipality of the province, versus the total number of expected community pharmacies as calculated, for both 2003 and 2008.

Table 5.188: Total existing and expected number of community pharmacies in each district council of the KwaZulu-Natal province, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Amajuba district	15	18	16	19
eThekweni metropolitan	266	204	293	223
Sisonke district	8	11	5	9
Umgungundlovu district	63	61	59	58
Ugu district	29	33	31	35
Umkhanyakude district	5	12	9	16
Umzinyathi district	5	10	6	12
Uthukela district	18	23	17	23
Uthungulu district	27	34	32	38
Zululand district	12	21	13	25
iLembe district	14	19	17	25
Total (KwaZulu-Natal Province)	462	446	498	483

From the table 5.188, it is evident that the province's metropolitan municipality, eThekweni, contained a significant oversupply of community pharmacies given that the total number of registered community pharmacies situated in the metropolitan was 62 more than the expected number of community pharmacies in 2003 and 70 more than the expected number of community pharmacies in 2008. For the year 2008, the Umgungundlovu district council was the

only other district council which contained more than the expected number of community pharmacies, however containing only one more community pharmacy than expected. The remaining district councils of the KwaZulu-Natal province were undersupplied with community pharmacies. The Zululand district council was the district council with the highest number of community pharmacies less than the expected number of community pharmacies (n=12) followed by iLembe district council (n=8) and Umkhanyakude (n=7) district councils respectively.

Tables E.4.1 and E.4.2 in part E of the Reference Manual contain the results of the total number of registered community pharmacies versus the calculated expected number of community pharmacies for each local municipality of the KwaZulu-Natal province, for both 2003 and 2008.

For the year 2008, as indicated in table E.4.2, 18.5% of the municipalities in KwaZulu-Natal, including the metropolitan municipality, contained more than the calculated expected number of community pharmacies. The availability of community pharmacies in the province was therefore skewed in favour of these municipalities, namely, eThekweni metropolitan, Msundudzi, uMngeni, Hibiscus coast, Umdoni, Endumeni, Umtshezi, uMhlathuze, Abaqulusi and KwaDukuza.

From table E.4.2 in part E of the Reference Manual, it is also evident that 27.8% (n=15) of the local municipalities in the province contained no registered community pharmacies whereas, according to the calculated expected number of pharmacies, there should have been a community pharmacy situated in it. These local municipalities are Emadlangeni, Ingwe, Impendle, Mooi Mpoana, Ezingoleni, Umzumbe, Vulamehlo, Umhlabuyalingana, Msinga, Imbazane, Indaka, Ntambana, eDumbe, Maphumulo and Ndwendwe.

5.12.5 LIMPOPO PROVINCE

Consider tables E.5.1 and E.5.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

In 2003, a percentage of 63% of the municipalities in the province of Limpopo were undersupplied with community pharmacies. The percentage municipalities in the province with a possible undersupply of community pharmacies, decreased to 48% for the year 2008 indicating an improvement in the distribution of community pharmacies between the two years. As previously noted, the situation in Limpopo between the year 2003 and 2008 may have been influenced by the restructuring of provincial boundaries which took place in the year 2005.

For the year 2008, all district councils of the province of Limpopo, contained registered community pharmacies less than the expected number of community pharmacies, with the exception of the Waterberg district council which contained two more community pharmacies than expected. Table 5.189 presents the results of the existing versus the calculated expected number of community pharmacies for each district council of the province for the years 2003 and 2008.

Table 5.189: Total existing and expected number of community pharmacies in each district council of the Limpopo province, 2003 and 2008.

2003			2008		
DISTRICT COUNCIL			DISTRICT COUNCIL		
	Existing	Expected		Existing	Expected
Bohlabela	4	8	Capricorn district	35	40
Capricorn district	26	29	Greater Sekhukhune district	22	27
Mopani district	22	24	Mopani district	38	41
Sekhukhune Cross Boundary	1	9	Vhembe district	22	31
Vhembe district	18	23	Waterberg district	28	26
Waterberg district	26	23			
Total (Limpopo Province)	97	116	LIMPOPO Province	145	165

The results of the calculated expected number of community pharmacies within each local municipality of the Limpopo province, for the years 2003 and 2008, are presented in tables E.5.1 (for the year 2003) and E.5.2 (for the year 2008) in part E of the Reference Manual.

According to table E.5.2, 28% (n=7) of the province's municipalities, in 2008, contained more than the calculated expected number of community pharmacies. Of these, the Polokwane local municipality contained the highest possible oversupply of community pharmacies, with seven more community pharmacies than the expected situated therein. This was followed by the Thabazimbi local municipality (n=3) and Ba-Phalaborwa(n=2) local municipalities respectively. The remaining four local municipalities (Elias Motsoaledi, Musina, Lephalale and Modimolle)

contained only one more registered community pharmacy than the calculated expected number of community pharmacies.

As is furthermore evident from the table E.5.2, the three local municipalities in Limpopo without any registered community pharmacies for the year 2008, Molemole, Mutale and Fetakgomo (see also table 5.99 in pg 158) had an expected number of community pharmacies. The Molemole local municipality had the highest expected number of community pharmacies (n=3) while the expected number of community pharmacies for the remaining local municipalities, Fetakgomo and Mutale, was two community pharmacies for each.

5.12.6 MPUMALANGA PROVINCE

Consider tables E.6.1 and E.6.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

The percentage of municipalities in the province of Mpumalanga which were possibly undersupplied with community pharmacies increased from 34.6% in the year 2003, to 42.1% for the year 2008.

Table 5.190 presents the results of the calculated expected number of community pharmacies versus the actual registered number of community pharmacies for the district councils of Mpumalanga, for the years 2003 and 2008. As evident from the table 5.190, the Gert Sibande district council was the only district council in the province with more than the expected number of community pharmacies for the year 2008.

The results of the calculated expected number of community pharmacies within each local municipality of Mpumalanga, for the years 2003 and 2008, are presented in tables E.6.1 (for the year 2003) and E.6.2 (for the year 2008) in part E of the Reference Manual.

For the year 2008, the province of Mpumalanga contained six local municipalities with a possible oversupply of community pharmacies. Of these, the Emalahleni local municipality contained the highest number of community pharmacies more than the expected community pharmacies (n=8). This was followed by the Mbombela (n=5), Steve Tshwete (n=5) Govan Mbeki (n=4), Thaba Chweu (n=3) and Msukaligwa (n=2) local municipalities respectively.

Local municipalities in Mpumalanga without any registered community pharmacies in the year 2008 were Ehlanzeni and Dr J.S. Moroka. According to table E.6.2, the Ehlanzeni local

municipalities had no expected number of community pharmacies; however, the expected number of community pharmacies for the Dr JS Moroka local municipality was eight.

Table 5.190: Total existing and expected number of community pharmacies in each district council of the Mpumalanga province, 2003 and 2008.

2003			2008		
DISTRICT COUNCIL			DISTRICT COUNCIL		
	Existing	Expected		Existing	Expected
Bohlabela district	1	1	Ehlanzeni district	49	55
Ehlanzeni district	33	36	Gert Sibande district	45	41
Govan Mbeki district	44	44	Nkangala district	50	52
Metsweding	0	1			
Nkangala district	51	52			
Sekhukhune Cross Boundary	15	14			
Total (Mpumalanga Province)	144	148	Total (Mpumalanga Province)	144	148

5.12.7 NORTH WEST PROVINCE

Consider tables E.7.1 and E.7.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

The percentage municipalities in the North West province, with a possible undersupply of community pharmacies, increased from 42.3% in the year 2003 to 45.5% in the year 2008. Given that the total number of registered community pharmacies in the province increased between the two years, this may suggest that a mal-distribution of the community pharmacies to the population of the North West province has worsened over the study years.

Table 5.191 presents the results of the expected number of community pharmacies versus the actual registered number of community pharmacies for each district council of the North West province, for the years 2003 and 2008.

Table 5.191: Total existing and expected number of community pharmacies in each district council of the North West province, 2003 and 2008.

2003			2008		
DISTRICT COUNCIL			DISTRICT COUNCIL		
	Existing	Expected		Existing	Expected
Bojanala district	49	51	Bojanala district	57	60
Bophirima district	10	14	Bophirima district	10	15
Central district	24	21	Dr Kenneth Kaunda district	69	61
City of Tshwane metropolitan	13	19	Ngaka Modiri Molema	24	30
Frances Baard district	0	1		160	166
Kgalagadi district	0	3			
Southern district	53	45			
West Rand district	3	3			
Total (North West Province)	152	157	Total (North West Province)	58	65

For the year 2008, the Central and Southern district councils were the only district councils in the province with more than the calculated expected number of community pharmacies.

The results of the calculated expected number of community pharmacies for each local municipality of the North West province for the years 2003 and 2008 are presented in table E.7.1 (for the year 2003) and E.7.2 (for the year 2008) in part E of the Reference Manual.

For the year 2008, a percentage 31.8% of the municipalities in the North West province contained more community pharmacies than the calculated expected number of community pharmacies. Of these, the Rustenburg local municipality contained the highest number of community pharmacies more than the expected (n=9), followed by City of Tlokwe (n=7) and City of Matlosana (n=3) municipalities. The remaining municipalities (Lekwa Teemane, Mamusa, Naledi and Maquassi hills) contained only one more registered community pharmacy than expected.

From table E.7.2, four local municipalities were identified as containing no registered community pharmacies but with an expected number of community pharmacies. These were Moretele (n=6 expected community pharmacies), Greater Taung (n=4 expected community pharmacies, Kagisano (n=3 expected community pharmacies), Ratlou (n=3 more community pharmacies) and Molopo with one expected community pharmacy.

5.12.8 NORTHERN CAPE PROVINCE

Consider tables E.8.1 and E.8.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

More than half the municipalities in the Northern Cape province contained a possible undersupply of community pharmacies in both 2003 and 2008. The percentage municipalities in the province with less than the expected number of community pharmacies, was 51.6% in 2003; and 56.3% in 2008.

For the year 2003, the Northern Cape province contained no district councils with more than the expected number of community pharmacies. In 2008, the Frances Baard district council of the province contained three more registered community pharmacies than expected. The results of the registered community pharmacies versus the calculated expected number of community pharmacies for each district council of the Northern Cape, for the years 2003 and 2008, are presented in table 5.192.

Table 5.192: Total existing and expected number of community pharmacies in each district council of the Northern Cape province, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Frances Baard district	21	21	25	22
Kgalagadi district	4	4	6	9
Namakwa district	5	7	5	7
Pixley ka Seme/ Karoo district	8	14	9	15
Siyanda	10	13	13	12
Total (Northern Cape Province)	48	59	58	65

The results of the calculated expected number of community pharmacies for each local municipality of the Northern Cape, are presented in tables E.8.1(for the year 2003) and E.8.2 (for the year 2008) in part E of the Reference Manual.

For the year 2008, as evident from table E.8.2, 25% of the local municipalities in the Northern Cape contained more than the calculated expected number of community pharmacies. Of these, the Sol Plaatjie local municipality contained the highest number of pharmacies more than the expected number of community pharmacies (n=7) followed by the Gamagara local municipality with two more community pharmacies than the expected. The remaining local municipalities (Richtersveld, Umsobomvu, Khai !Garib, Tsantsabane, Kgatelopele and || Khara Hais) contained only one more community pharmacy than expected.

From table E.8.2, 11 local municipalities were identified as containing no registered community pharmacies but, with an expected number of community pharmacies for the year 2008. All of these local municipalities, with the exception of Moshaweng, had only one expected community pharmacy. The remaining ten local municipalities are Frances Baard, Magareng, Kalahari, Kamiesberg, Karoo Hoogland, Khai-M, Kareeberg, Ubuntu, !Kheis and Mier.

5.12.9 WESTERN CAPE PROVINCE

Consider tables E.9.1 and E.9.2 in part E of the Reference Manual for the comprehensive results of the discussion which follows below.

The percentage of municipalities in the Western Cape province with a possible undersupply of community pharmacies increased from 36.7% in 2003 to 50.0% in the year 2008. This suggests that the uneven distribution of the community pharmacies in the province to the population has increased between the two years.

Table 5.193 presents the results of the expected number of community pharmacies for each district council of the Western Cape province, versus the registered number of community pharmacies for the districts, for the years 2003 and 2008. As evident from the table, the provinces metropolitan municipality, City of Cape Town contained a possible oversupply of community pharmacies since the total number of registered community pharmacies situated in it were 39 more than expected in 2003 and 45 more than the expected in 2008. The Eden district council was the only other district council in the province with a possible oversupply of community pharmacies for both years.

Table 5.193: Total existing and expected number of community pharmacies in each district council of the Western Cape province, 2003 and 2008.

DISTRICT COUNCIL	2003		2008	
	Existing	Expected	Existing	Expected
Boland district	46	51	48	50
Central Karoo district	3	5	3	5
City of Cape Town Metropolitan	282	243	321	276
Eden district	50	44	56	51
Overberg district	18	17	20	19
West coast district	21	22	21	24
Total (Western Cape province)	420	382	469	425

The results of the calculated expected number of community pharmacies for each local municipality of the Western Cape province, for the years 2003 and 2008, are contained in tables E.9.1 (for the year 2003) and E.9.2 (for the year 2008) in part E of the Reference Manual.

For the year 2008, 26.7% of the municipalities in the province, including the metropolitan municipality, contained more registered community pharmacies than the calculated expected number of community pharmacies for the municipality. Of these, the City of Cape Town metropolitan municipality contained the highest number of community pharmacies more than the expected (n=45), followed by the Mossel Bay and Overstrand municipalities with three more community pharmacies than the calculated expected number. Of the remaining local municipalities with more than the expected number of community pharmacies, Breede Valley, Bitou, George and Knysna contained two more community pharmacies than the calculated expected number, while the Saldanha Bay local municipality contained only one more community pharmacy than expected.

Of the local municipalities without any registered community pharmacies in the province, for the year 2008, the Cape Winelands, Central Karoo, Laingsburg, Eden and West Coast local municipalities had one expected community pharmacy each.

5.13 CHAPTER SUMMARY

This chapter reported and discussed the results of the distribution of the registered pharmaceutical structures in the country, among the different geographical regions of the country (national, provincial, metropolitan municipality, district council and local municipality level), as well as the distribution of the registered pharmaceutical structures among the population of the respective geographical regions, from the year 2003 to 2008. The distribution of these pharmaceutical structures was presented for the various categories of pharmaceutical structures. The conclusions of the results are discussed and presented in chapter 6.

CHAPTER 6:

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter presents the conclusions of this study conducted on the availability of registered pharmaceutical structures in South Africa from 2003 until 2008. The limitations of the study as well as the recommendations for future studies are also included in this chapter.

6.2 CONCLUSIONS

The conclusions of the study presented in this section are based on the research objectives stated for the literature review and empirical investigation of the study, as stated in sections 1.4.2 and 4.1.2.

6.2.1 CONCLUSIONS ON THE LITERATURE REVIEW

*The **first research objective** of the literature study was to determine the significance of the availability of pharmaceutical structures in South Africa.*

In the first place, the literature reviewed showed the need for health care service, including medication, to the South African population. This was indicated in that the South African population continues to increase and contains demographic, urban-rural and socio-economic characteristics which expectedly will increase demands on health care and medicine usage (*refer to section 2.2*). The need for health care services to the South African population was also indicated in that the overall health status of the South African population has decreased over the years. This is evidenced in the decline in life expectancy and fertility rates. In addition, South Africa is characterised by a quadruple burden of disease which consists of communicable diseases (notably including among the highest HIV/AIDS prevalence rates in the world) and non-communicable diseases (*refer to section 2.3*).

In the second place, literature revealed that the availability of health care facilities is part of the overall concept of access to health care. Availability was taken to refer to “the actual presence and volume of health resources in relation to the demand for the services” (Penchansky & Thomas, 1981:128). It was also established that ensuring availability included ensuring equitable distribution of the resources to the population (*refer to section 2.4*). Further literature studies indicated the mandate and commitment of the South African government to ensuring that access to health care for all citizens be realised, and that inequities in health care service delivery be reduced (*refer to sections 2.5.1, 2.5.2, 2.5.4 and 2.5.5*).

Thirdly, section 2.6 presented, according to literature, the role of pharmacy in health care. It was found that medicinal therapy must be considered an inevitable aspect of health care and that pharmacy is the better qualified profession to ensure adequate, safe, quality, effective and cost-effective use thereof. The section included discussions on the various pharmaceutical services which may be provided from the different pharmaceutical structures in South Africa (*refer to section 2.6.1*), the development and role expansion of the pharmacy profession (*refer to section 2.6.2*) and discussions on how the pharmacy profession plays a role in the provision of primary health care, the health care approach on which the national health system of South Africa is based (*refer to section 2.6.3*).

Lastly, the significance of available pharmaceutical structures in South Africa was indicated in that the pharmaceutical structures, and consequently the services rendered there from, were (previously) inequitably distributed in South Africa with the availability thereof in favour of an affluent minority (*refer to section 2.7*).

*The **second research objective** of the literature study was to determine factors which would influence the geographical location and the availability of pharmaceutical structures.*

The literature reviewed revealed that the health care system, regulations of the pharmaceutical sector, the allocation of a pharmacy location and pharmacy human resources, are factors which influence the geographical location of pharmaceutical structures. These factors may also limit or promote the availability of pharmaceutical structures (*refer to section 3.2, 3.3, 3.4 and 3.5*).

6.2.2 CONCLUSIONS FROM THE EMPIRICAL INVESTIGATION

The **first research objective** of the empirical investigation was to establish the geographical distribution of the registered pharmaceutical structures in South Africa as of the year 2003 until 2008.

This research objective was achieved by the compilation of a Reference Manual wherein the total number of the various registered pharmaceutical structures situated within the country as well as within each province, district council and local municipality of the country, from the year 2003 until 2008, were indicated (*refer to the accompanying Reference Manual*).

The **second research objective** of the empirical investigation was to establish whether the different registered pharmaceutical structures that existed were geographically evenly distributed within the country.

The registered pharmaceutical structures in South Africa are not evenly distributed within the country. The geographical mal-distribution of all types of registered pharmaceutical structures presents both between provinces (*refer to section 5.2.2*) and within provinces, among the district councils and municipalities of the provinces (*refer to sections 5.3.1, 5.4.1, 5.5.1, 5.6.1, 5.7.1, 5.8.1, 5.9.1, 5.10.1 and 5.11.1 as well as the accompanying Reference Manual*).

The **third research objective** of the empirical investigation was to determine the changes in the distribution of the registered pharmaceutical structures in South Africa from the year 2003 to 2008.

The following conclusions could be formulated regarding this research objective (*refer to sections 5.2.2, 5.3.1, 5.4.1, 5.5.1, 5.6.1, 5.7.1, 5.8.1, 5.9.1, 5.10. and 5.11.1 as well as the accompanying Reference Manual*):

- The percentage of municipalities in the country containing at least one registered pharmaceutical structure increased over the years. In the case of the direct service pharmaceutical structures, the percentage municipalities containing at least one of these increased for each province except the Free State, Western Cape and Gauteng, for which the percentage remained the same, as well as for the Northern Cape province for which the percentage decreased.

- The disparities in the inter- and intra-provincial distribution of the registered pharmaceutical structures persisted over the study years and in some cases (Free State and Gauteng provinces) appeared to have worsened.
- Gauteng remained the province with the highest percentage of the pharmaceutical structures, followed by Western Cape and KwaZulu-Natal, while the Northern Cape province remained the province with the least number of registered pharmaceutical structures, throughout the entire study period. Most of the registered indirect service pharmacies remained concentrated in the province of Gauteng between 2003 and 2008.
- The province which experienced the highest increase in the total number of registered pharmaceutical structures over the study years was Gauteng, followed by the Western Cape and KwaZulu-Natal provinces, with the lowest increase being observed for the Northern Cape province.

*The **fourth research objective** of the empirical investigation was to establish the distribution of the registered pharmaceutical structures in South Africa in relation to the population and clientele they were to serve, from the year 2003 until 2008.*

This research objective was achieved by the compilation of a Reference Manual wherein the total number of registered pharmaceutical structures situated in the country as well as each geographical region of the country was indicated in relation to the total number of people or clients, as the case may be, of the geographical region. The pharmacy per population ratio for the different geographical regions was also indicated (*refer to the accompanying Reference Manual*).

*The **fifth research objective** of the empirical investigation was to establish whether the registered pharmaceutical structures in South Africa were equitably distributed to the population or clients they are to serve.*

The registered pharmaceutical structures in South Africa are not equitably distributed to the population and/or clients they serve. This is evidenced in the varying pharmacy per population ratio for the different provinces. In addition, considerable deviation of the provincial pharmacy per population ratio from the benchmark ratio (where the national pharmacy per population ratio

is used as a benchmark ratio for the case that the pharmaceutical structures are evenly distributed to the population in the country) is noted (*refer to section 5.2.3*).

The inequitable distribution of the registered pharmaceutical structures also presents in the varying pharmacy per population ratio for the different district councils and local municipalities within each province. Furthermore, where the provincial pharmacy per population ratio is used as the benchmark ratio for the case that the pharmaceutical structures within the province are evenly distributed to the population of the province, considerable deviation of the district and local municipality ratios from the benchmark is noted (*refer to section 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2, 5.9.2, 5.10.2 and 5.11.2 as well as the accompanying Reference Manual*).

*The **sixth research objective** of the empirical investigation was to determine the degree of and changes in the availability of registered pharmaceutical structures from the years 2003 until 2008.*

The following conclusions can be formulated regarding this objective:

- The availability of manufacturing pharmacies in South Africa improved over the study years (*refer to section 5.2.2.2*).
- The availability of wholesale pharmacies declined over the study years. This decrease took effect within each province except Mpumalanga. The North West and Northern Cape provinces experienced the most significant decline in the availability of these structures (*refer to section 5.2.2.3*).
- There has been an improvement in the availability of registered direct service pharmaceutical structures to the entire South African population between 2003 and 2008 (*refer to section 5.2.3.3*). However, this improvement did not take effect within each province, district council and municipality. Gauteng, Mpumalanga and the Northern Cape provinces are, however, the only provinces that experienced a decline in the availability of registered direct service pharmaceutical structures to the population (*refer to section 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2, 5.9.2, 5.10.2 and 5.11.2 as well as the accompanying Reference Manual*).

*The **seventh research objective** of the empirical investigation was to evaluate the availability and distribution of the registered community pharmacies in South Africa, 2003 and 2008.*

In 2008, only two municipalities in the country contained community pharmacy per population ratio below 1:5000 people. This demonstrates, according to the guideline of the Department of Health, a need for community pharmacies in all other municipalities, district councils and provinces. On evaluating the availability of community pharmacies in South Africa, by way of comparison between the existing and expected number of community pharmacies, according to the population, it was found that the local municipalities and district councils with a possible undersupply of community pharmacies increased between the years 2003 and 2008, with a considerable possible oversupply of community pharmacies in the metropolitan municipalities (refer to section 5.12).

*The **eighth research objective** of the empirical investigation was to establish a distribution trend or pattern for the different kinds of pharmaceutical structures in South Africa.*

Due to the extent and the nature of the services of the different pharmaceutical structures, a distinction was made between direct service and indirect (support) service pharmaceutical structures (refer to section 4.6). A major part of this study focused on the direct service structures and in particular, community pharmacies and private and public institutional pharmacies. However, it was also noted that whilst the services of these structure were not always border bound, the majority are situated in Gauteng. The highest number of the registered direct service pharmacies could be found in the local municipalities with key functional urban areas as identified in table 2.3 (refer to section 2.2.2) and in municipalities with relatively high estimated populations.

*The **ninth research objective** of the empirical investigation was to determine the impact of laws pertaining to the ownership and licensing of pharmaceutical structures on their availability.*

An increase in the total number of pharmaceutical structures and their density, between the year 2003 and 2004 was observed. However, in many instances, the year 2003 (the year before which ownership and licensing laws were introduced) was not seen as the year with the poorest availability of pharmaceutical structures. On the contrary, the year with the poorest availability of the structures varied considerably between and within provinces. This may have been

influenced by the introduction of regulations relating to the pricing of medication which were contested and not concluded during the study years (*refer to section 5.2.3, 5.3.2, 5.4.2, 5.5.2, 5.6.2, 5.7.2, 5.8.2, 5.9.2, 5.10.2 and 5.11.2*)

6.3 LIMITATIONS OF THE STUDY

The limitations pertaining specifically to the methodology used to conduct this study were presented in section 4.10. Further limitations of the study included the following:

- The study did not consider the economic and socio-economic status of the population in the geographical areas or the various demographic, economic and environmental factors of the population.
- The study did not take into consideration medical professionals authorised to dispense medicines or other pharmaceutical structures in the areas, which are not registered with the South African Pharmacy Council, such as clinics and primary health care facilities. Therefore, areas which did not have any pharmaceutical structures situated within them did not necessarily lack access to medicine and other pharmaceutical services.
- The study was only undertaken on the national, provincial, district council and local municipality levels (macro level) and therefore the availability of the pharmaceutical structures on main place level could not be established. Furthermore, distance to the pharmaceutical structure was not taken into consideration.
- The study did not consider the availability of community pharmacies as per various categories, i.e. independent, chain store or supermarket.
- Comparisons between the years 2003 and 2008 for the North West, Gauteng, Mpumalanga and Northern Cape have been influenced by changes in the provincial boundaries.

6.4 RECOMMENDATIONS

This study should be seen as a baseline study of the extent of the distribution and availability of the registered pharmaceutical structures in South Africa. Based on the experiences and results encountered during the study, the following recommendations can be made:

- There is a need for a national definition of the rural and urban areas in South Africa, specifically regarding pharmaceutical structures. Furthermore, there is a need for further studies comparing the availability of the pharmaceutical structures in the urban and rural areas of the country and whether the availability has improved or not.
- The present government imposed interventions that were put in place to improve the availability and distribution of registered pharmaceutical structures in South Africa (particularly the direct service providing structures) should be re-evaluated and monitored to determine whether they are still applicable to the South African context, and whether they will indeed foster an improvement in the equitable distribution of and availability of the structures. There is a need also to determine whether these interventions are enough to improve the availability, affordability and access of pharmaceutical structures.
- To enhance an understanding of the impact of laws pertaining to the licensing and ownership of pharmacies on the availability of pharmacies, it is recommended that further studies be conducted which evaluate the availability of the differing categories of community pharmacies in South Africa.
- As this study was mainly focused on the demographic aspect of the population on the availability of pharmaceutical structures, the impact that the laws and regulations introducing a transparent pricing system in South Africa would have on the availability of pharmaceutical structures and services, needs further research.
- That further studies be conducted on the availability of pharmaceutical structures in South Africa, with regard to vertical equity – the distribution of the structures equally among a population in relation to the need for those services.
- This study included an evaluation of the availability of community pharmacies between the years 2003 and 2008, using an illustration of the expected vs the existing number of community pharmacies according to the population of the geographical regions. It is recommended that more models be applied to test change sensitivities and should also include evaluation of the private and public institutional pharmacies.
- That further research be conducted on the impact of household or population income on the availability of pharmaceutical structures. Further studies considering also the demographic, environmental and economic status of the geographical areas and the availability of registered pharmaceutical structures in South Africa are also recommended.

- The relatively small number of registered mail order and consultant pharmacies in the country warrants further studies on the significance of these specific pharmacies on the viability of other direct service pharmaceutical providers in South Africa.
- Further research studies on how the factors identified as influencing the choice of a location, as well as market forces, do influence the availability of the pharmaceutical structures in South Africa are recommended.
- There is a need to evaluate the availability of all other medicine distribution structures – including clinics, primary health care clinics and centres – in South Africa.
- The Reference Manual developed in this study may be used as a reference source through which to identify specific provinces, district councils or local municipalities in need of attention where improving availability of pharmaceutical structures to their population is concerned.

6.5 CHAPTER SUMMARY

In this final chapter, the conclusions, limitations and recommendations relating to the study on the availability of registered pharmaceutical structures in South Africa from 2003 until 2008 were presented.

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INTRODUCTION

This **Reference Manual** is a collection of the tabulated results of the study conducted on *the availability of registered (with the South African Pharmacy Council) pharmaceutical structures in South Africa, from 2003 until 2008* (from here on referred to as 'the dissertation'). The results as presented in this document also serve to indicate the geographical distribution of the pharmaceutical structures within South Africa and within the specific provinces, district councils and metropolitan and local municipalities (geographical regions) of the country from, 2003 until 2008. The inclusion of the results on the population estimates and provider population ratios for the pharmaceutical structures, in the different geographical regions, serves to indicate the distribution of the pharmaceutical structures in relation to the population or clients of those geographical regions. These results have been discussed and referred to in Chapter 5 of the dissertation.

The different categories and types of pharmaceutical structures referred to in the tabulated results, are consistent with those presented in sections 4.4 and 4.6 of the dissertation. Furthermore, the information in this **Reference Manual** is organised into parts A, B,C, D and E, the orientation of which was explained in section 5.1.2 of the dissertation.

Part E contains tabulated results on the evaluation of the availability of registered community pharmacies in South Africa. The evaluation was done using a model illustrating the existing vs. expected number of community pharmacies situated in each municipality of the country for the years 2003 and 2008, according to the estimated population. The underlying methodology of this model was explained in section 4.6.2 of the dissertation. The information of these results, as tabulated in part E of this Reference Manual, can be explained using the following example:

ALFRED NZO district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Umzimkhulu	<i>a</i> (<i>e</i>)	<i>b</i> (<i>f</i>)	<i>c</i> (<i>g</i>)	<i>d</i> (<i>h</i>)	<i>i</i>	<i>K</i> ^{1/2}

Where:

- (a), (b), (c) and (d) refer to the total number of community pharmacies that should be situated in the municipality provided that the community pharmacies are evenly distributed to the population, using (a) the national, (b) the provincial, (c) the district or (d) the local municipality pharmacy per population ratio of the geographical region wherein the municipality is situated, as the benchmark ratio.
- (e), (f), (g) and (h) refer to the contribution factor of (a), (b), (c) and (d), as the case may be, to the calculated total number of 'expected' community pharmacies in the municipality.
- (i) refers to the total number of registered community pharmacies situated in the municipality.
- (k) refers to the sum of (e), (f), (g) and (h) which is the required or 'expected' number of community pharmacies for the municipality. The (+) alludes to a potential of one more community pharmacy to (k) while the (-) alludes to a potential deficit of one community pharmacy to (k).

The following notes should be taken into consideration upon deliberation of the results as presented in this document:

- The results presented on the registered community pharmacies presented in parts C and D include mail order pharmacies.
- 'Registered public institutional pharmacies' in parts C and D of the manual refers to a combination of the public psychiatric hospital and public hospital (institutional) pharmacies.
- 'Registered private institutional pharmacies' in parts C and D of the manual refers to a combination of the private psychiatric hospital and public hospital (institutional) pharmacies.

Table A.1: Changes in the total number of pharmacies and municipalities with registered pharmacies according to pharmacy category 2003 to 2008

	2003		2004		2005	
	Municipalities with pharmacy	Total number pharmacies	Municipalities with pharmacy	Total number pharmacies	Municipalities with pharmacy	Total number pharmacies
Community pharmacies	191 (70.22%)	2524 (67.04%)	190	2521	189	2534
Mail order pharmacies	4 (1.47%)	6 (0.16%)	4	6	4	6
Private institutional pharmacies	49 (18.01%)	149 (3.96%)	53	156	57	174
Private psychiatric institutional pharmacies	3 (1.10%)	4 (0.11%)	3	4	3	4
Public institutional pharmacies	185 (68.01%)	470 (12.48%)	185	472	187	482
Public institutional psychiatric pharmacies	11 (4.04%)	15 (0.4%)	11	15	11	15
Public correctional service pharmacies	17 (6.25%)	18 (0.5%)	17	19	17	19
Public military pharmacies	12 (4.41%)	16 (0.42%)	14	23	16	36
Public support pharmacies	19 (6.99%)	33 (0.88%)	18	33	18	32
Wholesalers	33 (12.13%)	368 (9.77%)	33	365	36	364
Manufacturers	12 (4.41%)	102 (2.71%)	12	116	16	174
Consultant pharmacies	6 (2.21%)	14 (0.37%)	6	15	7	15
All Registered pharmacies	210 (77.21%)	3765 (100%)	210	3789	210	3855

Table A.1: Changes in the total number of pharmacies and municipalities with registered pharmacies according to pharmacy category 2003 to 2008_(continued)

	2006		2007		2008		Change in number of pharmacies from 2003 to 2008		Changes in the number of municipalities with pharmacies	
	Municipalities with pharmacy	Total number pharmacies	Municipalities with pharmacy	Total number pharmacies	Municipalities with pharmacy	Total number pharmacies	n	%	n	%
Community pharmacies	191	2667	192	2749	191 (74.61%)	2805	281	+11.13%	0	0
Mail order pharmacies	5	6	5	6	5 (1.95%)	6	0	0	0	0
Private institutional pharmacies	63	198	67	215	66 (25.78%)	217	68	+44.40%	17	+34.69%
Private psychiatric pharmacies	3	4	3	4	3 (1.17%)	4	0	0	0	0
Public institutional pharmacies	190	506	190	527	189 (73.83%)	531	61	+12.98%	4	+2.16%
Public psychiatric pharmacies	11	15	11	15	11 (4.3%)	15	0	0	0	0
Public correctional service pharmacies	17	19	17	19	17 (6.64%)	19	1	+5.56%	0	0
Public military pharmacies	16	36	16	36	17 (6.64%)	32	16	+50.00%	5	+41.67%
Public support pharmacies	18	32	17	29	17 (6.64%)	29	-4	-12.12%	-2	-11.77%
Wholesalers	37	363	37	354	34 (13.28%)	310	-58	-15.76%	1	+3.03%
Manufacturers	15	189	15	207	17 (6.64%)	246	144	+141.185	5	+41.67%
Consultant pharmacies	7	15	7	14	6 (2.34%)	13	-1	-7.14%	0	0
All Registered pharmacies	207	4050	209	4175	208 (81.25%)	4227	462	+12.27%	-2	-0.95

TABLE A.2: NATIONAL:

Changes in the total number of registered pharmacies provided pharmaceutical services directly to patients in both the public and private health care sector for 2003 to 2008

REGISTERED PHARMACIES	2003	2004	2005	2006	2007	2008	% Change from August 2003 to August 2008
Total number of public pharmacies provided pharmaceutical services directly to patients	519	529	552	576	597	597	+15% (n = 78)
Public institutional pharmacies**	485	487	497	521	542	546	+12.6% (n = 61)
Public pharmacies of the military and correctional services	34	42	55	55	55	51	+50% (n = 17)
Total number of private pharmacies provided pharmaceutical services directly to patients	2683	2687	2718	2875	2968	3032	+ 13% (n = 349)
Community pharmacies*	2530	2527	2540	2673	2749	2811	+ 11% (n = 281)
Private institutional pharmacies***	153	160	178	202	219	221	+44.4% (n = 68)
Total number of registered pharmacies provided pharmaceutical services directly to patients	3202	3213	3270	3396	3516	3578	+11.7% (n = 376)
Total number of registered pharmacies	3765	3789	3855	4050	4175	4227	+ 12.3% (n = 462)

* Including mail-order pharmacies

** Including public institutional pharmacies as well as psychiatric public institutional pharmacies

*** Including private institutional pharmacies as well as psychiatric private institutional pharmacies

Table A.3: National availability of manufacturing pharmacies as a ratio of the number of pharmacies per manufacturing pharmacy 2003 to 2008

	2003			2004			2005		
	Total manufacturing pharmacies = 102			Total manufacturing pharmacies = 116			Total manufacturing pharmacies = 174		
	Total number pharmacies	Pharmacies per manufacturing pharmacy		Total number pharmacy	Pharmacies per manufacturing pharmacy		Total number pharmacy	Pharmacies per manufacturing pharmacy	
Community pharmacies	2530	24.8		2527	21.8		2540	14.6	
Private institutional pharmacies	153	1.5		160	1.4		178	1.0	
Public generalised institutional pharmacies	485	4.8		487	4.2		497	2.9	
Public closed institutional pharmacies	34	0.3		42	0.4		55	0.3	
Total pharmacies servicing direct to patient	3202	31.4		3216	27.7		3270	18.8	
Wholesale pharmacies									

Table A.3 continued

	2006			2007			2008		
	Total manufacturing pharmacies = 189			Total manufacturing pharmacies = 207			Total manufacturing pharmacies = 246		
	Total number pharmacies	Pharmacies per manufacturing pharmacy		Total number pharmacy	Pharmacies per manufacturing pharmacy		Total number pharmacy	Pharmacies per manufacturing pharmacy	
Community pharmacies	2673	14.1		2755	13.3		2811	11.4	
Private institutional pharmacies	202	1.1		219	1.1		221	0.9	
Public generalised institutional pharmacies	521	2.8		542	2.6		546	2.2	
Public closed institutional pharmacies	55	0.3		55	0.3		51	0.2	
Total pharmacies servicing direct to patient	3451	18.3		3571	17.3		3629	14.8	
Wholesale pharmacies									

Table A.4: National availability of Wholesale pharmacies as a ratio of the number of pharmacies per Wholesale pharmacy 2003 to 2008

	2003		2004		2005	
	Total Wholesale pharmacies = 368		Total Wholesale pharmacies = 365		Total Wholesale pharmacies = 364	
	Total number pharmacies	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
Community pharmacies	2530	6.9	2527	6.9	2540	7.0
Private institutional pharmacies	153	0.4	160	0.4	178	0.5
Public generalised institutional pharmacies	485	1.3	487	1.3	497	1.4
Public closed institutional pharmacies	34	0.1	42	0.1	55	0.2
Total pharmacies servicing direct to patient	3202	8.7	3216	8.8	3270	9.0

Table A.4 continued

	2006		2007		2008	
	Total Wholesale pharmacies = 363		Total Wholesale pharmacies = 354		Total Wholesale pharmacies = 310	
	Total number pharmacies	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
Community pharmacies	2673	7.4	2755	7.8	2811	9.1
Private institutional pharmacies	202	0.6	219	0.6	221	0.7
Public generalised institutional pharmacies	521	1.4	542	1.5	546	1.8
Public closed institutional pharmacies	55	0.1	55	0.2	51	0.2
Total pharmacies servicing direct to patient	3451	9.5	3571	10.1	3629	11.7

Table A.5: Availability of pharmaceutical structures providing services to the patients in South Africa represented as a ratio of the estimated total population per pharmacy 2003 to 2008

	2003					2004					2005				
	(Total Population = 46 083 505)					(Total Population = 46 659 549)					(Total Population = 47 154 227.70)				
	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy
Community pharmacies	191	2 524	18 258	190	2 521	18 508	189	2 534	18 648	189	2 534	18 648	189	2 534	18 648
Mail order pharmacies	4	6	7 680 584	4	6	7 776 992	4	6	7 859 038	4	6	7 859 038	4	6	7 859 038
Private institutional pharmacies	49	149	309 285	53	157	299 100	57	174	271 001	57	174	271 001	57	174	271 001
Private psychiatric pharmacies	3	4	11 520 876	3	4	11 664 887	3	4	11 788 556	3	4	11 788 556	3	4	11 788 556
Public institutional pharmacies	185	470	98 050	185	472	98 855	187	482	97 830	187	482	97 830	187	482	97 830
Public psychiatric pharmacies	11	15	3 072 234	11	15	3 110 637	11	15	3 143 615	11	15	3 143 615	11	15	3 143 615
Public correctional service pharmacies	17	18	2 560 195	17	19	3 110 637	17	19	2 481 801	17	19	2 481 801	17	19	2 481 801
Public military pharmacies	12	16	2 880 219	14	23	2 028 676	16	36	1 309 840	16	36	1 309 840	16	36	1 309 840
Consultant pharmacies	6	14	3 291 679	6	15	3 110 637	7	15	3 143 615	7	15	3 143 615	7	15	3 143 615

Table A.5: Availability of pharmaceutical structures providing services to the patients in South Africa represented as a ratio of the estimated total population per pharmacy 2003 to 2008 (continued)

	2006					2007					2008				Changes in the availability ratio from 2003-2008	
	(Total Population = 47 701 140.03)					(Total Population = 48 149 530.74)					(Total Population = 48 715 109.30)				n	%
Community pharmacies	191	2667	17 886	192	2749	17 515	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy	Municipalities with pharmacy	Total number pharmacies	Population per pharmacy	17 367	-891	-4.88	
Mail order pharmacies	5	6	7 950 190	5	6	6 024 921	5	6	6 024 921	5	6	8 119 184	438 600	5.71		
Private institutional pharmacies	63	198	240 915	67	215	223 951	67	215	223 951	66	217	224 494	-84 791	-27.42		
Private psychiatric pharmacies	3	4	11925285	3	4	12037382	3	4	12037382	3	4	12178777	+657 901	+5.71		
Public institutional pharmacies	190	506	94 271	190	527	91 365	190	527	91 365	189	531	91 742	-6 308	-6.43		
Public psychiatric pharmacies	11	15	3 180 076	11	15	3 209 969	11	15	3 209 969	11	15	3 247 674	+175 440	+5.71		
Public correctional service pharmacies	17	19	2 510 586	17	19	2 534 186	17	19	2 534 186	17	19	2 563 953	+3 758	+0.15		
Public military pharmacies	16	36	1 325 032	16	36	1 337 487	16	36	1 337 487	17	32	1 522 347	-1 357872	-47.14		
Consultant pharmacies	7	15	3 180 076	7	14	3 439 252	7	14	3 439 252	6	13	3 747 316	+455 637	+13.84		

TABLE A.6.1: NATIONAL: Changes in the distribution of all direct service pharmacies* provided pharmaceutical services directly to patients for 2003 to 2008

YEAR	Estimated population nationally	Total number of municipalities Nationally	Estimated population per pharmacy	Municipalities without any registered pharmacy			
				Number of Municipalities		Population	
				n	%**	n	%***
2003	46 083 505	272	14 547	62	22.79	3 423 608	7.43
2004	46 659 549	272	14 696	62	22.79	3 469 802	7.44
2005	47 154 228	272	14 667	67	24.63	4 091 655	8.68
2006	47 701 140	256	14 109	49	19.14	2 765 817	5.80
2007	48 149 531	256	13 694	49	18.14	2 630 006	5.46
2008	48 715 109	256	13 615	51	19.92	2 668 262	5.48

* Includes community and mail order pharmacies, public institutional and public psychiatric pharmacies as well as private institutional and private psychiatric pharmacies

** % of total number of municipalities in South Africa

*** % of total estimated population in South Africa for the specific year

TABLE A.6.2: NATIONAL: Changes in the distribution of community pharmacies* for 2003 to 2008

YEAR	Estimated population nationally	Total number of municipalities Nationally	Estimated population per pharmacy	Municipalities without any community pharmacy		
				Number of Municipalities		Population
				n	%**	%***
2003	46 083 505	272	18 215	81	29,78	11,38
2004	46 659 549	272	18 464	83	30,51	11,66
2005	47 154 228	272	18 565	83	30,51	11,55
2006	47 701 140	256	17 846	65	25,39	8,21
2007	48 149 531	256	17 477	66	25,78	8,33
2008	48 715 109	256	17 330	68	26,56	8,34

* Includes Mail order pharmacies

** % of total number of municipalities in South Africa

*** % of total estimated population in South Africa for the specific year

TABLE A.6.3: NATIONAL: Changes in the distribution of private institutional pharmacies* for 2003 to 2008

YEAR	Estimated population nationally	Total number of municipalities nationally	Estimated population per pharmacy	Municipalities without any private institutional pharmacy		
				Number of Municipalities		
				n	%**	n
2003	46 083 505	272	301 199.38	223	81.99	20 811 207.45
2004	46 659 549	272	289 810.86	216	79.41	20 785 528.46
2005	47 154 228	272	264 911.39	203	74.63	20 206 576.69
2006	47 701 140	256	236 144.26	193	75.39	18 638 849.26
2007	48 149 531	256	219 860.87	191	74.61	18 448 712.47
2008	48 715 109	256	220 430.36	193	74.54	18 806 893.65
						%***
						45.16
						44.55
						42.85
						39.07
						38.32
						38.61

* Includes Private institutional and private Psychiatric pharmacies

** % of total number of municipalities in South Africa

*** % of total estimated population in South Africa for the specific year

TABLE A.6.4: NATIONAL: Changes in the distribution of public institutional pharmacies* for 2003 to 2008

YEAR	Estimated population nationally	Total number of municipalities Nationally	Estimated population per pharmacy	Municipalities without any public institutional pharmacy		
				Number of Municipalities		Population
				n	%**	%***
2003	46 083 505	272	95 017.54	81	29.78	11.85
2004	46 659 549	272	95 810.16	84	30.88	11.90
2005	47 154 228	272	94 877.72	85	31.25	11.42
2006	47 701 140	256	94 271.02	66	25.78	8.12
2007	48 149 531	256	88 185.95	68	26.56	8.54
2008	48 715 109	256	89 221.81	70	27.34	8.45

* Includes Public Institutional and Public Psychiatric pharmacies

** % of total number of municipalities in South Africa

*** % of total estimated population in South Africa for the specific year

Table B.1: Total number of municipalities (N) with and total number of all direct service pharmacies (Tpharm) in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm
Eastern Cape	33	289	33	292	32	291	34	320	34	334	34	327
Free State	18	206	18	205	18	210	18	221	18	219	18	216
Gauteng	12	1344	12	1360	12	1376	11	1446	11	1496	11	1529
Kwazulu Natal	36	616	36	613	37	624	39	650	39	666	39	680
Limpopo	21	149	21	157	21	160	22	187	22	195	22	212
Mpumalanga	20	192	20	189	20	191	17	175	17	184	17	192
North West	21	233	21	229	21	229	19	235	19	238	19	243
Northern Cape	25	103	25	104	25	106	25	111	25	114	24	105
Western Cape	24	633	24	640	24	668	24	705	24	729	24	723
South Africa	210	3765	210	3789	210	3855	209	4050	209	4175	208	4227

Table B.2: Total number of municipalities (N) with and total number of registered community pharmacies (Tcom) in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tcom	N	Tcom	N	Tcom	N	Tcom	N	Tcom		
Eastern Cape	30	193	30	194	29	190	31	200	31	210	30	202
Free State	18	134	18	134	17	131	18	138	18	140	18	141
Gauteng	12	874	12	873	12	872	11	929	11	957	11	989
Kwazulu Natal	33	462	32	455	33	459	35	479	35	488	65	498
Limpopo	20	97	20	103	20	101	22	123	22	129	22	145
Mpumalanga	20	144	20	139	20	141	17	129	17	137	17	144
North West	17	152	17	152	17	151	16	152	16	154	16	159
Northern Cape	17	48	17	50	17	53	17	56	18	59	18	58
Western Cape	24	420	24	421	24	436	24	461	24	475	24	469
South Africa (TOTAL)	191	2524	190	2521	189	2534	191	2667	192	2749	191	2805

Table B.3: Total number of municipalities (N) with and total number of registered mail order pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total mail order	N	Total mail order	N	Total mail order	N	Total mail order	N	Total mail order	N	Total mail order
Eastern Cape	0	0	0	0	0	0	0	0	0	0	0	0
Free State	0	0	0	0	0	0	0	0	0	0	0	0
Gauteng	4	6	4	6	4	6	4	5	4	5	4	5
Kwazulu Natal	0	0	0	0	0	0	0	0	0	0	0	0
Limpopo	0	0	0	0	0	0	0	0	0	0	0	0
Mpumalanga	0	0	0	0	0	0	0	0	0	0	0	0
North West	0	0	0	0	0	0	1	1	1	1	1	1
Northern Cape	0	0	0	0	0	0	0	0	0	0	0	0
Western Cape	0	0	0	0	0	0	0	0	0	0	0	0
South Africa (TOTAL)	4	6	4	6	4	6	5	6	5	6	5	6

Table B.4: Total number of municipalities (N) with and total number of registered private institutional pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional
Eastern Cape	5	10	5	11	5	12	6	13	8	15	8	15
Free State	5	10	5	9	5	11	6	12	6	13	6	13
Gauteng	9	57	9	59	10	64	9	71	9	77	9	78
Kwazulu Natal	7	23	8	25	9	28	9	30	10	32	10	33
Limpopo	5	7	5	8	7	10	7	10	7	10	7	10
Mpumalanga	5	8	6	10	5	10	6	11	7	13	7	13
North West	5	9	5	9	7	12	7	15	7	16	7	16
Northern Cape	2	2	2	2	2	2	3	4	3	4	3	4
Western Cape	6	23	8	23	7	25	10	32	10	35	9	35
South Africa	49	149	53	156	57	174	63	198	67	215	66	217

Table B.5: Total number of municipalities (N) with and total number of registered private psychiatric pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total private psychiatric	N	Total private psychiatric	N	Total private psychiatric	N	Total private psychiatric	N	Total private psychiatric	N	Total private psychiatric
Eastern Cape	1	1	1	1	1	1	1	1	1	1	1	1
Free State	0	0	0	0	0	0	0	0	0	0	0	0
Gauteng	2	3	2	3	2	3	2	3	2	3	2	3
Kwazulu Natal	0	0	0	0	0	0	0	0	0	0	0	0
Limpopo	0	0	0	0	0	0	0	0	0	0	0	0
Mpumalanga	0	0	0	0	0	0	0	0	0	0	0	0
North West	0	0	0	0	0	0	0	0	0	0	0	0
Northern Cape	0	0	0	0	0	0	0	0	0	0	0	0
Western Cape	0	0	0	0	0	0	0	0	0	0	0	0
South Africa (TOTAL)	3	4	3	4	3	4	3	4	3	4	3	4

Table B.6: Total number of municipalities (N) with and total number of registered public institutional pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional
Eastern Cape	25	47	25	48	26	51	30	69	30	71	30	72
Free State	18	40	18	40	18	41	18	44	17	39	17	40
Gauteng	8	44	8	44	8	44	7	42	9	53	9	55
Kwazulu Natal	30	68	30	68	30	69	32	73	32	76	33	79
Limpopo	18	36	18	37	19	38	21	43	19	45	19	46
Mpumalanga	19	34	19	34	19	34	16	28	16	27	16	28
North West	21	58	21	56	21	55	19	55	19	56	19	56
Northern Cape	24	47	24	47	24	46	24	46	24	46	22	39
Western Cape	22	96	22	98	22	104	23	106	24	114	24	116
South Africa	185	470	185	472	187	482	190	506	192	527	189	531

Table B.7: Total number of municipalities (N) with and total number of registered public psychiatric pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public psychiatric	N	Total public psychiatric	N	Total public psychiatric	N	Total public psychiatric	N	Total public psychiatric	N	Total public psychiatric
Eastern Cape	1	1	1	1	1	1	1	1	1	1	1	1
Free State	1	1	1	1	1	1	1	1	1	1	1	1
Gauteng	4	4	4	4	4	4	4	4	4	4	4	4
Kwazulu Natal	1	3	1	3	1	3	1	3	1	3	1	3
Limpopo	0	0	0	0	0	0	0	0	0	0	0	0
Mpumalanga	0	0	0	0	0	0	0	0	0	0	0	0
North West	2	2	2	2	2	2	2	2	2	2	2	2
Northern Cape	1	1	1	1	1	1	1	1	1	1	1	1
Western Cape	1	3	1	3	1	3	1	3	1	3	1	3
South Africa (TOTAL)	11	15	11	15	11	15	11	15	11	15	11	15

Table B.8: Total number of municipalities (N) with and total number of registered public correctional services pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public correctional	N	Total public correctional	N	Total public correctional	N	Total public correctional	N	Total public correctional	N	Total public correctional
Eastern Cape	3	3	3	3	3	3	3	3	3	3	3	3
Free State	2	2	2	3	2	3	2	3	2	3	2	3
Gauteng	4	5	4	5	4	5	4	5	4	5	4	5
Kwazulu Natal	2	2	2	2	2	2	2	2	2	2	2	2
Limpopo	0	0	0	0	0	0	0	0	0	0	0	0
Mpumalanga	3	3	3	3	3	3	3	3	3	3	3	3
North West	0	0	0	0	0	0	0	0	0	0	0	0
Northern Cape	0	0	0	0	0	0	0	0	0	0	0	0
Western Cape	3	3	3	3	3	3	3	3	3	3	3	3
South Africa (TOTAL)	17	18	17	19	17	19	17	19	17	19	17	19

Table B.9: Total number of municipalities (N) with and total number of registered public military pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public military	N	Total public military	N	Total public military	N	Total public military	N	Total public military	N	Total public military
Eastern Cape	2	2	2	2	2	2	2	2	2	2	2	2
Free State	1	1	1	1	1	6	1	6	1	6	1	2
Gauteng	1	2	1	6	2	8	2	8	2	8	3	9
Kwazulu Natal	1	1	3	4	3	4	3	4	3	4	3	4
Limpopo	3	3	3	3	3	3	3	3	3	3	3	3
Mpumalanga	0	0	0	0	0	0	0	0	0	0	0	0
North West	1	1	1	1	1	1	1	1	1	1	1	1
Northern Cape	1	1	1	1	1	1	1	1	1	1	1	1
Western Cape	2	5	2	5	3	11	3	11	3	11	3	10
South Africa (TOTAL)	12	16	14	23	16	36	16	36	16	36	17	32

Table B.10: Total number of registered private support service pharmacies in each province, 2003-2008

	2003	2004	2005	2006	2007	2008
Eastern Cape	27	27	26	26	26	26
Free State	16	15	15	15	15	14
Gauteng	329	339	349	358	365	363
Kwazulu Natal	52	51	53	53	55	55
Limpopo	5	5	7	7	7	7
Mpumalanga	3	3	3	4	4	4
North West	7	6	5	6	6	6
Northern Cape	3	2	2	2	2	1
Western Cape	74	77	78	81	81	80
South Africa (TOTAL)	516	525	538	552	561	556

Table B.11: Total number of municipalities (N) with and total number of registered public support pharmacies in each province for 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total public support		N	Total public support		N	Total public support		N	Total public support		N	Total public support		N	Total public support	
Eastern Cape	2	5		2	5		2	5		2	5		2	5		2	5	
Free State	1	2		1	2		1	2		1	2		1	2		1	2	
Gauteng	6	10		6	10		6	10		6	10		6	9		6	9	
Kwazulu Natal	2	4		2	4		2	4		2	4		2	4		2	4	
Limpopo	1	1		1	1		1	1		1	1		1	1		1	1	
Mpumalanga	0	0		0	0		0	0		0	0		0	0		0	0	
North West	4	4		3	3		3	3		3	3		2	2		2	2	
Northern Cape	1	1		1	1		1	1		1	1		1	1		1	1	
Western Cape	2	6		2	7		2	6		2	6		2	5		2	5	
South Africa (TOTAL)	19	33		18	33		18	32		18	32		17	29		17	29	

Table B.12: Total number of municipalities (N) with and total number of registered consultant pharmacies in each province for 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total consultant pharmacies	N	Total consultant pharmacies	N	Total consultant pharmacies	N	Total consultant pharmacies	N	Total consultant pharmacies	N	Total consultant pharmacies
Eastern Cape	0	0	0	0	0	0	0	0	0	0	0	0
Free State	0	0	0	0	0	0	0	0	0	0	0	0
Gauteng	4	10	4	11	4	11	4	11	4	10	3	9
Kwazulu Natal	1	1	1	1	2	2	2	2	2	2	2	2
Limpopo	0	0	0	0	0	0	0	0	0	0	0	0
Mpumalanga	0	0	0	0	0	0	0	0	0	0	0	0
North West	0	0	0	0	0	0	0	0	0	0	0	0
Northern Cape	0	0	0	0	0	0	0	0	0	0	0	0
Western Cape	1	3	1	3	1	2	1	2	1	2	1	2
South Africa (TOTAL)	6	14	6	15	7	15	7	15	7	14	6	13

Table B.13: Distribution of registered manufacturing pharmacies in each province for 2003 to 2008

	2003	2004	2005	2006	2007	2008
Eastern Cape	5	5	7	7	7	7
Free State	1	1	1	1	1	1
Gauteng	74	87	136	149	166	194
Kwazulu Natal	10	9	9	10	10	12
Limpopo	0	0	0	0	0	0
Mpumalanga	0	0	1	1	1	1
North West	0	0	0	0	0	4
Northern Cape	0	0	0	0	0	0
Western Cape	12	14	20	21	22	27
South Africa (TOTAL)	102	116	174	189	207	246

Table B.14: Distribution of registered wholesale pharmacies in each province for 2003 to 2008

	2003	2004	2005	2006	2007	2008
Eastern Cape	20	20	19	19	19	19
Free State	14	13	14	14	14	13
Gauteng	222	221	213	209	199	169
Kwazulu Natal	41	41	44	43	45	43
Limpopo	5	5	7	7	7	7
Mpumalanga	3	3	2	3	3	3
North West	7	6	5	6	6	2
Northern Cape	3	2	2	2	2	1
Western Cape	53	54	58	60	59	53
South Africa (TOTAL)	368	365	364	363	354	310

Table B.15: Availability of all registered pharmaceutical structures providing services directly to the patient in each province, represented as a ratio of the total population per pharmacy, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Eastern Cape	6 480 431	252	25 716	6 693 437	255	26 249	6 380 177	255	6 380 177	255	25 020	6 380 177
Free State	2 738 116	185	14 800	2 726 715	184	14 819	2 710 746	184	2 710 746	184	14 732	2 710 746
Gauteng	9 267 189	988	9 380	9 521 943	989	9 628	9 767 765	993	9 767 765	993	9 837	9 767 765
Kwazulu-natal	9 600 825	556	17 268	9 674 901	551	17 559	9 782 753	559	9 782 753	559	17 500	9 782 753
Limpopo	5 373 150	140	38 380	5 390 857	148	36 425	5 477 111	149	5 477 111	149	36 759	5 477 111
Mpumalanga	3 211 182	186	17 264	3 251 322	183	17 767	3 303 343	185	3 303 343	185	17 856	3 303 343
North West	3 720 479	221	16 834	3 820 041	219	17 443	3 881 162	220	3 881 162	220	17 642	3 881 162
Northern Cape	846 009	98	8 632	856 584	100	8 56	870 289	102	870 289	102	8 532	870 289
Western Cape	4 744 047	542	8 752	4 896 617	545	8 985	5 022 343	568	5 022 343	568	8 842	5 022 343
Total (South Africa)	46 083 505	3168	14 547	46 659 549	3174	14 700	47 154 228	3215	47 154 228	3215	14 667	47 154 228

Table B.15: Availability of all registered pharmaceutical structures providing services directly to the patient in each province, represented as a ratio of the total population per pharmacy, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Eastern Cape	6 534 040	284	23 007	6 547 318	298	21 971	6 571 726	291	6 571 726	291	22 583	6 571 726
Free State	2 741 487	195	14 059	2 767 072	193	14 337	2 797 961	195	2 797 961	195	14 349	2 797 961
Gauteng	10 356 663	1054	9 826	10 503 327	1099	9 557	10 720 299	1134	10 720 299	1134	9 453	10 720 299
Kwazulu-natal	9 826 682	585	16 798	9 871 593	599	16 480	9 981 789	613	9 981 789	613	16 283	9 981 789
Limpopo	5 114 038	176	29 057	5 220 240	184	28 371	5 278 513	201	5 278 513	201	26 261	5 278 513
Mpumalanga	3 545 426	168	21 104	3 578 753	177	20 219	3 659 430	185	3 659 430	185	19 781	3 659 430
North West	3 403 818	225	15 128	3 435 814	229	15 003	3 425 236	234	3 425 236	234	14 638	3 425 236
Northern Cape	1 004 036	107	9 393	1 013 474	110	9 213	1 024 788	102	1 024 788	102	10 047	1 024 788
Western Cape	5 101 275	602	8 474	5 149 227	627	8 212	5 255 368	623	5 255 368	623	8 436	5 255 368
Total (South Africa)	47 701 140	3396	14 046	48 149 531	3510	13 718	48 715 109	3578	48 715 109	3578	13 615	48 715 109

Table B.16: Availability of registered community pharmacies* in each province, represented as a ratio of the population per pharmacy, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Eastern Cape	6 480 431	193	33 577		6 693 437	194	34 502		6 380 177	190	33 580	
Free State	2 738 116	134	20 434		2 726 715	134	20 349		2 710 746	131	20 693	
Gauteng	9 267 189	880	10 531		9 521 943	879	10 833		9 767 765	878	11 125	
Kwazulu-natal	9 600 825	462	20 781		9 674 901	455	21 264		9 782 753	459	21 313	
Limpopo	5 373 150	97	55 393		5 390 857	103	52 338		5 477 111	101	54 229	
Mpumalanga	3 211 182	144	22 300		3 251 322	139	23 391		3 303 343	141	23 428	
North West	3 720 479	152	24 477		3 820 041	152	25 132		3 881 162	151	25 703	
Northern Cape	846 009	48	17 625		856 584	50	17 132		870 289	53	16 421	
Western Cape	4 744 047	420	11 295		4 896 617	421	11 631		5 022 343	436	11 519	
Total (South Africa)	46 083 505	2530	18 215		46 659 549	2527	18 464		47 154 228	2540	18 565	

*Includes mail order pharmacies

Table B.16: Availability of registered community pharmacies* in each province, represented as a ratio of the population per pharmacy, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Eastern Cape	6 534 040	200	32 670	6 547 318	210	31 178	6 571 726	202	6 571 726	202	32 533	6 571 726
Free State	2 741 487	138	19 866	2 767 072	140	19 765	2 797 961	141	2 797 961	141	19 844	2 797 961
Gauteng	10 356 663	934	11 089	10 503 327	962	10 918	10 720 299	994	10 720 299	994	10 785	10 720 299
Kwazulu-natal	9 826 682	479	20 515	9 871 593	488	20 229	9 981 789	498	9 981 789	498	20 044	9 981 789
Limpopo	5 114 038	123	41 578	5 220 240	129	40 467	5 278 513	145	5 278 513	145	36 404	5 278 513
Mpumalanga	3 545 426	129	27 484	3 578 753	137	26 122	3 659 430	144	3 659 430	144	25 413	3 659 430
North West	3 403 818	153	22 247	3 435 814	155	22 167	3 425 236	160	3 425 236	160	21 408	3 425 236
Northern Cape	1 004 036	56	17 929	1 013 474	59	17 177	1 024 788	58	1 024 788	58	17 669	1 024 788
Western Cape	5 101 275	461	11 066	5 149 227	475	10 840	5 255 368	469	5 255 368	469	11 205	5 255 368
Total (South Africa)	47 701 140	2673	17 846	48 149 531	2755	17 477	48 715 109	2811	48 715 109	2811	17 330	48 715 109

*Includes mail order pharmacies

Table B.17: Availability of registered private institutional pharmacies* in each province, represented as a ratio of the population per pharmacy, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Eastern Cape	6 480 431	11	589 130	6 693 437	12	557 789	6 380 177	13	490 783			
Free Sate	2 738 116	10	273 812	2 726 715	9	302 968	2 710 746	11	246 431			
Gauteng	9 267 189	60	154 453	9 521 943	62	153 580	9 767 765	67	145 788			
Kwazulu-natal	9 600 825	23	417 427	9 674 901	25	386 996	9 782 753	28	349 384			
Limpopo	5 373 150	7	767 593	5 390 857	8	673 857	5 477 111	10	547 711			
Mpumalanga	3 211 182	8	401 398	3 251 322	10	325 132	3 303 343	10	330 334			
North West	3 720 479	9	413 387	3 820 041	9	424 449	3 881 162	12	323 430			
Northern Cape	846 009	2	423 005	856 584	2	428 292	870 289	2	435 145			
Western Cape	4 744 047	23	206 263	4 896 617	23	212 896	5 022 343	25	200 894			
Total (South Africa)	46 083 505	153	301 199	46 659 549	160	291 622	47 154 228	178	264 911			

*Includes private psychiatric and private hospital pharmacies

Table B.17: Availability of registered private institutional pharmacies* in each province, represented as a ratio of the population per pharmacy, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Eastern Cape	6 534 040	14	466 717	6 547 318	16	409 207	6 571 726	16	6 571 726	16	410 968	6 571 726
Free State	2 741 487	12	228 457	2 767 072	13	212 852	2 797 961	13	2 797 961	13	215 228	2 797 961
Gauteng	10 356 663	74	139 955	10 503 327	80	131 292	10 720 299	81	10 720 299	81	132 349	10 720 299
Kwazulu-natal	9 826 682	30	327 556	9 871 593	32	308 487	9 981 789	33	9 981 789	33	302 478	9 981 789
Limpopo	5 114 038	10	511 404	5 220 240	10	522 024	5 278 513	10	5 278 513	10	527 851	5 278 513
Mpumalanga	3 545 426	11	322 311	3 578 753	13	275 289	3 659 430	13	3 659 430	13	281 495	3 659 430
North West	3 403 818	15	226 921	3 435 814	16	214 738	3 425 236	16	3 425 236	16	214 077	3 425 236
Northern Cape	1 004 036	4	251 009	1 013 474	4	253 369	1 024 788	4	1 024 788	4	256 197	1 024 788
Western Cape	5 101 275	32	159 415	5 149 227	35	147 121	5 255 368	35	5 255 368	35	150 153	5 255 368
Total (South Africa)	47 701 140	202	236 144	48 149 531	219	219 861	48 715 109	221	48 715 109	221	220 430	48 715 109

*Includes private psychiatric and private hospital pharmacies

Table B.18: Availability of registered public generalised institutional pharmacies* in each province, represented as a ratio of the population per pharmacy, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Eastern Cape	6 480 431	48	135 009	6 693 437	49	136 601	6 380 177	52	122 696
Free State	2 738 116	41	66 783	2 726 715	41	66 505	2 710 746	42	64 542
Gauteng	9 267 189	48	193 066	9 521 943	48	198 374	9 767 765	48	203 495
Kwazulu-natal	9 600 825	71	135 223	9 674 901	71	136 266	9 782 753	72	135 872
Limpopo	5 373 150	36	149 254	5 390 857	37	145 699	5 477 111	38	144 135
Mpumalanga	3 211 182	34	94 447	3 251 322	34	95 627	3 303 343	34	97 157
North West	3 720 479	60	62 008	3 820 041	58	65 863	3 881 162	57	68 091
Northern Cape	846 009	48	17 625	856 584	48	17 846	870 289	47	18 517
Western Cape	4 744 047	99	47 920	4 896 617	101	48 481	5 022 343	107	46 938
Total (South Africa)	46 083 505	485	95 018	46 659 549	487	95 810	47 154 228	497	94 878

*Includes all registered public psychiatric and public hospital pharmacies

Table B.18: Availability of registered public institutional pharmacies* in each province, represented as a ratio of the population per pharmacy, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Population per pharmacy
Eastern Cape	6 534 040	70	93 343	6 547 318	72	90 935	6 571 726	73	6 571 726	73	90 016	90 016
Free State	2 741 487	45	60 922	2 767 072	40	69 177	2 797 961	41	2 797 961	41	68 243	68 243
Gauteng	10 356 663	46	258 917	10 503 327	57	184 269	10 720 299	59	10 720 299	59	181 700	181 700
Kwazulu-natal	9 826 682	76	129 298	9 871 593	79	124 957	9 981 789	82	9 981 789	82	121 729	121 729
Limpopo	5 114 038	43	118 931	5 220 240	45	116 005	5 278 513	46	5 278 513	46	114 750	114 750
Mpumalanga	3 545 426	28	126 622	3 578 753	27	132 546	3 659 430	28	3 659 430	28	130 694	130 694
North West	3 403 818	57	59 716	3 435 814	58	59 238	3 425 236	58	3 425 236	58	59 056	59 056
Northern Cape	1 004 036	47	21 362	1 013 474	47	21 563	1 024 788	40	1 024 788	40	25 620	25 620
Western Cape	5 101 275	109	46 801	5 149 227	117	44 010	5 255 368	119	5 255 368	119	44 163	44 163
Total (South Africa)	47 701 140	521	91 557	48 149 531	542	88 837	48 715 109	546	48 715 109	546	89 222	89 222

*Includes all registered public psychiatric and public hospital pharmacies

Table B.19: Availability of wholesale pharmacies in the EASTERN CAPE PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004			2005		
	Total Wholesale pharmacies = 20			Total Wholesale pharmacies = 20			Total Wholesale pharmacies = 19		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	193	9.7		194	9.70		190	10	
Private institutional pharmacies	11	0.6		12	0.60		13	0.68	
Public generalised institutional pharmacies	48	2.4		49	2.45		52	2.74	
Public closed institutional pharmacies	5	0.3		5	0.25		5	0.26	
Total pharmacies servicing direct to patient	257	12.9		260	13.0		260	13.6	

Table B.19 continued

	2006			2007			2008		
	Total Wholesale pharmacies = 19			Total Wholesale pharmacies = 19			Total Wholesale pharmacies = 19		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	200	10.5		210	11.0		202	10.6	
Private institutional pharmacies	14	0.7		16	0.8		16	0.8	
Public generalised institutional pharmacies	70	3.7		72	3.8		73	3.8	
Public closed institutional pharmacies	5	0.3		5	0.3		5	0.3	
Total pharmacies servicing direct to patient	289	15.2		303	15.9		296	15.6	

Table B.20: Availability of wholesale pharmacies in the FREE STATE PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004			2005		
	Total Wholesale pharmacies = 14			Total Wholesale pharmacies = 13			Total Wholesale pharmacies = 14		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	134	9.57		134	10.31		131	9.36	
Private institutional pharmacies	10	0.71		9	0.69		11	0.79	
Public generalised institutional pharmacies	41	2.93		41	3.15		42	3.00	
Public closed institutional pharmacies	3	0.21		4	0.31		9	0.64	
Total pharmacies servicing direct to patient	188	13.4		188	14.5		193	13.8	

Table B.20 continued

	2006			2007			2008		
	Total Wholesale pharmacies = 14			Total Wholesale pharmacies = 14			Total Wholesale pharmacies = 13		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	138	9.9		140	10.0		141	10.8	
Private institutional pharmacies	12	0.9		13	0.9		13	1.0	
Public generalised institutional pharmacies	45	3.2		40	2.9		41	3.2	
Public closed institutional pharmacies	9	0.6		9	0.6		5	0.4	
Total pharmacies servicing direct to patient	204	14.6		202	14.4		200	15.4	

Table B.21: Availability of wholesale pharmacies in GAUTENG PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003		2004		2005	
	Total Wholesale pharmacies = 222		Total Wholesale pharmacies = 221		Total Wholesale pharmacies = 213	
	Total number pharmacies	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
Community pharmacies	880	4.0	879	4.0	878	4.1
Private institutional pharmacies	60	0.3	62	0.28	67	0.31
Public generalised institutional pharmacies	48	0.2	48	0.22	47	0.23
Public closed institutional pharmacies	7	0.03	11	0.05	13	0.06
Total pharmacies servicing direct to patient	995	4.5	1000	4.5	1005	4.7

Table B.21 continued

	2006		2007		2008	
	Total Wholesale pharmacies = 209		Total Wholesale pharmacies = 199		Total Wholesale pharmacies = 169	
	Total number pharmacies	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
Community pharmacies	934	4.5	962	4.8	994	5.9
Private institutional pharmacies	74	0.4	80	0.4	81	0.5
Public generalised institutional pharmacies	46	0.2	57	0.3	59	0.3
Public closed institutional pharmacies	13	0.06	13	0.07	14	0.08
Total pharmacies servicing direct to patient	1067	5.1	1112	5.6	1148	6.8

Table B.22: Availability of wholesale pharmacies in the KWAZULU-NATAL PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004			2005		
	Total Wholesale pharmacies = 41			Total Wholesale pharmacies = 41			Total Wholesale pharmacies = 44		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	462	11.3		455	11.1		459	10.4	
Private institutional pharmacies	23	0.7		25	0.6		28	0.6	
Public generalised institutional pharmacies	71	1.7		71	1.7		72	1.6	
Public closed institutional pharmacies	3	0.07		6	0.2		6	0.1	
Total pharmacies servicing direct to patient	559	13.6		557	13.6		565	12.8	

Table B.22 continued

	2006			2007			2008		
	Total Wholesale pharmacies = 43			Total Wholesale pharmacies = 45			Total Wholesale pharmacies = 43		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	479	11.1		488	10.8		498	11.5	
Private institutional pharmacies	30	0.7		32	0.7		33	0.8	
Public generalised institutional pharmacies	76	1.8		79	1.8		82	1.9	
Public closed institutional pharmacies	6	0.1		6	0.1		6	0.1	
Total pharmacies servicing direct to patient	591	13.7		605	13.4		619	14.4	

Table B.23: Availability of wholesale pharmacies in the LIMPOPO PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004			2005		
	Total Wholesale pharmacies = 5			Total Wholesale pharmacies = 5			Total Wholesale pharmacies = 7		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	97	19.40		103	20.6		101	14.43	
Private institutional pharmacies	7	1.40		8	1.6		10	1.43	
Public generalised institutional pharmacies	36	7.20		37	7.4		38	5.43	
Public closed institutional pharmacies	3	0.60		3	0.6		3	0.43	
Total pharmacies servicing direct to patient	143	28.6		151	30.2		152	21.7	

Table B.23 continued

	2006			2007			2008		
	Total Wholesale pharmacies = 7			Total Wholesale pharmacies = 7			Total Wholesale pharmacies = 7		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	123	17.6		129	18.4		145	20.7	
Private institutional pharmacies	10	1.7		10	1.4		10	1.4	
Public generalised institutional pharmacies	43	6.1		45	6.4		46	6.6	
Public closed institutional pharmacies	3	0.4		3	0.4		3	0.4	
Total pharmacies servicing direct to patient	179	25.6		187	26.7		204	29.1	

Table B.24: Availability of wholesale pharmacies in the MPUMALANGA PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004		2005	
	Total Wholesale pharmacies = 3			Total Wholesale pharmacies = 3		Total Wholesale pharmacies = 2	
Community pharmacies	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
	144	48		139	46.33	141	70.5
Private institutional pharmacies	8	2.67		10	3.33	10	5
Public generalised institutional pharmacies	34	11.33		34	11.33	34	17
Public closed institutional pharmacies	3	1		3	1	3	1.5
Total pharmacies servicing direct to patient	190	63.3		186	62.0	188	94.0

Table B.24 continued

	2006			2007		2008	
	Total Wholesale pharmacies = 3			Total Wholesale pharmacies = 3		Total Wholesale pharmacies = 3	
Community pharmacies	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
	129	43.0		137	45.7	144	48.0
Private institutional pharmacies	11	3.7		13	4.3	13	4.3
Public generalised institutional pharmacies	28	9.3		27	9.0	28	9.3
Public closed institutional pharmacies	3	1.0		3	1.0	3	1.0
Total pharmacies servicing direct to patient	171	57.0		180	60.0	188	62.7

Table B.25: Availability of wholesale pharmacies in the NORTH WEST PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004			2005		
	Total Wholesale pharmacies = 7			Total Wholesale pharmacies = 6			Total Wholesale pharmacies = 5		
	Total number pharmacies	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	152	21.71	152	25.33	151	30.2			
Private institutional pharmacies	9	1.29	9	1.5	12	2.4			
Public generalised institutional pharmacies	60	8.57	58	9.67	57	11.4			
Public closed institutional pharmacies	1	0.1	1	0.2	1	0.2			
Total pharmacies servicing direct to patient	222	31.7	220	36.7	221	44.2			

Table B.25 continued

	2006			2007			2008		
	Total Wholesale pharmacies = 6			Total Wholesale pharmacies = 6			Total Wholesale pharmacies = 2		
	Total number pharmacies	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	153	25.5	155	25.8	160	80.0			
Private institutional pharmacies	15	2.5	16	2.7	16	8.0			
Public generalised institutional pharmacies	57	9.5	58	9.7	58	29.0			
Public closed institutional pharmacies	1	0.2	1	0.2	1	0.5			
Total pharmacies servicing direct to patient	226	37.7	230	38.3	235	117.5			

Table B.26: Availability of wholesale pharmacies in the NORTHERN CAPE PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004		2005	
	Total Wholesale pharmacies = 3			Total Wholesale pharmacies = 2		Total Wholesale pharmacies = 2	
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
Community pharmacies	48	16		50	25	53	26.5
Private institutional pharmacies	2	0.67		2	1	2	1
Public generalised institutional pharmacies	48	16		48	24	47	23.5
Public closed institutional pharmacies	1	0.33		1	0.5	1	0.5
Total pharmacies servicing direct to patient	99	33.0		101	50.2	103	51.5

Table B.26 continued

	2006			2007		2008	
	Total Wholesale pharmacies = 2			Total Wholesale pharmacies = 2		Total Wholesale pharmacies = 1	
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	Total number pharmacy	Pharmacies per wholesale pharmacy
Community pharmacies	56	28		59	29.5	58	58.0
Private institutional pharmacies	4	2.0		4	2.0	4	4.0
Public generalised institutional pharmacies	47	23.5		47	23.5	40	40.0
Public closed institutional pharmacies	1	0.5		1	0.5	1	1.0
Total pharmacies servicing direct to patient	108	54.0		111	55.5	103	103.0

Table B.27: Availability of wholesale pharmacies in the WESTERN CAPE PROVINCE as a ratio of the number of pharmacies per wholesale pharmacy, 2003 to 2008

	2003			2004			2005		
	Total Wholesale pharmacies = 53			Total Wholesale pharmacies = 54			Total Wholesale pharmacies = 58		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	420	7.92		421	7.8		436	7.52	
Private institutional pharmacies	23	0.43		23	0.43		25	0.43	
Public generalised institutional pharmacies	99	1.87		101	1.87		107	1.84	
Public closed institutional pharmacies	8	0.15		8	0.15		14	0.24	
Total pharmacies servicing direct to patient	550	10.4		463	8.6		582	10.0	

Table B.27 continued

	2006			2007			2008		
	Total Wholesale pharmacies = 60			Total Wholesale pharmacies = 59			Total Wholesale pharmacies = 53		
	Total number pharmacies	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy		Total number pharmacy	Pharmacies per wholesale pharmacy	
Community pharmacies	461	7.7		475	8.1		469	8.8	
Private institutional pharmacies	32	0.5		32	0.5		35	0.7	
Public generalised institutional pharmacies	109	1.8		117	2.0		119	2.2	
Public closed institutional pharmacies	14	0.2		14	0.2		13	0.2	
Total pharmacies servicing direct to patient	616	10.3		638	10.8		636	12.0	

TABLE B.28.1: PROVINCIAL: Distribution of All Direct service pharmacies provided pharmaceutical services directly to patients for 2003

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy			
				Number of Municipalities			
				n	%*	%**	%***
Eastern Cape	6 480 431	43	25 716	10	23.26	3.68	9.48
Free State	2 738 116	21	14 801	3	14.29	1.10	2.19
Gauteng	9 267 189	13	9 380	1	7.69	0.37	0.07
Kwazulu - Natal	9 600 825	55	17 268	19	34.55	6.99	16.26
Limpopo	5 373 150	27	38 380	6	22.22	2.21	11.04
Mpumalanga	3 211 182	26	17 264	6	23.08	2.21	8.94
North West	3 720 479	26	16 835	5	19.23	1.84	6.05
Northern Cape	846 009	31	8 633	6	19.35	2.21	4.28
Western Cape	4 744 047	30	8 753	6	20.00	2.21	0.85
TOTAL	46 083 505	272	14 547	62	22.79**	3 423 608.06	7.43****

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.28.2: PROVINCIAL: Distribution of community pharmacies for 2003

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any community pharmacy			
				Number of Municipalities		Population	
				n	%*	n	%***
Eastern Cape	6 480 431	43	33 577	13	30.23	1 275 949.39	19.69
Free State	2 738 116	21	20 434	3	14.29	60 804.96	2.22
Gauteng	9 267 189	13	10 531	1	7.69	6 064.39	0.07
Kwazulu - Natal	9 600 825	55	20 781	22	40.00	2 006 083.35	20.89
Limpopo	5 373 150	27	55 393	7	25.93	685 377.97	12.76
Mpumalanga	3 211 182	26	22 300	6	23.08	287 032.15	8.94
North West	3 720 479	26	24 477	9	34.62	744 621.39	20.01
Northern Cape	846 009	31	17 625	14	45.16	139 828.45	16.53
Western Cape	4 744 047	30	11 295	6	20.00	40 313.83	0.85
TOTAL	46 083 505	272	18 258	81	29.78**	5 246 075.88	11.38****

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.28.3: PROVINCIAL: Distribution of private institutional pharmacies for 2003

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any private institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 480 431	43	589 130	38	88.37	13.97	4 115 575.41	63.51	8.93
Free State	2 738 116	21	273 812	16	76.19	5.88	1 326 828.21	48.46	2.88
Gauteng	9 267 189	13	154 453	4	30.77	1.47	263 495.09	2.84	0.57
Kwazulu - Natal	9 600 825	55	417 427	48	87.27	17.65	4 739 966.43	49.37	10.29
Limpopo	5 373 150	27	767 593	22	81.48	8.09	4 067 671.14	75.70	8.83
Mpumalanga	3 211 182	26	401 398	21	80.77	7.72	2 111 228.26	65.75	4.58
North West	3 720 479	26	413 386	21	80.77	7.72	2 167 876.54	58.27	4.70
Northern Cape	846 009	31	423 005	29	93.55	10.66	724 145.93	85.60	1.57
Western Cape	4 744 047	30	206 263	24	80.00	8.82	1 294 420.44	27.29	2.81
TOTAL	46 083 505	272	301 199	223	81.99**		20 811 207.45	45.16****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.28.4: PROVINCIAL: Distribution of public institutional pharmacies for 2003

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any public institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 480 431	43	135 009	18	41.86	6.62	1 529 868.11	23.61	3.32
Free State	2 738 116	21	66 783	3	14.29	1.10	60 804.96	2.22	0.13
Gauteng	9 267 189	13	193 066	5	38.46	1.84	401 022.30	4.33	0.87
Kwazulu - Natal	9 600 825	55	135 223	25	45.45	9.19	2 026 503.07	21.11	4.40
Limpopo	5 373 150	27	149 254	3	11.11	1.10	760 558.90	14.15	1.65
Mpumalanga	3 211 182	26	94 447	7	26.92	2.57	326 736.96	10.17	0.71
North West	3 720 479	26	62 008	5	19.23	1.84	225 076.01	6.05	0.49
Northern Cape	846 009	31	17 625	7	22.58	2.57	52 826.64	6.24	0.11
Western Cape	4 744 047	30	47 920	8	26.67	2.94	76 471.19	1.61	0.17
TOTAL	46 083 505	272	95 018	81	29.78**		5 459 868.14	11.85****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

B.29: YEAR 2004

TABLE B.29.1: PROVINCIAL: Distribution of All Direct service pharmacies provided pharmaceutical services directly to patients for 2004

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy				
				Number of Municipalities			Population	
				n	%*	%**	n	%***
Eastern Cape	6 693 437	43	26 249	10	23.26	3.68	634 692.06	9.48
Free State	2 726 715	21	14 819	3	14.29	1.10	60 551.79	2.22
Gauteng	9 521 943	13	9 628	1	7.69	0.37	6 231.10	0.07
Kwazulu - Natal	9 674 901	55	17 559	19	34.55	6.99	1 573 389.09	16.26
Limpopo	5 390 857	27	36 425	6	22.22	2.21	594 963.91	11.04
Mpumalanga	3 251 322	26	17 767	6	23.08	2.21	290 620.06	8.94
North West	3 820 041	26	17 443	5	19.23	1.84	231 099.17	6.05
Northern Cape	856 584	31	8 566	6	19.35	2.21	36 644.90	4.28
Western Cape	4 896 617	30	8 985	6	20.00	2.21	41 610.34	0.85
TOTAL	46 659 549	272	14 696	62	22.79**		3 469 802.42	7.44****

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.29.2: PROVINCIAL: Distribution of community pharmacies for 2004

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any community pharmacy				
				Number of Municipalities		Population		
				n	%*	%**	n	%*** %****
Eastern Cape	6 693 437	43	34 502	12	27.91	4.41	1 317 888.88	19.69 2.82
Free State	2 726 715	21	20 347	3	14.29	1.10	60 795.51	2.23 0.13
Gauteng	9 521 943	13	10 833	1	7.69	0.37	6 231.10	0.07 0.01
Kwazulu - Natal	9 674 901	55	21 264	23	41.82	8.46	2 054 698.84	21.24 4.40
Limpopo	5 390 857	27	52 338	9	33.33	3.31	763 065.28	14.15 1.64
Mpumalanga	3 251 322	26	23 391	6	23.08	2.21	290 620.06	8.94 0.62
North West	3 820 041	26	25 132	9	34.62	3.31	764 547.88	20.01 1.64
Northern Cape	856 584	31	17 132	14	45.16	5.15	141 576.31	16.53 0.30
Western Cape	4 896 617	30	11 631	6	20.00	2.21	41 610.34	0.85 0.09
TOTAL	46 659 549	272	18 508	83	30.51**		5 441 034.20	11.66***

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.29.3: PROVINCIAL: Distribution of private institutional pharmacies for 2004

Provinces	Estimated population)	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any private institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 693 437	43	557 789	37	86.05	15.81	4 250 851.26	63.51	9.11
Free State	2 726 715	21	302 968	16	76.19	5.88	1 321 303.83	48.46	2.83
Gauteng	9 521 943	13	153 580	4	30.77	1.47	270 738.55	2.84	0.58
Kwazulu - Natal	9 674 901	55	386 996	47	85.45	17.28	4 700 704.67	48.59	10.07
Limpopo	5 390 857	27	673 857	22	81.48	8.09	4 081 075.97	75.70	8.75
Mpumalanga	3 251 322	26	325 132	18	69.23	6.62	1 988 979.84	61.17	4.26
North West	3 820 041	26	424 449	21	80.77	7.72	2 225 890.13	58.27	4.77
Northern Cape	856 584	31	428 292	29	93.55	10.66	733 197.75	85.60	1.57
Western Cape	4 896 617	30	212 896	22	73.33	8.09	1 212 786.46	24.77	2.60
TOTAL	46 659 549	272	289 811	216	79.41**		20 785 528.46	44.55****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.29.4: PROVINCIAL: Distribution of public institutional pharmacies for 2004

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any public institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 693 437	43	136 601	17	39.53	6.25	1 580 153.72	23.61	3.39
Free State	2 726 715	21	66 505	3	14.29	1.10	60 551.79	2.22	0.13
Gauteng	9 521 943	13	198 374	5	38.46	1.84	412 046.38	4.33	0.88
Kwazulu - Natal	9 674 901	55	136 266	25	45.45	9.19	2 042 138.78	21.11	4.38
Limpopo	5 390 857	27	145 699	9	33.33	3.31	763 065.28	14.15	1.64
Mpumalanga	3 251 322	26	95 627	5	19.23	1.84	330 821.17	10.17	0.71
North West	3 820 041	26	65 863	5	19.23	1.84	231 099.17	6.05	0.50
Northern Cape	856 584	31	17 846	7	22.58	2.57	53 486.97	6.24	0.11
Western Cape	4 896 617	30	48 481	8	26.67	2.94	78 930.52	16.12	0.17
TOTAL	46 659 549	272	95 810	84	30.88**		5 552 293.78	11.90****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

B.30: YEAR 2005

TABLE B.30.1: PROVINCIAL: Distribution of All Direct service pharmacies provided pharmaceutical services directly to patients for 2005

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy(					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 380 177	43	25 020	11	25.58	4.04	749 838.84	11.75	1.59
Free State	2 710 746	21	14 732	3	14.29	1.10	60 197.16	2.22	0.13
Gauteng	9 767 765	13	9 837	1	7.69	0.37	6 391.96	0.07	0.01
Kwazulu - Natal	9 782 753	55	17 500	22	40.00	8.09	1 966 611.93	20.10	4.17
Limpopo	5 477 111	27	36 759	7	25.93	2.57	698 638.78	12.76	1.48
Mpumalanga	3 303 343	26	17 856	6	23.08	2.21	295 269.98	8.94	0.63
North West	3 881 162	26	17 642	5	19.23	1.84	234 796.75	6.05	0.50
Northern Cape	870 289	31	8 532	6	19.35	2.21	37 231.21	4.28	0.08
Western Cape	5 022 343	30	8 842	6	20.00	2.21	42 678.73	0.85	0.09
TOTAL	47 154 228	272	14 667	67	24.63**		4 091 655.34	8.68****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.30.2: PROVINCIAL: Distribution of community pharmacies for 2005

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any community pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 380 177	43	33 580	14	32.56	5.15	1 401 063.18	21.96	2.97
Free State	2 710 746	21	20 693	4	19.05	1.47	116 235.09	4.29	0.25
Gauteng	9 767 765	13	11 125	1	7.69	0.37	6 391.96	0.07	0.01
Kwazulu - Natal	9 782 753	55	21 313	22	40.00	8.08	1 966 611.93	20.10	4.17
Limpopo	5 477 111	27	54 229	7	25.93	2.57	698 638.78	12.76	1.48
Mpumalanga	3 303 343	26	23 428	6	23.08	2.21	295 269.98	8.94	0.63
North West	3 881 162	26	25 703	9	34.62	3.31	776 780.64	20.01	1.65
Northern Cape	870 289	31	16 421	14	45.16	5.15	143 841.53	16.53	0.31
Western Cape	5 022 343	30	11 519	6	20.00	2.21	42 678.73	0.85	0.09
TOTAL	47 154 228	272	18 631	83	30.51**		5 447 575.18	11.55****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.30.3: PROVINCIAL: Distribution of private institutional pharmacies for 2005

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any private institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 380 177	43	490 783	38	88.37	13.97	4 051 906.66	63.51	8.59
Free State	2 710 746	21	246 431	16	76.19	5.88	1 313 565.40	48.46	2.79
Gauteng	9 767 765	13	145 788	3	23.08	1.10	198 654.77	2.03	0.42
Kwazulu - Natal	9 782 753	55	349 384	46	83.64	16.91	4 694 432.16	47.99	9.96
Limpopo	5 477 111	27	547 711	8	29.63	2.94	3 575 977.21	65.29	7.58
Mpumalanga	3 303 343	26	330 334	21	80.77	7.72	2 066 303.87	62.55	4.38
North West	3 881 162	26	323 430	19	73.08	6.99	2 061 081.98	53.10	4.37
Northern Cape	870 289	31	435 145	29	93.55	10.66	744 928.92	85.60	1.58
Western Cape	5 022 343	30	200 894	23	76.67	8.46	1 301 071.32	25.91	2.76
TOTAL	47 154 228	272	264 911	203	74.63**		20 206 576.69	42.85****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.30.4: PROVINCIAL: Distribution of public institutional pharmacies for 2005

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any public institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 380 177	43	122 696	17	39.53	6.25	1 452 645.23	22.77	3.08
Free State	2 710 746	21	64 541	3	14.29	1.10	60 197.16	2.22	0.13
Gauteng	9 767 765	13	203 495	5	38.46	1.84	422 683.95	4.33	0.90
Kwazulu - Natal	9 782 753	55	135 872	25	45.45	9.19	2 064 903.86	21.11	4.38
Limpopo	5 477 111	27	144 135	8	29.63	2.94	677 246.80	12.37	2.07
Mpumalanga	3 303 343	26	97 157	7	26.92	2.57	336 114.31	10.17	0.71
North West	3 881 162	26	68 091	5	19.23	1.84	234 796.75	6.05	0.50
Northern Cape	870 289	31	18 517	7	22.58	2.57	54 342.77	6.24	0.12
Western Cape	5 022 343	30	46 938	8	26.67	2.94	80 957.16	1.61	0.17
TOTAL	47 154 228	272	94 878	85	31.25**		5 383 887.99	11.42****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

B.31: YEAR 2006

TABLE B.31.1: PROVINCIAL: Distribution of All Direct service pharmacies provided pharmaceutical services directly to patients for 2006

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 534 040	41	23 007	8	19.51	3.13	618 008.65	9.46	1.30
Free State	2 741 487	21	14 059	3	14.29	1.17	60 879.83	2.22	0.13
Gauteng	10 356 663	12	9 826	1	8.33	0.39	6 524.06	0.06	0.01
Kwazulu - Natal	9 826 682	54	16 798	16	29.63	6.5	1 243 998.33	12.66	2.61
Limpopo	5 114 038	25	29 057	3	12.00	1.17	287 142.71	5.61	0.60
Mpumalanga	3 545 426	19	21 104	2	10.53	0.78	260 425.33	7.35	0.55
North West	3 403 818	22	15 128	3	13.64	1.17	123 797.92	3.64	0.26
Northern Cape	1 004 036	32	9 393	7	21.88	2.73	121 690.32	12.12	0.26
Western Cape	5 101 275	30	8 474	6	20.00	2.34	43 349.47	0.85	0.09
TOTAL	47 701 140	256	14 109	49	19.14**		2 765 816.62	5.80****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.31.2: PROVINCIAL: Distribution of community pharmacies for 2006

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any community pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 534 040	41	32 670	10	24.39	3.91	902 461.64	13.81	1.89
Free State	2 741 487	21	19 866	3	14.29	1.17	60 879.83	2.22	0.13
Gauteng	10 356 663	12	11 089	1	8.33	0.39	6 524.06	0.06	0.01
Kwazulu - Natal	9 826 682	54	20 515	19	35.49	7.42	1 522 862.16	15.50	3.19
Limpopo	5 114 038	25	41 578	3	12.00	1.17	287 142.71	5.61	0.60
Mpumalanga	3 545 426	19	27 484	2	10.53	0.78	260 425.33	7.35	0.55
North West	3 403 818	22	22 247	6	27.27	2.34	609 630.25	17.91	1.28
Northern Cape	1 004 036	32	17 929	15	46.88	5.86	224 494.37	22.36	0.47
Western Cape	5 101 275	30	11 066	6	20.00	2.34	43 349.47	0.85	0.09
TOTAL	47 701 140	256	17 846	65	25.39**		3 917 769.82	8.21****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.31.3: PROVINCIAL: Distribution of private institutional pharmacies for 2006

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any private institutional pharmacy				Population			
				Number of Municipalities		%**		n		%***	
				n	%*					%****	
Eastern Cape	6 534 040	41	466 717	35	85.37	13.67		4 084 038.50	62.50	8.56	
Free State	2 741 487	21	228 457	15	71.43	5.86		1 197 893.39	43.70	2.51	
Gauteng	10 356 663	12	139 955	3	25.00	1.17		202 760.32	1.96	0.53	
Kwazulu - Natal	9 826 682	54	327 556	45	83.33	17.58		4 706 694.24	47.90	9.87	
Limpopo	5 114 038	25	511 404	18	72.00	7.03		3 239 729.33	63.35	6.79	
Mpumalanga	3 545 426	19	322 311	13	68.42	5.08		2 183 185.20	61.58	4.58	
North West	3 403 818	22	226 921	15	68.18	5.86		1 541 921.60	45.30	3.23	
Northern Cape	1 004 036	32	251 009	29	90.63	11.33		677 662.83	67.49	1.42	
Western Cape	5 101 275	30	159 415	20	66.67	7.81		804 963.85	15.78	1.69	
TOTAL	47 701 140	256	236 144	193	75.39**			18 638 849.26	39.07****		

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.31.4: PROVINCIAL: Distribution of registered public institutional pharmacies for 2006

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any public institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 534 040	41	93 343	11	26.83	4.29	706 163.39	10.81	1.48
Free State	2 741 487	21	60 922	3	14.29	1.17	60 879.83	2.22	0.13
Gauteng	10 356 663	12	258 917	5	41.67	1.95	469 164.93	4.53	0.98
Kwazulu - Natal	9 826 682	54	129 298	22	40.74	8.59	1 698 230.56	17.28	3.56
Limpopo	5 114 038	25	118 931	4	16.00	1.56	318 630.46	6.23	0.67
Mpumalanga	3 545 426	19	126 622	3	15.79	1.17	301 066.21	8.49	0.63
North West	3 403 818	22	59 716	3	13.64	1.17	123 797.92	3.64	0.26
Northern Cape	1 004 036	32	21 362	8	25.00	3.13	138 190.94	13.76	0.29
Western Cape	5 101 275	30	46 801	7	23.33	2.73	55 200.76	1.08	0.12
TOTAL	47 701 140	256	94 271	66		25.78**	3 871 325.00	8.12****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

B.32: YEAR 2007

TABLE B.32.1: PROVINCIAL: Distribution of All Direct service pharmacies provided pharmaceutical services directly to patients for 2007

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 547 318	41	21 971	7	17.07	2.73	501 635.83	7.66	1.04
Free State	2 767 072	21	14 337	3	14.29	1.17	61 447.98	2.22	0.13
Gauteng	10 503 327	12	9 557	1	8.33	0.39	6 616.45	0.06	0.01
Kwazulu - Natal	9 871 593	54	16 480	15	27.78	5.84	1 212 774.26	12.29	2.52
Limpopo	5 220 240	25	28 371	4	16.00	1.56	293 105.70	5.61	0.61
Mpumalanga	3 578 753	19	20 219	3	15.78	1.17	262 873.33	7.35	0.55
North West	3 435 814	22	15 004	3	13.64	1.17	124 961.62	3.63	0.26
Northern Cape	1 013 474	32	9 213	7	21.88	2.73	122 834.21	12.12	0.26
Western Cape	5 149 227	30	8 212	6	20.00	2.34	43 756.96	0.85	0.09
TOTAL	48 149 531	256	13 693	49	19.14**		2 630 006.34	5.46****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.32.2: PROVINCIAL: Distribution of community pharmacies for 2007

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any community pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 547 318	41	31 178	10	24.39	3.91	904 295.55	13.81	1.88
Free State	2 767 072	21	19 765	3	14.29	1.17	61 447.98	2.22	0.13
Gauteng	10 503 327	12	10 918	1	8.33	0.39	6 616.45	0.06	0.01
Kwazulu - Natal	9 871 593	54	20 229	19	35.19	7.42	1 605 747.81	16.27	3.33
Limpopo	5 220 240	25	40 467	4	16.00	1.56	293 105.70	5.61	0.61
Mpumalanga	3 578 753	19	26 122	3	15.78	1.17	262 873.33	7.35	0.55
North West	3 435 814	22	22 167	6	27.27	2.34	615 360.78	17.91	1.28
Northern Cape	1 013 474	32	17 178	14	43.75	5.46	217 265.75	21.44	0.45
Western Cape	5 149 227	30	10 840	6	20.00	2.34	43 756.96	0.85	0.09
TOTAL	48 149 531	256	17 515	66	25.78**		4 010 470.31	8.33****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 272)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.32.3: PROVINCIAL: Distribution of registered private institutional pharmacies for 2007

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any private institutional pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 547 318	41	409 207	33	80.49	12.89	3 954 173.37	60.39	8.21
Free State	2 767 072	21	212 852	15	71.43	5.84	1 209 072.65	43.70	2.51
Gauteng	10 503 327	12	131 292	3	25.00	1.17	205 631.68	1.96	0.43
Kwazulu - Natal	9 871 593	54	308 487	44	81.48	17.19	4 561 840.16	46.21	9.47
Limpopo	5 220 240	25	522 024	19	76.00	7.42	3 307 007.71	63.35	6.87
Mpumalanga	3 578 753	19	275 289	13	68.42	5.08	2 158 007.87	60.30	4.48
North West	3 435 814	22	214 738	15	68.18	5.84	1 556 415.66	45.30	3.23
Northern Cape	1 013 474	32	253 369	29	90.63	11.33	684 032.86	67.49	1.42
Western Cape	5 149 227	30	147 121	20	66.67	7.81	812 530.51	15.78	1.69
TOTAL	48 149 531	256	219 861	191	74.61**		18 448 712.47	38.32***	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.32.4: PROVINCIAL: Distribution of public institutional pharmacies for 2007

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any public institutional pharmacy (Number of Municipalities)				Population			
				n	%*	%**	n	%***	%****		
Eastern Cape	6 547 318	41	90 935	11	26.83	4.29	707 598.39	10.81	1.47		
Free State	2 767 072	21	69 177	4	19.05	1.56	105 377.66	3.81	0.22		
Gauteng	10 503 327	12	184 269	3	25.00	1.17	254 468.47	2.42	0.53		
Kwazulu - Natal	9 871 593	54	124 957	22	40.74	8.59	1 705 992.05	17.28	3.54		
Limpopo	5 220 240	25	116 005	7	28.00	2.73	726 864.31	13.92	1.51		
Mpumalanga	3 578 753	19	132 546	4	21.05	1.56	303 896.23	8.49	0.63		
North West	3 435 814	22	59 238	3	13.64	1.17	124 961.62	3.64	0.26		
Northern Cape	1 013 474	32	21 563	8	25.00	3.12	139 489.94	13.76	0.29		
Western Cape	5 149 227	30	44 010	6	20.00	2.34	43 756.96	0.85	0.09		
TOTAL	48 149 531	256	88 836	68	26.56**		4 112 405.63	8.54****			

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

B.33: YEAR 2008

TABLE B.33.1: PROVINCIAL: Distribution of All Direct service pharmacies provided pharmaceutical services directly to patients for 2008

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy				
				Number of Municipalities		Population		
				n	%*	%**	n	%***
Eastern Cape	6 571 726	41	22 583	8	19.51	3.12	503 505.90	7.66
Free State	2 797 961	21	14 348	3	14.29	1.16	62 133.92	2.22
Gauteng	10 720 299	12	9 454	1	8.33	0.39	6 753.13	0.06
Kwazulu - Natal	9 981 789	54	16 283	15	27.78	5.84	1 226 312.41	12.29
Limpopo	5 278 513	25	26 261	4	16.00	1.56	296 377.63	5.61
Mpumalanga	3 659 430	19	19 781	3	15.78	1.17	268 800.99	7.35
North West	3 425 236	22	14 638	3	13.64	1.17	124 576.89	3.64
Northern Cape	1 024 787	32	10 047	8	25.00	3.12	135 142.38	13.19
Western Cape	5 255 368	30	8 436	6	20.00	2.34	44 658.92	0.85
TOTAL	48 715 109	256	13 615	51	19.92**		2 668 262.17	5.48****

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.33.2: PROVINCIAL: Distribution of community pharmacies for 2008

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 571 726	41	32 531	11	26.82	4.30	928 278.94	14.13	1.91
Free State	2 797 961	21	19 844	3	14.29	1.16	62 133.92	2.22	0.13
Gauteng	10 720 299	12	10 785	1	8.33	0.39	6 753.13	0.06	0.01
Kwazulu - Natal	9 981 789	54	20 044	19	35.19	7.42	1 623 672.71	16.27	3.33
Limpopo	5 278 513	25	36 404	4	16.00	1.56	296 377.63	5.61	0.61
Mpumalanga	3 659 430	19	25 413	3	15.00	1.16	268 800.99	7.35	0.55
North West	3 425 236	22	21 408	6	27.27	2.34	613 466.22	17.91	1.26
Northern Cape	1 024 787	32	17 669	14	43.75	5.57	219 691.08	21.44	0.45
Western Cape	5 255 368	30	11 205	6	20.00	2.34	44 658.92	0.85	0.09
TOTAL	48 715 109	256	17 330	67	26.17**		4 063 833.54	8.34****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.33.3: PROVINCIAL: Distribution of private institutional pharmacies for 2008

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 571 726	41	410 968	34	80.95	13.28	3 968 914.28	60.39	8.15
Free State	2 797 961	21	215 228	15	71.43	5.84	1 222 569.47	43.70	2.51
Gauteng	10 720 299	12	132 349	3	25.00	1.17	209 879.50	1.93	0.43
Kwazulu - Natal	9 981 789	54	302 478	44	81.48	17.19	4 612 763.79	46.21	9.47
Limpopo	5 278 513	25	527 851	19	73.08	7.42	3 343 923.69	63.35	6.86
Mpumalanga	3 659 430	19	281 495	13	65.00	5.08	2 206 648.09	60.30	4.53
North West	3 425 236	22	214 077	15	68.18	5.84	1 551 623.81	45.30	3.19
Northern Cape	1 024 787	32	256 197	29	90.63	11.32	691 668.69	67.49	1.42
Western Cape	5 255 368	30	150 153	21	70.00	8.20	998 902.33	19.01	2.05
TOTAL	48 715 109	256	220 430	193		75.39**	18 806 893.65	38.61***	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

TABLE B.33.4: PROVINCIAL: Distribution of public institutional pharmacies for 2008

Provinces	Estimated population	Total number of municipalities in provinces	Estimated population per pharmacy	Municipalities without any registered pharmacy					
				Number of Municipalities			Population		
				n	%*	%**	n	%***	%****
Eastern Cape	6 571 726	41	90 016	12	29.27	4.68	710 236.27	10.81	1.46
Free State	2 797 961	21	68 243	4	19.05	1.56	106 553.99	3.81	0.22
Gauteng	10 720 299	12	181 700	3	25.00	1.17	259 725.14	2.42	0.53
Kwazulu - Natal	9 981 789	54	121 729	21	38.89	8.20	1 662 380.73	16.65	3.41
Limpopo	5 278 513	25	114 750	7	28.00	2.73	734 978.26	13.92	1.51
Mpumalanga	3 659 430	19	130 694	4	21.05	1.56	310 748.93	8.49	0.63
North West	3 425 236	22	59 056	3	15.00	1.17	124 576.89	3.64	0.26
Northern Cape	1 024 787	32	25 620	10	31.25	3.91	162 530.63	15.86	0.33
Western Cape	5 255 368	30	44 163	6	20.00	2.34	44 658.92	0.85	0.09
TOTAL	48 715 109	256	89 222	70	27.34**		4 116 389.76	8.45****	

* % of total number of municipalities in the province

** % of total number of municipalities in South Africa (n = 256)

*** % of total population in the specific province

**** % of total estimated population in South Africa

C.1:

EASTERN CAPE PROVINCE

Table C.1.1.1: Total number of local municipalities (N) with and total number of all direct service pharmacies (Tpharm) in the EASTERN CAPE Province per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm
Alfred Nzo	2	2	2	2	2	2	2	9	2	10	2	9
Amatole	7	56	7	55	7	56	7	64	7	69	7	69
Cacadu	7	31	7	31	7	32	7	33	7	34	7	34
Chris Hani	7	25	7	24	7	24	7	25	8	27	8	26
Nelson Mandela	1	109	1	109	1	107	1	111	1	115	1	111
O.R. Tambo	5	15	5	19	4	19	5	25	5	27	5	27
Umkhahlamba	4	15	4	15	4	15	4	17	4	16	4	15
Total	33	252	33	255	32	255	33	284	34	298	34	291

Table C.1.1.2:

Total number of local municipalities (N) with and total number of community Pharmacies in the EASTERN CAPE Province per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
Alfred Nzo	1	1	1	1	1	1	2	4	2	4	2	3
Amatole	6	39	6	38	6	38	6	42	6	47	6	46
Cacadu District	7	23	7	23	7	23	7	23	7	23	7	23
Chris Hani	7	17	7	17	7	16	7	16	7	16	6	15
Nelson Mandela	1	94	1	93	1	91	1	95	1	98	1	94
O.R. Tambo	4	10	4	13	3	12	4	12	4	14	4	14
Umkhahlamba	4	9	4	9	4	9	4	8	4	8	4	7
Total	30	193	30	194	29	190	31	200	31	210	30	202

Table C.1.3: Total number of local municipalities (N) with and total number of private institutional pharmacies in the EASTERN CAPE Province per district municipality, 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional
Alfred Nzo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amatole	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
Cacadu	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Chris Hani	1	1	1	1	1	2	1	2	1	2	3	4	3	4	3	4	3	4
Nelson Mandela	1	5	1	6	1	6	1	6	1	6	1	6	1	6	1	6	1	6
O.R. Tambo	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Umkhahlamba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	11	5	12	5	13	6	14	8	16	8	16	8	16	8	16	8	16

Table C.1.1.4: Total number of local municipalities (N) with and total number of public institutional pharmacies in the EASTERN CAPE Province per district municipality, 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional	N	Total Public institutional
Alfred Nzo	1	1	1	1	1	1	2	5	2	6	2	6	2	6	2	6		
Amatole	6	14	6	14	6	15	7	19	7	19	7	19	7	19	7	20		
Cacadu	6	7	6	7	6	8	6	8	6	8	6	9	6	9	6	9		
Chris Hani	3	6	3	6	4	6	5	7	5	7	5	7	5	7	5	7		
Nelson Mandela	1	10	1	10	1	10	1	10	1	10	1	11	1	11	1	11		
O.R. Tambo	4	4	4	5	4	6	5	12	5	12	5	12	5	12	5	12		
Umkhahlamba	4	6	4	6	4	6	4	9	4	9	4	8	4	8	4	8		
Total	25	48	25	49	26	52	30	70	30	72	30	72	30	72	30	73		

Table C.1.5: Availability of all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of EASTERN CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Alfred Nzo	554 161	2	277 081	572 376	2	286 188	545 588	2	545 588	2	272 794	
Amatole	1 675 577	56	29 921	1 730 652	55	31 466	1 649 655	56	1 649 655	56	29 458	
Cacadu	390 823	31	12 607	403 669	31	13 021	384 777	32	384 777	32	12 024	
Chris Hani	815 795	24	33 991	842 609	24	35 108	803 174	24	803 174	24	33 466	
Nelson Mandela	1 012 591	109	9 290	1 045 874	109	9 595	996 926	107	996 926	107	9 317	
O.R. Tambo	1 687 832	15	112 522	1 743 310	19	91 753	1 661 721	19	1 661 721	19	87 459	
Umkhahlamba	343 652	15	22 910	354 947	15	23 663	338 335	15	338 335	15	22 556	
Total	6 480 431	252	25 716	6 693 437	255	26 249	6 380 177	255	6 380 177	255	25 020	

Table C.1.5: Availability of all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of EASTERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Alfred Nzo	573 778	9	63 753	574 944	10	57 494	577 088	9	577 088	9	64 121	
Amatole	1 685 190	64	26 331	1 688 615	69	24 473	1 694 910	69	1 694 910	69	24 564	
Cacadu	393 065	33	11 911	393 864	34	11 584	395 332	34	395 332	34	11 625	
Chris Hani	820 475	25	32 819	822 143	27	30 450	825 208	26	825 208	26	31 739	
Nelson Mandela	1 018 401	111	9 175	1 020 470	115	8 874	1 024 275	111	1 024 275	111	9 228	
O.R. Tambo	1 697 516	25	67 901	1 700 965	27	62 999	1 707 307	27	1 707 307	27	63 234	
Umkhahlamba	345 614	17	20 330	346 316	16	21 645	347 608	15	347 608	15	23 174	
Total	6 534 040	284	23 007	6 547 318	298	21 670	6 571 726	291	6 571 726	291	22 583	

Table C.1.6:

Availability of registered community pharmacies, in the district municipalities of EASTERN
CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Alfred Nzo	554 161	1	554 161	572 376	1	572 376	545 588	1	545 588	1	545 588	545 588
Amatole	1 675 577	39	42 964	1 730 652	38	45 543	1 649 655	38	43 412	38	43 412	43 412
Cacadu	390 823	23	16 992	403 669	23	17 551	384 777	23	16 729	23	16 729	16 729
Chris Hani	815 795	17	47 988	842 609	17	49 565	803 174	16	50 198	16	50 198	50 198
Nelson Mandela	1 012 591	94	10 772	1 045 874	93	11 246	996 926	91	10 955	91	10 955	10 955
O.R. Tambo	1 687 832	10	168 783	1 743 310	13	134 101	1 661 721	12	138 477	12	138 477	138 477
Umkhahlamba	343 652	9	38 183	354 947	9	39 439	338 335	9	37 593	9	37 593	37 593
Total	6 480 430.50	193	33 577	6 693 437	194	34 502	6 380 177	190	33 580	190	33 580	33 580

Table C.1.6:

Availability of registered community pharmacies, in the district municipalities of EASTERN
CAPE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Alfred Nzo	573 778	4	143 445	574 944	4	143 736	577 088	3	192 363
Amatole	1 685 190	42	40 123	1 688 615	47	35 928	1 694 910	46	36 846
Cacadu	393 065	23	17 090	393 864	23	17 125	395 332	23	17 188
Chris Hani	820 475	16	51 280	822 143	16	51 384	825 208	15	55 014
Nelson Mandela	1 018 401	95	10 720	1 020 470	98	10 413	1 024 274	94	10 896
O.R. Tambo	1 697 516	12	141 460	1 700 965	14	121 498	1 707 306	14	121 950
Umkhahlamba	345 614	8	43 202	346 316	8	43 290	347 607	7	49 658
Total	6 534 040	200	32 670	6 547 318	210	31 178	6 571 726	202	32 548

Table C.1.1.7: Availability of registered private institutional pharmacies, in the district municipalities of EASTERN CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	
Alfred Nzo	554 161	0	-	572 376	0	-	545 588	0	545 588	0	-	
Amatole	1 675 577	3	558 526	1 730 652	3	576 884	1 649 655	3	1 649 655	3	549 885	
Cacadu	390 823	1	390 823	403 669	1	403 669	384 777	1	384 777	1	384 777	
Chris Hani	815 7945	1	825 795	842 609	1	842 609	803 174	2	803 174	2	401 587	
Nelson Mandela	1 012 591	5	202 518	1 045 874	6	174 312	996 926	6	996 926	6	166 154	
O.R. Tambo	1 687 832	1	1 687 832	1 743 310	1	1 743 309	1 661 721	1	1 661 721	1	1 661 721	
Umkhahlamba	343 652	0	-	354 947	0	-	338 335	0	338 335	0	-	
Total	6 480 431	11	589 130	6 693 437	12	557 784	6 380 177	13	6 380 177	13	490 783	

Table C.1.7: Availability of registered private institutional pharmacies, in the district municipalities of EASTERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Alfred Nzo	573 778	0	-	574 944	0	-	577 088	0	577 088	0	-	577 088
Amatole	1 685 190	3	561 730	1 688 615	3	562 871	1 694 910	3	1 694 910	3	564 970	1 694 910
Cacadu	393 065	2	196 533	393 864	2	196 932	395 332	2	395 332	2	197 666	395 332
Chris Hani	820 475	2	410 238	822 143	4	205 535	825 207	4	825 207	4	206 302	825 207
Nelson Mandela	1 018 401	6	169 733	1 020 470	6	170 078	1 024 274	6	1 024 274	6	170 712	1 024 274
O.R. Tambo	1 697 516	1	1 697 516	1 700 965	1	1 700 965	1 707 306	1	1 707 306	1	1 707 307	1 707 306
Umkhahlamba	345 614	0	-	346 316	0	-	347 608	0	347 608	0	-	347 608
Total	6 534 040	14	466 717	6 547 318	16	409 207	6 571 726	16	6 571 726	16	410 733	6 571 726

Table C.1.8: Availability of registered public institutional pharmacies, in the district municipalities of EASTERN CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Alfred Nzo	554 161	1	554 161	572 376	1	572 376	545 588	1	545 588	1	545 588	545 588
Amatole	1 675 577	14	119 684	1 730 652	14	123 618	1 649 655	15	1 649 655	15	109 977	1 649 655
Cacadu	390 823	7	55 832	403 669	7	57 667	384 777	8	384 777	8	48 097	384 777
Chris Hani	815 795	6	135 966	842 609	6	140 435	803 174	6	803 174	6	133 862	803 174
Nelson Mandela	1 012 591	10	101 259	1 045 874	10	104 587	996 926	10	996 926	10	99 693	996 926
O.R. Tambo	1 687 832	4	421 958	1 743 310	5	348 662	1 661 721	6	1 661 721	6	276 953	1 661 721
Umkhahlamba	343 652	6	57 275	354 947	6	59 158	338 335	6	338 335	6	56 389	338 335
Total	6 480 430	48	135 009	6 693 437	49	136 601	6 380 177	52	6 380 177	52	122 696	6 380 177

Table C.1.8: Availability of registered public institutional pharmacies, in the district municipalities of EASTERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Alfred Nzo	573 778	5	114 756	574 944	6	95 824	577 088	6	96 181
Amatole	1 685 190	19	88 694	1 688 615	19	88 874	1 694 910	20	84 745
Cacadu	393 065	8	49 133	393 864	9	43 763	395 332	9	43 926
Chris Hani	820 475	7	117 211	822 143	7	117 449	825 208	7	117 887
Nelson Mandela	1 018 401	10	101 840	1 020 470	11	92 770	1 024 274	11	93 116
O.R. Tambo	1 697 516	12	141 460	1 700 965	12	141 747	1 707 306	12	142 275
Umkhahlamba	345 614	9	38 402	346 316	8	43 290	347 607	8	43 451
Total	6 534 040	70	93 343	6 547 318	72		6 571 726	73	

C.2:

FREE STATE PROVINCE

Table C.2.1:

Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the FREE STATE province per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm
Lejweleputswa	4	43	4	43	4	41	4	43	4	42	4	43
Motho	2	58	2	58	2	63	2	68	2	67	2	65
Northern Free State/ Fezile Dabi	4	42	4	43	4	41	4	43	4	43	4	45
Thabo Mofutsanyane	5	33	5	32	5	32	5	33	5	34	5	35
Xhariep	3	9	3	8	3	7	3	8	3	7	3	7
Total	18	185	18	184	18	184	18	195	18	193	18	195

Table C.2.2:

Total number of local municipalities (N) with and total number of Community Pharmacies in the FREE STATE Province per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
Lejweleputswa	4	34	4	34	4	32	4	34	4	34	4	35
Motheo	2	42	2	43	2	45	2	49	2	49	2	47
Northern Free State/ Fezile Dabi	4	30	4	31	4	29	4	29	4	30	4	32
Thabo Mofutsanyane	5	23	5	22	5	22	5	22	5	23	5	23
Xhariep	3	5	3	4	2	3	3	4	3	4	3	4
Total	18	134	18	134	17	131	18	138	18	140	18	141

Table C.2.3: Total number of local municipalities (N) with and total number of Private institutional pharmacies* in the FREE STATE Province per district municipality, 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional
Lejweleputswa	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Motho	1	5	1	4	1	6	1	6	1	6	1	7	1	7	1	7	1	7
Northern Free State/ Fezile Dabi	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Thabo Mofutsanyane	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Xhariep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	10	5	9	5	11	5	12	6	12	6	13	6	13	6	13	6	13

* Includes both private hospital and private psychiatric pharmacies

Table C.2.4:

Total number of local municipalities (N) with and total number of Public institutional Pharmacies* in the FREE STATE province per district municipality, 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional
Lejweleputswa	4	7	4	7	4	7	4	7	4	7	4	7	4	6	4	6	4	6
Motheo	2	11	2	11	2	12	2	13	2	13	2	11	2	11	2	11	2	11
Northern Free State/ Fezile Dabi	4	9	4	9	4	9	4	11	4	11	4	10	4	10	4	10	4	10
Thabo Mofutsanyane	5	10	5	10	5	10	5	10	5	10	5	10	5	10	5	11	5	11
Xhariep	3	4	3	4	3	4	3	4	3	4	3	3	2	3	2	3	2	3
Total	18	41	18	41	18	42	18	45	18	40	17	40	17	41	17	41	17	41

* Includes both public hospital and psychiatric pharmacies

Table C.2.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Lejweleputswa	664 625	43	15 456	661 858	43	15 392	657 981	41	657 981	41	16 048	657 981
Motho	736 721	58	12 702	733 653	58	12 649	729 356	63	729 356	63	11 577	729 356
Northern Free State	465 638	42	11 087	463 699	43	10 784	460 983	41	460 983	41	11 243	460 983
Thabo Mofutsanyane	734 315	33	22 252	731 258	32	22 852	726 975	32	726 975	32	22 718	726 975
Xhariep	136 817	9	15 202	136 248	8	17 031	135 450	7	135 450	7	19 350	135 450
Total	2 738 116	185	14 801	2 726 715	184	14 819	2 710 746	184	2 710 746	184	14 732	2 710 746

Table C.2.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Lejweleputswa	665 443	43	15 475	671 653	42	15 992	679 151	43	15 794
Motheo	737 628	68	10 847	744 511	67	11 112	752 822	65	11 582
Fezile Dabi	466 211	43	10 842	470 562	43	10 943	475 815	45	10 574
Thabo Mofutsanyane	735 219	33	22 279	742 080	34	21 826	750 364	35	21 439
Xhariep	136 986	8	17 123	138 264	7	19 752	139 808	7	19 973
Total	2 741 487	195	14 059	2 767 072	193	14 337	2 797 961	195	14 349

Table C.2.6: Availability of registered community pharmacies, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Lejweleputswa	664 625	34	19 548	661 858	34	19 466	657 981	32	20 562
Motheo	736 721	42	17 541	733 653	43	17 062	729 356	45	16 208
Northern Free State	465 638	30	15 521	463 699	31	14 958	460 983	29	15 896
Thabo Mofutsanyane	734 315	23	31 927	731 258	22	33 239	726 975	22	33 044
Xhariep	136 817	5	27 364	136 248	4	34 062	135 450	3	45 150
Total	2 738 116	134	20 434	2 726 715	134	20 349	2 710 746	131	20 693

Table C.2.6: Availability of registered community pharmacies, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Lejweleputswa	665 443	34	19 572	671 653	34	19 755	679 151	35	19 404
Motheo	737 628	49	15 054	744 511	49	15 194	752 822	47	16 018
Fezile Dabi	466 211	29	16 076	470 562	30	15 685	475 815	32	14 869
Thabo Mofutsanyane	735 219	22	33 419	742 080	23	32 264	750 364	23	32 624
Xhariep	136 986	4	34 246	138 264	4	334 566	139 808	4	34 952
Total	2 741 487	138	19 866	2 767 072	140	19 765	2 797 961	141	19 844

Table C.2.7: Availability of registered private institutional pharmacies, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Lejweleputswa	664 625	2	332 313	661 858	2	330 929	657 981	2	657 981	2	328 991	657 981
Motheo	736 721	5	147 344	733 653	4	183 414	729 356	6	729 356	6	121 559	729 356
Northern Free State	465 638	3	155 213	463 699	3	154 566	460 983	3	460 983	3	153 661	460 983
Thabo Mofutsanyane	734 315	0	-	731 258	0	-	726 975	0	726 975	0	-	726 975
Xhariep	136 817	0	-	136 248	0	-	135 450	0	135 450	0	-	135 450
Total	2 738 116	10	273 812	2 726 715	9	302 968	2 710 746	11	2 710 746	11	246 431	2 710 746

Table C.2.7: Availability of registered private institutional pharmacies, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Lejweleputswa	665 443	2	332 722	671 654	2	335 827	679 151	2	339 576
Motho	737 628	6	122 938	744 512	7	106 359	752 822	7	107 546
Fezile Dabi	466 211	3	155 404	470 562	3	156 854	475 815	3	158 605
Thabo Mofutsanyane	735 219	1	735 219	742 080	1	742 080	750 364	1	750 364
Xhariep	136 986	0	-	138 264	0	-	139 808	0	-
Total	2 741 487	12	228 457	2 767 072	13	212 852	2 797 961	13	215 228

Table C.2.8:

Availability of registered public institutional pharmacies, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Lejweleputswa	664 625	7	94 946	661 858	7	94 551	657 981	7	93 997
Motho	736 721	11	66 975	733 653	11	66 696	729 356	12	60 780
Northern Free State	465 638	9	51 738	463 699	9	51 522	460 983	9	51 220
Thabo Mofutsanyane	734 315	10	73 432	731 258	10	73 126	726 975	10	72 697
Xhariep	136 817	4	34 204	136 248	4	34 062	135 450	4	33 862
Total	2 738 116	41	66 783	2 726 715	41	66 505	2 710 746	42	64 542

Table C.2.8: Availability of registered public institutional pharmacies, in the district municipalities of FREE STATE PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Lejweleputswa	665 443	7	95 063	671 654	6	111 942	679 151	6	679 151	6	113 192	
Motheo	737 627	13	56 741	744 512	11	67 683	752 822	11	752 822	11	68 438	
Fezile Dabi	466 211	11	42 383	470 562	10	47 056	475 815	10	475 815	10	47 582	
Thabo Mofutsanyane	735 219	10	73 522	742 080	10	74 208	750 364	11	750 364	11	68 215	
Xhariep	136 986	4	34 246	138 264	3	46 088	139 808	3	139 808	3	46 603	
Total	2 741 487	45	60 922	2 767 072	40	69 177	2 797 961	41	2 797 961	41	68 243	

C.3: GAUTENG PROVINCE

Table C.3.1: Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in GAUTENG province per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm		
City of Johannesburg Metropolitan	1	335	1	341	1	348	1	372	1	394	1	413
City of Tshwane Metropolitan	1	268	1	270	1	270	1	298	1	305	1	318
Ekurhuleni metropolitan	1	249	1	243	1	245	1	261	1	268	1	267
Metsweding District	2	13	2	13	2	12	2	12	2	13	2	13
Sedibeng District	3	60	3	59	3	57	3	62	3	66	3	68
West Rand District	4	63	4	63	4	61	3	49	3	53	3	55
Total	12	988	12	989	12	993	11	1054	11	1099	11	1134

Table C.3.2:

**Total number of local municipalities (N) with and total number of Community Pharmacies*
(Tpharm) in GAUTENG PROVINCE per district municipality, 2003 to 2008**

	2003		2004		2005		2006		2007		2008	
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
City of Johannesburg Metropolitan	1	301	1	305	1	312	1	331	1	347	1	365
City of Tshwane Metropolitan	1	238	1	239	1	237	1	261	1	265	1	275
Ekurhuleni metropolitan	1	224	1	218	1	219	1	236	1	244	1	244
Metsweding District	2	9	2	9	2	8	2	8	2	9	2	9
Sedibeng District	3	55	3	55	3	51	3	56	3	55	3	57
West Rand District	4	53	4	53	4	51	3	42	3	42	3	44
Total	12	880	12	879	12	878	11	934	11	962	11	994

* Includes mail order pharmacies

Table C.3.3: Total number of local municipalities (N) with and total number of Private institutional Pharmacies* in GAUTENG PROVINCE per district municipality, 2003c to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional
City of Johannesburg Metropolitan	1	17	1	19	1	19	1	25	1	31	1	32
City of Tshwane Metropolitan	1	19	1	20	1	22	1	25	1	24	1	24
Ekurhuleni metropolitan	1	14	1	14	1	15	1	15	1	14	1	14
Metsweding District	2	2	2	2	2	2	2	2	2	2	2	2
Sedibeng District	1	2	1	1	2	3	2	3	2	4	2	4
West Rand District	3	6	3	6	3	6	2	4	2	5	2	6
Total	9	60	9	62	10	67	9	74	9	80	9	81

* Includes both private hospital and private psychiatric pharmacies

Table C.3.4: Total number of local municipalities (N) with and total number of Public institutional Pharmacies* in GAUTENG PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional
City of Johannesburg Metropolitan	1	17	1	17	1	17	1	16	1	16	1	16
City of Tshwane Metropolitan	1	11	1	11	1	11	1	12	1	16	1	19
Ekurhuleni metropolitan	1	11	1	11	1	11	1	10	1	10	1	9
Metsweding District	1	2	1	2	1	2	1	2	1	2	1	2
Sedibeng District	2	3	2	3	2	3	2	3	3	7	3	7
West Rand District	2	4	2	3	2	4	1	3	2	6	2	6
Total	8	48	8	48	8	48	7	46	9	57	9	59

* Includes both public hospital and public psychiatric pharmacies

Table C.3.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of GAUTENG PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
City of Johannesburg Metropolitan	3 382 806	335	10 098	3 475 799	341	10 193	3 565 532	348	10 246
City of Tshwane Metropolitan	1 601 352	268	5 975	1 645 373	270	6 094	1 687 851	270	6 251
Ekurhuleni metropolitan	2 600 966	249	10 545	2 672 466	243	10 998	2 741 460	245	11 190
Metsweding District	132 584	13	10 199	136 229	13	10 479	139 745	12	11 645
Sedibeng District	833 240	60	13 887	856 146	59	14 511	878 248	57	15 408
West Rand District	716 240	63	11 369	735 930	63	11 681	754 929	61	12 376
Total	9 267 189	988	9 380	9 521 943	989	9 628	9 767 765	993	9 837

Table C.3.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of GAUTENG PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
City of Johannesburg Metropolitan	3 639 220	372	9 783	3 690 756	394	9 367	3 766 998	413	9 121
City of Tshwane Metropolitan	2 240 503	298	7 518	2 272 232	305	7 450	2 319 170	318	7 386
Ekurhuleni metropolitan	2 798 117	261	10 721	2 837 742	268	10 589	2 896 363	267	10 848
Metsweding District	180 379	12	15 032	182 933	13	14 072	186 712	13	14 363
Sedibeng District	896 399	62	14 458	909 093	66	13 774	927 873	68	13 645
West Rand District	602 045	49	12 287	610 570	53	11 520	623 183	55	11 331
Total	10 356 663	1054	9 826	10 503 327	1099	9 557	10 720 299	1134	9 454

Table C.3.6:

Availability of registered community pharmacies, in the district municipalities of GAUTENG PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
City of Johannesburg Metropolitan	3 382 806	301	11 239	3 475 799	305	11 396	3 565 532	312	11 428
City of Tshwane Metropolitan	1 601 352	238	6 728	1 645 373	239	6 884	1 687 851	237	7 122
Ekurhuleni metropolitan	2 600 966	224	11 611	2 672 466	218	12 259	2 741 460	219	12 518
Metsweding District	132 584	9	14 732	136 229	9	15 137	139 746	8	17 468
Sedibeng District	833 240	55	15 150	856 146	55	15 566	878 248	51	17 221
West Rand District	716 240	53	13 514	735 930	53	13 885	754 929	51	14 803
Total	9 267 189	880	10 531	9 521 943	879	10 833	9 767 765	878	11 125

Table C.3.6:

Availability of registered community pharmacies, in the district municipalities of GAUTENG PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
City of Johannesburg Metropolitan	3 639 220	331	10 995	3 690 756	347	10 636	3 766 998	365	10 321			
City of Tshwane Metropolitan	2 240 503	261	8 584	2 272 232	265	8 574	2 319 170	275	8 433			
Ekurhuleni metropolitan	2 798 117	236	11 856	2 837 742	244	11 630	2 896 363	244	11 870			
Metsweding District	180 379	8	22 547	182 933	9	20 326	186 712	9	20 746			
Sedibeng District	896 399	56	16 007	909 093	55	16 529	927 873	57	16 278			
West Rand District	602 045	42	14 334	610 570	42	14 537	623 183	44	14 163			
Total	10 356 663	934	11 089	10 503 327	962	10 918	10 720 299	994	10 785			

**Table C.3.7: Availability of registered private institutional pharmacies, in the district municipalities of
GAUTENG PROVINCE, 2003 to 2008**

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
City of Johannesburg Metropolitan	3 382 806	17	198 989	3 475 799	19	182 937	3 565 532	19	187 660			
City of Tshwane Metropolitan	1 601 352	19	84 282	1 645 373	20	82 269	1 687 852	22	76 721			
Ekurhuleni metropolitan	2 600 966	14	185 783	2 672 466	14	190 890	2 741 460	15	182 764			
Metsweding District	132 584	2	66 292	136 228	2	68 114	139 746	2	69 873			
Sedibeng District	833 240	2	416 620	856 146	1	856 146	878 248	3	292 749			
West Rand District	716 240	6	119 373	735 930	6	122 655	754 929	6	125 821			
Total	9 267 189	60	154 453	9 521 943	62	153 580	9 767 765	67	145 788			

**Table C.3.7: Availability of registered private institutional pharmacies, in the district municipalities of
GAUTENG PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Population per pharmacy
City of Johannesburg Metropolitan	3 639 220	25	145 569	3 690 756	31	119 057	3 766 998	32	3 766 998	32	117 719	
City of Tshwane Metropolitan	2 240 503	25	89 620	2 272 232	24	94 676	2 319 170	24	2 319 170	24	96 632	
Ekurhuleni metropolitan	2 798 117	15	186 541	2 837 742	14	202 695	2 896 363	14	2 896 363	14	206 883	
Metsweding District	180 379	2	90 190	182 933	2	91 467	186 712	2	186 712	2	93 356	
Sedibeng District	896 399	3	298 800	909 093	4	227 273	927 873	4	927 873	4	231 968	
West Rand District	602 045	4	150 511	610 570	5	122 114	623 183	5	623 183	5	124 637	
Total	10 356 663	74	139 955	10 503 327	80	131 292	10 720 299	81	10 720 299	81	132 349	

**Table C.3.8: Availability of registered public institutional pharmacies, in the district municipalities of
GAUTENG PROVINCE, 2003 to 2008**

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
City of Johannesburg Metropolitan	3 382 806	17	198 989	3 475 799	17	204 459	3 565 532	17	209 737
City of Tshwane Metropolitan	1 601 352	11	145 577	1 645 373	11	149 580	1 687 851	11	153 441
Ekurhuleni metropolitan	2 600 966	11	236 451	2 672 466	11	242 951	2 741 460	11	249 224
Metsweding District	132 584	2	66 292	136 229	2	68 114	139 746	2	69 873
Sedibeng District	833 240	3	294 413	856 146	3	285 382	878 248	3	292 749
West Rand District	716 240	4	179 060	735 930	4	183 982	754 929	4	188 732
Total	9 267 189	48	193 066	9 521 943	48	198 374	9 767 765	48	203 495

**Table C.3.8: Availability of registered public institutional pharmacies, in the district municipalities of
GAUTENG PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
City of Johannesburg Metropolitan	3 639 220	16	227 451	3 690 756	16	230 672	3 766 997	16	235 437			
City of Tshwane Metropolitan	2 240 503	12	186 709	2 272 232	16	142 014	2 319 170	19	122 061			
Ekurhuleni metropolitan	2 798 117	10	279 812	2 837 742	10	283 774	2 896 363	9	321 818			
Metsweding District	180 379	2	90 190	182 933	2	91 466	186 712	2	93 356			
Sedibeng District	896 399	3	298 800	909 093	7	129 870	927 873	7	132 553			
West Rand District	602 045	3	200 682	610 570	6	101 761	623 183	6	103 864			
Total	10 356 663	46	258 917	10 503 327	57	184 269	10 720 299	59	181 700			

C.4:

KWAZULU-NATAL PROVINCE

Table C.4.1:

Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the KWAZULU-NATAL PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm		
Amajuba District	3	19	3	18	3	18	3	19	3	21	3	21
Ethekwini	1	302	1	297	1	302	1	318	1	324	1	335
Sisonke District	5	13	5	14	5	15	4	11	4	10	4	10
Umgungundlovu District	5	77	5	78	5	76	4	79	5	79	5	78
Ugu District	3	35	3	35	3	35	3	35	3	35	3	37
Umkhanyakude District	3	8	3	8	3	8	3	11	4	13	4	14
Umzinyathi District	3	11	3	11	3	12	3	12	3	11	3	11
Uthukela District	3	22	3	21	3	21	3	21	3	21	3	21
Uthungulu District	4	37	4	36	5	38	3	41	5	43	5	43
Zululand District	4	16	4	16	4	16	5	18	5	20	5	20
iLembe District	2	16	2	17	2	18	3	20	3	22	3	23
Total	36	556	36	551	37	559	38	585	39	599	39	613

Table C.4.2:

Total number of local municipalities (N) with and total number of Community Pharmacies in the KwaZulu-Natal province per district municipality, 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
Amajuba District	3	15	2	14	2	14	2	14	2	15	2	16	2	16	2	16		
Ethekwini	1	266	1	260	1	264	1	264	1	278	1	283	1	283	1	293		
Sisonke District	4	8	4	9	4	8	4	8	4	6	3	5	3	5	3	5		
Umgungundlovu District	5	63	5	63	5	60	5	60	5	62	5	62	5	62	5	59		
Ugu District	3	29	3	29	3	29	3	29	3	29	3	29	3	29	3	31		
Umkhanyakude District	2	5	2	5	2	5	2	5	3	7	4	9	4	9	4	9		
Umzinyathi District	2	5	2	5	2	6	2	6	3	7	3	6	3	6	3	6		
Uthukela District	3	18	3	17	3	17	3	17	3	17	3	17	3	17	3	17		
Uthungulu District	4	27	4	26	5	28	5	28	5	31	5	32	5	32	5	32		
Zululand District	4	12	4	12	4	12	4	12	4	12	4	13	4	13	4	13		
iLembe District	2	14	2	15	2	16	2	16	2	5	2	16	2	16	2	17		
Total	33	462	32	455	33	459	35	479	35	488	35	498	35	498	35	498		

Table C.4.3:

Total number of local municipalities (N) with and total number of Private institutional Pharmacies* in the KWAZULU-NATAL PROVINCE per district municipality, 2003 to 2008

	2003			2004			2005			2006			2007			2008		
	N	Total private institutional		N	Total private institutional		N	Total private institutional		N	Total private institutional		N	Total private institutional		N	Total private institutional	
Amajuba District	1	1		1	1		1	1		1	1		1	1		1	1	
Ethekwini District	1	14		1	15		1	16		1	17		1	18		1	19	
Sisonke District	0	0		0	0		1	1		1	1		1	1		1	1	
Umgungundlovu District	2	2		3	3		3	4		3	5		3	5		3	5	
Ugu District	1	2		1	2		1	2		1	2		1	2		1	2	
Umkhanyakude District	0	0		0	0		0	0		0	0		0	0		0	0	
Umzinyathi District	0	0		0	0		0	0		0	0		0	0		0	0	
Uthukela District	1	1		1	1		1	1		1	1		1	1		1	1	
Uthungulu District	1	3		1	3		1	3		1	3		1	3		1	3	
Zululand District	0	0		0	0		0	0		0	0		0	0		0	0	
iLembe District	0	0		0	0		0	0		0	0		1	1		1	1	
Total	7	23		8	25		9	28		9	30		10	32		10	33	

Table C.4.4:

Total number of local municipalities (N) with and total number of Public institutional Pharmacies in the KWAZULU-NATAL PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional
Amajuba District	2	3	2	3	2	3	2	3	2	4	2	4
Ethekwini	1	22	1	22	1	22	1	23	1	23	1	23
Sisonke District	4	5	4	5	4	6	3	4	3	4	3	4
Umgungundlovu District	4	12	4	12	4	12	4	12	4	12	5	14
Ugu District	3	4	3	4	3	4	3	4	3	4	3	4
Umkhanyakude District	2	3	2	3	2	3	2	4	2	4	2	5
Umzinyathi District	3	6	3	6	3	6	3	5	3	5	3	5
Uthukela District	3	3	3	3	3	3	3	3	3	3	3	3
Uthungulu District	4	7	4	7	4	7	4	7	4	8	4	8
Zululand District	3	4	3	4	3	4	4	6	4	7	4	7
iLembe District	1	2	1	2	1	2	3	5	3	5	3	5
Total	30	71	30	71	30	72	32	76	32	79	33	82

Table C.4.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Amajuba District	476 739	19	25 092	480 418	18	26 690	485 773	18	26 987
Ethekwini	3 147 413	302	10 422	3 171 697	297	10 680	3 207 054	302	10 619
Sisonke District	303 944	13	23 380	306 289	14	21 878	309 703	15	20 647
Umgungundlovu District	945 062	77	12 274	952 353	78	12 210	962 970	76	12 671
Ugu District	717 080	35	20 488	722 612	35	20 646	730 668	35	20 876
Umkhanyakude District	583 936	8	72 992	588 441	8	73 555	595 001	8	74 375
Umzinyathi District	464 945	11	42 268	468 532	11	42 594	473 755	12	39 480
Uthukela District	669 189	22	30 418	674 352	21	32 112	681 869	21	32 470
Uthungulu District	902 413	37	24 390	909 376	36	25 260	919 513	38	24 198
Zululand District	819 321	16	51 207	825 642	16	51 603	834 846	16	52 178
iLembe District	570 783	16	35 674	575 187	17	33 835	581 599	18	32 311
Total	9 600 825	556	17 268	9 674 901	551	17 559	9 782 753	559	17 500

Table C.4.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	
Amajuba District	488 797	19	25 725	491 030	21	23 382	496 512	21	496 512	21	23 643	
Ethekwini	3 227 013	318	10 148	3 241 761	324	10 005	3 277 949	335	3 277 949	335	9 785	
Sisonke District	294 678	11	26 789	296 024	10	29 602	299 329	10	299 329	10	29 933	
Umgungundlovu District	968 963	79	12 265	973 391	79	12 321	984 257	78	984 257	78	12 619	
Ugu District	735 215	35	21 006	738 575	35	21 102	746 820	37	746 820	37	20 184	
Umkhanyakude District	598 704	11	54 428	601 440	13	46 264	608 154	14	608 154	14	43 440	
Umzinyathi District	476 704	12	39 725	478 882	11	43 535	484 228	11	484 228	11	44 021	
Uthukela District	686 113	21	32 672	689 249	21	32 821	696 943	21	696 943	21	33 188	
Uthungulu District	925 236	41	22 567	929 465	43	21 615	939 840	43	939 840	43	21 857	
Zululand District	840 042	18	46 669	843 881	20	42 194	853 301	20	853 301	20	42 665	
iLembe District	585 219	20	29 261	587 894	22	26 722	594 456	23	594 456	23	25 846	
Total	9 826 682	585	16 798	9 871 583	599	16 480	9 981 789	613	9 981 789	613	16 283	

Table C.4.6: Availability of registered community pharmacies, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Amajuba District	476 739	15	31 783	480 418	14	34 316	485 773	14	34 698
Ethekwini	3 147 413	266	11 832	3 171 697	260	12 199	3 207 054	264	12 148
Sisonke District	303 944	8	37 993	306 289	9	34 032	309 703	8	38 713
Umgungundlovu District	945 062	63	15 001	952 353	63	15 117	962 970	60	16 049
Ugu District	717 080	29	24 727	722 612	29	24 918	730 668	29	25 195
Umkhanyakude District	583 936	5	116 787	588 441	5	117 688	595 001	5	119 000
Umzinyathi District	464 945	5	92 989	468 532	5	93 706	473 755	6	78 959
Uthukela District	669 189	18	37 177	674 352	17	39 668	681 869	17	40 110
Uthungulu District	902 413	27	33 423	909 376	26	34 976	919 513	28	32 840
Zululand District	819 321	12	68 277	825 642	12	68 804	834 846	12	69 571
iLembe District	570 783	14	40 770	575 187	15	38 346	581 599	16	36 350
Total	9 600 825	462	20 781	9 674 901	455	21 264	9 782 753	459	21 313

Table C.4.6: Availability of registered community pharmacies, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Amajuba District	488 797	15	32 585	491 030	16	30 689	496 512	16	496 512	16	31 032	496 512
Ethekwini	3 227 013	278	11 608	3 241 761	283	11 455	3 277 949	293	3 277 949	293	11 188	3 277 949
Sisonke District	294 678	6	49 113	296 024	5	59 205	299 329	5	299 329	5	59 866	299 329
Umgungundlovu District	968 963	62	15 628	973 391	62	15 700	984 257	59	984 257	59	16 682	984 257
Ugu District	735 215	29	25 352	738 575	29	25 468	746 820	31	746 820	31	24 091	746 820
Umkhanyakude District	598 704	7	85 529	601 440	9	66 827	608 154	9	608 154	9	67 573	608 154
Umzinyathi District	476 704	7	68 100	478 882	6	79 814	484 228	6	484 228	6	80 705	484 228
Uthukela District	686 113	17	40 360	689 249	17	40 544	696 943	17	696 943	17	40 997	696 943
Uthungulu District	925 236	31	29 846	929 465	32	29 046	939 840	32	939 840	32	29 370	939 840
Zululand District	840 042	12	70 003	843 881	13	64 944	853 301	13	853 301	13	65 639	853 301
iLembe District	585 219	15	39 015	587 894	16	36 743	594 456	17	594 456	17	34 968	594 456
Total	9 826 682	479	20 515	9 871 583	488	20 229	9 981 789	498	9 981 789	498	20 044	9 981 789

Table C.4.7: Availability of registered private institutional pharmacies, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Amajuba District	476 739	1	476 739	480 418	1	480 418	485 773	1	485 773	1	485 773	485 773
Ethekwini	3 147 413	14	224 815	3 171 697	15	211 446	3 207 054	16	3 207 054	16	200 441	200 441
Sisonke District	303 944	0	-	306 289	0	-	309 703	1	309 703	1	309 703	309 703
Umgungundlovu District	945 062	2	472 531	952 353	3	317 451	962 970	4	962 970	4	240 742	240 742
Ugu District	717 080	2	358 540	722 612	2	361 306	730 668	2	730 668	2	365 334	365 334
Umkhanyakude District	583 936	0	-	588 441	0	-	595 001	0	595 001	0	-	-
Umkhanyathi District	464 945	0	-	468 532	0	-	473 755	0	473 755	0	-	-
Uthukela District	669 189	1	669 189	674 352	1	674 352	681 869	1	681 869	1	681 869	681 869
Uthungulu District	902 413	3	300 804	909 376	3	303 125	919 513	3	919 513	3	306 504	306 504
Zululand District	819 321	0	-	825 642	0	-	834 846	0	834 846	0	-	-
iLembe District	570 783	0	-	575 187	0	-	581 599	0	581 599	0	-	-
Total	9 600 825	23	417 427	9 674 901	25	386 996	9 782 753	28	9 782 753	28	349 384	349 384

Table C.4.7: Availability of registered private institutional pharmacies, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Amajuba District	488 797	1	488 796	491 030	1	491 030	496 512	1	496 512	1	496 512	496 512
Ethekwini	3 227 013	17	189 824	3 241 761	18	180 098	3 277 949	19	3 277 949	19	172 524	172 524
Sisonke District	294 678	1	294 678	296 024	1	296 024	299 329	1	299 329	1	299 329	299 329
Umgungundlovu District	968 963	5	193 793	973 391	5	194 678	984 257	5	984 257	5	196 851	196 851
Ugu District	735 215	2	367 607	738 575	2	369 288	746 820	2	746 820	2	373 410	373 410
Umkhanyakude District	598 704	0	-	601 440	0	-	608 154	0	608 154	0	-	-
Umkhanyathi District	476 704	0	-	478 882	0	-	484 228	0	484 228	0	-	-
Uthukela District	686 113	1	686 113	689 249	1	689 249	696 943	1	696 943	1	696 943	696 943
Uthungulu District	925 236	3	308 412	929 465	3	309 822	939 840	3	939 840	3	313 280	313 280
Zululand District	840 042	0	-	843 881	0	-	853 301	0	853 301	0	-	-
iLembe District	585 219	0	-	587 894	1	587 894	594 456	1	594 456	1	594 456	594 456
Total	9 826 682	30	327 556	9 871 583	32	308 487	9 981 789	33	9 981 789	33	302 478	302 478

Table C.4.8: Availability of registered public institutional pharmacies, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Amajuba District	476 739	3	158 913	480 418	3	160 139	485 773	3	161 924			
Ethekwini	3 147 413	22	143 064	3 171 697	22	144 168	3 207 054	22	145 775			
Sisonke District	303 944	5	60 789	306 289	5	61 258	309 703	6	51 617			
Umgungundlovu District	945 062	12	78 755	952 353	12	79 363	962 970	12	80 248			
Ugu District	717 080	4	179 270	722 612	4	180 653	730 668	4	182 667			
Umkhanyakude District	583 936	3	194 645	588 441	3	196 147	595 001	3	198 334			
Umzinyathi District	464 945	6	77 491	468 532	6	78 089	473 755	6	78 959			
Uthukela District	669 189	3	223 063	674 352	3	224 784	681 869	3	227 290			
Uthungulu District	902 413	7	128 916	909 376	7	129 911	919 513	7	131 359			
Zululand District	819 321	4	204 830	825 642	4	206 411	834 846	4	208 712			
iLembe District	570 783	2	285 392	575 187	2	287 594	581 599	2	290 800			
Total	9 600 825	71	135 223	9 674 901	71	136 266	9 782 753	72	135 872			

Table C.4.8: Availability of registered public institutional pharmacies, in the district municipalities of KWAZULU-NATAL PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Amajuba District	488 797	3	162 923	491 030	4	122 758	496 512	4	496 512	4	124 128	
Ethekwini	3 227 013	23	140 305	3 241 761	23	140 946	3 277 949	23	3 277 949	23	142 520	
Sisonke District	294 678	4	73 669	296 024	4	74 006	299 329	4	299 329	4	74 832	
Umgungundlovu District	968 963	12	80 747	973 391	12	81 116	984 257	14	984 257	14	70 304	
Ugu District	735 215	4	183 804	738 575	4	184 644	746 820	4	746 820	4	186 705	
Umkhanyakude District	598 704	4	149 676	601 440	4	150 360	608 154	5	608 154	5	121 631	
Umkhanyathi District	476 704	5	95 341	478 882	5	95 776	484 228	5	484 228	5	96 846	
Uthukela District	686 113	3	228 704	689 249	3	229 750	696 943	3	696 943	3	232 314	
Uthungulu District	925 236	7	132 177	929 465	8	116 183	939 840	8	939 840	8	117 480	
Zululand District	840 042	6	140 007	843 881	7	120 554	853 301	7	853 301	7	121 900	
iLembe District	585 219	5	117 044	587 894	5	117 579	594 456	5	594 456	5	118 891	
Total	9 826 682	76	129 298	9 871 583	79	124 957	9 981 789	82	9 981 789	82	121 729	

C.5: LIMPOPO PROVINCE

Table C.5.1: Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the LIMPOPO PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Tpharm	N	Tpharm	N	Tpharm
Bohlabela District	2	5	2	7	2	8
Capricorn District	4	37	4	37	4	37
Mopani District	4	34	4	39	4	40
Sekhukhune Cross Boundary District	2	3	2	3	2	3
Vhembe District	3	23	3	22	3	22
Waterberg District	6	38	6	40	6	39
Total	21	140	21	148	21	149

	2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm
Capricorn District	4	39	4	43	4	47
Greater Sekhukhune	4	28	4	26	4	28
Mopani District	5	45	5	50	5	56
Vhembe District	3	24	3	25	3	29
Waterberg District	6	40	6	40	6	41
Total	22	176	22	184	22	201

Table C.5.2: Total number of local municipalities (N) with and total number of Community Pharmacies in the LIMPOPO PROVINCE per district municipality, 2003 to 2008

	2003			2004			2005		
	N	Total community pharmacies		N	Total community pharmacies		N	Total community pharmacies	
Bohlabela District	2	4		2	6		2	6	
Capricorn District	4	26		4	26		4	25	
Mopani District	4	22		4	26		4	27	
Sekhukhune Cross Boundary District	1	1		1	1		1	1	
Vhembe District	3	18		3	17		3	16	
Waterberg District	6	26		6	27		6	26	
Total	20	97		20	103		20	101	

	2006			2007			2008		
	N	Total community pharmacies		N	Total community pharmacies		N	Total community pharmacies	
Capricorn District	4	27		4	31		4	35	
Greater Sekhukhune	4	20		4	20		4	22	
Mopani District	5	32		5	33		5	38	
Vhembe District	3	17		4	18		3	22	
Waterberg District	6	27		6	27		5	28	
Total	22	123		22	129		22	145	

Table C.5.3: Total number of local municipalities (N) with and total number of private institutional pharmacies* Pharmacies in the LIMPOPO PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Total private institutional	N	Total private institutional	N	Total private institutional
Bohlabela District	0	0	0	0	0	0
Capricorn District	1	1	1	1	1	1
Mopani District	2	2	2	3	2	3
Sekhukhune Cross Boundary District	0	0	0	0	0	0
Vhembe District	0	0	0	0	1	1
Waterberg District	2	4	2	4	3	5
Total	5	7	5	8	7	10

	2006		2007		2008	
	N	Total private institutional	N	Total private institutional	N	Total private institutional
Capricorn District	1	1	1	1	1	1
Greater Sekhukhune	0	0	0	0	0	0
Mopani District	2	3	2	3	2	3
Vhembe District	1	1	1	1	1	1
Waterberg District	3	5	3	5	3	5
Total	7	10	7	10	7	10

Table C.5.4: Total number of local municipalities (N) with and total number of public institutional pharmacies* Pharmacies in the LIMPOPO PROVINCE per district municipality, 2003 to 2008

	2003			2004			2005		
	N	Total public institutional		N	Total public institutional		N	Total public institutional	
Bohlabela District	1	1		1	1		2	2	
Capricorn District	4	10		4	10		4	11	
Mopani District	4	10		4	10		4	10	
Sekhukhune Cross Boundary District	2	2		2	2		2	2	
Vhembe District	2	5		2	5		2	5	
Waterberg District	5	8		5	9		5	8	
Total	18	36		18	37		19	38	

	2006			2007			2008		
	N	Total public institutional		N	Total public institutional		N	Total public institutional	
Capricorn District	4	11		4	11		4	11	
Greater Sekhukhune	4	8		2	6		2	6	
Mopani District	5	10		5	14		5	15	
Vhembe District	3	6		3	6		3	6	
Waterberg District	5	8		5	8		5	8	
Total	21	43		19	45		19	46	

Table C.5.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bohlabela District	606 463	5	121 292	608 461	7	86 923	618 197	8	618 197	8	77 275	618 197
Capricorn District	1 176 477	37	31 797	1 180 354	37	31 901	1 199 240	37	1 199 240	37	32 412	1 199 240
Mopani District	982 427	34	28 895	985 665	39	25 273	1 001 436	40	1 001 436	40	25 036	1 001 436
Sekhukhune Cross Boundary District	759 576	3	253 192	762 079	3	254 026	774 272	3	774 272	3	258 091	774 272
Vhembe District	1 222 514	23	53 153	1 226 543	22	55 752	1 246 168	22	1 246 168	22	56 644	1 246 168
Waterberg District	625 693	38	24 065	627 755	40	15 694	637 799	39	637 799	39	16 354	637 799
Total	5 373 150	140	38 380	5 390 857	148	36 425	5 477 111	149	5 477 111	149	36 759	5 477 111

Table C.5.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Capricorn District	1 182 318	39	30 316	1 206 871	43	28 067	1 220 344	47	25 965
Greater Sekhukhune	990 386	28	35 371	1 010 953	26	38 883	1 022 238	28	36 508
Mopani District	1 083 950	45	24 088	1 106 460	50	22 129	1 118 811	56	79 979
Vhembe District	1 228 585	24	51 191	1 254 098	25	50 164	1 268 098	29	43 727
Waterberg District	628 800	40	15 720	641 858	40	16 046	649 023	41	15 830
Total	5 114 038	176	29 057	5 220 240	184	28 371	5 278 513	201	26 261

Table C.5.6: Availability of registered community pharmacies, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Bohlabela District	606 463	4	151 615.66	608 461	6	101 410	618 197	6	103 033
Capricorn District	1 176 477	26	45 249.11	1 180 354	26	45 398	1 199 240	25	47 970
Mopani District	982 427	22	44 655.79	985 665	26	37 910	1 001 436	27	37 090
Sekhukhune Cross Boundary District	759 576	1	759 575.63	762 079	1	762 079	774 272	1	774 272
Vhembe District	1 222 514	18	67 917.47	1 226 543	17	72 150	1 246 168	16	77 885
Waterberg District	625 693	26	24 065.11	627 755	27	23 250	637 799	26	24 531
Total	5 373 150	97	55 393.01	5 390 857	103	52 338	5 477 111	101	54 229

Table C.5.6:

Availability of registered community pharmacies, in the district municipalities of LIMPOPO
PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Capricorn District	1 182 318	27	43 790	1 206 871	31	38 931	1 220 344	35	34 867
Greater Sekhukhune	990 386	20	49 519	1 010 953	20	50 548	1 022 238	22	46 465
Mopani District	1 083 950	32	33 873	1 106 460	33	33 529	1 118 811	38	29 442
Vhembe District	1 228 585	17	72 270	1 254 098	18	69 672	1 268 098	22	57 641
Waterberg District	628 800	27	23 289	641 858	27	23 772	649 023	28	23 179
Total	5 114 038	123	41 578	5 220 240	129	40 467	5 278 513	145	36 404

Table C.5.7: Availability of registered private institutional pharmacies, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	
Bohlabela District	606 463	0	-	608 461	0	-	618 197	0	618 197	0	-	
Capricorn District	1 176 477.05	1	1 176 477.05	1 180 354	1	1 180 354	1 199 240	1	1 199 240	1	1 199 240	
Mopani District	982 427.42	2	491 213.71	985 665	3	328 555	1 001 436	3	1 001 436	3	333 812	
Sekhukhune Cross Boundary District	759 575.63	0	-	762 079	0	-	774 272	0	774 272	0	-	
Vhembe District	1 222 514.46	0	-	1 226 543	0	-	1 246 168	1	1 246 168	1	1 246 168	
Waterberg District	625 692.96	4	156 423.24	627 755	4	156 939	637 799	5	637 799	5	127 560	
Total	5 373 150.17	7	767 592.88	5 390 857	8	673 857	5 477 111	10	5 477 111	10	547 711	

Table C.5.7: Availability of registered private institutional pharmacies, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Capricorn District	1 182 318	1	1 182 319		1 206 871	1	1 206 871		1 220 344	1	1 220 344	
Greater Sekhukhune	990 386	0	-		1 010 953	0	-		1 022 238	0	-	
Mopani District	1 083 950	3	361 317		1 106 460	3	368 820		1 118 811	3	372 937	
Vhembe District	1 228 585	1	1 228 585		1 254 098	1	1 254 098		1 268 098	1	1 268 098	
Waterberg District	628 800	5	125 760		641 858	5	128 372		649 023	5	129 805	
Total	5 114 038	10	511 404		5 220 240	10	522 024		5 278 513	10	527 851	

Table C.5.8: Availability of registered public institutional pharmacies, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Bohlabela District	606 463	1	606 462.64	608 461	1	608 461	618 197	2	309 098
Capricorn District	1 176 477	10	117 647.71	1 180 354	10	118 035	1 199 240	11	109 022
Mopani District	982 427	10	98 242.74	985 665	10	98 566.7	1 001 436	10	100 144
Sekhukhune Cross Boundary District	759 576	2	379 787.82	762 079	2	381 039.5	774 272	2	387 136
Vhembe District	1 222 514	5	244 502.89	1 226 543	5	245 309	1 246 168	5	249 234
Waterberg District	625 693	8	78 211.62	627 755	9	69 750	637 799	8	79 725
Total	5 373 150	36	149 254.17	5 390 857	37	145 699	5 477 111	38	144 135

Table C.5.8: Availability of registered public institutional pharmacies, in the district municipalities of LIMPOPO PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Capricorn District	1 182 318	11	107 484	1 206 871	11	109 716	1 220 344	11	110 940
Greater Sekhukhune	990 386	8	123 798	1 010 953	6	168 492	1 022 238	6	170 373
Mopani District	1 083 950	10	108 395	1 106 460	14	79 033	1 118 811	15	74 587
Vhembe District	1 228 585	6	204 764	1 254 098	6	209 016	1 268 098	6	211 350
Waterberg District	628 800	8	78 600	641 858	8	80 232	649 023	8	81 128
Total	5 114 038	43	118 931	5 220 240	45	116 005	5 278 513	46	114 750

C.6: MPUMALANGA PROVINCE

Table C.6.1: Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the MPUMALANGA PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Tpharm	N	Tpharm	N	Tpharm
Bohlabela District	1	2	1	2	1	2
Ehlanzeni	4	46	4	43	4	49
Govan Mbeki	7	56	7	56	7	54
Metsweding District	0	0	0	0	0	0
Nkangala	5	61	5	57	5	56
Sekhukhune Cross Boundary	3	21	3	23	3	24
Total	20	186	20	183	20	185

	2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm
Ehlanzeni District	5	56	5	60	5	62
Gert Sibande District	7	54	7	54	7	59
Nkangala District	5	58	5	63	5	64
Total	17	168	17	177	17	185

Table C.6.2: Total number of local municipalities (N) with and total number community pharmacies in the MPUMALANGA PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
Bohlabela District	1	1	1	1	1	1
Ehlanzeni	4	33	4	32	4	36
Govan Mbeki	7	44	7	43	7	41
Metsweding District	0	0	0	0	0	0
Nkangala	5	51	5	46	5	45
Sekhukhune Cross Boundary	3	15	3	17	3	18
Total	20	144	20	139	20	141

	2006		2007		2008	
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
Ehlanzeni District	5	42	5	47	5	49
Gert Sibande District	7	40	7	41	7	45
Nkangala District	5	47	5	49	5	50
Total	17	129	17	137	17	144

Table C.6.3: Total number of local municipalities (N) with and total number Private institutional pharmacies in the MPUMALANGA PROVINCE per district municipality, 2003 to 2008

	2003			2004			2005		
	N	Total private institutional		N	Total private institutional		N	Total private institutional	
Bohlabela District	0	0		0	0		0	0	
Ehlanzeni	2	4		2	4		2	4	
Govan Mbeki	1	2		1	3		1	3	
Metsweding District	0	0		0	0		0	0	
Nkangala	2	2		3	3		2	3	
Sekhukhune Cross Boundary	0	0		0	0		0	0	
Total	5	8		6	10		5	10	

	2006			2007			2008		
	N	Total private institutional		N	Total private institutional		N	Total private institutional	
Ehlanzeni District	2	4		2	3		2	3	
Gert Sibande District	2	4		2	4		2	4	
Nkangala District	2	3		3	6		3	6	
Total	6	11		7	13		7	13	

Table C.6.4: Total number of local municipalities (N) with and total number Public institutional pharmacies in the MPUMALANGA PROVINCE per district municipality, 2003 to 2008

	2003			2004			2005		
	N	Total public institutional		N	Total public institutional		N	Total public institutional	
Bohlabela District	1	1		1	1		1	1	
Ehlanzeni	4	9		4	9		4	9	
Govan Mbeki	6	10		6	10		6	10	
Metsweding District	0	0		0	0		0	0	
Nkangala	5	8		5	8		5	8	
Sekhukhune Cross Boundary	3	6		3	6		3	6	
Total	19	34		19	34		19	34	

	2006			2007			2008		
	N	Total public institutional		N	Total public institutional		N	Total public institutional	
Ehlanzeni District	5	10		5	10		5	10	
Gert Sibande District	6	10		6	9		6	10	
Nkangala District	5	8		5	8		5	8	
Total	16	28		16	27		16	28	

Table C.6.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of MPUMALANGA PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Bohlabela District	2 608	2	1 304	2 640	2	1 320	2 682	2	1 341
Ehlanzeni	971 356	46	21 116	983 498	45	21 856	999 234	49	20 392
Govan Mbeki	925 417	56	16 525	936 985	56	16 732	951 977	54	17 629
Metsweding District	34 401	0	-	34 831	0	-	35 389	0	-
Nkangala	1 049 429	61	17 204	1 062 547	57	18 641	1 079 548	56	19 278
Sekhukhune Cross Boundary	227 970	21	10 856	230 820	23	10 036	234 513	24	9 771
Total	3 211 182	186	17 264	3 251 322	183	17 767	3 303 343	185	17 856

Table C.6.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of MPUMALANGA PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Ehlanzeni District	1 524 021	56	27 215	1 538 347	60	25 639	1 573 014	62	25 371
Gert Sibande District	947 235	54	17 541	956 139	54	17 706	977 699	59	16 571
Nkangala District	1 074 170	58	18 520	1 084 267	63	17 211	1 108 717	64	17 324
Total	3 545 426	138	21 104	3 578 753	177	20 219	3 659 430	185	19 781

Table C.6.6: Availability of registered community pharmacies, in the district municipalities of MPUMALANGA PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bohlabela District	2 608	1	2 608	2 640	1	2 640	2 682	1	2 682	1	2 682	
Ehlanzeni	971 356	33	29 435	983 498	32	30 734	999 234	36	27 756			
Govan Mbeki	925 417	44	21 032	936 985	43	21 790	951 977	41	23 219			
Metsweding District	34 401	0	-	34 831	0	-	35 389	0	-			
Nkangala	1 049 429	51	20 577	1 062 547	46	240 490	1 079 548	45	23 990			
Sekhukhune Cross Boundary	227 970	15	15 198	230 820	17	13 578	234 513	18	13 029			
Total	3 211 182	144	22 300	3 251 322	139	23 391	3 303 343	141	23 428			

**Table C.6.6: Availability of registered community pharmacies, in the district municipalities of
MPUMALANGA PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Ehlanzeni District	1 524 021	42	36 286		1 538 347	47	32 731		1 573 014	49	32 102	
Gert Sibande District	947 235	40	23 681		956 139	41	23 320		977 699	45	21 727	
Nkangala District	1 074 170	47	22 855		1 084 267	49	22 128		1 108 717	50	22 174	
Total	3 545 426	129	27 484		3 578 753	137	26 122		3 659 430	144	25 413	

Table C.6.7: Availability of registered private institutional pharmacies, in the district municipalities of MPUMALANGA PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bohlabela District	2 608	0	-	2 640	0	-	2 682	0	2 682	0	-	
Ehlanzeni	971 356	4	242 839	983 498	4	245 874	999 234	4	999 234	4	249 808	
Govan Mbeki	925 417	2	462 709	936 985	3	312 328	951 977	3	951 977	3	317 326	
Metsweding District	34 401	0	-	34 831	0	-	35 389	0	35 389	0	-	
Nkangala	1 049 429	2	524 714	1 062 547	3	354 182	1 079 548	3	1 079 548	3	359 849	
Sekhukhune Cross Boundary	227 970	0	-	230 820	0	-	234 513	0	234 513	0	-	
Total	3 211 182	8	401 398	3 251 322	10	325 132	3 303 343	10	3 303 343	10	330 334	

**Table C.6.7: Availability of registered private institutional pharmacies, in the district municipalities of
MPUMALANGA PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Ehlanzeni District	1 524 021	4	381 005	1 538 347	3	512 782	1 573 014	3	1 573 014	3	524 338	1 573 014
Gert Sibande District	947 235	4	236 809	956 139	4	239 035	977 699	4	977 699	4	244 425	977 699
Nkangala District	1 074 170	3	358 057	1 084 267	6	180 711	1 108 717	6	1 108 717	6	184 786	1 108 717
Total	3 545 426	11	322 311	3 578 753	13	275 289	3 659 430	13	3 659 430	13	281 495	3 659 430

**Table C.6.8: Availability of registered public institutional pharmacies, in the district municipalities of
MPUMALANGA PROVINCE, 2003 to 2008**

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Bohlabela District	2 608	1	2 608		2 640	1	2 640		2 682	1	2 682	
Ehlanzeni	971 356	9	107 928		983 498	9	109 278		999 234	9	111 026	
Govan Mbeki	925 417	10	92 542		936 985	10	93 699		951 977	10	95 197.68	
Metsweding District	34 401	0	-		34 831	0	-		35 389	0	-	
Nkangala	1 049 429	8	131 179		1 062 547	8	132 818		1 079 548	8	134 943	
Sekhukhune Cross Boundary	227 970	61	3 737		230 820	6	38 470		234 513	6	39 086	
Total	3 211 182	34	94 447		3 251 322	34	95 627		3 303 343	34	97 157	

**Table C.6.8: Availability of registered public institutional pharmacies, in the district municipalities of
MPUMALANGA PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Ehlanzeni District	1 524 021	10	152 402	1 538 347	10	153 835	1 573 014	10	1 573 014	10	157 301	
Gert Sibande District	947 235	10	94 723	956 139	9	106 238	977 699	10	977 699	10	97 770	
Nkangala District	1 074 170	8	134 271	1 084 267	8	135 533	1 108 717	8	1 108 717	8	138 590	
Total	3 545 426	28	126 622	3 578 753	27	132 546	3 659 430	28	3 659 430	28	130 694	

C.7:

NORTH WEST PROVINCE

Table C.7.1: Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the NORTH WEST PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Tpharm	N	Tpharm	N	Tpharm
Bojanala District	5	66	5	66	5	67
Bophirima District	5	28	5	27	5	26
Central District	4	41	4	40	4	39
City of Tshwane Metropolitan	1	18	1	18	1	18
Frances Baard District	0	0	0	0	0	0
Kgalagadi District	1	1	1	1	1	1
Southern District	4	63	4	63	4	64
West Rand District	1	4	1	4	1	5
Total	21	221	21	219	21	220

	2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm
Bojanala District	5	70	5	73	5	74
Bophirima District	5	26	5	26	5	27
Kenneth Kaunda District (southern)	5	86	5	87	5	88
Ngaka Modiri Molema District (central)	4	43	4	43	4	45
Total	19	225	19	229	19	234

Table C.7.2: Total number of local municipalities (N) with and total number of Community Pharmacies in the NORTH WEST PROVINCE per district municipality, 2003 to 2008

	2003			2004			2005		
	N	Total community pharmacies		N	Total community pharmacies		N	Total community pharmacies	
Bojanala District	4	49		4	49		4	50	
Bophirima District	3	10		3	10		3	9	
Central District	4	24		4	23		4	22	
City of Tshwane Metropolitan	1	13		1	14		1	14	
Frances Baard District	0	0		0	0		0	0	
Kgalagadi District	0	0		0	0		0	0	
Southern District	4	53		4	53		4	53	
West Rand District	1	3		1	3		1	3	
Total	17	152		17	152		17	151	

	2006			2007			2008		
	N	Total community pharmacies		N	Total community pharmacies		N	Total community pharmacies	
Bojanala District	4	52		4	56		4	57	
Bophirima District	3	9		3	9		3	10	
Kenneth Kaunda District (southern)	5	69		5	68		5	69	
Ngaka Modiri Molema District (central)	4	23		4	22		4	24	
Total	16	153		16	155		16	160	

Table C.7.3: Total number of local municipalities (N) with and total number of Private institutional pharmacies in the NORTH WEST PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Total private institutional	N	Total private institutional	N	Total private institutional
Bojanala District	1	5	1	5	1	5
Bophirima District	1	1	1	1	1	1
Central District	1	1	1	1	1	1
City of Tshwane Metropolitan	1	1	1	1	1	1
Frances Baard District	0	0	0	0	0	0
Kgalagadi District	0	0	0	0	0	0
Southern District	1	1	1	1	2	3
West Rand District	0	0	0	0	1	1
Total	5	9	5	9	7	12

	2006		2007		2008	
	N	Total private institutional	N	Total private institutional	N	Total private institutional
Bojanala District	2	6	2	6	2	6
Bophirima District	1	1	1	1	1	1
Kenneth Kaunda District (southern)	3	7	3	7	3	7
Ngaka Modiri Molema District (central)	1	1	1	2	1	2
Total	7	15	7	16	7	16

Table C.7.4: Total number of local municipalities (N) with and total number of Public institutional pharmacies in the NORTH WEST PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005	
	N	Total public institutional	N	Total public institutional	N	Total public institutional
Bojanala District	5	12	5	12	5	12
Bophirima District	5	17	5	16	5	16
Central District	4	16	4	16	4	16
City of Tshwane Metropolitan	1	4	1	3	1	3
Frances Baard District	0	0	0	0	0	0
Kgalagadi District	1	1	1	1	1	1
Southern District	4	9	4	9	4	8
West Rand District	1	1	1	1	1	1
Total	21	60	21	58	7	57

	2006		2007		2008	
	N	Total public institutional	N	Total public institutional	N	Total public institutional
Bojanala District	5	12	5	11	5	11
Bophirima District	5	16	5	6	5	16
Kenneth Kaunda District (southern)	5	10	5	12	5	12
Ngaka Modiri Molema District (central)	4	19	4	19	4	19
Total	19	57	19	58	19	58

Table C.7.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Bojanala District	1 201 855	66	18 210	1 234 017	66	18 697	1 253 761	67	18 713
Bophirima District	445 802	28	15 922	457 732	27	16 953	465 056	26	17 887
Central District	773 621	41	18 869	794 324	40	19 858	807 033	39	20 693
City of Tshwane Metropolitan Frances Baard District	465 344	18	25 852	477 796	18	26 544	485 441	18	26 969
Kgalagadi District	141 989	1	141 989	145 788	1	145 788	148 121	1	148 121
Southern District	608 024	63	9 651	624 295	63	9 909	634 283	64	9 911
West Rand District	61 989	4	15 497	63 648	4	15 912	64 666	5	12 933
Total	3 720 479	221	16 835	3 820 041	219	17 443	3 881 162	220	17 642

Table C.7.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Bojanala District	1 261 564	70	18 022	1 273 423	73	17 444	1 269 502	74	17 155
Bophirima District	467 950	26	17 998	472 349	26	18 167	470 895	27	17 441
Kenneth Kaunda District (southern)	862 248	86	10 026	870 354	87	10 004	867 674	88	9 860
Ngaka Modiri Molema District (central)	812 056	43	18 885	819 689	43	19 063	817 165	45	18 159
Total	3 403 818	225	15 128	3 435 814	229	15 003	3 425 236	234	14 638

Table C.7.6: Availability of registered community pharmacies in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Bojanala District	1 201 855	49	24 528		1 234 017	49	25 184		1 253 761	50	25 075	
Bophirima District	445 802	10	44 580		457 732	10	45 773		465 056	9	51 673	
Central District	773 621	24	322 234		794 324	23	34 536		807 033	22	36 683	
City of Tshwane Metropolitan	465 344	13	35 796		477 796	14	34 128		485 441	14	34 674	
Frances Baard District	21 856	0	-		22 441	0	-		22 800	0	-	
Kgalagadi District	141 989	0	-		145 788	0	-		148 121	0	-	
Southern District	608 024	53	11 472		624 295	53	11 779		634 283	53	11 968	
West Rand District	61 989	3	20 663		63 648	3	21 216		64 666	3	21 555	
Total	3 720 479	152	24 477		3 820 041	152	25 132		3 881 162	151	25 703	

Table C.7.6: Availability of registered community pharmacies in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Bojanala District	1 261 564	52	24 260	1 273 423	56	22 740	1 269 502	57	22 272
Bophirima District	467 950	9	51 994	472 349	9	52 483	470 895	10	47 089
Kenneth Kaunda District (southern)	862 248	69	12 496	870 354	68	12 799	867 674	69	12 575
Ngaka Modiri Molema District (central)	812 056	23	35 307	819 689	22	37 259	817 165	24	34 049
Total	3 403 818	153	22 247	3 435 814	155	22 167	3 425 236	160	21 408

Table C.7.7: Availability of registered private institutional pharmacies in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bojanala District	1 201 855	5	240 371	1 234 017	5	246 803	1 253 761	5	1 253 761	5	250 752	
Bophirima District	445 802	1	445 802	457 732	1	457 732	465 056	1	465 056	1	465 056	
Central District	773 621	1	773 321	794 324	1	794 324	807 033	1	807 033	1	807 033	
City of Tshwane Metropolitan Frances Baard District	465 344	1	465 344	477 796	1	477 796	485 441	1	485 441	1	485 441	
Kgalagadi District	141 989	0	-	22 441	0	-	22 800	0	22 800	0	-	
Southern District	608 024	1	608 024	624 295	1	624 295	634 283	3	634 283	3	211 428	
West Rand District	61 989	0	-	63 648	0	-	64 666	1	64 666	1	64 666	
Total	3 720 479	9	413 387	3 820 041	9	424 449	3 881 162	12	3 881 162	12	323 430	

Table C.7.7: Availability of registered private institutional pharmacies in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bojanala District	1 261 564	6	210 261	1 273 423	6	212 237	1 269 502	6	211 584			
Bophirima District	467 950	1	467 950	472 349	1	472 349	470 895	1	470 895			
Kenneth Kaunda District (southern)	862 248	7	123 178	870 354	7	124 336	867 674	7	123 953			
Ngaka Modiri Molema District (central)	812 056	1	812 056	819 689	2	409 844	817 165	2	408 583			
Total	3 403 818	15	226 921	3 435 814	16	214 738	3 425 236	16	214 077			

Table C.7.8: Availability of registered public institutional pharmacies in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bojanala District	1 201 855	12	100 155	1 234 017	12	102 835	1 253 761	12	1 253 761	12	104 480	
Bophirima District	445 802	17	26 224	457 732	16	28 608	465 056	16	465 056	16	29 066	
Central District	773 621	16	48 351	794 324	16	49 645	807 033	16	807 033	16	50 440	
City of Tshwane Metropolitan	465 344	4	116 336	477 796	3	159 265	485 441	3	485 441	3	161 814	
Frances Baard District	21 856	0	-	22 441	0	-	22 800	0	22 800	0	-	
Kgalagadi District	141 989	1	141 989	145 788	1	145 788	148 121	1	148 121	1	148 121	
Southern District	608 024	9	67 558	624 295	9	69 366	634 283	8	634 283	8	79 285	
West Rand District	61 989	1	61 989	63 648	1	63 648	64 666	1	64 666	1	64 666	
Total	3 720 479	60	62 008	3 820 041	58	65 863	3 881 162	57	3 881 162	57	68 091	

Table C.7.8: Availability of registered public institutional pharmacies in the district municipalities of NORTH WEST PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Bojanala District	1 261 564	12	105 130	1 273 423	11	115 766	1 269 502	11	1 269 502	11	115 409	
Bophirima District	467 950	16	29 247	472 349	16	29 522	470 895	16	470 895	16	29 431	
Kenneth Kaunda District (southern)	862 248	10	86 225	870 354	12	72 529	867 674	12	867 674	12	72 306	
Ngaka Modiri Molema District (central)	812 056	19	42 740	819 689	19	43 142	817 165	19	817 165	19	43 009	
Total	3 403 818	57	59 716	3 435 814	58	59 238	3 425 236	58	3 425 236	58	59 056	

C.8: NORTHERN CAPE PROVINCE

Table C.8.1: Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the NORTHERN CAPE PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm
Frances Baard District	4	32	4	33	4	35	4	37	4	37	4	37
Karoo District/ Pixely ka Seme	8	22	8	21	8	22	8	22	8	23	8	23
Kgalagadi District	2	5	2	5	2	6	2	8	2	8	2	8
Namakwa District	5	18	5	18	5	16	5	17	5	17	4	9
Siyanda District	6	21	6	23	6	23	6	23	6	25	6	25
Total	25	98	25	100	25	102	25	107	25	110	24	102

Table C.8.2: Total number of local municipalities (N) with and total number of Community pharmacies in the NORTHERN CAPE PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total Community pharmacies	N	Total Community pharmacies	N	Total Community pharmacies	N	Total Community pharmacies	N	Total Community pharmacies	N	Total Community pharmacies
Frances Baard District	3	21	3	22	3	24	3	25	3	25	3	25
Karoo District/ Pixely ka Seme	5	8	5	7	5	8	5	8	6	9	6	9
Kgalagadi District	2	4	2	4	2	5	2	6	2	6	2	6
Namakwa District	3	5	3	5	3	4	3	5	3	5	3	5
Siyanda District	4	10	4	12	4	10	4	12	4	14	4	13
Total	17	48	17	50	17	53	17	56	18	59	18	58

Table C.8.3: Total number of local municipalities (N) with and total number of Private institutional pharmacies in the **NORTHERN CAPE PROVINCE per district municipality, 2003 to 2008**

	2003		2004		2005		2006		2007		2008	
	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional
Frances Baard District	0	0	0	0	0	0	1	2	1	2	1	2
Karoo District/ Pixely ka Seme	0	0	0	0	0	0	0	0	0	0	0	0
Kgalagadi District	0	0	0	0	0	0	0	0	0	0	0	0
Namakwa District	1	1	1	1	1	1	1	1	1	1	1	1
Siyanda District	1	1	1	1	1	1	1	1	1	1	1	1
Total	2	2	2	2	2	2	3	4	3	4	3	4

Table C.8.4: Total number of local municipalities (N) with and total number of Public institutional pharmacies in the NORTHERN CAPE PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional
Frances Baard District	4	11	4	11	4	11	4	10	4	10	4	10
Karoo District/ Pixely ka Seme	8	14	8	14	8	14	8	14	8	14	8	14
Kgalagadi District	1	1	1	1	1	1	1	2	1	2	1	2
Namakwa District	5	12	5	12	5	11	5	11	5	11	3	3
Siyanda District	6	10	6	10	6	10	6	10	6	10	6	11
Total	24	48	24	48	24	47	24	47	24	47	22	40

Table C.8.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of NORTHERN CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Frances Baard District	311 802	32	9 744		315 700	33	9 567		320 751	35	9 164	
Karoo District	169 310	22	7 696		171 426	21	8 163		174 169	22	7 917	
Kgalagadi District	37 926	5	7 585		38 400	5	7 680		39 015	6	6 502	
Namakwa District	111 161	18	6 176		112 551	18	6 253		114 352	16	7 147	
Siyanda District	215 809	21	10 277		218 507	23	9 500		222 003	23	9 652	
Total	846 009	98	8 633		856 584	100	8 566		870 289	102	8 532	

Table C.8.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of NORTHERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Frances Baard District	331 285	37	8 654	334 399	37	9 038	338 132	37	9 139			
Kgalagadi District	180 454	8	22 557	182 151	8	22 769	184 184	8	23 023			
Namakwa District	110 269	17	6 486	111 306	17	6 547	112 548	9	12 505			
Pixley ka Seme	167 951	22	7 634	169 530	23	7 371	171 422	23	7 453			
Siyanda District	214 077	23	9 308	216 089	25	8 644	218 501	25	8 740			
Total	1 004 036	107	9 393	1 013 474	110	9 213	1 024 787	102	10 047			

Table C.8.6: Availability of registered community pharmacies, in the district municipalities of NORTHERN CAPE PROVINCE, 2003 to 2008

	2003			2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Frances Baard District	311 802	21	14 848	315 700	22	14 350	320 751	24	13 365
Karoo District	169 310	8	21 164	171 426	7	24 489	174 169	8	21 771
Kgalagadi District	37 926	4	9 842	38 400	4	9 600	39 015	5	7 803
Namakwa District	111 161	5	22 232	112 551	5	22 510	114 352	4	28 588
Siyanda District	215 809	10	21 581	218 507	12	18 209	222 003	12	18 500
Total	846 009	48	17 625	856 584	50	17 132	870 289	53	16 421

Table C.8.6: Availability of registered community pharmacies, in the district municipalities of NORTHERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Frances Baard District	331 285	25	13 251	334 399	25	13 376	338 132	25	13 525
Kgalagadi District	180 454	6	30 076	182 151	6	30 358	184 184	6	30 697
Namakwa District	110 269	5	22 054	111 306	5	22 261	112 548	5	22 510
Pixley ka Seme	167 951	8	20 994	169 530	9	18 837	171 422	9	19 047
Siyanda District	214 077	12	17 840	216 089	14	15 435	218 501	13	16 808
Total	1 004 036	56	17 929	1 013 474	59	17 178	1 024 787	58	17 669

**Table C.8.7: Availability of registered private institutional pharmacies, in the district municipalities of
NORTHERN CAPE PROVINCE, 2003 to 2008**

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Frances Baard District	311 802	0	-	315 700	0	-	320 751	0	-	-	-	-
Karoo District	169 310	0	-	171 426	0	-	174 169	0	-	-	-	-
Kgalagadi District	37 926	0	-	38 400	0	-	39 015	0	-	-	-	-
Namakwa District	111 161	1	111 161	112 551	1	112 551	114 352	1	114 352	1	114 352	114 352
Siyanda District	215 809	1	215 809	218 507	1	218 507	222 003	1	222 003	1	222 003	222 003
Total	846 009	2	423 005	856 584	2	428 292	870 289	2	435 145	2	435 145	435 145

**Table C.8.7: Availability of registered private institutional pharmacies, in the district municipalities of
NORTHERN CAPE PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Frances Baard District	331 285	2	165 643	334 399	2	167 200	338 132	2	169 066			
Kgalagadi District	180 454	0	-	182 151	0	-	184 184	0	-			
Namakwa District	110 269	1	110 269	111 306	1	111 305	112 548	1	112 548			
Pixley ka Seme	167 951	0	-	169 530	0	-	171 422	0	-			
Siyanda District	214 077	1	214 077	216 089	1	216 089	218 501	1	218 501			
Total	1 004 036	4	251 009	1 013 474	4	253 368	1 024 787	4	256 197			

**Table C.8.8: Availability of registered public institutional pharmacies, in the district municipalities of
NORTHERN CAPE PROVINCE, 2003 to 2008**

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy		Total population	Total number pharmacies	Population per pharmacy	
Frances Baard District	311 802	11	28 346		315 700	11	28 700		320 751	11	29 159	
Karoo District	169 310	14	12 094		171 426	14	12 245		174 169	14	12 441	
Kgalagadi District	37 926	1	37 926		38 400	1	38 400		39 015	1	39 015	
Namakwa District	111 161	12	9 263		112 551	12	9 379		114 352	11	10 396	
Siyanda District	215 809	10	21 581		218 507	10	21 851		222 003	10	22 200	
Total	846 009	48	17 625		856 584	48	17 845		870 289	47	18 517	

**Table C.8.8: Availability of registered public institutional pharmacies, in the district municipalities of
NORTHERN CAPE PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Frances Baard District	331 285	10	33 128	334 399	10	33 440	338 132	10	338 132	10	33 813	
Kgalagadi District	180 454	2	90 227	182 151	2	91 075	184 184	2	184 184	2	92 092	
Namakwa District	110 269	11	10 024	111 306	11	10 119	112 548	3	112 548	3	37 516	
Pixley ka Seme	167 951	14	11 996	169 530	14	12 109	171 422	14	171 422	14	12 244	
Siyanda District	214 077	10	21 408	216 089	10	21 609	218 501	11	218 501	11	19 864	
Total	1 004 036	47	21 362	1 013 474	47	21 563	1 024 787	40	1 024 787	40	25 620	

C.9: WESTERN CAPE PROVINCE

Table C.9.1: Total number of local municipalities (N) with and total number of All Direct service pharmacies (Tpharm) in the **WESTERN CAPE PROVINCE** per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm	N	Tpharm
Boland District/ Cape Winelands	5	59	5	60	5	62	5	65	5	65	5	64
Central Karoo	2	5	2	5	2	5	2	5	2	6	2	6
City of Cape Town	1	362	1	364	1	381	1	402	1	417	1	415
Eden District	7	65	7	65	7	70	7	78	7	82	7	80
Overberg District	4	23	4	23	4	23		25	4	26	4	28
West Coast District	5	28	5	28	5	27	5	27	5	31	5	30
Total	24	542	24	545	24	568	24	602	24	627	24	623

Table C.9.2: Total number of local municipalities (N) with and total number of community pharmacies in the WESTERN CAPE PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies	N	Total community pharmacies
Boland District/ Cape Winelands	5	46	5	47	5	49	5	49	5	48	5	48
Central Karoo	2	3	2	3	2	3	2	3	2	3	2	3
City of Cape Town	1	282	1	285	1	296	1	312	1	324	1	321
Eden District	7	50	7	48	7	51	7	58	7	58	7	56
Overberg District	4	18	4	17	4	17	4	19	4	20	4	20
West Coast District	5	21	5	21	5	20	5	20	5	22	5	21
Total	24	420	24	421	24	436	24	461	24	475	24	469

Table C.9.3: Total number of local municipalities (N) with and total number of Private institutional pharmacies in the WESTERN CAPE PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional	N	Total private institutional
Boland District/ Cape Winelands	1	1	1	1	1	1	4	4	4	4	3	3
Central Karoo	0	0	0	0	0	0	0	0	0	0	0	0
City of Cape Town	1	18	1	16	1	19	1	23	1	26	1	27
Eden District	2	2	4	4	3	3	3	3	3	3	3	3
Overberg District	1	1	1	1	1	1	1	1	1	1	1	1
West Coast District	1	1	1	1	1	1	1	1	1	1	1	1
Total	6	23	8	23	7	25	10	32	10	35	9	35

Table C.9.4: Total number of local municipalities (N) with and total number of Public institutional pharmacies in the WESTERN CAPE PROVINCE per district municipality, 2003 to 2008

	2003		2004		2005		2006		2007		2008	
	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional	N	Total public institutional
Boland District/ Cape Winelands	5	12	5	12	5	12	5	12	5	13	5	13
Central Karoo	1	2	1	2	1	2	1	2	2	3	2	3
City of Cape Town	1	62	1	63	1	66	1	67	1	67	1	67
Eden District	6	13	6	13	6	16	7	17	7	21	7	21
Overberg District	4	4	4	5	4	5	4	5	4	5	4	7
West Coast District	5	6	5	6	5	6	5	6	5	8	5	8
Total	22	99	22	101	22	107	23	109	24	117	24	119

Table C.9.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of WESTERN CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	
Boland District	660 042	59	11 187	681 269	60	11 354	698 761	62	698 761	62	11 270	
Central Karoo	63 397	5	12 679	65 436	5	13 087	67 116	5	67 116	5	13 423	
City of Cape Town	3 033 737	362	8 380	3 131 302	364	8 602	3 211 702	381	3 211 702	381	8 430	
Eden District	477 038	65	7 339	492 380	65	7 575	505 023	70	505 023	70	7 215	
Overberg District	213 406	23	9 278	220 269	23	9 577	225 925	23	225 925	23	9 823	
West Coast District	296 427	28	9 622	305 960	28	10 927	313 816	27	313 816	27	11 623	
Total	4 744 047	542	8 753	4 896 617	545	8 985	5 022 343	568	5 022 343	568	8 842	

Table C.9.5: Availability all registered pharmaceutical structures providing services directly to the patient, in the district municipalities of WESTERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Cape Winelands	709 743	65	10 919	716 415	65	11 022	731 182	64	11 425			
Central Karoo	68 171	5	13 634	68 811	6	11 469	70 230	6	11 705			
City of Cape Town	3 262 178	402	8 114	3 292 842	417	7 896	3 360 718	415	8 098			
Eden District	512 960	78	6 576	517 781	82	6 314	528 454	80	6 606			
Overberg District	229 476	25	9 179	231 633	26	8 909	236 408	28	8 443			
West Coast District	318 748	27	11 805	321 744	31	10 379	328 376	30	10 946			
Total	5 101 275	602	8 474	5 149 227	627	8 212	5 255 368	623	8 436			

Table C.9.6: Availability of registered community pharmacies in the district municipalities of WESTERN CAPE PROVINCE, 2003 to 2008

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Boland District	660 042	46	14 349	681 269	47	14 495	698 761	49	14 260			
Central Karoo	63 397	3	21 132	65 436	3	21 812	67 116	3	22 372			
City of Cape Town	3 033 737	282	10 758	3 131 302	285	10 987	3 211 702	296	10 850			
Eden District	477 038	50	9 541	492 380	48	10 258	505 023	51	9 902			
Overberg District	213 406	18	11 856	220 269	17	12 957	225 925	17	13 290			
West Coast District	296 427	21	12 830	305 960	21	14 569	313 816	20	15 691			
Total	4 744 047	420	11 295	4 896 617	421	11 631	5 022 343	436	11 519			

Table C.9.6: Availability of registered community pharmacies in the district municipalities of WESTERN CAPE PROVINCE, 2003 to 2008 (continued)

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Cape Winelands	709 743	49	14 485	716 415	48	14 925	731 182	48	15 233
Central Karoo	68 171	3	22 723	68 811	3	22 937	70 230	3	23 410
City of Cape Town	3 262 178	312	10 456	3 292 842	324	10 163	3 360 718	321	10 469
Eden District	512 960	58	8 844	517 781	58	8 927	528 454	56	9 437
Overberg District	229 476	19	12 078	231 633	20	11 582	236 408	20	11 820
West Coast District	318 748	20	15 937	321 744	22	14 625	328 376	21	15 637
Total	5 101 275	461	11 066	5 149 227	475	10 840	5 255 368	469	11 205

**Table C.9.7: Availability of registered private institutional pharmacies in the district municipalities of
WESTERN CAPE PROVINCE, 2003 to 2008**

	2003				2004				2005			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Boland District	660 042	1	660 042	681 269	1	681 269	698 761	1	698 761	1	698 761	
Central Karoo	63 397	0	-	65 436	0	-	67 116	0			-	
City of Cape Town	3 033 737	18	168 541	3 131 302	16	195 706	3 211 702	19			169 037	
Eden District	477 038	2	238 519	492 380	4	123 095	505 023	3			168 341	
Overberg District	213 406	1	213 406	220 269	1	220 270	225 925	1			225 925	
West Coast District	296 427	1	296 427	305 960	1	305 960	313 816	1			313 816	
Total	4 744 047	23	206 263	4 896 617	23	212 896	5 022 343	25			200 894	

**Table C.9.7: Availability of registered private institutional pharmacies in the district municipalities of
WESTERN CAPE PROVINCE, 2003 to 2008 (continued)**

	2006				2007				2008			
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Total population	Total number pharmacies	Population per pharmacy	Total population
Cape Winelands	709 743	4	177 436	716 415	4	179 104	731 182	3	243 727			
Central Karoo	68 171	0	-	68 811	0	-	70 230	0	-			
City of Cape Town	3 262 178	23	141 834	3 292 842	26	126 648	3 360 718	27	124 471			
Eden District	512 960	3	170 986	517 781	3	172 594	528 454	3	176 151			
Overberg District	229 476	1	229 476	231 633	1	231 633	236 408	1	236 408			
West Coast District	318 748	1	318 748	321 744	1	321 744	328 376	1	328 376			
Total	5 101 275	32	159 415	5 149 227	35	147 121	5 255 368	35	150 153			

**Table C.9.8: Availability of registered public institutional pharmacies in the district municipalities of
WESTERN CAPE PROVINCE, 2003 to 2008**

	2003				2004			2005		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population
Boland District	660 042	12	55 003	681 269	12	56 772	698 761	12	58 230	
Central Karoo	63 397	2	31 698	65 436	2	32 718	67 116	2	33 558	
City of Cape Town	3 033 737	62	48 931	3 131 302	63	49 703	3 211 702	66	48 662	
Eden District	477 038	13	36 695	492 380	13	37 875	505 023	16	31 564	
Overberg District	213 406	4	53 352	220 269	5	44 054	225 925	5	45 185	
West Coast District	296 427	6	44 904	305 960	6	50 993	313 816	6	52 303	
Total	4 744 047	99	47 920	4 896 617	101	48 481	5 022 343	107	46 938	

**Table C.9.8: Availability of registered public institutional pharmacies in the district municipalities of
WESTERN CAPE PROVINCE, 2003 to 2008 (continued)**

	2006			2007			2008		
	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy	Total population	Total number pharmacies	Population per pharmacy
Cape Winelands	709 743	12	59 145	716 415	13	55 109	731 182	13	56 245
Central Karoo	68 171	2	34 085	68 811	3	22 937	70 230	3	23 410
City of Cape Town	3 262 178	67	48 689	3 292 842	67	49 147	3 360 718	67	50 160
Eden District	512 960	17	30 174	517 781	21	24 656	528 454	21	25 164
Overberg District	229 476	5	45 895	231 633	5	46 327	236 408	7	33 772
West Coast District	318 748	6	53 125	321 744	8	40 218	328 376	8	41 047
Total	5 101 275	109	46 801	5 149 227	117	44 010	5 255 368	119	44 163

D.1: 2003-2005

D.1.1 EASTERN CAPE PROVINCE

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005

		2003			2004			2005		
ALFRED NZO District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
O'Connors Camp	All Direct service pharmacies	0	0	0	0	0	0	0	0	0
	Community pharmacies		0	0		0	0			
	Private institutional pharmacies		0	0		0	0			
	Public institutional pharmacies		0	0		0	0			
Umzimkhulu	All Direct service pharmacies	175534.24	1	175534.24	181303.92	1	181303.92	172818.69	1	172818.69
	Community pharmacies		1	175534.24		1	181303.92		1	172818.69
	Private institutional pharmacies		0	0		0				
	Public institutional pharmacies		0	0		0				
Umzimvubu	All Direct service pharmacies	378626.94	1	378626.94	391072.12	1	391072.12	372769.50	1	372769.50
	Community pharmacies		0	0		0			0	
	Private institutional pharmacies		0	0		0			0	
	Public institutional pharmacies		1	378626.94		1	391072.12		1	372769.50

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005...continued

AMATOLE District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Amahlathi	All Direct service pharmacies	140010.19	3	46670.06	144612.22	3	48204.07	137844.20	3	45948.07
	Community pharmacies		1	140010.19		1	144612.22		1	137844.20
	Private institutional pharmacies		0	0		0	-		0	-
	Public institutional pharmacies		2	70005.09		2	72306.11		2	68922.10
Buffalo City	All Direct service pharmacies	706604.03	40	17665.10	729829.57	39	18713.58	695672.73	40	17391.82
	Community pharmacies		31	22793.68		30	24327.65		30	23189.09
	Private institutional pharmacies		3	235534.68		3	243276.52		3	231890.91
	Public institutional pharmacies		6	117767.34		6	121638.26		7	99381.82
Great Kei	All Direct service pharmacies	44744.10	0	-	46214.81	0	-	44051.90	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Mbashe	All Direct service pharmacies	255104.71	1	255104.71	263489.80	1	263489.80	251158.19	1	251158.19
	Community pharmacies		1	255104.71		1	263489.80		1	251158.19
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005....continued

AMATOLE		2003			2004			2005		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mnquma	All Direct service pharmacies	289722.66	3	96574.22	299245.63	3	99748.54	285240.60	3	95080.20
	Community pharmacies		2	144861.33		2	149622.81		2	142620.30
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	289722.66		1	299245.63		1	285240.60
Ngqushwa	All Direct service pharmacies	84821.80	1	84821.80	87609.83	1	87609.83	83509.59	1	83509.59
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	84821.80		1	87609.83		1	83509.59
Nkokobe	All Direct service pharmacies	129562.88	5	25912.58	133821.52	5	26764.30	127558.52	5	25511.70
	Community pharmacies		2	64781.44		2	66910.76		2	63779.26
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	43187.63		3	44607.17		3	42519.51
Nxuba	All Direct service pharmacies	25006.28	3	8335.43	25828.22	3	8609.41	24619.43	3	8206.48
	Community pharmacies		2	12503.14		2	12914.11		2	12309.71
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	25006.28		1	2528.22		1	24619.43

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005....continued

CACADU District municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Aberden Plain	All Direct service pharmacies	6583.30	0	-	6799.69	0	-	6481.46	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Baviaans	All Direct service pharmacies	15441.92	0	-	15949.48	0	-	15203.03	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Blue Crane Route	All Direct service pharmacies	35247.19	3	11749.06	36405.74	3	12135.25	34701.91	3	11567.30
	Community pharmacies		2	17623.60		2	18202.87		2	17350.96
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	35247.19		1	36405.74		1	34701.91
Camdeboo	All Direct service pharmacies	44659.53	4	11164.88	46127.46	4	11531.86	43968.64	3	14656.21
	Community pharmacies		3	14886.51		3	15375.82		2	21984.32
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	44659.53		1	46127.46		1	43968.64

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005....continued

CACADU		2003				2004				2005			
District municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ikwezi	All Direct service pharmacies	10435.22	0	-	10778.22	0	-	10273.79	0	-		0	-
	Community pharmacies		0	-					0	-			
	Private institutional pharmacies		0	-					0	-			
	Public institutional pharmacies		0	-					0	-			
Kou Kamma	All Direct service pharmacies	34523.32	1	34523.32	35658.08	1	34523.32	33989.24	1	35658.08		1	33989.24
	Community pharmacies		1	34523.32					1	35658.08		1	33989.24
	Private institutional pharmacies		0	-					0	-		0	-
	Public institutional pharmacies		0	-					0	-		0	-
Kouga	All Direct service pharmacies	71169.93	9	7907.77	73509.23	9	8167.69	70068.92	9	7785.44		9	7785.44
	Community pharmacies		8	8896.24					8	9188.65		8	8758.61
	Private institutional pharmacies		0	-					0	-		0	-
	Public institutional pharmacies		1	71169.93		1	73509.23		1	70068.92			
Makana	All Direct service pharmacies	75054.07	5	15010.81	77521.04	5	15504.21	73892.97	7	10556.14		7	10556.14
	Community pharmacies		3	25018.02					3	25840.35		4	18473.24
	Private institutional pharmacies		0	-					0	-		0	-
	Public institutional pharmacies		2	37527.03					2	38760.52		3	24630.99

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005...continued

		2003				2004				2005			
CACADU District municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ndlambe	All Direct service pharmacies	55854.87	5	11170.97	57690.78	5	11538.16	54990.78	5	10998.16		5	10998.16
	Community pharmacies		4	13963.72		4	14422.69		4	13747.70			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	55854.87		1	57690.78		1	54990.78			
Sunday's River Valley	All Direct service pharmacies	41853.65	4	10463.41	43229.35	4	10804.34	41206.17	4	10301.54		4	10301.54
	Community pharmacies		2	20926.83		2	21614.67		2	20603.08			
	Private institutional pharmacies		1	41853.65		1	43229.35		1	41206.17			
	Public institutional pharmacies		1	41853.65		1	43229.35		1	41206.17			
CHRIS HANI District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Emalahleni	All Direct service pharmacies	116720	0	-	120556.97	0	-	114914.77	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005....continued

CHRIS HANI District Municipality...continued		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Engcobo	All Direct service pharmacies	149417.49	3	49805.83	154328.73	3	51442.91	147105.97	3	49035.32		3	49035.32
	Community pharmacies		2	74708.75		2	77164.37		2	73552.99			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	149417.49		1	51442.91		1	147105.97			
Inkwanca	All Direct service pharmacies	20377	1	20377	21046.91	1	21046.91	20061.89	1	20061.89		1	20061.89
	Community pharmacies		1	20377		1	21046.91		1	20061.89			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Intsika Yethu	All Direct service pharmacies	195559.00	1	195559.00	201986.87	1	201986.87	192533.66	1	192533.66		1	192533.66
	Community pharmacies		1	195559.00		1	201986.87		1	192533.66			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Inxuba Yethemba	All Direct service pharmacies	60700.48	7	8671.50	62695.66	7	8956.52	59761.43	6	9960.24		6	9960.24
	Community pharmacies		4	15175.12		4	15673.91		4	14940.36			
	Private institutional pharmacies		0	-		1	62695.66		0	-			
	Public institutional pharmacies		3	20233.49		3	20898.55		2	29880.72			

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005...continued

CHRIS HANI District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Lukanji	All Direct service pharmacies	185775.16	10	18577.52	191881.45	10	19188.14	182901.18	10	18290.12
	Community pharmacies		7	26539.31		7	27411.64		6	30483.53
	Private institutional pharmacies		1	185775.16		1	19188.45		2	91450.59
	Public institutional pharmacies		2	92887.58		2	95940.72		2	91450.59
Mountain Zebra National Park	All Direct service pharmacies	96.65	0	-	99.83	0	-	95.16	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Sakhisizwe	All Direct service pharmacies	54397.06	1	54397.06	56185.05	1	56185.05	53555.53	2	26777.76
	Community pharmacies		1	54397.06		1	56185.05		1	53555.53
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		1	53555.53
Tsolwana	All Direct service pharmacies	32751.40	1	32751.40	33827.91	1	33827.91	32244.73	1	32244.73
	Community pharmacies		1	32751.40		1	33827.91		1	32244.73
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005...continued

			2003			2004			2005		
NELSON MANDELA District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Nelson Mandela	All Direct service pharmacies	1012591.14	109	9289.83	1045874.25	109	9595.18	996926.16	107	9317.07	
	Community pharmacies		94	10772.25		93	11245.96		91	10955.23	
	Private institutional pharmacies		5	202518.23		6	174312.37		6	166154.36	
	Public institutional pharmacies		10	101259.11		10	104587.42		10	99692.62	
O.R TAMBO District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
King Sabata Dalindyebo	All Direct service pharmacies	418031.10	7	59718.73	431771.47	7	53971.43	411564.08	10	41156.41	
	Community pharmacies		5	83606.22		6	71961.91		7	58794.87	
	Private institutional pharmacies		1	418031.10		0	-		1	411564.08	
	Public institutional pharmacies		1	418031.10		1	431771.47		2	205782.04	
Mbizana	All Direct service pharmacies	247091.78	2	123545.89	255213.50	2	127606.75	243269.22	2	121634.61	
	Community pharmacies		1	247091.78		1	255213.50		1	243269.22	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	247091.78		1	255213.50		1	243269.22	
Mhlontlo	All Direct service pharmacies	198008.48	1	198008.48	204516.87	1	204516.87	194945.25	1	194945.25	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	198008.48		1	204516.87		1	194945.25	

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005...continued

O.R TAMBO District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ntabankulu	All Direct service pharmacies	137322.10	0	-	141835.77	0	-	135197.70	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Nyandeni	All Direct service pharmacies	283139.36	0	-	292445.94	0	-	278759.14	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Port St Johns	All Direct service pharmacies	147129.09	1	147129.09	151965.11	1	151965.11	144852.98	0	-
	Community pharmacies		1	147129.09		1	151965.11		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Qaukeni	All Direct service pharmacies	257110.20	4	64277.55	265561.22	7	37937.32	253132.66	6	42188.78
	Community pharmacies		3	85703.40		5	53112.24		4	63283.16
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	25711.20		2	132780.61		2	126566.33

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005....continued

UKHAHLAMBA District Municipality		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Elundini	All Direct service pharmacies	138496.00	4	34624.00	143048.26	4	35762.06	136353.44	3	45451.15		3	45451.15
	Community pharmacies		3	46165.33		3	47682.75		2	68176.72			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	138496.00		1	143048.26		1	136535.44			
Gariep	All Direct service pharmacies	31515.08	3	10505.03	32550.95	3	10850.32	31027.53	3	10342.51		3	10342.51
	Community pharmacies		2	15757.54		2	16275.48		2	15513.77			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	31515.08		1	32550.95		1	31027.53			
Maletswai	All Direct service pharmacies	37559.76	4	9389.94	38794.32	4	9698.58	36978.70	4	9244.67		4	9244.67
	Community pharmacies		3	12519.92		3	12931.44		3	12326.23			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	37559.76		1	38794.32		1	36978.70			
Oviston Nature Reserve	All Direct service pharmacies	9.06	0	-	9.36	0	-	8.92	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2003-2005...continued

		2003			2004			2005		
UKHAHLAMBA District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Senqu	All Direct service pharmacies	136071.68	4	34017.92	140544.26	4	35136.06	133966.63	5	26793.33
	Community pharmacies		1	136071.68		1	140544.26		2	66983.31
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	45357.23		3	46848.09		3	44655.54

D.1.2

FREE STATE PROVINCE

Table D.1.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2003-2005

LEJWELEPUTSWA District Municipality		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Masilonyana	All Direct service pharmacies	65 162.98	4	16 290.75	64 891.67	4	16 222.92	64 511.62	4	16 127.91	64 511.62	4	16 127.91
	Community pharmacies		3	21 720.99		3	21 630.56		3	21 503.87			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	65 162.98		1	64 891.67		1	64 511.62			
Matjhabeng	All Direct service pharmacies	412 919.76	31	13 319.99	411 200.53	31	13 264.53	408 792.27	30	13 626.41	408 792.27	30	13 626.41
	Community pharmacies		25	16 516.79		25	16 448.02		24	17 033.01			
	Private institutional pharmacies		2	206 459.88		2	205 600.27		2	204 396.14			
	Public institutional pharmacies		4	103 229.94		4	102 800.13		4	102 198.07			
Nala	All Direct service pharmacies	99 394.92	5	19 878.98	98 981.08	5	19 796.22	98 401.38	5	19 680.28	98 401.38	5	19 680.28
	Community pharmacies		4	24848.73		4	24 745.27		4	24 600.35			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	99 394.92		1	98 981.08		1	98 401.38			
Tokologo	All Direct service pharmacies	32 828.83	0	-	32 692.14	0	-	32 500.68	0	-	32 500.68	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2003-2005...continued

		2003				2004				2005			
LEJWELEPUTSWA District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Tswelopele	All Direct service pharmacies	54 318.50	3	18 106.17	54 092.34	3	18 030.78	53 775.54	2	26 887.77		2	26 887.77
	Community pharmacies		2	27 159.25		2	27 048.17		1	53 775.54			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	54318.50		1	54 092.34		1	53 775.54			
MOTHEO District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mangaung	All Direct service pharmacies	652 920.65	55	11 871.28	650 202.15	55	11 821.86	646 394.14	81			81	
	Community pharmacies		40	16 323.02		41	15 858.59		43				
	Private institutional pharmacies		5	130 584.13		4	162 550.54		6				
	Public institutional pharmacies		10	65 292.07		10	65 020.22		11				
Mantsopa	All Direct service pharmacies	55 996.77	3	18 665.59	55 763.62	3	18 587.87	55 437.03	3	18 479.01		3	18 479.01
	Community pharmacies		2	27 998.38		2	27 881.81		2	27 718.52			
	Private Institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	55 996.77		1	55 763.62		1	55 437.03			
Naledi	All Direct service pharmacies	27 803.14	0	-	27 687.38	0	-	27 525.23	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private Institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE ROVINCE, 2003-2005...continued

NORTHERN FREE STATE			2003			2004			2005		
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Mafube	All Direct service pharmacies	58 294.14	5	11 658.83	58 051.43	5	11 610.29	57 711.44	4	14 427.86	
	Community pharmacies		3	19 431.38		3	19 350.48		2	28 855.72	
	Private institutional pharmacies		1	58 294.14		1	58 051.43		1	57 711.44	
	Public institutional pharmacies		1	58 294.14		1	58 051.43		1	57 711.44	
Metsimaholo	All Direct service pharmacies	117 307.53	12	9 775.63	116 819.11	13	8 986.09	116 134.94	12	9 677.91	
	Community pharmacies		9	13 304.17		10	11 681.91		9	12 903.88	
	Private institutional pharmacies		1	117 307.53		1	116 819.11		1	116 134.94	
	Public institutional pharmacies		2	58 653.77		2	58 409.56		2	58 067.47	
Moghaka	All Direct service pharmacies	169 845.60	13	13065.05	169 138.43	13	13 010.65	168 147.84	13	12 934.45	
	Community pharmacies		9	18 871.73		9	18 793.16		9	18 683.09	
	Private institutional pharmacies		1	169 845.60		1	169 138.43		1	168 147.84	
	Public institutional pharmacies		3	56615.20		3	56 379.48		3	56 049.28	
Ngwathe	All Direct service pharmacies	120 190.63	12	10 015.89	119 690.20	12	9 974.18	118 989.22	12	9 915.77	
	Community pharmacies		9	13 354.51		9	13298.91		9	13 221.02	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		3	40 063.54		3	39 896.73		3	39 663.07	

Table D.1.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE ROVINCE, 2003-2005...continued

		2003			2004			2005		
THABO MOFUTSANYANE District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Dihlabeng	All Direct service pharmacies	130 407.91	7	18 629.70	129 864.94	7	18 552.13	129 104.37	7	18 443.48
	Community pharmacies		5	26 081.58		5	25 972.99		5	25 820.87
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	65 203.95		2	64 932.47		2	64 552.18
Golden Gate Highlands National Park	All Direct service pharmacies	172.99	0	-	172.27	0	-	171.26	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Maluti a Phofung	All Direct service pharmacies	364 966.32	10	36 496.63	363 446.75	10	36 344.67	361 318.17	10	36 131.82
	Community pharmacies		7	52138.05		7	51 920.96		7	51 616.88
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	121 655.44		3	121 148.92		3	120 439.39
Nketoana	All Direct service pharmacies	62 664.30	4	15 666.08	62 403.39	3	20 801.13	62 037.92	3	20 679.31
	Community pharmacies		3	20 888.10		2	31 201.70		2	31 018.96
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	62 664.30		1	62403.39		1	62 037.70

Table D.1.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE ROVINCE, 2003-2005....continued

		200			2004			2005		
THABO MOFUTSANYANE District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Phumelela	All Direct service pharmacies	51 491.05	5	10 298.21	51 276.66	5	10 255.33	50 976.35	5	10 195.27
	Community pharmacies		4	12 875.76		4	12 819.17		4	12 7844.09
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	51 491.05		1	51 276.66		1	50 976.35
Setsofo	All Direct service pharmacies	124 612.38	7	17 801.77	124 093.55	7	17 727.65	123 366.77	7	17 623.82
	Community pharmacies		4	31 153.10		4	31 023.39		4	30 841.69
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	41 537.46		3	41 364.52		3	41 122.26

Table D.1.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE ROVINCE, 2003-2005....continued

XHARIEP District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kopanong	All Direct service pharmacies	56 603.73	2	28 301.87	56 368.06	2	28 184.03	56 037.93	1	56 037.93
	Community pharmacies		1	56 603.73		1	56 368.06		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	56 603.73		1	56 368.06		1	56 037.93
Letsemeng	All Direct service pharmacies	43 469.98	3	14 489.99	43 288.99	2	21 644.49	43 035.46	2	21 517.73
	Community pharmacies		2	21 734.99		1	43 288.99		1	43 035.46
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	43 469.98		1	43 288.99		1	43 035.46
Mhokare	All Direct service pharmacies	36 743.77	4	9 185.94	36 590.78	4	9 147.70	36 376.48	4	9 094.12
	Community pharmacies		2	18 371.88		2	18 295.39		2	18 188.24
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	18 371.88		2	18 295.39		2	18 188.24

D.1.3

GAUTENG PROVINCE

Table D.1.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG PROVINCE, 2003-2005

			2003			2004			2005		
JOHANNESBURG Metropolitan Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
City of Johannesburg Metro	All Direct service pharmacies	3 382 806.09	335	10 097.93	3 475 799.22	341	10 192.96	3 565 531.94	348	10 245.78	
	Community pharmacies		301	11 238.56		305	11 396.06		312	11 427.99	
	Private institutional pharmacies		17	198 988.59		19	182 936.80		19	187 659.58	
	Public institutional pharmacies		17	198 988.59		17	204 458.78		17	209 737.17	
TSHWANE Metropolitan Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
City of Tshwane Metro	All Direct service pharmacies	1 601 352.22	268	5 975.19	1 645 373.29	270	6 093.98	1 687 850.95	361	6 251.30	
	Community pharmacies		238	6 728.37		239	6 884.41		235	7 121.73	
	Private institutional pharmacies		19	84 281.70		20	82 268.66		22	76 720.50	
	Public institutional pharmacies		11	145 577.47		11	149 579.39		11	153 441.0	

Table D.1.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG ROVINCE, 2003-2005...continued

		2003			2004			2005		
EKHURULENI Metropolitan Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ekurhuleni Metro	All Direct service pharmacies	2 600 965.97	249	10 445.65	2 672 466.36	243	10 997.80	2 741 459.89	245	11 189.63
	Community pharmacies		222	11 611.46		218	12 259.02		219	12 518.08
	Private institutional pharmacies		14	185 783.28		14	190 890.45		15	182 763.99
	Public institutional pharmacies		11	236 451.45		11	242 951.49		11	249 223.63
METSWEDING District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kungwini	All Direct service pharmacies	77 446.49	8	9 680.81	79 575.49	8	9 946.94	81 629.85	7	11 661.41
	Community pharmacies		7	11 063.78		7	11 367.93		6	13 604.97
	Private institutional pharmacies		1	77 446.49		1	79 575.49		1	81 629.85
	Public institutional pharmacies		0	-		0	-		0	-
Nokeng tsa taemane	All Direct service pharmacies	55 137.36	5	11 027.47	56 653.08	5	11 330.62	58 115.66	5	11 623.13
	Community pharmacies		2	27 568.68		2	28 326.54		2	29 057.83
	Private institutional pharmacies		1	55 137.36		1	56 653.08		1	58 115.66
	Public institutional pharmacies		2	27 568.68		2	28 326.54		2	29 057.83

Table D.1.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG PROVINCE, 2003-2005...continued

SEDIBENG District Municipality				2003			2004			2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Emfuleni	All Direct service pharmacies	690 448.59	44	15 692.01	709 428.98	44	16 123.39	727 743.90	42	17 327.24		42	17 327.24
	Community pharmacies		40	17 261.21		41	17 303.15		38	19 151.16			
	Private institutional pharmacies		2	345 224.29		1	709 428.98		2	363871.95			
	Public institutional pharmacies		2	345 224.29		2	354 714.49		2	363871.95			
Lesedi	All Direct service pharmacies	75 020.95	9	8 335.66	77 083.27	9	8 564.81		9	8 785.92		9	8 785.92
	Community pharmacies		8	9 377.62		8	9 635.41		7	11 296.18			
	Private institutional pharmacies		0	-		0	-		1	79 073.28			
	Public institutional pharmacies		1	75 020.95		1	77 083.27		1	79073.28			
Midvaal	All Direct service pharmacies	67 770.53	7	9 681.50	69 633.54	6	11 605.59		6	11 905.20		6	11 905.20
	Community pharmacies		7	9 681.50		6	11 605.59		6	11 905.20			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
WEST RAND District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Merafong City	All Direct service pharmacies	156 614.88	13	12 047.30	160 920.21	13	12 378.48		13	12 698.05		13	12 698.05
	Community pharmacies		10	15 661.49		10	16 092.02		10	16 507.46			
	Private institutional pharmacies		2	78 307.44		2	80 460.11		2	82 537.30			
	Public institutional pharmacies		1	156 614.88		1	160 920.21		1	165 074.60			

Table D.1.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG PROVINCE, 2003-2005...continued

WEST RAND District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Merafong City	All Direct service pharmacies	156 614.88	13	12 047.30	160 920.21	13	12 378.48	165 074.60	13	12 698.05
	Community pharmacies		10	15 661.49		10	16 092.02		10	16 507.46
	Private institutional pharmacies		2	78 307.44		2	80 460.11		2	82 537.30
	Public institutional pharmacies		1	156 614.88		1	160 920.21		1	165 074.60
Mogale City	All Direct service pharmacies	303 820.16	33	8 935.89	312 172.15	34	9 181.53	320 231.32	33	9 703.98
	Community pharmacies		28	10 850.72		28	11 149.01		27	11 860.42
	Private institutional pharmacies		3	101 273.39		3	104 057.38		3	106 743.77
	Public institutional pharmacies		3	101 273.39		3	104 057.38		3	106 743.77
Randfontein	All Direct service pharmacies	135 101.67	12	11 258.47	138 815.61	12	11 567.97	142 399.33	12	11 866.61
	Community pharmacies		11	12 281.97		11	12 619.60		11	12 945.39
	Private institutional pharmacies		1	135 101.67		1	138 815.61		1	142 399.33
	Public institutional pharmacies		0	-		0	-		0	-
West Rand	All Direct service pharmacies	6 064.39	0	-	6 231.10	0	-	6 391.96	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Westonaria	All Direct service pharmacies	114 639.22	4	28 659.81	117 790.65	4	29 447.66	120 831.58	3	40 277.19
	Community pharmacies		4	28 659.81		4	29 447.66		3	40 277.19
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

D.1.4

KWAZULU-NATAL PROVINCE

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULUNATAL ROVINCE, 2003-2005

AMAJUBA District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Dannhauser	All Direct service pharmacies	104 687.71	1	104 687.71	105 495.44	1	105 495.44	106671.47	1	106671.47
	Community pharmacies		1	104 687.71		1	105 495.44		1	106671.47
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Newcastle	All Direct service pharmacies	339 168.15	16	21 198.01	341 785.04	16	21 361.57	345595.15	16	21599.70
	Community pharmacies		13	26 089.86		13	26 291.16		13	26584.24
	Private institutional pharmacies		1	339 168.15		1	341 785.04		1	345595.15
	Public institutional pharmacies		2	169 584.08		2	170 892.52		2	172797.57
Utrecht	All Direct service pharmacies	32 883.61	2	16 441.80	33 137.32	1	33 137.32	33 506.73	1	33506.73
	Community pharmacies		1	32 883.61		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public Institutional pharmacies		1	32 883.61		1	33 137.32		1	33506.73

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

		2003			2004			2005		
ETHEKWINI District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ethekwini	All Direct service pharmacies	3 147 412	302	10 421	3 171 697	297	10 679	3 207 054	302	10 619
	Community pharmacies		266	11 832		260	12 199		264	12 148
	Private Institutional pharmacies		14	224 815		15	211 446		16	200 441
	Public Institutional pharmacies		22	143 064		22	144 168		22	145 775
SISONKE District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Kokstad	All Direct service pharmacies	57 583.23	4	14 395.81	58 027.52	4	14 506.88	58 674.40	5	11734.88
	Community pharmacies		2	28 791.62		2	29 013.76		2	29337.20
	Private institutional pharmacies		0	-		0	-		1	58674.40
	Public institutional pharmacies		2	28 791.62		2	29 013.76		2	29337.40
Ingwe	All Direct service pharmacies	109 551.25	1	109 551.25	110 396.50	1	110 396.50	111627	1	111627
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	109 551.25		1	110 396.50		1	111627

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2003-2005...continued

SISONKE District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kwa Sani	All Direct service pharmacies	15 595.90	1	15 595.90	15 716.24	1	15 716.24	15 891.44	1	15891.44
	Community pharmacies		1	15 595.90		1	15 716.24		1	15891.44
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Matatiele	All Direct service pharmacies	16 535.00	5	3 307.00	16 662.58	5	3 332.52	16 848.33	5	3 369.67
	Community pharmacies		4	4 133.75		4	4 165.64		3	5 616.11
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	16 535.00		1	16 662.58		2	8 424.16
Mkhomazi Wilderness area	All Direct service pharmacies	0	0	0	835.49	0	-	844.80	0	-
	Community pharmacies		0	0		0	-		0	-
	Private institutional pharmacies		0	0		0	-		0	-
	Public institutional pharmacies		0	0		0	-		0	-
Ubuhlebezwe	All Direct service pharmacies	103 849.46	2	51 924.73	104 650.72	3	34 883.57	105817.33	3	35272.44
	Community pharmacies		1	103 849.46		2	52 325.36		2	52908.66
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	103 849.46		1	104 650.72		1	105817.33

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

		2003				2004				2005			
UMGUNGUNDLOVU District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Highmoor/Kamberg Park	All Direct service pharmacies	12.22	0	-	12.32	0	-	12.46	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Impendle	All Direct service pharmacies	34 208.73	0	-	34 472.67	0	-	34856.96	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Mkhambathini	All Direct service pharmacies	60 160.14	2	30 080.07	60 624.32	2	30 312.16	61300.14	2	30 312.16		1	61300.14
	Community pharmacies		2	30 080.07		2	30 312.16		1	61300.14			
	Private Institutional pharmacies		0	-		0	-		0	-			
	Public Institutional pharmacies		0	-		0	-		0	-			
Mooi Mpofana	All Direct service pharmacies	37 496.58	0	-	37 785.89	0	-	38207.11	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

UMGUNGUNDLOVU District Municipality...continued		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Msunduzi	All Direct service pharmacies	563 473.36	59	9 550.40	567 820.90	59	9 624.08	574150.78	58	9 899.15		58	9 899.15
	Community pharmacies		50	11 269.47		50	11 356.42		48	11961.47			
	Private institutional pharmacies		1	563 473.36		1	567 820.90		2	287075.39			
	Public institutional pharmacies		8	70 434.17		8	70 977.61		8	71768.85			
Richmond	All Direct service pharmacies	64 397.28	3	21 465.76	64 894.14	3	21 631.38	65617.56	3	21872.52		3	21872.52
	Community pharmacies		1	64 397.28		1	64 894.14		1	65617.56			
	Private institutional pharmacies		1	64 397.28		1	64 894.14		1	65617.56			
	Public institutional pharmacies		1	64 397.28		1	64 894.14		1	65617.56			
uMngeni	All Direct service pharmacies	75 252.89	9	8 361.43	75 833.51	10	7 583.35	76678.88	10	7 667.89		10	7 667.89
	Community pharmacies		8	9 406.61		8	9 479.19		8	9 584.86			
	Private institutional pharmacies		0	-		1	75 833.51		1	76678.88			
	Public institutional pharmacies		1	75 252.89		1	75 833.51		1	76678.88			
uMshwathi	All Direct service pharmacies	110 060.52	4	27 515.13	110 909.70	4	27 727.43	112146.09	4	28036.52		4	28036.52
	Community pharmacies		2	55 030.26		2	55 454.85		2	56073.04			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	55 030.26		2	55 454.85		2	56073.04			

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

UGU District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ezingoleni	All Direct service pharmacies	55 435.13	0	-	55 862.85	0	-	56485.59	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Hibiscus Coast	All Direct service pharmacies	222 194.79	26	8 545.95	223 909.16	26	8 611.89	226405.22	26	8 707.89
	Community pharmacies		22	10 099.76		22	10 177.69		22	10291.15
	Private institutional pharmacies		2	111 097.40		2	111 954.58		2	113202.61
	Public institutional pharmacies		2	111 097.40		2	111 954.58		2	113202.61
Umdoni	All Direct service pharmacies	63 453.09	6	10 575.51	63 942.67	6	10 657.11	64655.48	6	10775.91
	Community pharmacies		5	12 690.62		5	12 788.53		5	12931.10
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	63 453.09		1	63 942.67		1	64655.48
Umzumbi	All Direct service pharmacies	197 362.75	0	-	198 885.53	0	-	201102.64	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

		2003			2004			2005		
UGU District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Vulamehlo	All Direct service pharmacies	84 603.10	0	-	85 255.86	0	-	86206.27	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
uMuziwabantu	All Direct service pharmacies	94 030.72	3	31 343.57	94 756.22	3	31 585.41	95812.53	3	31937.51
	Community pharmacies		2	47 015.36		2	47 378.11		2	47906.27
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	94 030.72		1	94 756.22		1	95812.53
UMKHANYAKUDE District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Hlabisa	All Direct service pharmacies	180 182.00	5	36 036.40	181 572.21	5	36 314.44	183596.32	5	36719.26
	Community pharmacies		4	45 045.50		4	45 393.05		4	45899.08
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	180 182.00		1	181 572.21		1	183596.32
Jozini	All Direct service pharmacies	187 472.72	2	93 736.36	188 919.18	2	94 459.59	191025.19	2	95512.60
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	93 736.36		2	94 459.59		2	95512.60

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005....continued

		2003				2004				2005			
UMKHANYAKUDE District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mtubatuba	All Direct service pharmacies	35 835.34	0	-	36 111.83	0	-		0	-	36514.39	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
St Lucia Park	All Direct service pharmacies	5 186.41	0	-	5 226.43	0	-		0	-	5 284.69	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
The Big 5 False Bay	All Direct service pharmacies	31 686.82	1	31 686.82	31 931.30	1	31 931.30		1	31 931.30	32287.26	1	32287.26
	Community pharmacies		1	31 686.82		1	31 931.30		1	32287.29			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Umhlabuyalingana	All Direct service pharmacies	143 572.57	0	-	144 680.32	0	-		0	-	146293.17	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

UMZINYATHI District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Endumeni	All Direct service pharmacies	52 056.63	5	10 411.33	52 458.28	5	10 491.66	53043.06	6	8 840.51
	Community pharmacies		3	17 352.21		3	17 486.09		4	13260.77
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	26 028.31		2	26 229.14		2	26521.53
Msinga	All Direct service pharmacies	171 156.70	0	-	172 477.28	0	-	174400.00	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Nqutu	All Direct service pharmacies	147 717.01	1	147 717.01	148 856.74	1	148 856.74	150516.14	1	150516.14
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	147 717.01		1	148 856.74		1	150516.14
Umvoti	All Direct service pharmacies	94 014.42	5	18 802.88	94 739.80	5	18 947.96	95795.93	5	19159.19
	Community pharmacies		2	417 007.21		2	47 369.90		2	47897.96
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	31 338.14		3	31 579.93		3	31931.98

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005....continued

		2003			2004			2005		
UTHUKELA District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Emnambithi/Ladysmith	All Direct service pharmacies	229 639.31	11	20 876.30	231 411.12	10	23 141.11	233990.81	10	23399.08
	Community pharmacies		9	25 515.48		8	28 926.39		8	29248.85
	Private institutional pharmacies		1	229 639.31		1	231 411.12		1	233990.81
	Public institutional pharmacies		1	229 639.31		1	231 411.12		1	233990.81
Gaints Castle Game Reserve	All Direct service pharmacies	518.44	0	-	522.44	0	-	528.26	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Imbabazane	All Direct service pharmacies	122 159.77	0	-	123 102.31	0	-	124474.61	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Indaka	All Direct service pharmacies	115 747.04	0	-	116 640.10	0	-	117940.36	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

UTHUKELA		2003			2004			2005		
District Municipality....continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Okhahlamba	All Direct service pharmacies	140 085.08	4	35 021.27	141 165.92	4	35 291.48	142739.59	4	35684.90
	Community pharmacies		3	46 695.03		3	47 055.31		3	47579.86
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	140 085.08		1	141 165.92		1	142739.59
Umtshezi	All Direct service pharmacies	61 039.14	7	8 719.88	61 510.10	7	8 787.16	62195.79	7	8 885.11
	Community pharmacies		6	10 173.19		6	10 251.68		6	10365.97
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	61039.14		1	61 510.10		1	62195.79
UTHUNGULU										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mbonambi	All Direct service pharmacies	108 927.90	0	-	109 768.35	0	-	110992.01	1	110992.01
	Community pharmacies		0	-		0	-		1	110992.01
	Private institutional pharmacies		0	-		0	-		0	--
	Public institutional pharmacies		0	-		0	-		0	-
Mthonjaneni	All Direct service pharmacies	51 308.00	2	25654.00	51 703.87	2	25 851.94	52280.25	2	26140.13
	Community pharmacies		1	51 308.00		1	51 703.87		1	52280.25
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	51 308.00		1	51 703.87		1	52280.25

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

		2003			2004			2005		
UTHUNGULU District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Nkandla	All Direct service pharmacies	136 091.38	2	68 045.69	137 141.41	2	68 570.70	138670.22	2	69335.11
	Community pharmacies		1	136 091.38		1	137 141.41		1	138670.22
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	136 091.38		1	137 141.41		1	138670.22
Ntambanana	All Direct service pharmacies	86 331.56	0	-	86 997.66	0	-	87967.48	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
uMhlathuze	All Direct service pharmacies	294 572.34	24	12 273.85	296 845.14	23	12 906.31	300154.27	24	12506.43
	Community pharmacies		19	15 503.81		18	16 491.40		19	15797.59
	Private institutional pharmacies		3	98 190.78		3	98 948.38		3	100051.14
	Public institutional pharmacies		2	147 286.17		2	148 422.57		2	150077.14
uMlalazi	All Direct service pharmacies	225 182.17	9	25020.24	226 919.59	9	25 213.29	229449.21	9	25494.36
	Community pharmacies		6	37 530.36		6	37 819.93		6	38241.54
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	75 060.72		3	75 639.86		3	76483.07

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2003-2005...continued

ZULULAND		2003				2004				2005			
District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Abaqulusi	All Direct service pharmacies	194 561.76	10	19 456.18	196 062.93	10	19 606.29	198 248.57	10	19 606.29	198 248.57	10	19 824.86
	Community pharmacies		9	21 617.97		9	21 784.77		9	22 027.62			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	194 561.76		1	196 062.93		1	198 248.57			
Nongoma	All Direct service pharmacies	202 116.29	2	101 058.14	203 675.74	2	101 837.87	205 946.25	2	101 837.87	205 946.25	2	102 973.12
	Community pharmacies		1	202 116.29		1	203 675.74		1	205 946.25			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	202 116.29		1	203 675.74		1	205 946.25			
Ulundi	All Direct service pharmacies	216 913.65	3	72 304.55	218 587.28	3	72 862.43	221 024.01	3	73 674.67	221 024.01	3	73 674.67
	Community pharmacies		1	216 913.65		1	218 587.28		1	221 024.01			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	108 456.83		2	109 293.64		2	110 512.01			
eDumbe	All Direct service pharmacies	83 759.75	0	-	84 406.00	0	-	85 346.93	0	-	85 346.93	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

ZULULAND		2003				2004				2005			
District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
uPhongolo	All Direct service pharmacies	121 969.31	1	121 969.31	122 910.37	1	122 910.37	124280.54	1	124280.54	124280.54	1	124280.54
	Community pharmacies		1	121 969.31		1	122 910.37		1	124280.54			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
ILEMBE													
District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
KwaDukuza	All Direct service pharmacies	161 523.34	13	12 424.87	162 769.59	14	11 626.40	164584.09	15	10972.27	164584.09	15	10972.27
	Community pharmacies		11	14 683.94		12	13 564.13		13	12660.31			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	80 761.67		2	81 384.80		2	82292.05			
Maphumulo	All Direct service pharmacies	122 857.47	0	-	123 805.39	0	-	125185.54	0	-	125185.54	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Ndwedwe	All Direct service pharmacies	155 341.81	0	-	156 540.37	0	-	158285.43	0	-	158285.43	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL ROVINCE, 2003-2005...continued

		2003			2004			2005		
ILEMBE										
District Municipality ...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
eNdondakusuka	All Direct service pharmacies	131 060.81	3	43 686.94	132 072.02	3	44 024.01	133544.31	3	44514.77
	Community pharmacies		3	43 686.94		3	44 024.01		3	44514.77
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

D.1.5

LIMPOPO PROVINCE

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO ROVINCE, 2003-2005

BOHLABELA District Municipality			2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Bushbuckridge	All Direct service pharmacies	508 515.70	3	169 505.20	510 191.49	5	102 038.30	518354.55	5	103670.91	
	Community pharmacies		2	254 257.80		4	127 547.87		4	129588.64	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	508 515.7		1	510 191.49		1	518354.55	
Kruger Park	All Direct service pharmacies	1 780.0	0	-	1 785.94	0	-	1814.52	0	-	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Maruleng	All Direct service pharmacies	96 166.8	2	48 083.4	96 483.78	2	48 241.89	98027.52	3	32675.84	
	Community pharmacies		2	48 083.4		2	48 241.89		2	49013.76	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		1	98027.52	

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO ROVINCE, 2003-2005...continued

		2003				2004				2005			
CAPRICORN District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Aganang	All Direct service pharmacies	150 465.8	2	75 232.9	150 961.65	3	50 320.55	153377.04	3	51125.68		3	51125.68
	Community pharmacies		1	150 465.8		2	75 480.82		2	76688.52			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	150 465.8		1	150 961.65		1	153377.04			
Blouberg	All Direct service pharmacies	164 355.8	3	54 785.3	164 897.51	3	54 965.84	167535.87	3	55845.29		3	55845.29
	Community pharmacies		1	164 355.8		1	164 897.51		1	167535.87			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	82 177.9		2	82 448.76		2	83767.94			
Lepele-Nkumpi	All Direct service pharmacies	232 282.0	3	58 070.50	233 047.49	5	46 609.50	236776.25	6	39462.71		6	39462.71
	Community pharmacies		1	232 282.0		2	116 523.75		2	118388.13			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	77 427.3		3	77 682.50		4	59194.06			
Molemole	All Direct service pharmacies	111 503.8	0	-	111 871.30	0	-	113661.24	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO ROVINCE, 2003-2005...continued

		2003			2004			2005		
CAPRICORN										
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Polokwane	All Direct service pharmacies	517 869.50	28	18 495.34	519 576.12	26	19 983.70	527889.33	25	21115.57
	Community pharmacies		23	22 516.07		21	24 741.72		20	26394.47
	Private institutional pharmacies		1	517 869.50		1	519 576.12		1	527889.33
	Public institutional pharmacies		4	129 467.38		4	129 894.03		4	131972.33
MOPANI										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ba-Phalaborwa	All Direct service pharmacies	133 552.5	7	19 078.9	133 992.65	8	16 746.08	136136.53	9	15126.28
	Community pharmacies		5	26 710.5		6	22 332.11		7	19448.08
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	66 776.2		2	66 996.32		2	68068.26
Greater Giyani	All Direct service pharmacies	241 919.0	8	30 239.8	242 716.32	9	26 968.48	246599.78	9	27399.98
	Community pharmacies		5	48 383.8		6	40 452.72		6	41099.96
	Private institutional pharmacies		1	241919.0		1	242 716.32		1	246599.78
	Public institutional pharmacies		2	120 959.5		2	121 358.16		2	123299.89
Greater Letaba	All Direct service pharmacies	224 281.3	4	56 070.3	225 020.47	4	56 255.12	228620.79	4	57155.20
	Community pharmacies		2	112 140.6		2	112 510.23		2	114310.40
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	112 140.6		2	112510.23		2	114310.40

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO PROVINCE, 2003-2005....continued

		2003			2004			2005		
MOPANI										
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Tzaneen	All Direct service pharmacies	382 674.4	15	25 511.6	383 935.54	18	21 329.75	390078.50	18	21671.03
	Community pharmacies		10	38 267.4		12	31 994.63		12	32506.54
	Private institutional pharmacies		1	382 674.4		2	191 967.77		2	195039.25
	Public institutional pharmacies		4	95 668.6		4	95 983.88		4	97519.63
SEKHUKHUNE CROSS BOUNDARY										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Fetakgomo	All Direct service pharmacies	93 814.1	0	-	94 123.32	0	-	95629.29	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Greater Groblersdal	All Direct service pharmacies	92 368.2	1	92 368.2	92 672.68	1	92 672.68	94155.45	1	94155.45
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	92 368.2		1	92 672.68		1	94155.45

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO ROVINCE, 2003-2005...continued

			2003			2004			2005		
SEKHUKHUNE CROSS BOUNDARY District Municipality...continued											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population
Greater Marble Hall	All Direct service pharmacies	68 138.0	0	-	68 362.62	0	-	69456.42	0	-	0
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Greater Tubatse	All Direct service pharmacies	237 367.5	0	-	238 149.74	0	-	241960.14	0	-	0
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Makhuduthamaga	All Direct service pharmacies	267 887.6	2	133 943.8	268 770.41	2	134 385.21	273070.74	2	136535.37	1
	Community pharmacies		1	267 887.6		1	268 770.41		1	273070.74	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	267 887.6		1	268 770.41		1	273070.74	
VHEMBE District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population
Makhado	All Direct service pharmacies	506 464.5	12	42 205.3	508 133.62	12	42 344.47	516263.76	12	43021.98	8
	Community pharmacies		9	56 273.8		9	56 459.29		8	64532.97	
	Private institutional pharmacies		0	-		0	-		1	516263.76	
	Public institutional pharmacies		3	168 821.3		3	169 377.87		3	172087.92	

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO ROVINCE, 2003-2005....continued

VHEMBE District Municipality...continued			2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Musina	All Direct service pharmacies	40 050.1	2	20 025.0	40 182.15	1	40 182.15	40825.07	1	40825.07	
	Community pharmacies		2	20 025.0		1	40 182.15		1	40825.07	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Mutale	All Direct service pharmacies	80 406.0	0	-	80 670.99	0	-	81961.73	0	-	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Thulamela	All Direct service pharmacies	595 593.6	9	66 177.0	597 556.44	9	66 395.16	607117.34	9	67457.48	
	Community pharmacies		7	85 084.8		7	85 365.21		7	86731.05	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		2	297 796.8		2	298 778.22		2	303558.67	
WATERBERG District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Bela-Bela	All Direct service pharmacies	53 104.7	3	17 701.5	53 279.74	5	10 655.95	54132.22	4	13533.05	
	Community pharmacies		2	26 552.3		3	17 759.91		2	27066.11	
	Private institutional pharmacies		0	-		0	-		1	54132.22	
	Public institutional pharmacies		1	53 104.7		2	26 639.87		1	54132.22	

Table D.1.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of LIMPOPO ROVINCE, 2003-2005...continued

WATERBERG District Municipality ...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Lephalale	All Direct service pharmacies	97 908.2	9	10 878.6	98 230.88	9	10 914.54	99802.57	9	11089.17
	Community pharmacies		6	16 318.0		6	16 371.81		6	16633.76
	Private institutional pharmacies		1	97 908.2		1	98 230.88		1	99802.57
	Public institutional pharmacies		2	48 954.1		2	49 115.44		2	49901.29
Modimolle	All Direct service pharmacies	74 165.0	5	14 833.0	74 409.46	5	14 881.89	75600.02	5	15120.00
	Community pharmacies		4	18 541.2		4	18 602.37		4	18900.00
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	74 165.0		1	74 409.46		1	75600.02
Mogalakwena	All Direct service pharmacies	304 075.0	10	30 407.5	305 077.06	10	30 507.71	309958.30	10	30995.83
	Community pharmacies		7	43 439.2		7	43 582.44		7	44279.76
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	101 358.3		3	101 692.65		3	103319.43
Mookgopong	All Direct service pharmacies	31 332.1	1	31 332.1	31 435.44	1	31 435.44	31938.40	1	31938.40
	Community pharmacies		1	31 332.1		1	31 435.44		1	31938.40
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Thabazimbi	All Direct service pharmacies	65 107.7	10	6 510.7	65 322.32	10	6 532.23	66367.48	10	6 636.75
	Community pharmacies		6	10 851.2		6	10 887.05		6	11061.25
	Private institutional pharmacies		3	21 702.5		3	21 774.11		3	22122.49
	Public institutional pharmacies		1	65 107.7		1	65 322.32		1	66367.48

D.1.6

MPUMALANGA PROVINCE

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPUMALANGA PROVINCE, 2003-2005

		2003			2004			2005		
BOHLABELA District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Bushbuckridge	All Direct service pharmacies	662.16	2	331.08	670.44	2	335.22	681.16	2	340.58
	Community pharmacies		1	662.16		1	670.44		1	681.16
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	662.16		1	670.44		1	681.16
Kruger Park	All Direct service pharmacies	1 945.35	0	-	1 969.66	0	-	2 001.18	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
ENHLANZENI District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Lowveld	All Direct service pharmacies	509.96	0	-	516.36	0	-	524.62	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPULANAGA ROVINCE, 2003-2005...continued

ENHLANZENI District Municipality...continued		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mbombela	All Direct service pharmacies	488 207.91	27	18 081.77	494 310.50	26	19 011.94	502219.47	30	16740.65		30	16740.65
	Community pharmacies		21	23 248.00		20	24 715.53		24	20925.81			
	Private institutional pharmacies		3	162 735.97		3	164 770.17		3	167406.49			
	Public institutional pharmacies		3	162 735.97		3	164 770.17		3	167406.49			
Nkomazi	All Direct service pharmacies	343 868.76	6	57 311.46	348 167.12	6	58 027.85	353737.79	6	58956.30		6	58956.30
	Community pharmacies		4	85 967.19		4	87 041.78		4	88434.45			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		2	171 934.38		2	174 083.56		2	176868.90			
Thaba Chweu	All Direct service pharmacies	83 516.23	9	9 279.58	84 560.18	9	9 395.58	85913.14	9	9 545.90		9	9 545.90
	Community pharmacies		6	13 919.37		6	14 093.36		6	14318.86			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		3	27 838.74		3	28 186.73		3	28637.71			
Umjindi	All Direct service pharmacies	55 253.18	4	13 813.30	55 943.85	4	13 985.96	56838.95	4	14209.74		4	14209.74
	Community pharmacies		2	27 626.59		2	27 971.92		2	28419.47			
	Private institutional pharmacies		1	55 253.18		1	55 943.85		1	56838.95			
	Public institutional pharmacies		1	55 253.18		1	55 943.85		1	56838.95			

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPULANAGA ROVINCE, 2003-2005....continued

GOVAN MBEKI District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Albert Luthuli	All Direct service pharmacies	193 245.28	6	32 207.55	195 660.84	6	32 610.14	198791.42	6	33131.90
	Community pharmacies		4	48 311.32		4	48 915.21		4	49697.85
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	96 622.64		2	97 830.42		2	99395.71
Dipaleseng	All Direct service pharmacies	39 704.81	2	19 552	40 201.12	2	20 100.56	40844.34	1	40844.34
	Community pharmacies		2	19 552		2	20 100.56		1	40844.34
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Highveld East	All Direct service pharmacies	228 016.80	21	10 857.94	230 867.01	21	10 993.67	234560.88	20	11728.04
	Community pharmacies		17	13 412.75		16	14 429.19		15	15637.39
	Private institutional pharmacies		2	114 008.40		3	76 955.67		3	78186.96
	Public institutional pharmacies		2	114 008.40		2	115 433.51		2	117280.44
Lekwa	All Direct service pharmacies	106 179.72	6	17 696.62	107 506.97	6	17 917.83	109227.08	6	18204.51
	Community pharmacies		5	21 235.94		5	21 201.39		5	21845.42
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	106 179.72		1	107 506.97		1	109227.08

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPULANAGA ROVINCE, 2003-2005....continued

			2003			2004			2005		
GOVAN MBEKI District Municipality...continued											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population
Mkhondo	All Direct service pharmacies	146 918.89	6	24 486.48	148 755.38	6	24 792.56	151 135.46	6	25 189.24	
	Community pharmacies		4	36 729.72		4	37 188.84		4	37 783.87	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		2	73 459.45		2	37 188.84		2	75 567.73	
Msukaligwa	All Direct service pharmacies	128 338.37	11	11 667.12	129 942.59	11	11 812.96	132 021.68	11	12 001.97	
	Community pharmacies		10	12 833.84		10	12 994.26		10	13 202.17	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	128 338.37		1	129 942.59		1	13 2021.68	
Seme	All Direct service pharmacies	83 013.44	4	20 753.36	84 051.11	4	21 012.78	85 395.93	4	21 348.98	
	Community pharmacies		2	41 506.72		2	42 025.55		2	42 697.96	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		2	41 506.72		2	42 025.55		2	42 697.96	
METSWEDING DistrictMunicipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population
Kungwini	All Direct service pharmacies	34 401.37	0	-	34 831.39	0	-	35 388.69	0	-	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPULANAGA ROVINCE, 2003-2005...continued

NKANGALA		2003				2004				2005			
District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Delmas	All Direct service pharmacies	57 789.74	4	14 447.44	58 512.11	3	19 504.04	59448.31	3	19816.10		3	19816.10
	Community pharmacies		3	19 263.25		2	29 256.06		2	29724.15			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	57 789.74		1	58 512.11		1	59448.31			
Dr JS Moroka	All Direct service pharmacies	250 175.45	0	-	253 302.64	0	-	257355.48	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Emlalheni	All Direct service pharmacies	284 244.72	30	9 474.82	287 797.77	29	9 924.06	292402.54	29	10082.85		29	10082.85
	Community pharmacies		27	10 527.58		26	11 069		25	11696.10			
	Private institutional pharmacies		1	284 244.72		1	287 797.77		2	146201.27			
	Public institutional pharmacies		2	142 122.36		2	143 898.89		2	146201.27			
Hihglands	All Direct service pharmacies	44 230.92	7	6 318.70	44 783.81	5	8 956.76	45500.35	4	11375.09		4	11375.09
	Community pharmacies		4	11 057.73		2	22 391.91		2	22750.18			
	Private institutional pharmacies		1	44 230.92		1	44 783.81		0	-			
	Public institutional pharmacies		2	22 115.46		2	22 391.91		2	22750.18			

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPULANAGA ROVINCE, 2003-2005...continued

NKANGALA District Municipality ...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mdala Nature Reserve	All Direct service pharmacies	0	0	-	0	0	-	0	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Middelburg	All Direct service pharmacies	146 803.73	18	8 155.76	148 638.78	18	8 257.71	151017.00	18	8 389.83
	Community pharmacies		16	9 175.23		15	9 909.25		15	10067.80
	Private institutional pharmacies		0	-		1	148 638.78		1	151017.00
	Public institutional pharmacies		2	73 401.87		2	74 319.39		2	75508.50
Thembisile	All Direct service pharmacies	266 184.46	2	133 092.23	269 511.76	2	134 755.88	273823.95	2	136911.98
	Community pharmacies		1	266 184.46		1	269 511.76		1	273823.95
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	266 184.46		1	269 511.76		1	273823.95

Table D.1.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of MPULANAGA ROVINCE, 2003-2005...continued

SEKHUKHUNE CROSS BOUNDARY District municipality		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Groblersdal	All Direct service pharmacies	133 761.07	8	16 720.13	135 433.08	8	16 929.14	137600.01	7	17200.00		7	17200.00
	Community pharmacies		6	22 293.51		6	22 572.18		6	22933.34			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	66 880.53		2	67 716.54		1	68800.01			
Greater Marble Hall	All Direct service pharmacies	55 981.15	4	13 995.29	56 680.91	5	11 336.18	57587.80	6	9 597.97		6	9 597.97
	Community pharmacies		3	18 660.38		4	14 170.23		5	11517.56			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	55 981.15		1	56 680.91		1	57587.80			
Greater Tubatse	All Direct service pharmacies	38 228.32	9	4 247.59	38 706.17	10	3 870.62	39325.47	10	3 932.55		10	3 932.55
	Community pharmacies		6	6 371.39		7	5 529.45		7	5 617.92			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	12 742.77		3	12 902.06		3	13108.49			
Schuindersdraai Nature Reserve	All Direct service pharmacies	0	0	-	0	0	-	0	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

D.1.7

NORTH WEST PROVINCE

Table D.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005

BOJANALA District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kgetlengrivier	All Direct service pharmacies	36 983	4	9 246	37 927	4	9 493	38 577	4	9 645
	Community pharmacies		2	18 491		2	18 986		2	19 290
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	18 491		2	18 986		2	19 290
Madiibeng	All Direct service pharmacies	342 964	18	19 054	352 142	18	19 563	357 776	19	18 830
	Community pharmacies		16	21 435		16	22 009		17	21 046
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	171 482		2	176 071		2	178 888
Moretele	All Direct service pharmacies	180 393	1	180 393	185 220	1	185 220	188184	1	188 183
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	180 393		1	185 220		1	188 183
Moses Kotane	All Direct service pharmacies	240 167	6	40 028	246 594	6	41 099	250 540	6	41 757
	Community pharmacies		2	120 084		2	123 297		2	125 270
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		4	60 042		4	61649		4	62 635

Table D.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005....continued

		2003			2004			2005		
BOJANALA District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Pilansberg National Park	All Direct service pharmacies	301	0	-	309	0	-	314	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Rustenburg	All Direct service pharmacies	401 047	37	10 839	411 779	37	11 129	418 368	37	11 307
	Community pharmacies		29	13 829		29	14 199		29	14 426
	Private institutional pharmacies		5	80 209		5	82 356		5	83 674
	Public institutional pharmacies		3	133 682		3	137 260		3	139 456
BOPHIRIMA District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Taung	All Direct service pharmacies	184 715	3	61 572	189 658	3	63 219	192 693	3	64 231
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	61 572		3	63 219		3	64 231
Kagisano	All Direct service pharmacies	97 730	6	16 288	100 346	6	16 724	101 951	6	16 992
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		6	16 288		6	16 724		6	16 992

Table D.1.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005....continued

BOPHIRIMA District Municipality...continued		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Lekwa-Teemane	All Direct service pharmacies	43 554	6	7 259	44 719	6	7 453	45 434	6	7 572		6	7 572
	Community pharmacies		3	14 518		3	14 906		3	15 145			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	14 518		3	14 906		3	15 145			
Mamusa	All Direct service pharmacies	49 039	4	12 260	50 351	4	12 589	51 157	4	12 789		4	12 789
	Community pharmacies		3	16 347		3	16 784		3	17 052			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	49 039		1	50 351		1	51 157			
Molopo	All Direct service pharmacies	11 853	0	-	12 170	0	-	12 365	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Naledi	All Direct service pharmacies	58 912	9	6 546	60 488	8	7 561	61 456	7	8 779		7	8 779
	Community pharmacies		4	14 728		4	15 122		3	20 485			
	Private institutional pharmacies		1	58 912		1	60 488		1	61 456			
	Public institutional pharmacies		4	14 728		3	20 162		3	20 485			

Table D.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005...continued

CENTRAL District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ditsobotla	All Direct service pharmacies	149 649	8	18 706	153 654	9	17 073	156 112	9	17 346
	Community pharmacies		5	29 930		6	25 609		6	26 019
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	49 883		3	51 218		3	52 037
Mafikeng	All Direct service pharmacies	263 100	15	17 540	270 140.56	14	19 296	274 462.8	14	19604
	Community pharmacies		8	32 887		7	38 592		7	39 209
	Private institutional pharmacies		1	263 100		1	270 140.56		1	274 463
	Public institutional pharmacies		6	43 850		6	45 023		6	45 744
Setla-Kgobi	All Direct service pharmacies	105 785	0	-	108 616	0	-	110 354	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Tswaing	All Direct service pharmacies	115 735	10	11 573	118 833	9	13 204	120 734	8	15 092
	Community pharmacies		7	16 534		6	19 805		5	24 147
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	38 578		3	39 611		3	40 245

Table D.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005....continued

CENTRAL			2003			2004			2005		
District Municipality...continued											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Zeerust	All Direct service pharmacies	139 353	8	17 419	143 082	8	17 885	145 371	8	18 171	
	Community pharmacies		4	34 838		4	35 770		4	36 343	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		4	34 838		4	35 770		4	36 343	
CITY OF TSHWANE											
Metropolitan Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
City of Tshwane Metro	All Direct service pharmacies	465 344	18	25 852	477 796	18	26 544	485 441	18	26 969	
	Community pharmacies		13	35 796		14	34 128		14	34 674	
	Private institutional pharmacies		1	465 344		1	477 796		1	485 441	
	Public institutional pharmacies		4	116 336		3	159 265		3	161 813	
FRANCES BAARD											
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Phokwane	All Direct service pharmacies	21 856	0	-	22 441	0	-	22 800	0	-	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	

Table D.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005...continued

		2003			2004			2005		
KGALAGADI District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ga-Segonyana	All Direct service pharmacies	56 707	1	56 707	58 225	1	58 225	59 156	1	59 156
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	56 707		1	58 225		1	59 156
Moshaweng	All Direct service pharmacies	85 281	0	-	87 564	0	-	88 965	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
SOUTHERN District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
City Council of Klerksdorp	All Direct service pharmacies	364 200	34	10 711	373 947	35	10 684	379 930	37	10 268
	Community pharmacies		29	12 559		30	12 465		31	12 256
	Private institutional pharmacies		1	364 200		1	373 947		2	189 965
	Public institutional pharmacies		4	91 050		4	93 487		4	94 982
Maquassi Hills	All Direct service pharmacies	70 014	6	11 669	71 888	5	14 378	73 038	4	18 259
	Community pharmacies		4	17 503		3	23 963		3	24 346
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	35 007		2	35 944		1	73 038

Table D.1.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2003-2005...continued

SOUTHERN			2003			2004			2005		
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Potchefstroom	All Direct service pharmacies	130 136	21	6 197	133 619	21	6 362	135 756	21	6 464	
	Community pharmacies		19	6 850		19	7 033		18	7 542	
	Private institutional pharmacies		0	-		0	-		1	135 756	
	Public institutional pharmacies		2	65 068		2	66 809		2	67 878	
Ventersdorp	All Direct service pharmacies	43 673	2	21 837	44 842	2	22 421	45 560	2	22 780	
	Community pharmacies		1	43 673		1	44 842		1	45 560	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	43 673		1	44 842		1	45 560	
WEST RAND											
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Merafong City	All Direct service pharmacies	61 989	4	15 497	63 648	4	15 912	64 666	4	12 933	
	Community pharmacies		3	20 662		3	21 216		3	21 555	
	Private institutional pharmacies		0	-		0	-		1	64 666	
	Public institutional pharmacies		1	61 989		1	63 648		1	64 666	

D.1.8

NORTHERN CAPE PROVINCE

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005

FRANCES BAARD District Municipality		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Diamondfields	All Direct service pharmacies	4 637	0	-	4 695	0	-	4 770	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Dikgatleng	All Direct service pharmacies	36 779	2	18 389	37 238	2	18 619	37 834	2	18 917		2	18 917
	Community pharmacies		1	36 779		1	37 238		1	37 834		1	37 834
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	36 779		1	37 238		1	37 834		1	37 834
Magareng	All Direct service pharmacies	22 350	1	22 350	22 629	1	22 629	22 991	1	22 331		1	22 331
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	22 350		1	22 629		1	22 331		1	22 331
Phokwane	All Direct service pharmacies	40 885	5	8 177	41 396	5	8 279	42 059	5	8 412		5	8 412
	Community pharmacies		2	20 443		2	20 698		2	21 029		2	21 029
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		3	13 628		3	13 799		3	14 020		3	14 020

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005...continued

		2003				2004				2005			
FRANCES BAARD													
District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population		
Sol Plaatjie	All Direct service pharmacies	207 151	24	8 631	209 741	25	8 390	213 097	27	7 892			
	Community pharmacies		18	11 508		19	11 039		21	10 147			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		6	34 525		6	34 957		6	35 516			
KAROO													
District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population		
Bo Karoo	All Direct service pharmacies	3 280	0	-	3 321	0	-	3 374	0	-			
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Emthanjeni	All Direct service pharmacies	36 572	6	6 095	37 029	5	7 406	37 622	5	7 524			
	Community pharmacies		3	12 191		2	18 515		2	18 811			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	12 191		3	12 343		3	12 541			
Kareeberg	All Direct service pharmacies	9 757	2	4 878	9 879	2	4 939	10 037	2	5 018			
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	4 878		2	4 939		2	5 018			

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005...continued

KAROO District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Renosterberg	All Direct service pharmacies	9 327	2	4 663	9 443	2	4 722	9 594	2	4 797
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	4 663		2	4 722		2	4 797
Siyancuma	All Direct service pharmacies	36 832	3	12 277	37 292	3	12 431	37 889	3	12 630
	Community pharmacies		1	36 832		1	37 292		1	37 889
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	18 416		2	18 646		2	18 945
Siyathemba	All Direct service pharmacies	18 018	2	9 009	18 243	2	9 122	18 535	2	9 268
	Community pharmacies		1	18 018		1	18 243		1	18 535
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	18 018		1	18 243		1	18 535
Thembelihle	All Direct service pharmacies	14 384	2	7 192.23	14 564	2	7 282	14 797	2	7 399
	Community pharmacies		1	14 384		1	14 564		1	14 797
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	14 384		1	14 564		1	14 797
Ubuntu	All Direct service pharmacies	16 831	1	16 831	17 041	1	17 041	17 313	1	17 314
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	16 831		1	17 041		1	17 314

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005...continued

		2003			2004			2005		
KAROO District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Umsombomvu	All Direct service pharmacies	24 310	4	6 077	24 614	4	6 153	25 007	5	5 001
	Community pharmacies		2	12 155		2	12 307		3	8 336
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	12 155		2	12 307		2	12 504
KGLAGADI District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ga-Segonyana	All Direct service pharmacies	14 880	3	4 960	15 066	3	5 022	15 307	3	5 102
	Community pharmacies		2	7 440		2	7 533		2	7 654
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	14 880		1	15 066		1	15 307
Gamagara	All Direct service pharmacies	16 634	2	8 317	16 842	2	8 421	17 112	3	5 703
	Community pharmacies		2	8 317		2	8 421		3	5 703
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Kalahari	All Direct service pharmacies	6 412	0	-	6 492	0	-	6 596	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005....continued

		2003				2004				2005			
NAMAQWA District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Hantam	All Direct service pharmacies	20 374	6	3 396	20 629	6	3 438	20 959	5	4 192	20 959	5	4 192
	Community pharmacies		1	20 374		1	20 629		1	20 959			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		5	4 075		5	4 126		4	5 240			
Kamiesberg	All Direct service pharmacies	11 064	1	11 064	11 203	1	11 203	11 382	1	11 381	11 381	1	11 381
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	11 064		1	11 203		1	11 381			
Karoo Hoogland	All Direct service pharmacies	10 802	3	3 601	10 937	3	3 646	11 112	3	3 704	11 112	3	3 704
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	3 601		3	3 646		3	3 704			
Khai-Ma	All Direct service pharmacies	11 670	0	-	11 816	0	-	12 005	0	-	12 005	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.1.8:

Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005...continued

		2003			2004			2005		
NAMAQWA										
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Nama Khoi	All Direct service pharmacies	45 996	5	9 199	46 571	5	9 314	47 316	5	9 463
	Community pharmacies		2	22 998		2	23 286		2	23 658
	Private institutional pharmacies		1	45 996		1	46 571		1	47 316
	Public institutional pharmacies		2	22 998		2	23 286		2	23 658
Namaqualand	All Direct service pharmacies	837	0	-	847	0	-	861	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Richterveld	All Direct service pharmacies	10 417	3	3 472	10 547	3	3 515	10 716	2	5 358
	Community pharmacies		2	5 208		2	5 273		1	10 716
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	10 417		1	10 547		1	10 716
SIYANDA										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
!Kheis	All Direct service pharmacies	16 479	1	16 479	16 685	1	16 685	16 952	1	16 952
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	16 479		1	16 685		1	16 952

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005...continued

SIYANDA District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Benede Oranje	All Direct service pharmacies	9 357	0	-	9 473	0	-	9 625	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Kai !Garib	All Direct service pharmacies	59 318	5	11 863	60 059	5	12 012	61 020	5	12 204
	Community pharmacies		2	29 659		2	30 030		2	30 510
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	19 773		3	20 020		3	20 340
Kgatelopele	All Direct service pharmacies	15 887	3	5 292	16 076	3	5 359	16 333	3	5 444
	Community pharmacies		2	7 939		2	8 038		2	8 167
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	15 887		1	16 076		1	16 333
Mier	All Direct service pharmacies	7 027	2	3 513	7 115	2	3 557	7 228	2	3 614
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	3 513		2	3 557		2	3 614

Table D.1.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2003-2005...continued

		2003			2004			2005		
SIYANDA District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Tsantsabane	All Direct service pharmacies	31 885	3	10 628	32 284	4	8 071	32 800	4	8 200
	Community pharmacies		1	31 885		2	16 142		2	16 400
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	15 943		2	16 142		2	16 400
Khara Hais	All Direct service pharmacies	75 886	7	10 838	76 815	8	9 602	78 044	8	9 755
	Community pharmacies		5	15 173		6	12 802		6	13 007
	Private institutional pharmacies		1	75 886		1	76 815		1	78 044
	Public institutional pharmacies		1	75 886		1	76 815		1	78 044

D.1.9

WESTERN CAPE PROVINCE

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005

BOLAND District Municipality											2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy			
Breede River	All Direct service pharmacies	6 820	0	-	7 039	0	-	7 220	0	-	7 220	0	-	7 220	0	-			
	Community pharmacies		0	-		0	-		0	-									
	Private institutional pharmacies		0	-		0	-		0	-									
	Public institutional pharmacies		0	-		0	-		0	-									
Breede River/ Winelands	All Direct service pharmacies	85 204	6	14 201	87 944	6	14 657	90 202	7	12 886	90 202	7	12 886	90 202	7	12 886			
	Community pharmacies		4	21 301		4	21 986		5	18 040									
	Private institutional pharmacies		0	-		0	-		0	-									
	Public institutional pharmacies		2	42 602		2	43 973		2	45 101									
Breede Valley	All Direct service pharmacies	153 120	16	9 570	158 044	16	9 878	162 102	16	10 131	162 102	16	10 131	162 102	16	10 131			
	Community pharmacies		13	11 778		13	12 157		13	12 469									
	Private institutional pharmacies		0	-		0	-		0	-									
	Public institutional pharmacies		3	51 040		3	52 681		3	54 033									
Drakenstein	All Direct service pharmacies	203 851	16	12 741	210 407	16	13 150	215 809	16	13 488	215 809	16	13 488	215 809	16	13 488			
	Community pharmacies		13	15 681		13	16 185		13	16 601									
	Private institutional pharmacies		0	-		0	-		0	-									
	Public institutional pharmacies		3	67 950		3	70 136		3	71 936									

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005....continued

BOLAND		2003				2004				2005			
District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Stellenbosch	All Direct service pharmacies	123 412	14	8 815	127 381	14	9 099	130 652	15	8 710			
	Community pharmacies		12	10 284		12	10 615		13	10 050			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	61 706		2	63 690		2	65 326			
Witzenberg	All Direct service pharmacies	87 636	7	12 519	90 455	8	11 307	92 777	8	11 597			
	Community pharmacies		4	21 909		5	18 091		5	18 555			
	Private institutional pharmacies		1	87 636		1	90 455		1	92 777			
	Public institutional pharmacies		2	43 818		2	45 227		2	46 389			
CENTRAL KAROO													
District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Beaufort West	All Direct service pharmacies	38 907	4	9 727	40 159	4	10 040	41 190	4	10 298			
	Community pharmacies		2	19 454		2	20 080		2	20 595			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	19 454		2	20 080		2	20 595			
Central Karoo	All Direct service pharmacies	6 473	0	-	6 681	0	-	6 852	0	-			
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005....continued

CENTRAL KAROO			2003			2004			2005		
District Municipality...continued											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Laingsburg	All Direct service pharmacies	6 994.92	0	-	7 219.88	0	-	7 405.25	0	-	
	Community pharmacies		0	-		0	-				
	Private institutional pharmacies		0	-		0	-				
	Public institutional pharmacies		0	-		0	-				
Prince Albert	All Direct service pharmacies	11 021.37	1	11 021	11 375.82	1	11 376	11 667.91	1	11 668	
	Community pharmacies		1	11 021		1	11 376		1	11 668	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
CITY OF CAPE TOWN											
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
City of Cape Town	All Direct service pharmacies	3 033 737	362	8 380	3 131 302	364	8 602	3 211 702	381	8 430	
	Community pharmacies		282	10 758		285	10 987		296	10 850	
	Private institutional pharmacies		18	168 541		16	195 706		19	169 036	
	Public institutional pharmacies		62	48 931		63	49 703		66	48 662	

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005....continued

EDEN District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
George	All Direct service pharmacies	141 969.25	21	6 760	146 535.01	21	6 978	150 297.5	24	6 262
	Community pharmacies		16	8 873		16	9 158		18	8 350
	Private institutional pharmacies		1	141 969		1	146 535		1	150 298
	Public institutional pharmacies		4	35 492		4	36 634		5	30 059
Kannaland	All Direct service pharmacies	25 135.99	2	12 568	25 944.36	2	12 972	26 610.52	2	13 305
	Community pharmacies		2	12 568		2	12 972		2	13 305
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Knysna	All Direct service pharmacies	53 978.62	9	5 998	55 714.58	9	6 191	57 145.12	10	5 715
	Community pharmacies		7	7 711		7	7 959		8	7 143
	Private institutional pharmacies		1	53 979		1	55 715		0	-
	Public institutional pharmacies		1	53 979		1	55 715		2	28 573
Langeberg	All Direct service pharmacies	46 273.83	8	5 784	47 762.00	8	5 970	48 988.35	8	6 124
	Community pharmacies		5	9 255		5	9 552		5	9 797
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	15 425		3	15 921		3	16 329

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE ROVINCE, 2003-2005...continued

EDEN District Municipality...continued		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mossel Bay	All Direct service pharmacies	74 957.08	13	5 766	77 367.71	12	6 447	79 354.22	13	6 104
	Community pharmacies		10	7 496		9	8 596		9	8 817
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	24 986		3	25 789		4	19 839
Oudtshoorn	All Direct service pharmacies	88 794.87	5	17 758	91 650.53	5	18 330	94 003.77	5	18 801
	Community pharmacies		4	22 199		3	30 550		3	31 335
	Private institutional pharmacies		0	-		1	91 651		1	94 004
	Public institutional pharmacies		1	88 795		1	91 651		1	94 004
Plettenberg Bay	All Direct service pharmacies	30 627.27	7	4 375	31 612.25	8	3 952	32 423.94	8	4 053
	Community pharmacies		6	5 105		6	5 269		6	5 404
	Private institutional pharmacies		0	-		1	31 612		1	32 424
	Public institutional pharmacies		1	30 627		1	31 612		1	32 424
South Cape	All Direct service pharmacies	15 301.58	0	-	15 793.68	0	-	16 199.20	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005...continued

OVERBERG District Municipality		2003			2004			2005		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Cape Agulhas	All Direct service pharmacies	27 462.73	3	9 154	28 345.94	3	9 448.65	29 073.75	3	9 691
	Community pharmacies		2	13 731		2	14 173		2	14 537
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	27 463		1	28 346		1	29 074
Overberg	All Direct service pharmacies	263.19	0	-	271.65	0	-	278.63	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Overstrand	All Direct service pharmacies	58 441.27	10	5 844	60 320.75	10	6 032	61 869.56	10	6 187
	Community pharmacies		8	7 305		8	7 540		8	7 734
	Private institutional pharmacies		1	58 441		1	60 321		1	61 870
	Public institutional pharmacies		1	58 441		1	60 321		1	61 870
Swellendam	All Direct service pharmacies	29 436.11	3	9 812	30 382.79	3	10 128	31 162.90	3	10 388
	Community pharmacies		2	14 718		2	15 191		2	15 581
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	29 436		1	30 383		1	31 163
Theewaterskloof	All Direct service pharmacies	97 803.02	7	13 972	100 948.38	7	14 421	103 540.3	7	14 791
	Community pharmacies		6	16 301		5	20 190		5	20 708
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	97 803		2	50 474		2	51 770

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005....continued

WEST COAST District Municipality		2003				2004				2005			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Bergrivier	All Direct service pharmacies	48 594.28	4	12 149	50 157.08	4	12 539	51 444.93	4	12 861		4	12 861
	Community pharmacies		3	16 198		3	16 719		3	17 148			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	48 594		1	50 157		1	51 445			
Cederberg	All Direct service pharmacies	41 235.52	5	8 247	42 561.66	5	8 512	43 654.48	5	8 731		5	8 731
	Community pharmacies		3	13 745		3	14 187		3	14 551			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	20 618		2	21 281		2	21 827			
Matzikama	All Direct service pharmacies	52 644.85	4	13 161	54 337.92	4	13 584	55 733.1	4	13 933		4	13 933
	Community pharmacies		3	17 548		3	18 112		3	18 578			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	52 645		1	54 338		1	55 733			
Saldanha Bay	All Direct service pharmacies	73 864.48	9	8 207	76 239.98	9	8 471	78 197.53	9	8 689		9	8 689
	Community pharmacies		7	10 552		7	10 891		7	11 171			
	Private institutional pharmacies		1	73 864		1	76 240		1	78 198			
	Public institutional pharmacies		1	73 864		1	76 240		1	78 198			

Table D.1.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2003-2005....continued

		2003			2004			2005		
WEST COAST District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Swartland	All Direct service pharmacies	75 626.06	6	12 604	78 058.21	6	13 010	80 062.44	5	16 012
	Community pharmacies		5	15 125		5	15 612		4	20 016
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	75 626		1	78 058		1	80 062
West Coast	All Direct service pharmacies	4 461.61	0	-	4 605.09	0	-	4 723.33	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

D.2: 2006-2008

D.2.1 EASTERN CAPE PROVINCE

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008

		2006			2007			2008		
ALFRED NZO District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Matatiele	All Direct service pharmacies	192 979.11	5	38 596	193 371.27	4	48 343	194 092.1	3	64 697
	Community pharmacies		3	64 326		3	64 457		2	97 046
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	96 489		1	193 371		1	194 092
Umzimvubu	All Direct service pharmacies	380 799.27	4	95 199	381 573.10	6	63 596	382 995.6	6	63 833
	Community pharmacies		1	380 799		1	381 573		1	382 995
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	126 933		5	76 315		5	76 599
AMATOLE District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Amahlathi	All Direct service pharmacies	140 813.48	4	35 203	141 099.63	4	35 275	141 625.6	4	35 406
	Community pharmacies		1	140 813		1	141 100		1	141 626
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	46 938		3	47 033		3	47 209

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008....continued

AMATOLE District Municipality...continued		2006			2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Buffalo City	All Direct service pharmacies	710 658.10	42	16 920	712 102.24	46	15 480	714 756.9	45	15 883
	Community pharmacies		32	22 208		36	19 781		35	20 422
	Private institutional pharmacies		3	236 886		3	237 367		3	238 252
	Public institutional pharmacies		7	101 523		7	101 729		7	102 108
Great Kei	All Direct service pharmacies	45 000.82	0	-	45 092.26	0	-	45 260.36	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Mbashe	All Direct service pharmacies	256 568.34	3	85 523	257 089.72	4	64 272	258 048.1	4	64 512
	Community pharmacies		1	256 568		2	128 544		2	129 124
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	128 284		2	128 544		2	129 124
Mnquma	All Direct service pharmacies	291 384.92	6	48 564	291 977.05	6	48 663	293 065.5	7	41 867
	Community pharmacies		4	72 846		4	72 994		4	73 266
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	145 692		2	145 989		3	97 689

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

AMATOLE		2006			2007			2008		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ngqushwa	All Direct service pharmacies	85 308.46	1	85 308	85 481.81	1	85 482	85 800.49	1	85 800
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	85 308		1	85 482		1	85 800
Nkokobe	All Direct service pharmacies	130 306.24	5	26 061	130 571.03	5	26 114	131 057.8	5	26 212
	Community pharmacies		2	65 153		2	65 286		2	65 529
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	43 435		3	43 524		3	43 686
Nxuba	All Direct service pharmacies	25 149.75	3	8 383	25 200.86	3	8 400	25 294.80	3	8 432
	Community pharmacies		2	12 575		2	12 600		2	12 647.4
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	25 150		1	25 201		1	25 295
CACADU										
District municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Baviaans	All Direct service pharmacies	15 530.51	0	-	15 562.07	0	-	15 620.09	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008....continued

CACADU		2006				2007				2008			
District municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Blue Crane Route	All Direct service pharmacies	35 449.42	3	11 816	35 521.46	3	11 840	35 653.88	3	11 885		3	11 885
	Community pharmacies		2	17 724		2	17 761		2	17 827			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	35 449		1	35 521		1	35 654			
Cacadu	All Direct service pharmacies	6 621.07	0	-	6 634.53	0	-	6 659.25	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Camdeboo	All Direct service pharmacies	44 915.76	3	14 972	45 007.04	4	11 252	45 174.82	4	11 294		4	11 294
	Community pharmacies		2	22 458		2	22 504		2	22 587			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	44 916		2	22 504		2	22 587			
Ikwezi	All Direct service pharmacies	10 495.09	0	-	10 516.42	0	-	10 555.63	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

CACADU		2006			2007			2008		
District municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kou Kamma	All Direct service pharmacies	34 721.40	1	34 721	34 791.95	1	34 792	34 921.66	1	34 922
	Community pharmacies		1	34 721		1	34 792		1	34 922
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Kouga	All Direct service pharmacies	71 578.26	10	7 158	71 723.72	10	7 172	71 991.10	10	7 199
	Community pharmacies		8	8 947		8	8 965		8	8 999
	Private institutional pharmacies		1	71 578		1	71 724		1	71 991
	Public institutional pharmacies		1	71 578		1	71 724		1	71 991
Makana	All Direct service pharmacies	75 484.69	7	10 783	75 638.08	7	10 805	75 920.05	7	10 846
	Community pharmacies		4	18 871		4	18 909		4	18 980
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	25 162		3	25 213		3	25 307
Ndlambe	All Direct service pharmacies	56 175.33	5	11 235	56 289.49	5	11 258	56 499.33	5	11 300
	Community pharmacies		4	14 043		4	14 072		4	14 125
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	56 175		1	56 289		1	56 499
Sunday's River Valley	All Direct service pharmacies	42 093.78	4	10 523	42 179.32	4	10 545	42 336.56	4	10 584
	Community pharmacies		2	21 046		2	21 090		2	21 168
	Private institutional pharmacies		1	42 094		1	42 179		1	42 337
	Public institutional pharmacies		1	42 094		1	42 179		1	42 337

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

		2006				2007				2008			
CHRIS HANI District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Chris Hani	All Direct service pharmacies	97.20	0	-	97.40	0	-		0	-	97.77	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Emalahleni	All Direct service pharmacies	117 390.13	0	-	117 628.68	1	117 629	118 067.2	1	118 067	118 067.2	1	118 067
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		1	117 629		1	118 067			
	Public institutional pharmacies		0	-		0	-		0	-			
Engcobo	All Direct service pharmacies	150 274.76	3	50 092	150 580.14	3	50 193	151 141.5	3	50 381	151 141.5	3	50 381
	Community pharmacies		2	75 137		2	75 290		2	75 571			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public Institutional pharmacies		1	150 275		1	150 580		1	151 141			
Inkwanca	All Direct service pharmacies	20 494.04	1	20 494	20 535.68	2	10 268	20 612.24	1	20 612	20 612.24	1	20 612
	Community pharmacies		1	20 494		1	20 536		0	-			
	Private institutional pharmacies		0	-		1	20 536		1	20 612			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

		2006				2007				2008			
CHRIS HANI District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Intsika Yethu	All Direct service pharmacies	196 681.0	2	98 341	197 080.68	2	98 540	197 815.4	2	98 908	197 815.4	2	98 908
	Community pharmacies		1	196 681		1	197 081		1	197 815			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	196 681		1	197 081		1	197 815			
Inxuba Yethemba	All Direct service pharmacies	61 048.74	6	10 175	61 172.80	6	10 195	61 400.85	6	10 233	61 400.85	6	10 233
	Community pharmacies		4	15 262		4	15 293		4	15 350			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	30 524		2	30 586		2	30 700			
Lukanji	All Direct service pharmacies	186 841.02	10	18 684	187 220.71	10	18 722	187 918.7	10	18 792	187 918.7	10	18 792
	Community pharmacies		6	31 140		6	31 203		6	31 319			
	Private institutional pharmacies		2	93 421		2	93 610		2	93 959			
	Public institutional pharmacies		2	93 421		2	93 610		2	93 959			
Sakhisizwe	All Direct service pharmacies	54 709.16	2	27 355	54 820.33	2	27 410	55 024.70	2	27 512	55 024.70	2	27 512
	Community pharmacies		1	54 709		1	54 820		1	55 025			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	54 709		1	54 820		1	55 025			

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008....continued

		2006			2007			2008		
CHRIS HANI District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Tsolwana	All Direct service pharmacies	32 939.31	1	32 939	33 006.24	1	33 006	33 129.29	1	33 129
	Community pharmacies		1	32 939		1	33 129			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
NELSON MANDELA District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Nelson Mandela	All Direct service pharmacies	1 018 400.79	111	9 175	1 020 470.30	115	8 874	1 024 274	111	9 228
	Community pharmacies		95	10 720		98	10 413		94	10 897
	Private institutional pharmacies		6	169 733		6	170 078		6	170 712
	Public institutional pharmacies		10	101 840		11	92 770		11	93 116
O.R TAMBO District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
King Sabata Dalindyebo	All Direct service pharmacies	420 429.52	12	35 036	421 283.88	14	30 091	422 854.4	15	28 190
	Community pharmacies		6	70 072		8	52 660		8	52 857
	Private institutional pharmacies		1	420 430		1	421 284		1	422 854
	Public institutional pharmacies		5	84 086		5	84 257		6	70 476

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

O.R TAMBO District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mbizana	All Direct service pharmacies	248 509.45	2	124 255	249 014.45	2	124 507	249 942.7	2	124 971	249 943	2	124 971
	Community pharmacies		1	248 509		1	249 014		1	249 943			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	248 509		1	249 014		1	249 943			
Mhlontlo	All Direct service pharmacies	199 144.54	1	199 145	199 549.22	1	199 549	200 293.1	1	199 549	200 293	1	200 293
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	199 145		1	199 549		1	200 293			
Ntabankulu	All Direct service pharmacies	138 109.97	0	-	138 390.62	0	-	138 906.5	0	-	138 906.5	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Nyandeni	All Direct service pharmacies	284 763.85	0	-	285 342.52	0	-	286 406.3	0	-	286 406.3	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

O.R TAMBO		2006			2007			2008		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Port St Johns	All Direct service pharmacies	147 973.23	2	73 987	148 273.93	2	74 136.97	148 826.7	2	74 413
	Community pharmacies		1	147 973		1	148 274		1	148 827
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	147 973		1	148 274		1	148 827
Qaukeni	All Direct service pharmacies	258 585.35	8	32 323	259 110.82	8	32 389	260 076.8	7	37 154
	Community pharmacies		4	64 646		4	64 778		4	65 019
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		4	64 646		4	64 778		3	86 692
UKHAHLAMBA										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Elundini	All Direct service pharmacies	139 290.60	3	46 430	139 573.66	2	69 787	140 093.9	2	70 047
	Community pharmacies		1	139 291		1	139 573		1	140 094
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	69 645		1	139 573		1	140 094
Gariep	All Direct service pharmacies	31 695.89	4	7 924	31 760.30	4	7 940	31 878.70	3	10 626
	Community pharmacies		2	15 848		2	15 880		1	31 879
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	15 848		2	15 880		2	15 939

Table D.2.1: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the EASTERN CAPE PROVINCE, 2006-2008...continued

		2006				2007				2008			
UKHAHLAMBA District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Maletswai	All Direct service pharmacies	37 775.25	4	9 444	37 852.01	4	9 463	37 993.12	4	9 498	37 993.12	4	9 498
	Community pharmacies		3	12 592		3	12 617		3	12 664			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	37 775		1	37 852		1	37 993			
Senqu	All Direct service pharmacies	136 852.38	6	22 809	137 130.48	6	22 855	137 641.7	6	22 940	137 641.7	6	22 940
	Community pharmacies		2	68 426		2	68 565		2	68 821			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		4	34 213		4	34 283		4	34 410			

D.2.2

FREE STATE PROVINCE

Table D.2.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the FREE STATE PROVINCE, 2006-2008

FEZILE DABI District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mafube	All Direct service pharmacies	58 366	4	14 591	58 911	4	14 728	59 563	4	14 892		4	14 892
	Community pharmacies		2	29 183		2	29 455		2	29 784			
	Private institutional pharmacies		1	58 366		1	58 911		1	59 563			
	Public institutional pharmacies		1	58 366		1	58 911		1	59 563			
Metsimaholo	All Direct service pharmacies	117 452	12	9 787	118 548	12	9 879	119 871	12	9 879		13	9 221
	Community pharmacies		9	13 050		9	13 172		10	11 987			
	Private institutional pharmacies		1	117 452		1	118 548		1	119 871			
	Public institutional pharmacies		2	58 726		2	59 274		2	59 936			
Moghaka	All Direct service pharmacies	170 055	14	12 147	171 642	14	12 260	173 558	14	12 397		14	12 397
	Community pharmacies		9	18 895		10	17 164		10	17 356			
	Private institutional pharmacies		1	170 055		1	171 642		1	173 558			
	Public institutional pharmacies		4	42 514		3	57 214		3	57 853			
Ngwathe	All Direct service pharmacies	120 339	13	9 257	121 462	13	9 343	122 818	13	9 343		14	8 773
	Community pharmacies		9	13 370		9	13 496		10	12 282			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		4	30 0885		4	30 365		4	30 704			

Table D.2.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2006-2008...continued

LEJWELEPUTSWA District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Masilonyana	All Direct service pharmacies	65 243	4	16 311	65 852	4	16 463	66 587	4	16 647		4	16 647
	Community pharmacies		3	21 745		3	21 951		3	22 196			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	65 243		1	65 852		1	66 587			
Matjhabeng	All Direct service pharmacies	413 428	32	12 920	417 286	31	13 461	421 945	32	13 186		32	13 186
	Community pharmacies		26	15 901		26	16 049		27	15 628			
	Private institutional pharmacies		2	206 714		2	208 643		2	210 972			
	Public institutional pharmacies		4	103 357		3	139 095		3	140 648			
Nala	All Direct service pharmacies	99 517	5	19 903	100 446	5	20 089	101 567	5	20 313		5	20 313
	Community pharmacies		4	24 879		4	25 111		4	25 392			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	99 517		1	100 446		1	10 567			
Tokologo	All Direct service pharmacies	32 869	0	-	33 176	0	-	33 546	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2006-2008...continued

		2006			2007			2008		
LEJWELEPUTSWA										
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Tswelopele	All Direct service pharmacies	54 385	2	27 193	54 893	2	27 446	55 506	2	27 753
	Community pharmacies		1	54 385		1	54 893		1	55 506
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	54 385		1	54 893		1	55 506
MOTHEO										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mangaung	All Direct service pharmacies	653 723	65	10 057	659 825	64	10 310	667 191	62	10 761
	Community pharmacies		47	13 909		47	14 039		45	14 826
	Private institutional pharmacies		6	108 954		7	65 983		7	95 313
	Public institutional pharmacies		12	54 477		10	65 983		10	66 719
Mantsopa	All Direct service pharmacies	56 066	3	18 689	56 589	3	18 863	57 221	3	19 074
	Community pharmacies		2	28 033		2	28 294		2	28 610
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	56 066		1	56 589		1	57 221
Naledi	All Direct service pharmacies	27 837	0	-	28 097	0	-	28 411	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-

Table D.2.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2006-2008....continued

		2006			2007			2008		
THABO MOFUTSANYANE District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Dihlabeng	All Direct service pharmacies	130 568	8	16 321	131 787	9	14 643	133 258	9	14 806
	Community pharmacies		5	26 114		6	21 965		6	22 210
	Private institutional pharmacies		1	130 568		1	131 787		1	133 258
	Public institutional pharmacies		2	65 284		2	65 894		2	66 629
Maluti a Phofung	All Direct service pharmacies	365 416	10	36 542	368 826	10	36 883	372 943	10	37 294
	Community pharmacies		7	52 202		7	52 689		7	53 277
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	121 805		3	122 942		3	124 314
Nketoana	All Direct service pharmacies	62 741	3	20 914	63 327	3	21 109	64 034	3	21 345
	Community pharmacies		2	31 371		2	31 663		2	32 017
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	62 741		1	63 327		1	64 034
Phumelela	All Direct service pharmacies	51 554	5	10 311	52 036	5	10 407	52 616	5	10 523
	Community pharmacies		4	12 888		4	13 009		4	13 154
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	51 554		1	52 036		1	52 616

Table D.2.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2006-2008...continued

		2006				2007				2008			
THABO MOFUTSANYANE District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Setso	All Direct service pharmacies	124 766	7	17 824	125 930	7	17 990	127 336	8	15 917		8	15 917
	Community pharmacies		4	31 191		4	31 483		4	31 834			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public Institutional pharmacies		3	41 589		3	41 977		4	31 834			
Thabo Mofutsanyane	All Direct service pharmacies	173	0	-	175	0	-	177	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
XHARIEP District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kopanong	All Direct service pharmacies	56 673	2	28 337	57 202	2	28 601	57 841	2	28 920		2	28 920
	Community pharmacies		1	56 673		1	57 202		1	57 841			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public Institutional pharmacies		1	56 673		1	57 202		1	57 841			
Letsemeng	All Direct service pharmacies	43 524	2	21 762	43 930	1	43 930	44 420	1	44 420		1	44 420
	Community pharmacies		1	43 524		1	43 930		1	44 420			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	43 524		0	-		0	-			

Table D.2.2: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the FREE STATE PROVINCE, 2006-2008....continued

		2006			2007			2008		
XHARIEP District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mohokare	All Direct service pharmacies	36 789	4	9 197	37 132	4	9 283	37 547	4	9 387
	Community pharmacies		2	18 395		2	18 566		2	18 773
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	18 395		2	18 566		2	18 773

D.2.3

GAUTENG PROVINCE

Table D.2.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the GAUTENG PROVINCE, 2006-2008

		2006			2007			2008		
JOHANNESBURG Metropolitan Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
City of Johannesburg Metro	All Direct service pharmacies	3 639 220	372	9 783	3 690 756	394	9 367	3 766 998	413	9 121
	Community pharmacies		331	10 995		347	10 636		365	10 321
	Private institutional pharmacies		25	14 569		31	119 057		32	117 719
	Public institutional pharmacies		16	227 451		16	230 672		16	235 437
TSHWANE Metropolitan Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
City of Tshwane Metro	All Direct service pharmacies	2 240 503	298	7 518	2 272 232	305	7 450	2 319 170	318	7 293
	Community pharmacies		261	8 584		265	8 574		275	8 433
	Private institutional pharmacies		25	89 620		24	94 676		24	96 632
	Public institutional pharmacies		12	186 709		16	142 014		19	122 061

Table D.2.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG PROVINCE, 2006-2008....continued

		2006			2007			2008		
EKHURULENI Metropolitan Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ekhuruleni Metro	All Direct service pharmacies	2 798 117	261	10 721	2 837 742	268	10 589	2 896 363	267	10 848
	Community pharmacies		236	11 856		244	11 630		244	11 870
	Private institutional pharmacies		15	186 541		14	202 696		14	206 883
	Public institutional pharmacies		10	279 812		10	283 774		9	321 818
METSWEDING District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kungwini	All Direct service pharmacies	121 062	7	17 295	122 777	8	15 347	125 313	8	15 664
	Community pharmacies		6	20 177		7	17 540		7	17 902
	Private institutional pharmacies		1	121 062		0	-		0	-
	Public institutional pharmacies		0	-		1	122 777		1	125 313
Nokeng tsa taemane	All Direct service pharmacies	59 317	5	11 863	60 157	5	12 031	61 399	5	12 280
	Community pharmacies		2	29 658		2	30 078		2	30 700
	Private institutional pharmacies		1	59 317		1	60 157		1	61 399
	Public institutional pharmacies		2	29 658		2	30 078		2	30 700

Table D.2.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG PROVINCE, 2006-2008....continued

SEDIBENG District Municipality		2006			2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Emfuleni	All Direct service pharmacies	742 784	47	15 803	753 303	50	15 066	768 864	51	15 076
	Community pharmacies		43	17 274		42	17 936		43	17 881
	Private institutional pharmacies		2	371 392		3	251 101		3	256 288
	Public institutional pharmacies		2	371 392		5	150 661		5	153 773
Lesedi	All Direct service pharmacies	80 707	9	8 968	81 850	9	9 094	83 541	8	10 443
	Community pharmacies		7	11 530		7	11 693		6	13 924
	Private institutional pharmacies		1	80 707		1	81 850		1	83 541
	Public institutional pharmacies		1	80 707		1	81 850		1	83 541
Midvaal	All Direct service pharmacies	72 907	6	12 151	73 940	7	10 563	75 467	9	8 385
	Community pharmacies		6	12 151		6	12 323		8	9 433
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		1	73 940		1	75 467
WEST RAND District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mogale City	All Direct service pharmacies	326 849	33	9 905	331 478	36	9 208	338 326	37	9 144
	Community pharmacies		27	12 106		27	12 277		28	12 083
	Private institutional pharmacies		3	108 950		4	82 870		4	84 581
	Public institutional pharmacies		3	108 950		5	66 296		5	67 665

Table D.2.3: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the GAUTENG PROVINCE, 2006-2008...continued

		2006				2007				2008			
WEST RAND District Municipality....continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Randfontein	All Direct service pharmacies	145 342	13	11 180	147 401	14	10 529	150 445	15	10 030		15	10 030
	Community pharmacies		12	12 112		12	12 283		13	11 573			
	Private institutional pharmacies		1	145 342		1	147 401		1	150 445			
	Public institutional pharmacies		0	-		1	147 401		1	150 445			
West Rand	All Direct service pharmacies	6 524	0	-	6 616	0	-	6 753	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Westonaria	All Direct service pharmacies	123 329	3	41 110	125 075	3	41 692	127 659	3	42 553		3	42 553
	Community pharmacies		3	41 110		3	41 692		3	42 553			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

D.2.4

KWAZULU-NATAL PROVINCE

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008

AMAJUBA District Municipality			2006			2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Dannhauser	All Direct service pharmacies	107 335	1	107 335	107 782	1	107 782	109 030	1	109 030	
	Community pharmacies		1	107 335		1	107 782		1	109 030	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Emadlangeni	All Direct service pharmacies	33 715	1	33 715	33 869	1	33 869	34 247	1	34 247	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	33 715		1	33 869		1	34 247	
Newcastle	All Direct service pharmacies	347 746	17	20 456	349 335	19	18 386	353 235	19	18 591	
	Community pharmacies		14	24 839		15	23 289		15	23 549	
	Private institutional pharmacies		1	347 746		1	349 335		1	353 235	
	Public institutional pharmacies		2	173 873		3	116 445		3	117 745	

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

ETHEKWINI District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ethekwini	All Direct service pharmacies	3 227 013	318	10 148	3 241 761	324	10 005	3 277 494	335	9 784			
	Community pharmacies		278	11 608		283	11 455		293	11 188			
	Private institutional pharmacies		17	189 824		18	180 097		19	172 524			
	Public institutional pharmacies		23	140 305		23	140 946		23	142 520			
SISONKE District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Kokstad	All Direct service pharmacies	59 040	5	11 808	59 309	4	14 827	59 971	4	14 993			
	Community pharmacies		2	29 520		2	29 655		2	29 986			
	Private institutional pharmacies		1	59 040		1	59 309		1	59 971			
	Public institutional pharmacies		2	29 520		1	59 309		1	59 971			
Ingwe	All Direct service pharmacies	112 322	2	56 161	112 835	2	56 418	114 095	2	57 047			
	Community pharmacies		1	112 322		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	112 322		2	56 418		2	57 047			
Kwa Sani	All Direct service pharmacies	15 990	1	15 990	16 063	1	16 063	16 243	1	16 243			
	Community pharmacies		1	15 990		1	16 063		1	16 243			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008....continued

SISONKE District Municipality...continued			2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Sisonke	All Direct service pharmacies	850	0	-	854	0	-	863	0	-		0	-	
	Community pharmacies		0	-		0	-		0	-				
	Private institutional pharmacies		0	-		0	-		0	-				
	Public institutional pharmacies		0	-		0	-		0	-				
Ubuhlebezwe	All Direct service pharmacies	106 476	3	35 492	106 963	3	35 654	108 157	3	36 052		3	36 052	
	Community pharmacies		2	53 238		2	53 481		2	54 078				
	Private institutional pharmacies		0	-		0	-		0	-				
	Public institutional pharmacies		1	106 476		1	106 963		1	108 157				
UMGUNGUNDLOVU District Municipality														
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Impendle	All Direct service pharmacies	35 074	0	-	35 234	0	-	35 628	0	-		0	-	
	Community pharmacies		0	-		0	-		0	-				
	Private institutional pharmacies		0	-		0	-		0	-				
	Public institutional pharmacies		0	-		0	-		0	-				
Mkhambathini	All Direct service pharmacies	61 682	1	61 682	61 964	1	61 964	62 655	1	61 964		2	31 328	
	Community pharmacies		1	61 682		1	61 964		1	62 655				
	Private institutional pharmacies		0	-		0	-		0	-				
	Public institutional pharmacies		0	-		0	-		1	62 655				

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008....continued

UMGUNGUNDLOVU District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mooi Mpofana	All Direct service pharmacies	38 444	0	-	38 621	0	-	39 052	0	-	0	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Richmond	All Direct service pharmacies	66 026	3	22 009	66 328	3	22 109	67 068	3	22 356	3	22 356	
	Community pharmacies		1	66 026		1	66 328		1	66 328		1	67 068
	Private institutional pharmacies		1	66 026		1	66 328		1	66 328		1	67 068
	Public institutional pharmacies		1	66 026		1	66 328		1	66 328		1	67 068
Msunduzi	All Direct service pharmacies	577 724	61	9 471	580 364	61	9 514	586 843	61	9 620	49	11 979	
	Community pharmacies		50	11 554		50	11 607		50	11 607		3	195 614
	Private institutional pharmacies		3	192 575		3	193 455		3	193 455		9	65 205
	Public institutional pharmacies		8	72 215		8	72 546		8	72 546			
uMgungundlovu	All Direct service pharmacies	13	0	-	13	0	-	13	0	-	0	0	-
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-		0	-

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

		2006			2007			2008		
UMGUNGUNDLOVU District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
uMngeni	All Direct service pharmacies	77 156	10	7 716	77 509	10	7 751	78 374	9	8 708
	Community pharmacies		8	9 645		8	9 689		7	11 196
	Private institutional pharmacies		1	77 156		1	77 509		1	78 374
	Public institutional pharmacies		1	77 156		1	77 509		1	78 374
uMshwathi	All Direct service pharmacies	112 844	4	28 211	113 360	4	28 340	114 625	3	38 208
	Community pharmacies		2	56 422		2	56 680		1	114 625
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	56 422		2	56 680		2	57 313
UGU District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ezingoleni	All Direct service pharmacies	56 837	0	-	57 097	0	-	57 734	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Hibiscus Coast	All Direct service pharmacies	227 814	26	8 762	228 855	26	8 802	231 410	27	8 571
	Community pharmacies		22	10 355		22	10403		23	10 061
	Private institutional pharmacies		2	113 907		2	114 428		2	115 705
	Public institutional pharmacies		2	113 907		2	114 428		2	115 705

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

		2006				2007				2008			
UGU District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Umdoni	All Direct service pharmacies	65 058	6	10 843	65 355	6	10 893	66 085	7	9 441		7	9 441
	Community pharmacies		5	13 012		5	13 071		6	11 014			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	65 058		1	65 355		1	66 085			
Umzumbi	All Direct service pharmacies	202 354	0	-	203 279	0	-	205 548	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Vulamehlo	All Direct service pharmacies	86 743	0	-	87 139	0	-	88 112	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
uMuziwabantu	All Direct service pharmacies	96 409	3	32 136	96 849	3	32 283	97 931	3	32 644		3	32 644
	Community pharmacies		2	48 204		2	48 425		2	48 965			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	96 409		1	96 849		1	97 931			

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

		2006				2007				2008			
UMKHANYAKUDE District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Hlabisa	All Direct service pharmacies	184 739	6	30 790	185 583	6	30 931	187 655	6	31 276		6	31 276
	Community pharmacies		5	36 948		5	37 117		5	37 531			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	184 739		1	185 583		1	187 655			
Jozini	All Direct service pharmacies	192 214	4	48 054	193 093	5	38 619	195 248	6	32 541		6	32 541
	Community pharmacies		1	192 214		2	96 546		2	97 324			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	64 071		3	64 364		4	48 812			
Mtubatuba	All Direct service pharmacies	36 742	0	-	36 910	1	36 910	37 322	1	37 322		1	37 322
	Community pharmacies		0	-		1	36 910		1	37 322			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
The Big five false bay	All Direct service pharmacies	32 488	1	32 488	32 637	1	32 637	33 001	1	33 001		1	33 001
	Community pharmacies		1	32 488		1	32 637		1	33 001			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008....continued

		2006				2007				2008			
UMKHANYAKUDE District Municipality....continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Umhlabyalingana	All Direct service pharmacies	147 204	0	-	147 876	0	-	149 527	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Umkhanyakude	All Direct service pharmacies	5 318	0	-	5 342	0	-	5 402	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
UMZINYATHI District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Endumeni	All Direct service pharmacies	53 373	5	10 675	53 617	4	13 404	54 216	4	13 554		4	13 554
	Community pharmacies		4	13 343		3	17 872		3	18 072		3	18 072
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	53 373		1	53 617		1	54 216		1	54 216
Msinga	All Direct service pharmacies	175 485	0	-	176 287	0	-	178 255	0	-		0	-
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-		0	-

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

		2006				2007				2008			
UMZINYATHI District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Nqutu	All Direct service pharmacies	151 453	2	75 726	152 145	2	76 073	153 843	2	76 922	153 843	2	76 922
	Community pharmacies		1	151 453		1	152 145		1	153 843			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	151 453		1	152 145		1	153 843			
Umvoti	All Direct service pharmacies	96 392	5	19 278	96 833	5	19 367	97 914	5	19 583	97 914	5	19 583
	Community pharmacies		2	48 196		2	48 416		2	48 957			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	32 131		3	32 277		3	32 638			
UTHUKELA District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Emnambithi/Ladysmith	All Direct service pharmacies	235 447	10	23 545	236 523	10	23 652	239 163	10	23 916	239 163	10	23 916
	Community pharmacies		8	29 431		8	29 565		8	29 895			
	Private institutional pharmacies		1	235 447		1	236 523		1	239 163			
	Public institutional pharmacies		1	235 447		1	236 523		1	239 163			
Imbabazane	All Direct service pharmacies	125 249	0	-	125 822	0	-	127 226	0	-	127 226	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008....continued

UTHUKELA District Municipality...continued		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Indaka	All Direct service pharmacies	118 674	0	-	119 217	0	-	120 547	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Okhahlamba	All Direct service pharmacies	143 628	4	35 907	144 284	4	36 071	145 895	4	36 474		4	36 474
	Community pharmacies		3	47 876		3	48 095		3	48 632		3	48 632
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	143 328		1	144 284		1	145 895		1	145 895
Umtshezi	All Direct service pharmacies	62 583	7	8 940	62 869	7	8 981	63 571	7	9 082		7	9 082
	Community pharmacies		6	10 430		6	10 478		6	10 595		6	10 595
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	62 583		1	62 869		1	63 571		1	63 571
Uthukela	All Direct service pharmacies	532	0	-	534	0	-	540	0	-		0	-
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-		0	-

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

UTHUNGULU District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mbonambi	All Direct service pharmacies	111 683	1	111 683	112 193	1	112 193	113 446	1	113 446		1	113 446
	Community pharmacies		1	111 683		1	112 193		1	113 446			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Mthonjaneni	All Direct service pharmacies	52 606	2	26 303	52 846	2	26 423	53 436	2	26 718		2	26 718
	Community pharmacies		1	52 606		1	52 846		1	53 436			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	52 606		1	52 846		1	53 436			
Nkandla	All Direct service pharmacies	139 533	2	69 767	140 171	2	70 085	141 736	2	70 868		2	70 868
	Community pharmacies		1	139 533		1	140 171		1	141 736			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	139 533		1	140 171		1	141 736			
Ntambanana	All Direct service pharmacies	88 515	0	-	88 919	0	-	89 912	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

		2006			2007			2008		
UTHUNGULU District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
uMhlatuze	All Direct service pharmacies	302 022	27	11 186	303 403	29	10 462	306 789	30	10 226
	Community pharmacies		22	13 728		23	13 191		24	12 783
	Private institutional pharmacies		3	100 674		3	101 134		3	102 263
	Public institutional pharmacies		2	151 011		3	101 134		3	102 263
uMlalazi	All Direct service pharmacies	230 877	9	25 653	231 932	9	25 770	234 521	8	29 315
	Community pharmacies		6	38 480		6	38 655		5	46 904
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	76 959		3	77 311		3	78 174
ZULULAND District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Abaqulusi	All Direct service pharmacies	199 482	10	19 948	200 394	11	18 218	202 631	11	18 421
	Community pharmacies		9	22 165		9	22 266		9	22 515
	Private Institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	199 482		2	100 197		2	101 316
Nongoma	All Direct service pharmacies	207 228	2	103 614	208 175	3	69 392	210 499	3	70 166
	Community pharmacies		1	207 228		2	104 088		2	105 249
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	207 228		1	208 175		1	210 499

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

ZULULAND		2006			2007			2008		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ulundi	All Direct service pharmacies	222 400	4	55 600	223 416	4	55 854	225 910	4	56 477
	Community pharmacies		1	222 400		1	223 416		1	225 910
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	74 133		3	74 472		3	75 303
eDumbe	All Direct service pharmacies	85 878	1	85 878	86 271	1	86 271	87 234	1	87 234
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	85 878		1	86 271		1	87 234
uPhongolo	All Direct service pharmacies	125 054	1	125 054	125 626	1	125 626	127 028	1	127 028
	Community pharmacies		1	125 054		1	125 626		1	127 028
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
ILEMBE										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
KwaDukuza	All Direct service pharmacies	165 608	15	11 041	166 365	17	9 786	168 222	17	9 895
	Community pharmacies		13	12 739		14	11 883		14	12 016
	Private institutional pharmacies		0	-		1	166 365		1	168 222
	Public institutional pharmacies		2	82 804		2	83 183		2	84 111

Table D.2.4: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the KWAZULU-NATAL PROVINCE, 2006-2008...continued

ILEMBE District Municipality...continued		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Mandeni	All Direct service pharmacies	134 375	4	33 594	134 990	4	33 747	136 496	5	27 299		5	27 299
	Community pharmacies		2	67 188		2	67 495		3	45 499			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	67 188		2	67 495		2	68 248			
Maphumulo	All Direct service pharmacies	125 965	0	-	126 540	0	-	127 953	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Ndwedwe	All Direct service pharmacies	159 271	1	159 271	159 998	1	159 998	161 784	1	161 784		1	161 784
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	159 271		1	159 998		1	161 784			

D.2.5

LIMPOPO PROVINCE

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the LIMPOPO PROVINCE, 2006-2008

CAPRICORN District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Aganang	All Direct service pharmacies	151 213	3	50 404	154 353	3	51 451	156 076	3	52 025		3	52 025
	Community pharmacies		2	75 606		2	77 177		2	78 038			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	151 213		1	154 353		1	156 076			
Blouberg	All Direct service pharmacies	165 172	3	55 057	168 602	3	56 201	170 484	3	56 828		3	56 828
	Community pharmacies		1	165 172		1	168 602		1	170 484			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	82 586		2	84 301		2	85 242			
Lepele-Nkumpi	All Direct service pharmacies	233 435	6	38 906	238 283	6	39 714	240 943	6	40 157		6	40 157
	Community pharmacies		2	116 718		2	119 142		2	120 471			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		4	58 359		4	59 571		4	60 236			
Molemole	All Direct service pharmacies	112 057	0	-	114 385	0	-	115 661	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the LIMPOPO PROVINCE, 2006-2008...continued

		2006				2007				2008			
CAPRICORN District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Polokwane	All Direct service pharmacies	520 441	27	19 276	531 249	31	17 137	537 179	35	15 348		35	15 348
	Community pharmacies		22	23 656		26	20 433		30	17 906			
	Private institutional pharmacies		1	520 441		1	531 249		1	537 179			
	Public institutional pharmacies		4	130 110		4	132 812		4	134 295			
GREATER SEKHUKHUNE District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Elias Motsoaledi	All Direct service pharmacies	226 041	9	25 116	230 735	9	25 637	233 311	11	21 210		11	21 210
	Community pharmacies		7	32 292		7	32 962		9	25 923			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		2	113 021		2	115 368		2	116 655			
Fetakgomo	All Direct service pharmacies	94 280	0	-	96 238	0	-	97 312	0	-		0	-
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-		0	-
Greater Marble Hall	All Direct service pharmacies	124 229	6	20 705	126 808	5	25 362	128 224	4	32 056		4	32 056
	Community pharmacies		5	24 846		5	25 362		4	32 056			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	124 229		0	-		0	-		0	-

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the LIMPOPO PROVINCE, 2006-2008...continued

GREATER SEKHUKHUNE			2006			2007			2008		
District Municipality...continued											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total pharmacies
Greater Tubatse	All Direct service pharmacies	276 618	11	25 147	282 363	11	25 669	285 515	12	23 793	12
	Community pharmacies		7	39 517		7	40 338		8	35 689	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		4	69 155		4	70 591		4	71 379	
Makhuduthamaga	All Direct service pharmacies	269 218	2	134 609	274 808	1	274 808	277 876	1	277 876	1
	Community pharmacies		1	269 218		1	274 808		1	277 876	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	269 218		0	-		0	-	
MOPANI											
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total pharmacies
Ba-Phalaborwa	All Direct service pharmacies	134 216	9	14 913	137 003	11	12 455	138 532	12	11 544	12
	Community pharmacies		7	19 174		8	17 125		9	15 392	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		2	67 108		3	45 668		3	46 177	
Greater Giyani	All Direct service pharmacies	243 121	10	24 312	248 169	9	27 574	250 939	12	20 912	12
	Community pharmacies		7	34 731		6	41 362		8	31 367	
	Private institutional pharmacies		1	243 121		1	248 169		1	250 939	
	Public institutional pharmacies		2	121 560		2	124 085		3	83 646	

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the LIMPOPO PROVINCE, 2006-2008...continued

		2006			2007			2008		
MOPANI District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Letaba	All Direct service pharmacies	225 395	3	75 132	230 076	4	57 519	232 644	4	58 161
	Community pharmacies		2	112 697		2	115 038		2	116 322
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	225 395		2	115 038		2	116 322
Greater Tzaneen	All Direct service pharmacies	384 575	20	19 229	392 561	22	17 844	396 943	23	17 258
	Community pharmacies		14	27 470		14	28 040		15	26 463
	Private institutional pharmacies		2	192 287		2	196 280		2	198 471
	Public institutional pharmacies		4	96 144		6	65 427		6	66 157
Maruleng	All Direct service pharmacies	96 644	3	32 215	98 651	4	24 663	99 753	5	19 951
	Community pharmacies		2	48 322		3	32 884		4	24 938
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	96 644		1	98 651		1	99 753
VHEMBE District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Makhado	All Direct service pharmacies	508 979	12	42 415	519 549	12	43 296	525 349	14	37 524
	Community pharmacies		8	63 622		8	64 944		10	52 534
	Private institutional pharmacies		1	508 979		1	519 549		1	525 349
	Public institutional pharmacies		3	169 660		3	173 783		3	175 116

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the LIMPOPO PROVINCE, 2006-2008....continued

		2006			2007			2008		
VHEMBE District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Musina	All Direct service pharmacies	40 249	2	20 125	41 085	3	13 695	41 543	4	10 386
	Community pharmacies		1	40 249		2	20 542		3	13 848
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	40 249		1	41 085		1	41 543
Mutale	All Direct service pharmacies	80 805	0	-	82 483	0	-	83 404	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Thulamela	All Direct service pharmacies	598 551	10	59 855	610 981	10	61 098	617 801	11	56 164
	Community pharmacies		8	74 819		8	76 373		9	68 645
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	299 275		2	305 490		2	308 901
WATERBERG District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Bela-Bela	All Direct service pharmacies	53 368	4	13 342	54 477	4	13 619	55 085	4	13 771
	Community pharmacies		2	26 684		2	27 238		2	27 542
	Private institutional pharmacies		1	53 368		1	54 477		1	55 085
	Public institutional pharmacies		1	53 368		1	54 477		1	55 085

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the LIMPOPO PROVINCE, 2006-2008...continued

WATERBERG District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Lephalale	All Direct service pharmacies	98 394	9	10 933	100 437	9	11 160	101 559	9	11 284		9	11 284
	Community pharmacies		6	16 399		6	16 740		6	16 926			
	Private institutional pharmacies		1	98 394		1	100 437		1	101 559			
	Public institutional pharmacies		2	49 197		2	50 219		2	50 779			
Modimolle	All Direct service pharmacies	74 533	5	14 907	76 081	5	15 216	76 930	5	15 386		5	15 386
	Community pharmacies		4	18 633		4	19 020		4	19 233			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	74 533		1	76 081		1	76 930			
Mogalakwena	All Direct service pharmacies	305 585	10	30 558	311 931	10	31 193	315 413	11	28 674		11	28 674
	Community pharmacies		7	43 655		7	44 562		8	39 427			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		3	101 862		3	103 977		3	105 138			
Mookgopong	All Direct service pharmacies	31 488	1	31 488	32 142	1	32 142	32 500	1	32 500		1	32 500
	Community pharmacies		1	31 488		1	32 142		1	32 500			
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-		0	-

Table D.2.5: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the LIMPOPO PROVINCE, 2006-2008...continued

		2006				2007				2008			
WATERBERG													
District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy			
Thabazimbi	All Direct service pharmacies	65 431	11	5 948	66 790	11	6 072	67 535	11	6 140			
	Community pharmacies		7	9 347		7	9 541		7	9 648			
	Private institutional pharmacies		3	21 810		3	22 263		3	22 512			
	Public institutional pharmacies		1	65 431		1	66 790		1	67 535			

D.2.6

MPUMALANGA PROVINCE

Table D.2.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the MPUMALANGA PROVINCE, 2006-2008

EHLANZENI District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Bushbuckridge	All Direct service pharmacies	525 935	7	75 134	530 879	9	58 987	542 828	9	60 314		9	60 314
	Community pharmacies		5	105 187		7	75 840		7	77 547			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	262 967		2	265 439		2	271 414			
Ehlanzeni	All Direct service pharmacies	4 352	0	-	4 393	0	-	4 492	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Mbombela	All Direct service pharmacies	499 718	30	16 657	504 415	32	15 763	515 789	32	15 630		33	15 630
	Community pharmacies		24	20 822		27	18 682		27	18 421		28	18 421
	Private institutional pharmacies		3	166 573		2	252 208		2	257 895		2	257 895
	Public institutional pharmacies		3	166 573		3	168 138		3	171 930		3	171 930
Nkomazi	All Direct service pharmacies	351 976	7	50 282	355 284	5	71 057	363 296	5	60 549		6	60 549
	Community pharmacies		5	70 395		3	118 428		3	90 824		4	90 824
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		2	175 988		2	177 642		2	181 648		2	181 648

Table D.2.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the MPUMALANGA PROVINCE, 2006-2008...continued

EHLANZENI		2006				2007				2008			
District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Thaba Chweu	All Direct service pharmacies	85 485	8	10 686	86 289	10	8 629	88 235	10	8 823		10	8 823
	Community pharmacies		6	14 248		8	10 789		8	11 029			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	42 743		2	43 144		2	44 117			
Umjindi	All Direct service pharmacies	56 556	4	14 139	57 087	4	14 272	58 375	4	14 594		4	14 594
	Community pharmacies		2	28 277		2	28 544		2	29 187			
	Private institutional pharmacies		1	56 556		1	57 087		1	58 375			
	Public institutional pharmacies		1	56 556		1	57 087		1	58 375			
GERT SIBANDE													
District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Albert Luthuli	All Direct service pharmacies	197 801	6	32 967	199 661	6	33 277	204 163	6	34 027		6	34 027
	Community pharmacies		4	49 450		4	49 915		4	51 041			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	98 901		2	99 830		2	102 081			
Dipaleseng	All Direct service pharmacies	40 641	1	40 641	41 023	1	41 023	41 948	2	20 974		2	20 974
	Community pharmacies		1	40 641		1	41 023		2	20 974			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the MPUMALANGA PROVINCE, 2006-2008...continued

GERT SIBANDE District Municipality...continued		2006			2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Govan Mbeki	All Direct service pharmacies	233 392	20	11 670	235 586	21	11 218	240 899	22	10 950
	Community pharmacies		15	15 560		16	14 724		17	14 171
	Private institutional pharmacies		3	77 797		3	78 529		3	80 300
	Public institutional pharmacies		2	116 696		2	117 793		2	120 449
Lekwa	All Direct service pharmacies	108 683	6	18 114	109 705	6	18 284	112 178	7	16 025
	Community pharmacies		5	21 737		5	21 941		6	18 696
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	108 683		1	109 705		1	112 178
Mkhondo	All Direct service pharmacies	150 383	6	25 064	151 796	5	30 359	155 219	6	25 870
	Community pharmacies		4	37 596		4	37 949		4	38 805
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	75 191		1	151 796		2	77 610
Msukaligwa	All Direct service pharmacies	131 364	11	11 942	132 599	11	12 054	135 589	11	12 326
	Community pharmacies		9	14 596		9	14 733		9	15 065
	Private institutional pharmacies		1	131 364		1	132 599		1	135 589
	Public institutional pharmacies		1	131 364		1	132 599		1	135 589
Seme	All Direct service pharmacies	84 971	4	21 243	85 769	4	21 442	87 703	5	17 541
	Community pharmacies		2	42 485		2	42 885		3	29 234
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	42 485		2	42 885		2	43 852

Table D.2.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the MPUMALANGA PROVINCE, 2006-2008...continued

NKANGALA District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Delmas	All Direct service pharmacies	59 152	3	19 717	59 708	3	19 903	61 055	4	15 264		4	15 264
	Community pharmacies		2	29 576		2	29 854		3	20 352			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	59 152		1	59 708		1	61 055			
Dr JS Moroka	All Direct service pharmacies	256 074	0	-	258 481	0	-	264 309	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Emakhazeni	All Direct service pharmacies	45 274	4	11 318	45 699	5	9 140	46 730	4	11 682		4	11 682
	Community pharmacies		2	22 637		2	22 850		1	46 730			
	Private institutional pharmacies		0	-		1	45 699		1	46 730			
	Public institutional pharmacies		2	22 637		2	22 850		2	23 365			
Emalahleni	All Direct service pharmacies	290 946	31	9 385	293 681	32	9 178	300 303	32	9 384		32	9 384
	Community pharmacies		27	10 776		27	10 877		27	11 122			
	Private institutional pharmacies		2	145 473		3	97 894		3	100 101			
	Public institutional pharmacies		2	145 473		2	146 840		2	150 152			

Table D.2.6: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the MPUMALANGA PROVINCE, 2006-2008...continued

		2006			2007			2008		
NKANGALA District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Steve Tshwete	All Direct service pharmacies	150 265	18	8 348	151 677	20	7 584	155 097	20	7 755
	Community pharmacies		15	10 018		16	9 480		16	9 694
	Private institutional pharmacies		1	150 265		2	75 839		2	77 549
	Public institutional pharmacies		2	75 132		2	75 839		2	77 549
Thembisile	All Direct service pharmacies	272 460	2	136 230	275 021	3	91 673	281 223	4	70 306
	Community pharmacies		1	272 460		2	137 511		3	93 741
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	272 460		1	275 021		1	281 223

D.2.7

NORTH WEST PROVINCE

Table D.2.7:

Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the NORTH WEST PROVINCE, 2006-2008

		2006			2007			2008		
BOJANALA District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kgetlengrivier	All Direct service pharmacies	38 820	4	9 705	39 185	4	9 796	39 064	4	9 766
	Community pharmacies		2	19 410		2	19 592		2	19 532
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	19 410		2	19 592		2	19 532
Madibeng	All Direct service pharmacies	360 003	20	18 000	363 387	20	18 169	362 268	21	17 251
	Community pharmacies		17	21 177		17	21 376		18	20 126
	Private institutional pharmacies		1	360 003		1	363 387		1	362 268
	Public institutional pharmacies		2	180 001		2	181 693		2	181 134
Moretele	All Direct service pharmacies	189 355	1	189 355	191 135	1	191 135	190 546	1	190 546
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	189 355		1	191 135		1	190 546
Moses Kotane	All Direct service pharmacies	252 099	6	42 016	254 469	5	50 894	253 685	5	50 737
	Community pharmacies		2	126 049		2	127 234		2	126 843
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		4	63 025		3	84 823		3	84 562

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2006-2008...continued

		2006				2007				2008			
BOJANALA District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Pilansberg National Park	All Direct service pharmacies	316	0	-	319	0	-	318	0	-	318	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Rustenburg	All Direct service pharmacies	420 971	39	10 794	424 929	43		423 620	43		423 620	43	9 852
	Community pharmacies		31	13 580		35			35			35	12 103
	Private institutional pharmacies		5	84 194		5			5			5	84 724
	Public institutional pharmacies		3	140 324		3			3			3	141 207
BOPHIRIMA District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Greater Taung	All Direct service pharmacies	193 892	3	64 631	195 714	3	65 238	195 112	3	65 037	195 112	3	65 037
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		3	64 631		3	65 238		3	65 037		3	65 037
Kagisano	All Direct service pharmacies	102 586	6	17 098	103 550	6	17 258	103 231	6	17 205	103 231	6	17 205
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		6	17 098		6	17 258		6	17 205		6	17 205

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2006-2008...continued

BOPHIRIMA		2006			2007			2008		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Lekwa-Teemane	All Direct service pharmacies	45 718	6	7 620	46 147	6	7 691	46 005	6	7 668
	Community pharmacies		3	15 239		3	15 382		3	15 335
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	15 239		3	15 382		3	15 335
Mamusa	All Direct service pharmacies	51 475	4	12 867	51 959	4	12 990	51 799	4	12 950
	Community pharmacies		3	17 158		3	17 320		3	17 266
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	51 475		1	51 959		1	51 799
Molopo	All Direct service pharmacies	12 442	0	-	12 558	0	-	12 520	0	-
	Community pharmacies		0	-		0	-		0	-
	Private Institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Naledi	All Direct service pharmacies	61 838	7	8 834	62 420	7	8 917	62 227	8	7 778
	Community pharmacies		3	20 613		3	20 807		4	15 556
	Private institutional pharmacies		1	61 838		1	62 420		1	62 227
	Public institutional pharmacies		3	20 613		3	20 807		3	20 742

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2006-2008....continued

DR KENNETH KAUNDA District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
City of Matlosana	All Direct service pharmacies	382 294	39	9 802	385 888	38	10 155	384 700	37	10 397		37	10 397
	Community pharmacies		33	11 585		31	12 448		30	12 823			
	Private institutional pharmacies		2	191 147		2	192 944		2	192 350			
	Public institutional pharmacies		4	95 574		5	77 178		5	76 940			
City of Tlokwe	All Direct service pharmacies	136 601	22	6 209	137 885	23	5 995	137 461	24	5 728		24	5 728
	Community pharmacies		18	7 589		19	7 257		20	6 873			
	Private institutional pharmacies		2	68 301		2	68 943		2	68 730			
	Public institutional pharmacies		2	68 301		2	68 943		2	68 730			
Maquassi Hills	All Direct service pharmacies	73 492	4	18 373	74 183	4	18 546	73 955	4	18 489		4	18 489
	Community pharmacies		3	24 497		3	24 728		3	24 652			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	73 492		1	74 183		1	73 955			
Merafong City	All Direct service pharmacies	224 018	19	11 790	226 123	20	11 306	225 427	21	10 735		21	10 735
	Community pharmacies		14	16 001		14	16 152		15	15 028			
	Private institutional pharmacies		3	74 623		3	75 374		3	75 142			
	Public institutional pharmacies		2	112 009		3	75 374		3	75 142			
Ventersdorp	All Direct service pharmacies	45 843	2	22 922	46 274	2	23 137	46 132	2	23 066		2	23 066
	Community pharmacies		1	45 843		1	46 274		1	46 132			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	45 843		1	46 274		1	46 132			

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTH WEST PROVINCE, 2006-2008....continued

NGAKA MODIRI MOLEMA District Municipality													
		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ditsobotla	All Direct service pharmacies	157 084	9	17 454	158 560	9	17 618	158 072	10	15 807	158 072	10	15 807
	Community pharmacies		6	26 181		6	26 427		7	22 582			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	52 361		3	52 853		3	52 691			
Mafikeng	All Direct service pharmacies	276 171	16	17 261	278 767	18	15 487	277 909	19	14 627	277 909	19	14 627
	Community pharmacies		8	34 521		9	30 974		10	27 791			
	Private institutional pharmacies		1	276 171		2	139 383		2	138 954			
	Public institutional pharmacies		7	39 453		7	39 824		7	39 701			
Ramotshere Moiloa	All Direct service pharmacies	146 276	9	16 253	147 651	8	18 456	147 196	8	18 400	147 196	8	18 400
	Community pharmacies		4	36 569		3	49 217		3	49 065			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		5	29 255		5	29 530		5	29 439			
Ratlou	All Direct service pharmacies	111 040	0	-	112 084	0	-	111 739	0	-	111 739	0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Tswaing	All Direct service pharmacies	121 485	9	13 498	122 627	8	15 328	122 250	8	15 281	122 250	8	15 281
	Community pharmacies		5	24 297		4	30 657		4	30 562			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		4	30 371		4	30 657		4	30 562			

D.2.8

NORTHERN CAPE PROVINCE

Table D.2.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008

FRANCES BAARD District Municipality		2006				2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	
Dikgatleng	All Direct service pharmacies	36 483	2	18 241	36 827	2	18 413	37 237	2	18 619	
	Community pharmacies		1	36 483		1	36 827		1	37 237	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	36 483		1	36 827		1	37 237	
Frances Baard	All Direct service pharmacies	4 600	0	-	4 643	0	-	4 695	0	-	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	
Magareng	All Direct service pharmacies	22 170	1	22 170	22 379	1	22 379	22 689	1	22 689	
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		1	22 170		1	22 379		1	22 689	
Phokwane	All Direct service pharmacies	62 543	4	15 636	63 131	4	15 783	63 835	4	15 959	
	Community pharmacies		2	31 271		2	31 565		2	31 918	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		2	31 271		2	31 565		2	31 918	

Table D.2.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008...continued

		2006				2007				2008			
FRANCES BAARD District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Sol Plaatjie	All Direct service pharmacies	205 189	30	6 850	207 420	30	6 914	209 736	30	6 991		30	6 991
	Community pharmacies		22	9 340		22	9 428		22	9 533			
	Private institutional pharmacies		2	102 744		2	103 710		2	104 868			
	Public institutional pharmacies		6	34 248		6	34 570		6	34 956			
KGLAGADI District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Ga-Segonyana	All Direct service pharmacies	71 805	4	17 951	72 480	4	18 120	73 289	4	18 322		4	18 322
	Community pharmacies		2	35 902		2	36 240		2	36 645			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	35 902		2	36 240		2	36 645			
Gamagara	All Direct service pharmacies	16 501	4	4 125	16 656	4	4 164	16 842	4	4 210		4	4 210
	Community pharmacies		4	4 125		4	4 164		4	4 210			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Kalahari	All Direct service pharmacies	6 360	0	-	6 420	0	-	6 492	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

Table D.2.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008....continued

		2006				2007				2008			
KGLAGADI District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Moshaweng	All Direct service pharmacies	85 788	0	-	86 595	0	-	87 561	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
NAMAKWA District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Hantam	All Direct service pharmacies	20 211	5	4 042	20 401	5	4 080	20 629	2	10 314		2	10 314
	Community pharmacies		1	20 211		1	20 401		1	20 629		1	20 629
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		4	5 053		4	5 100		1	20 629		1	20 629
Kamiesberg	All Direct service pharmacies	10 976	1	10 976	11 079	1	11 079	11 202	1	11 202		1	11 202
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		1	10 976		1	11 079		1	11 202		1	11 202
Karoo Hoogland	All Direct service pharmacies	10 716	3	3 572	10 816	3	3 605	10 937	0	-		0	-
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		3	3 572		3	3 605		0	-		0	-

Table D.2.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008....continued

NAMA KWA		2006			2007			2008		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Khai-Ma	All Direct service pharmacies	11 576	0	-	11 685	0	-	11 816	0	-
	Community pharmacies		0	-		0	-			
	Private institutional pharmacies		0	-		0	-			
	Public institutional pharmacies		0	-		0	-			
Nama Khoi	All Direct service pharmacies	45 627	5	9 125	46 056	5	9 211	46 570	4	11 643
	Community pharmacies		2	22 814		2	23 028		2	23 285
	Private institutional pharmacies		1	45 627		1	46 056		1	46 570
	Public institutional pharmacies		2	22 814		2	23 028		1	46 570
Namakwa	All Direct service pharmacies	830	0	-	838	0	-	847	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Richterveld	All Direct service pharmacies	10 333	3	3 444	10 430	3	3 477	10 547	2	5 273
	Community pharmacies		2	5 167		2	5 215		2	5 273
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	10 333		1	10 430		0	-

Table D.2.8: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008...continued

PIXLEY KA SEME District Municipality		2006			2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Emthanjeni	All Direct service pharmacies	36 278	5	7 256	36 619	5	7 324	37 028	5	7 406
	Community pharmacies		2	18 139		2	18 310		2	18 514
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		3	12 093		3	12 206		3	12 343
Kareeberg	All Direct service pharmacies	9 678	2	4 839	9 769	2	4 885	9 878	2	4 939
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	4 839		2	4 885		2	4 393
Pixley ka Seme	All Direct service pharmacies	3 254	0	-	3 284	0	-	3 321	0	-
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-
Renosterberg	All Direct service pharmacies	9 252	2	4 626	9 339	3	3 113	9 443	3	3 148
	Community pharmacies		0	-		1	9 339		1	9 443
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	4 626		2	4 669		2	4 722

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008...continued

PIXLEY KA SEME District Municipality...continued		2006			2007			2008		
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Siyancuma	All Direct service pharmacies	36 536	3	12 179	36 880	3	12 293	37 292	3	12 431
	Community pharmacies		1	36 536		1	36 880		1	37 292
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	18 268		2	18 440		2	18 646
Siyathemba	All Direct service pharmacies	17 873	2	8 937	18 041	2	9 021	18 243	2	9 121
	Community pharmacies		1	17 873		1	18 041		1	18 243
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	17 873		1	18 041		1	18 243
Thembelihle	All Direct service pharmacies	14 269	2	7 135	14 403	2	7 201	14 564	2	7 282
	Community pharmacies		1	14 269		1	14 403		1	14 564
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	14 269		1	14 403		1	14 564
Ubuntu	All Direct service pharmacies	16 695	1	16 695	16 852	1	16 852	17 040	1	17 040
	Community pharmacies		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	16 695		1	16 852		1	17 040
Umsombomvu	All Direct service pharmacies	24 114	5	4 823	24 341	5	4 868	24 613	5	4 923
	Community pharmacies		3	8 038		3	8 113		3	8 204
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	12 057		2	12 171		2	12 306

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008...continued

SIYANDA District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
!Kheis	All Direct service pharmacies	16 347	1	16 347	16 500	1	16 500	16 684	1	16 500	16 684	1	16 684
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	16 347		1	16 500		1	16 684			
Kai !Garib	All Direct service pharmacies	58 841	5	11 768	59 394	5	11 879	60 058	5	11 879	60 058	5	12 012
	Community pharmacies		2	29 421		2	29 697		2	30 029			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		3	19 614		3	19 798		3	20 019			
Kgatelopele	All Direct service pharmacies	15 750	3	5 250	15 898	3	5 299	16 075	3	5 299	16 075	3	5 358
	Community pharmacies		2	7 875		2	7 949		2	8 038			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	15 750		1	15 898		1	16 075			
Mier	All Direct service pharmacies	6 970	2	3 485	7 036	2	3 518	7 114	2	3 518	7 114	2	3 557
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	3 485		2	3 518		2	3 557			

Table D.2.7: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the NORTHERN CAPE PROVINCE, 2006-2008....continued

SIYANDA District Municipality...continued		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Siyanda	All Direct service pharmacies	9 281	0	-	9 369	0	-	9 473	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Tsantsabane	All Direct service pharmacies	31 629	4	7 907	31 927	5	6 385	32 283	5	6 457		5	6 457
	Community pharmacies		2	15 815		3	10 642		3	10 761			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	15 815		2	15 963		2	16 142			
Khara Hais	All Direct service pharmacies	75 257	8	9 407	75 965	9	8 441	76 813	9	8 535		9	8 535
	Community pharmacies		6	12 543		7	10 852		6	12 802			
	Private institutional pharmacies		1	75 257		1	75 965		1	76 813			
	Public institutional pharmacies		1	75 257		1	75 965		2	38 406			

D.2.9

WESTERN CAPE PROVINCE

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the patient within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008

CAPE WINELANDS District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Breede River/Winelands	All Direct service pharmacies	91 619	7	13 089	92 481	7	13 212	94 384	7	13 484		7	13 484
	Community pharmacies		5	18 324		5	18 496		5	18 877			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	45 810		2	46 240		2	47 193			
Breede Valley	All Direct service pharmacies	164 650	17	9 685	166 197	17	9 776	169 623	18	9 424		18	9 424
	Community pharmacies		13	12 665		13	12 784		15	11 308			
	Private institutional pharmacies		1	164 650		1	166 197		0	-			
	Public institutional pharmacies		3	54 883		3	55 399		3	56 541			
Cape Winelands	All Direct service pharmacies	7 333	0	-	7 402	0	-	7 555	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Drakenstein	All Direct service pharmacies	219 201	18	12 178	221 261	18	12 292	225 822	17	13 284		17	13 284
	Community pharmacies		14	15 657		13	17 020		12	18 819			
	Private institutional pharmacies		1	219 201		1	221 261		1	225 822			
	Public institutional pharmacies		3	73 067		4	55 315		4	56 456			

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008...continued

CAPE WINELANDS			2006			2007			2008		
District Municipality...continued											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Population per pharmacy
Stellenbosch	All Direct service pharmacies	132 705	15	8 847	133 952	15	8 930	136 713	14	9 765	9 765
	Community pharmacies		12	11 059		12	11 163		11	12 428	
	Private institutional pharmacies		1	132 705		1	133 952		1	136 713	
	Public institutional pharmacies		2	66 352		2	66 976		2	68 357	
Witzenberg	All Direct service pharmacies	94 235	8	11 779	95 121	8	11 890	97 082	8	12 135	12 135
	Community pharmacies		5	18 847		5	19 024		5	19 416	
	Private institutional pharmacies		1	94 235		1	95 121		1	97 082	
	Public institutional pharmacies		2	47 118		2	47 561		2	48 541	
CENTRAL KAROO											
District Municipality											
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Population per pharmacy
Beaufort West	All Direct service pharmacies	41 837	4	10 459	42 231	4	10 558	43 101	4	10 775	10 775
	Community pharmacies		2	20 919		2	21 115		2	21 551	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		2	20 919		2	21 115		2	21 551	
Central Karoo	All Direct service pharmacies	6 960	0	-	7 026	0	-	7 170	0	-	-
	Community pharmacies		0	-		0	-		0	-	
	Private institutional pharmacies		0	-		0	-		0	-	
	Public institutional pharmacies		0	-		0	-		0	-	

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008....continued

		2006				2007				2008			
CENTRAL KAROO District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Laingsburg	All Direct service pharmacies	7 522	0	-	7 592	0	-	7 749	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Prince Albert	All Direct service pharmacies	11 851	1	11 851	11 963	2	5 981	12 209	2	6 105		2	6 105
	Community pharmacies		1	11 851		1	11 963		1	12 209		1	12 209
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		1	11 963		1	12 209		1	12 209
CITY OF CAPE TOWN District Municipality													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
City of Cape Town	All Direct service pharmacies	3 262 178	402	8 115	3 292 842	417	7 897	3 360 718	415	8 098		415	8 098
	Community pharmacies		312	10 456		324	10 163		321	10 470		321	10 470
	Private institutional pharmacies		23	141 834		26	126 648		27	124 471		27	124 471
	Public institutional pharmacies		67	48 689		67	49 149		67	50 160		67	50 160

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008...continued

EDEN District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Bitou	All Direct service pharmacies	32 934	8	4 117	33 243	9	3 694	33 928	9	3 770	33 928	9	3 770
	Community pharmacies		6	5 489		7	4 749		7	4 847		7	4 847
	Private institutional pharmacies		1	32 934		1	33 243		1	33 928		1	33 928
	Public institutional pharmacies		1	32 934		1	33 243		1	33 928		1	33 928
Eden	All Direct service pharmacies	16 454	0	-	16 608	0	-	16 951	0	-	16 951	0	-
	Community pharmacies		0	-		0	-		0	-		0	-
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		0	-		0	-		0	-		0	-
George	All Direct service pharmacies	152 660	26	5 871	154 095	27	5 707	157 271	26	6 049	157 271	26	6 049
	Community pharmacies		20	7 633		18	8 561		17	9 251		17	9 251
	Private institutional pharmacies		1	152 660		1	154 095		1	157 271		1	157 271
	Public institutional pharmacies		5	30 532		8	19 262		8	19 659		8	19 659
Hessequa	All Direct service pharmacies	49 758	8	6 220	50 226	8	6 278	51 261	8	6 408	51 261	8	6 408
	Community pharmacies		5	9 952		5	10 045		5	10 252		5	10 252
	Private institutional pharmacies		0	-		0	-		0	-		0	-
	Public institutional pharmacies		3	16 586		3	16 742		3	17 087		3	17 087

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008...continued

EDEN District Municipality...continued		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Kannaland	All Direct service pharmacies	27 029	3	9010	27 283	3	9 094	27 845	2	13 923	27 845	2	13 923
	Community pharmacies		2	13 514		2	13 641		1	27 845			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	27 029		1	27 283		1	27 845			
Knysna	All Direct service pharmacies	58 043	12	4 837	58 589	11	5 326	59 797	11	5 436	59 797	11	5 436
	Community pharmacies		10	5 804		9	6 510		9	6 644			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		2	29 022		2	29 294		2	29 898			
Mossel Bay	All Direct service pharmacies	80 601	16	5 038	81 359	16	5 085	83 036	16	5 190	83 036	16	5 190
	Community pharmacies		12	6 717		12	6 780		12	6 920			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		4	20 150		4	20 340		4	20 759			
Oudtshoorn	All Direct service pharmacies	95 481	5	19 096	96 379	8	12 047	98 365	8	12 296	98 365	8	12 296
	Community pharmacies		3	31 827		5	19 276		5	19 673			
	Private institutional pharmacies		1	95 481		1	96 379		1	98 365			
	Public institutional pharmacies		1	95 481		2	48 489		2	49 183			

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008...continued

OVERBERG District Municipality		2006				2007				2008			
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Cape Agulhas	All Direct service pharmacies	29 531	3	9 844	29 808	3	9 936	30 423	4	7 606		4	7 606
	Community pharmacies		2	14 765		2	14 904		2	15 211			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	29 531		1	29 808		2	15 211			
Overberg	All Direct service pharmacies	283	0	-	286	0	-	292	0	-		0	-
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			
Overstrand	All Direct service pharmacies	62 842	11	5 713	63 433	12	5 286	64 740	12	5 395		12	5 395
	Community pharmacies		9	6 982		10	6 343		10	6 474			
	Private institutional pharmacies		1	62 842		1	63 433		1	64 740			
	Public institutional pharmacies		1	62 842		1	63 433		1	64 740			
Swellendam	All Direct service pharmacies	31 653	3	10 551	31 950	3	10 650	32 609	4	8 152		4	8 152
	Community pharmacies		2	15 826		2	15 975		2	16 304			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	31 653		1	31 950		2	16 304			

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008...continued

OVERBERG		2006			2007			2008		
District Municipality...continued										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Theewaterskloof	All Direct service pharmacies	105 168	8	13 146	106 156	8	13 270	108 344	8	13 543
	Community pharmacies		6	17 528		6	17 693		6	18 057
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	52 584		2	53 078		2	54 172
WEST COAST										
District Municipality										
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Bergrivier	All Direct service pharmacies	52 253	4	13 063	52 745	5	10 549	53 832	5	10 766
	Community pharmacies		3	17 418		3	17 582		3	17 944
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	52 253		2	26 372		2	26 916
Cederberg	All Direct service pharmacies	44 341	5	8 868	44 757	5	8 951	45 680	5	9 136
	Community pharmacies		3	14 780		3	14 919		3	15 227
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		2	22 170		2	22 379		2	22 840
Matzikama	All Direct service pharmacies	56 609	4	14 152	57 141	4	14 285	58 319	4	14 580
	Community pharmacies		3	18 870		3	19 047		3	19 440
	Private institutional pharmacies		0	-		0	-		0	-
	Public institutional pharmacies		1	56 609		1	57 141		1	58 319

Table D.2.9: Availability and distribution of the registered pharmaceutical structures providing services directly to the public within the local municipalities of the WESTERN CAPE PROVINCE, 2006-2008....continued

		2006				2007				2008			
WEST COAST District Municipality...continued													
Local Municipality	Pharmacy category	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy	Total population	Total pharmacies	Population per pharmacy
Saldanha Bay	All Direct service pharmacies	79 426	9	8 825	80 173	10	8 017	81 826	9	9 091			
	Community pharmacies		7	11 347		8	10 022		7	11 689			
	Private institutional pharmacies		1	79 426		1	80 173		1	81 826			
	Public institutional pharmacies		1	79 426		1	80 173		1	81 826			
Swartland	All Direct service pharmacies	81 321	5	16 264	82 085	7	11 726	83 777	7	11 968			
	Community pharmacies		4	20 330		5	16 417		5	16 755			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		1	81 321		2	41 043		2	41 889			
West Coast	All Direct service pharmacies	4 798	0	-	4 843	0	-	4 942	0	-			
	Community pharmacies		0	-		0	-		0	-			
	Private institutional pharmacies		0	-		0	-		0	-			
	Public institutional pharmacies		0	-		0	-		0	-			

PART E

LOCAL MUNICIPALITY LEVEL RESULTS:

EVALUATION OF THE AVAILABILITY AND
DISTRIBUTION OF COMMUNITY PHARMACIES IN
SOUTH AFRICA,
2003 and 2008

E.1: EASTERN CAPE PROVINCE

Table E.1.1: Evaluation of the availability of community pharmacies in EASTERN CAPE PROVINCE, 2003

ALFRED NZO district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Umzimkhulu	9.6 (1.0)	5.2 (1.0)	0.3 (0.1)	1 (0.4)	1	2 ⁺
Umzimvubu	20.8 (2.1)	11.3 (2.3)	0.7 (0.2)	1 (0.4)	0	5
Total (Alfred Nzo district council)					1	7
AMATOLE district council						
Amahlathi	7.7 (0.8)	4.2 (0.8)	3.3 (1.0)	1 (0.4)	1	3
Buffalo city	38.8 (3.9)	21.0 (4.2)	16.4 (4.9)	31 (12.4)	31	25 ⁺
Great Kei	2.5 (0.3)	1.3 (0.3)	1.0 (0.4)	1 (0.4)	0	1 ⁺
Mbashe	14.0 (1.4)	7.6 (1.5)	5.9 (1.8)	1 (0.4)	1	5 ⁺
Mnquma	15.9 (1.6)	8.6 (1.7)	6.7 (2.0)	2 (0.8)	2	6 ⁺
Ngqushwa	4.7 (0.5)	2.5 (0.5)	2.0 (0.6)	1 (0.4)	0	2
Nkokobe	7.1 (0.7)	3.9 (0.8)	3.0 (0.9)	2 (0.8)	2	3 ⁺
Nxuba	1.4 (0.1)	0.7 (0.1)	0.6 (0.2)	2 (0.8)	2	1 ⁺
Total (Amatole district council)					39	46
CACADU district council						
Abeerden Plain	0.4 (0.0)	0.2 (0.0)	0.4 (0.1)	1 (0.4)	0	0 ⁺
Baviaans	0.8 (0.1)	0.5 (0.1)	0.9 (0.3)	1 (0.4)	0	1 ⁺
Blue Crane Route	1.9 (0.2)	1.0 (0.2)	2.1 (0.6)	2 (0.8)	2	2 ⁺
Camdeboo	2.5 (0.3)	1.3 (0.3)	2.6 (0.8)	3 (1.2)	3	3 ⁺
Ikwezi	0.6 (0.1)	0.3 (0.1)	0.6 (0.2)	1 (0.4)	0	3 ⁺
Kou Kamma	1.9 (0.2)	1.0 (0.2)	2.0 (0.6)	1 (0.4)	1	1 ⁺
Kouga	3.9 (0.4)	2.1 (0.8)	4.2 (1.3)	8 (3.2)	8	6 ⁺
Makana	4.1 (0.4)	2.2 (0.4)	4.4 (1.3)	3 (1.2)	3	3 ⁺

Table E.1.1: Evaluation of the availability of community pharmacies in EASTERN CAPE PROVINCE, 2003 (continued)

CACADU district council...continued						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Ndlambe	3.1 (0.3)	1.7 (0.3)	3.3 (1.0)	4 (1.6)	4	3 ⁺
Sunday's River Valley	2.3 (0.2)	1.2 (0.2)	2.5 (0.8)	2 (0.8)	2	2
Total (Cacadu district council)					23	24
CHRIS HANI district council						
Emalahleni	3.1 (0.3)	1.7 (0.3)	1.2 (0.4)	1 (0.4)	0	1 ⁺
Engcobo	8.2 (0.8)	4.4 (0.9)	3.1 (0.9)	2 (0.8)	2	3 ⁺
Inkwanca	1.1 (0.1)	0.6 (0.1)	0.4 (0.1)	1 (0.4)	1	1 ⁻
Intsika Yethu	10.7 (1.1)	5.8 (1.2)	4.1 (1.2)	1 (0.4)	1	4 ⁻
Inxuba Yethemba	3.3 (0.3)	1.8 (0.4)	1.3 (0.4)	4 (1.6)	4	3 ⁻
Lukanji	10.2 (1.0)	5.5 (1.1)	3.9 (1.2)	7 (2.8)	7	6 ⁺
Mountain Zebra National Park	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Sakhisizwe	3.0 (0.3)	1.6 (0.3)	1.1 (0.3)	1 (0.4)	1	1 ⁺
Tsolwana	1.8 (0.2)	1.0 (0.2)	0.7 (0.2)	1 (0.4)	1	1
Total (Chris Hani District council)					17	20
Nelson Mandela metropolitan						
Local Municipality	National (30%)	Provincial (30%)	Municipality (40%)	Total		
				Existing	Required	
Neslon Mandela	55.6 (16.7)	30.2 (9.1)	94 (37.6)	94	63 ⁺	
O.R. TAMBO district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
King Sabata Dalindyebo	22.9 (2.3)	12.4 (2.5)	2.5 (0.8)	5 (2.0)	5	8 ⁻
Mbizana	13.6 (1.4)	7.4 (1.5)	1.5 (0.5)	1 (0.4)	1	4 ⁻
Mhlontlo	10.9 (1.1)	5.9 (1.2)	1.2 (0.4)	1 (0.4)	0	3 ⁺

Table E.1.1: Evaluation of the availability of community pharmacies in EASTERN CAPE PROVINCE, 2003 (continued)

O.R. TAMBO district council...continued						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Ntabankulu	7.5 (0.8)	4.1 (0.8)	0.8 (0.2)	1 (0.4)	0	2 ⁺
Nyandeni	15.5 (1.6)	8.4 (1.7)	1.7 (0.3)	1 (0.4)	0	4
Port St Johns	8.1 (0.8)	4.4 (0.9)	0.9 (0.3)	1 (0.4)	1	2 ⁺
Qaukeni	14.1 (1.4)	7.7 (1.5)	1.5 (0.5)	3 (1.2)	3	5 ⁻
Total (O.R. Tambo district council)					10	28
UMKHAHLAMBA district council						
Elundini	7.6 (0.8)	4.1 (0.8)	3.6 (1.1)	3 (1.2)	3	4 ⁻
Gariep	1.7 (0.2)	0.9 (0.2)	0.8 (0.2)	2 (0.8)	2	1 ⁺
Maletswai	2.1 (0.2)	1.1 (0.2)	1.0 (0.3)	3 (1.2)	3	2 ⁻
Senqu	7.5 (0.8)	4.1 (0.8)	3.6 (1.1)	1 (0.4)	1	3 ⁺
Total (Umkhahlamba district council)					9	10

Table E.1.2: Evaluation of the availability of community pharmacies in EASTERN CAPE PROVINCE, 2008

ALFRED NZO district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Matatiele	11.2 (1.1)	5.9 (1.2)	1.0 (0.3)	2.0 (0.8)	2	3 ⁺
Umzumvubu	22.1 (2.2)	11.8 (2.4)	2.1 (0.6)	1 (0.4)	1	6 ⁻
TOTAL (Alfred Nzo district council)					3	9
AMATOLE district council						
Amahlathi	8.1 (0.8)	4.4 (0.9)	3.8 (1.14)	1 (0.4)	1	3 ⁺
Buffalo city	41.2 (4.1)	22.0 (4.4)	19.4 (5.8)	35 (14.0)	35	28 ⁺
Great Kei	2.6 (0.3)	1.4 (0.3)	1.2 (0.4)	1 (0.4)	0	1 ⁺
Mbashe	14.9 (1.5)	7.9 (1.6)	7.0 (2.1)	2 (0.8)	2	6
Mnquma	16.9 (1.7)	9.0 (1.8)	7.9 (2.4)	4 (1.6)	4	7 ⁺
Ngqushwa	4.9 (0.5)	2.6 (0.5)	2.3 (0.7)	1 (0.4)	0	2 ⁺
Nkokobe	7.6 (0.8)	4.0 (0.8)	3.6 (1.1)	2 (0.8)	2	3 ⁺
Nxuba	1.5 (0.2)	0.8 (0.2)	0.7 (0.2)	2 (0.8)	2	1 ⁺
TOTAL (Amatole district council)					46	51
CACADU district council						
Baviaans	0.9 (0.1)	0.5 (0.1)	0.9 (0.3)	1 (0.4)	0	1 ⁻
Blue Crane Route	2.1 (0.2)	1.1 (0.2)	2.1 (0.6)	2 (0.8)	2	2 ⁻
Cacadu	0.4 (0.0)	0.2 (0.0)	0.4 (0.1)	1 (0.4)	0	0 ⁺
Camdeboo	2.6 (0.3)	1.4 (0.3)	2.6 (0.8)	2 (0.8)	2	2 ⁺
Ikwezi	0.6 (0.1)	0.3 (0.1)	0.6 (0.2)	1 (0.4)	0	1 ⁻
Kou Kamma	2.0 (0.2)	1.1 (0.2)	2.0 (0.6)	1 (0.4)	1	1 ⁺
Kouga	4.2 (0.4)	2.2 (0.4)	4.2 (1.30)	8 (3.2)	8	5 ⁺
Makana	4.4 (0.4)	2.3 (0.5)	4.4 (1.3)	4 (1.6)	4	4 ⁻
Ndlambe	3.3 (0.3)	1.7 (0.3)	3.3 (1.0)	4 (1.6)	4	3 ⁺

Table E.1.2: Evaluation of the availability of community pharmacies in EASTERN CAPE PROVINCE, 2008 (Continued)

CACADU district council continued						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Sunday's River Valley	2.4 (0.2)	1.3 (0.3)	2.5 (0.80)	2 (0.8)	2	2 ⁺
TOTAL (Cacadu district council)					23	20
CHRIS HANI district council						
Chris Hani	0.0 (0.00)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Emalahleni	6.8 (0.7)	3.6 (0.70)	2.1 (0.6)	1 (0.4)	0	2 ⁺
Engcobo	8.7 (0.9)	4.6 (0.9)	2.7 (0.8)	2 (0.8)	2	3 ⁺
Inkwanca	1.2 (0.1)	0.6 (0.1)	0.4 (0.1)	1 (0.4)	0	1 ⁻
Intsika Yethu	11.4 (1.1)	6.1 (1.2)	3.6 (1.1)	1 (0.4)	1	4 ⁻
Inxuba Yethemba	3.5 (0.4)	1.9 (0.4)	1.1 (0.3)	4 (1.6)	4	3 ⁻
Lukanji	10.8 (1.1)	5.8 (1.2)	3.4 (1.0)	6 (2.4)	6	6 ⁻
Sakhisizwe	3.2 (0.3)	1.7 (0.3)	1.0 (0.4)	1 (0.4)	1	1 ⁺
Tsolwana	1.9 (0.2)	1.0 (0.2)	0.6 (0.2)	1 (0.4)	1	1
Total (Chris Hani District council)					15	21
NELSON MANDELA metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)		Existing	Required
Neslon Mandela	59.1 (17.7)	31.5 (9.5)	94 (37.6)		94	65 ⁻
O.R. TAMBO district council						
	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Existing	Required
King Sabata Dalindyebo	24.4 (2.4)	13.0 (2.6)	3.5 (1.1)	8 (3.2)	8	9 ⁺
Mbizana	14.4 (1.4)	7.7 (1.5)	2.0 (0.6)	1 (0.4)	1	4 ⁻
Mhlontlo	11.6 (1.2)	6.2 (1.2)	1.6 (0.5)	1 (0.4)	0	3 ⁺
Ntabankulu	8.0 (0.8)	4.3 (0.9)	1.1 (0.3)	1 (0.4)	0	2 ⁺
Nyandeni	16.5 (1.7)	8.8 (1.8)	2.3 (0.7)	1 (0.4)	0	5 ⁻
Port St Johns	8.6 (0.9)	4.6 (0.9)	1.2 (0.4)	1 (0.4)	1	3 ⁻

Table E.1.2: Evaluation of the availability of community pharmacies in EASTERN CAPE PROVINCE, 2008 (Continued)

O.R. TAMBO district council...continued						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Qaukeni	15.0 (1.5)	8.0 (1.6)	2.1 (0.6)	4 (1.6)	4	5 ⁺
Total (O.R. Tambo district council)					14	31
UMKHAHLAMBA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Elundini	8.1 (0.8)	4.3 (0.9)	2.8 (0.8)	1 (0.4)	1	3 ⁻
Gariep	1.8 (0.2)	1.0 (0.2)	0.6 (0.2)	1 (0.4)	1	1
Maletswai	2.2 (0.2)	1.2 (0.2)	0.8 (0.2)	3 (1.2)	3	2 ⁺
Senqu	7.9 (0.8)	4.2 (0.8)	2.7 (0.8)	2 (0.8)	2	3 ⁺
Total (Umkhahlamba district council)					7	9

E.2: FREE STATE PROVINCE

Table E.2.1: Evaluation of the availability of community pharmacies in FREE STATE PROVINCE, 2003

NORTHERN FREE STATE district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Mafube	3.2 (0.3)	2.9 (0.6)	3.8 (1.1)	3 (1.2)	3	3 ⁺
Metsimaholo	6.4 (0.6)	5.7 (1.1)	7.6 (2.3)	9 (3.6)	9	8 ⁻
Moghaka	9.3 (0.9)	8.3 (1.7)	10.9 (3.3)	9 (3.6)	9	9 ⁺
Ngwathe	6.6 (0.7)	5.9 (1.2)	7.7 (2.3)	9 (3.6)	9	8 ⁻
Total (Northern Free State district council)					30	28
LEJWELEPUTSWA district council						
Masilonyana	3.6 (0.4)	3.2 (0.6)	3.3 (1.0)	3 (1.2)	3	3 ⁺
Matjhabeng	22.7 (2.3)	20.2 (4.0)	21.1 (6.3)	25 (10.0)	25	23
Nala	5.5 (0.6)	4.9 (1.0)	5.1 (1.5)	4 (1.6)	4	5 ⁻
Tokologo	1.8 (0.2)	1.6 (0.3)	1.7 (0.5)	1 (0.4)	0	1 ⁺
Tswelopele	3.0 (0.3)	2.7 (0.5)	2.8 (0.8)	2 (0.8)	2	2 ⁺
Total (Lejweleputswa district council)					34	34
MOTHEO district council						
Mangaung	35.8 (3.6)	31.9 (6.4)	37.2 (11.2)	40 (16.0)	40	37 ⁺
Mantsopa	3.1 (0.3)	2.7 (0.5)	3.2 (1.0)	2 (0.8)	2	3 ⁻
Naledi	1.5 (0.2)	1.4 (0.3)	1.6 (0.5)	1 (0.4)	0	1 ⁺
Total (Motheo district council)					42	41
THABO MOFUTSANYANE district council						
Dihlabeng	7.2 (0.7)	6.4 (1.3)	4.1 (1.2)	5 (2.0)	5	5 ⁺
Golden Gates Highland national park	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Maluti a Phofung	20.0 (2.0)	17.9 (3.6)	11.4 (3.4)	7 (2.8)	7	12
Nketoana	3.4 (0.3)	3.1 (0.6)	2.0 (0.6)	3 (1.2)	3	3 ⁻
Phumelela	2.8 (0.3)	2.5 (0.5)	1.6 (0.5)	4 (1.6)	4	3 ⁻
Setsoto	6.8 (0.7)	6.1 (1.2)	3.9 (1.2)	4 (1.6)	4	5
Total (Thabo Mofutsanyane district council)					23	28

Table E.2.1: Evaluation of the availability of community pharmacies in FREE STATE PROVINCE, 2003 (continued)

XHARIEP district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Kopanong	3.1 (0.3)	2.8 (0.6)	2.0 (0.6)	1 (0.4)	1	2
Letsemeng	2.3 (0.2)	2.1 (0.4)	1.6 (0.5)	2 (0.8)	2	2
Mohokare	2.0 (0.2)	1.8 (0.4)	1.3 (0.4)	2 (0.8)	2	2
Total (Xhariep district council)					5	6

Table E.2.2: Evaluation of the availability of community pharmacies in FREE STATE PROVINCE, 2008

FEZILE DABI district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Mafube	3.4 (0.3)	3.0 (0.6)	4.0 (1.2)	2 (0.8)	2	3 ⁻
Metsimaholo	6.9 (0.7)	6.0 (1.2)	8.1 (2.4)	10 (4.0)	10	8 ⁻
Moqhaka	10.0 (1.0)	8.7 (1.7)	11.7 (3.5)	10 (4.0)	10	10 ⁺
Ngwathe	7.1 (0.7)	6.2 (1.20)	8.3 (2.50)	10 (4.0)	10	8 ⁺
Total (Fezile Dabi district council)					32	29
LEJWELEPUTSWA district council						
Masilonyana	3.8 (0.4)	3.4 (0.7)	3.3 (1.0)	3 (1.2)	3	3 ⁺
Matjhabeng	24.3 (2.4)	21.3 (4.2)	21.7 (6.5)	27 (10.8)	27	24 ⁻
Nala	5.9 (0.6)	5.1 (1.0)	5.2 (1.6)	4 (1.6)	4	5 ⁻
Tokologo	1.9 (0.2)	1.7 (0.3)	1.7 (0.5)	1 (0.4)	0	1 ⁺
Tswelopele	3.2 (0.3)	2.8 (0.6)	2.9 (0.9)	1 (0.4)	1	2 ⁺
Total (Lejweleputswa district council)					35	35
MOTHEO district council						
Mangaung	38.5 (3.9)	33.6 (6.7)	41.7 (12.5)	45 (18)	45	41 ⁺
Mantsopa	3.3 (0.3)	2.9 (0.6)	3.6 (1.1)	2 (0.8)	2	3 ⁻
Naledi	1.6 (0.2)	1.4 (0.3)	1.8 (0.5)	1 (0.4)	0	1 ⁺
Total (Motho district council)					47	45
THABO MOFUTSANYANE district council						
Dihlabeng	7.7 (0.8)	6.7 (1.3)	4.1 (1.2)	6 (2.4)	6	6 ⁻
Maluti a Phofung	21.5 (2.2)	18.8 (3.8)	11.4 (3.4)	7 (2.8)	7	12 ⁺
Nketoana	3.7 (0.4)	3.2 (0.6)	2.0 (0.6)	2 (0.8)	2	2 ⁺
Phumelela	3.0 (0.3)	2.7 (0.5)	1.6 (0.5)	4 (1.6)	4	3 ⁻
Setsotho	7.3 (0.7)	6.4 (1.3)	3.9 (1.2)	4 (1.6)	4	5 ⁻
Thabo Mofutsanyane	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0	0 ⁺
Total (Thabo Mofutsanyane district council)					23	28

Table E.2.2: Evaluation of the availability of community pharmacies in FREE STATE PROVINCE, 2008 (continued)

XHARIEP district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Kopanong	3.3 (0.3)	2.9 (0.6)	1.7 (0.5)	1 (0.4)	1	2
Letsemeng	2.6 (0.3)	2.2 (0.4)	1.3 (0.4)	1 (0.4)	1	1 ⁺
Mohokare	2.2 (0.2)	1.9 (0.4)	1.1 (0.3)	2 (0.8)	2	2 ⁺
Total (Xhariep district council)					4	5

E.3: GAUTENG PROVINCE

Table E.3.1: Evaluation of the availability of community pharmacies in GAUTENG PROVINCE, 2003

CITY OF JOHANNESBURG metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)		Existing	Required
City of Johannesburg	185.7 (55.7)	305.1 (61.0)	301 (120.4)		301	237⁺
CITY OF TSHWANE metropolitan						
City of Tshwane	87.9 (88.2)	144.4 (28.9)	238 (95.2)		238	212⁺
EKURHULENI metropolitan						
Ekurhuleni	142.8 (42.8)	234.6 (70.4)	224 (89.6)		224	203⁻
METSWEDING district council						
	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Existing	Required
Kungwini	4.3 (0.4)	7.0 (1.4)	5.3 (1.6)	7 (2.8)	7	6 ⁺
Nokeng tsa taemane	3.0 (0.3)	5.0 (1.0)	3.7 (1.1)	2 (0.8)	2	3 ⁺
Total (Metsweding district council)					9	9
SEDIBENG district council						
Emfuleni	37.9 (3.8)	62.3 (12.5)	45.6 (13.7)	40 (16.0)	40	46
Lesedi	4.1 (0.4)	6.8 (1.4)	5.0 (1.5)	8 (3.2)	8	6 ⁺
Midvaal	3.7 (0.4)	6.1 (1.2)	4.5 (1.4)	7 (2.8)	7	6 ⁻
Total (Sedibeng district council)					55	58
WEST RAND district council						
Merafong city	8.6 (0.9)	14.1 (2.8)	11.6 (3.5)	10 (4.0)	10	11 ⁺
Mogale city	16.7 (1.7)	27.4 (5.5)	22.5 (6.8)	28 (8.4)	28	22 ⁺
Randfontein	7.4 (0.7)	12.2 (2.4)	10.0 (3.0)	11 (4.4)	11	10 ⁺
West Rand	0.3 (0.0)	0.5 (0.1)	0.4 (0.1)	1 (0.4)	0	1 ⁻
Westonaria	6.3 (0.6)	10.3 (2.1)	8.5 (2.6)	4 (1.6)	4	7 ⁻
Total (West Rand district council)					53	51

Table E.3.2: Evaluation of the availability of community pharmacies in GAUTENG PROVINCE, 2008

CITY OF JOHANNESBURG metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)	Existing	Required	
City of Johannesburg	217.4 (65.2)	349.3 (104.8)	365 (146)	365	315⁺	
CITY OF TSHWANE metropolitan						
City of Tshwane	134 (40.2)	215 (64.5)	275 (110)	275	215⁺	
EKURHULENI metropolitan						
Ekurhuleni	167 (50.1)	269 (80.7)	244 (97.6)	244	228⁺	
METSWEDING district council						
	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Existing	Required
Kungwini	7 (0.7)	11.6 (2.3)	6.0 (1.8)	7 (2.8)	7	8 ⁺
Nokeng tsa taemane	3.5 (0.4)	5.7 (1.1)	3.0 (2.7)	2 (0.8)	2	5
Total (Metsweding district council)					9	13
SEDIBENG district council						
Emfuleni	44 (4.4)	71 (14.2)	47.2 (14.2)	43 (17.2)	43	50
Lesedi	4.8 (0.5)	7.7 (1.5)	5.1 (1.5)	6 (2.4)	6	6 ⁺
Midvaal	4.4 (0.4)	7 (1.4)	4.6 (1.4)	8 (3.2)	8	6 ⁺
Total (Sedibeng district council)					57	62
WEST RAND district council						
Mogale city	19.5 (2.0)	31.4 (6.3)	23.9 (7.2)	28 (11.2)	28	27 ⁺
Randfontein	8.7 (0.9)	13.9 (2.8)	10.6 (3.2)	13 (5.2)	13	12 ⁺
West Rand	0.4 (0.0)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁺
Westonaria	7.4 (0.7)	11.8 (2.4)	9.1 (2.7)	3 (1.2)	3	7
Total (West Rand district council)					44	47

E.4: KWAZULU-NATAL PROVINCE

Table E.4.1: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2003

ETHEKWINI metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)	Existing	Required	
EThekwini	172.8 (51.8)	151.5 (45.5)	266 (106.4)	266	204 ⁺	
AMAJUBA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Dannhauser	5.7 (0.6)	5.0 (1.0)	3.3 (1.0)	1 (0.4)	1	3
Newcastle	18.6 (1.9)	16.3 (3.3)	10.7 (3.2)	13 (5.2)	13	14 ⁺
Utrecht	4.0 (0.4)	1.6 (0.3)	1.0 (0.3)	1 (0.4)	1	1 ⁺
Total (Amajuba district council)					15	18
SISONKE district council						
Greater Kokstad	3.2 (0.3)	2.8 (0.6)	1.5 (0.5)	2 (0.8)	2	2 ⁺
Ingwe	6.0 (0.6)	5.3 (1.1)	2.9 (0.9)	1 (0.4)	0	3
Kwa Sani	0.9 (0.1)	0.8 (0.2)	0.4 (0.1)	1 (0.4)	1	1 ⁺
Matatiele	0.9 (0.1)	0.8 (0.2)	0.4 (0.1)	4 (1.6)	4	2
Ubuhlezwe	5.7 (0.6)	5.0 (1.0)	2.7 (0.8)	1 (0.4)	1	3 ⁺
Total (Sisonke district council)					8	11
UMGUNGUNDLOVU district council						
Highmoor/kamberg park	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Impendle	1.9 (0.2)	1.6 (0.3)	2.3 (0.7)	1 (0.4)	0	2 ⁺
Mkhambathini	3.3 (0.3)	2.9 (0.6)	4.0 (1.2)	2 (0.8)	2	3 ⁺
Mooi Mpofana	2.1 (0.2)	1.8 (0.4)	2.5 (0.8)	1 (0.4)	0	2 ⁺
Msunduzi	30.9 (3.1)	27.1 (5.4)	37.6 (11.3)	50 (20.0)	50	40 ⁺
Richmond	3.5 (0.4)	3.1 (0.6)	4.3 (1.3)	1 (0.4)	1	3 ⁺
uMngeni	4.1 (0.4)	3.6 (0.7)	5.0 (1.5)	8 (3.2)	8	6 ⁺
uMshwathi	6.0 (0.6)	5.3 (1.1)	7.3 (2.2)	2 (0.8)	2	5 ⁺
Total (Umgungundlovu district council)					63	61

Table E.4.1: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2003 (continued)

UGU district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Ezingoleni	3.0 (0.3)	2.7 (0.5)	2.2 (0.7)	1 (0.4)	0	2 ⁻
Hibiscus Coast	12.2 (1.2)	10.7 (2.0)	9.0 (2.7)	22 (8.8)	22	15 ⁻
Umdoni	3.5 (0.4)	3.1 (0.6)	2.6 (0.8)	5 (2.0)	5	4 ⁻
Umzumbe	10.8 (1.1)	9.5 (1.9)	8.0 (2.4)	1 (0.4)	0	6 ⁻
Vulamehlo	4.6 (0.5)	4.1 (0.8)	3.4 (1.0)	1 (0.4)	0	3 ⁻
uMuziwabantu	5.2 (0.5)	4.5 (0.9)	3.8 (1.1)	2 (0.8)	2	3 ⁺
Total (Ugu district council)					29	33
UMKHANYAKUDE district council						
Hlabisa	4.6 (0.5)	4.1 (0.8)	0.7 (0.2)	4 (1.6)	4	3 ⁺
Jozini	10.2 (1.0)	9.0 (1.8)	1.6 (0.5)	1 (0.4)	0	4 ⁻
Mtubatuba	2.0 (0.2)	1.7 (0.3)	0.3 (0.1)	1 (0.4)	0	1
St Lucia Park	0.3 (0.0)	0.2 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
The big five false bay	1.7 (0.2)	1.5 (0.3)	0.3 (0.1)	1 (0.4)	1	1
Umhlabuyalingana	7.9 (0.8)	6.9 (1.4)	1.2 (0.4)	1 (0.4)	0	3
Total (Umkhanyakude district council)					5	12
UMZINYATHI district council						
Endumeni	2.9 (0.3)	2.5 (0.5)	0.6 (0.2)	3 (1.2)	3	2 ⁺
Msinga	9.4 (0.9)	8.2 (1.6)	1.8 (0.5)	1 (0.4)	0	3 ⁺
Nqutu	8.1 (0.8)	7.1 (1.4)	1.6 (0.5)	1 (0.4)	0	3 ⁺
Umvoti	5.2 (0.5)	4.5 (0.9)	1.0 (0.3)	2 (0.8)	2	2 ⁺
Total (Umozinyathi district council)					5	10

Table E.4.1: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2003 (continued)

UTHUKELA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Emnambithi/ Ladysmith	12.6 (1.3)	11.1 (2.2)	6.2 (1.9)	9 (3.6)	9	9
Gaiths Castle Game Reserve	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Imbazane	6.7 (0.7)	5.9 (1.2)	3.3 (1.0)	1 (0.4)	0	3 ⁺
Indaka	6.4 (0.6)	5.6 (1.1)	3.1 (0.9)	1 (0.4)	0	3
Okhalhamba	7.7 (0.8)	6.7 (1.3)	3.8 (1.1)	3 (1.2)	3	4 ⁺
Umtshezi	3.4 (0.3)	2.9 (0.6)	1.6 (0.5)	6 (2.4)	6	4 ⁺
Total (Uthukela district council)					18	23
UTHUNGULU district council						
Mbonambi	6.0 (0.6)	5.2 (1.0)	3.3 (1.0)	1 (0.4)	0	3
Mthonjaneni	2.8 (0.3)	2.5 (0.5)	1.5 (0.5)	1 (0.4)	1	2 ⁻
Nkandla	7.5 (0.8)	6.5 (1.3)	4.1 (1.2)	1 (0.4)	1	4 ⁻
Ntambanana	4.7 (0.5)	4.2 (0.8)	2.6 (0.8)	1 (0.4)	0	2 ⁺
uMhlathuze	16.2 (1.6)	14.2 (2.8)	8.8 (2.6)	19 (7.6)	19	15 ⁻
uMlalazi	12.4 (1.2)	10.8 (2.2)	6.7 (2.1)	6 (2.4)	6	8 ⁻
Total (Uthungulu district council)					27	34
ZULULAND district council						
Abaqulusi	10.7 (1.1)	9.4 (1.9)	2.8 (0.8)	9 (3.6)	9	7 ⁺
Nongoma	11.1 (1.1)	9.7 (1.9)	3.0 (0.9)	1 (0.4)	1	4 ⁺
Ulundi	11.9 (1.2)	10.4 (2.1)	3.2 (1.0)	1 (0.4)	1	5 ⁺
eDumbe	4.6 (0.5)	4.0 (0.8)	1.2 (0.4)	1 (0.4)	0	2 ⁺
uPhongolo	6.7 (0.7)	5.9 (1.2)	1.8 (0.5)	1 (0.4)	1	3 ⁻
Total (Zululand district council)					12	21

Table E.4.1: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2003 (continued)

ILEMBE district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
KwaDukuza	8.9 (0.9)	7.8 (1.4)	4.0 (1.2)	11 (4.4)	11	8
Maphumulo	6.7 (0.7)	5.9 (1.2)	3.0 (0.9)	1 (0.4)	0	3
Ndwendwe	8.5 (0.9)	7.5 (1.5)	3.8 (1.1)	1 (0.4)	0	4
eNdondakasuka	7.3 (0.7)	6.4 (1.3)	3.3 (1.0)	3 (1.2)	3	4 ⁺
Total (iLemebe district council)					14	19

Table E.4.2: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2008

ETHEKWINI metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)	Existing	Required	
EThekwini	189 (56.7)	164 (49.2)	293 (117.2)	293	223 ⁺	
AMAJUBA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Dannhauser	6 (0.6)	5.4 (1.1)	3.5 (1.1)	1 (0.4)	1	3 ⁺
Emadlangeni	2 (0.2)	1.7 (0.3)	1.1 (0.3)	1 (0.4)	0	1 ⁺
Newcastle	20 (2.0)	17.6 (3.5)	11.4 (3.4)	15 (6.0)	15	15 ⁻
Total (Amajuba district council)					16	19
SISONKE district council						
Greater Kokstad	3 (0.3)	3 (0.6)	1 (0.3)	2 (0.8)	2	2
Ingwe	6.6 (0.7)	5.7 (1.1)	1.9 (0.6)	1 (0.4)	0	3 ⁻
Kwa Sani	1 (0.1)	0.8 (0.2)	0.3 (0.1)	1 (0.4)	1	1 ⁻
Sisonke	0 (0)	0 (0)	0 (0)	1 (0.4)	0	0 ⁺
Ubuhlezwe	6.2 (0.6)	5.4 (1.1)	1.8 (0.5)	2 (0.8)	2	3
Total (Sisonke district council)					5	9
UMGUNGUNDLOVU district council						
Impendle	2.1 (0.2)	1.8 (0.4)	2.1 (0.6)	1 (0.4)	0	2 ⁻
Mkhambathini	3.6 (0.4)	3.1 (0.6)	3.8 (1.1)	1 (0.4)	1	2 ⁺
Mooi Mpofana	2.2 (0.2)	1.9 (0.4)	2.3 (0.7)	1 (0.4)	0	2 ⁻
Richmond	3.9 (0.4)	3.3 (0.7)	4.0 (1.2)	1 (0.4)	1	3 ⁻
Msunduzi	33.9 (3.4)	29.3 (5.9)	35.2 (10.6)	49 (19.6)	49	40 ⁻
uMgungundlovu	0 (0)	0 (0)	0 (0)	1 (0.4)	0	0 ⁺
uMngeni	4.5 (0.5)	3.9 (0.8)	4.7 (1.4)	7 (2.8)	7	5 ⁺
uMshwathi	6.6 (0.7)	5.7 (1.1)	6.9 (2.1)	1 (0.4)	1	4 ⁺
Total (Umgungundlovu district council)					59	58

Table E.4.2: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2008 (continued)

UGU district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Ezingoleni	3.3 (0.3)	2.9 (0.6)	2.4 (0.7)	1 (0.4)	0	2
Hibiscus Coast	13.4 (1.3)	11.5 (2.3)	9.6 (2.9)	23 (9.2)	23	16 ⁻
Umdoni	3.8 (0.4)	3.3 (0.7)	2.7 (0.8)	6 (2.4)	6	4 ⁺
Umzumbe	11.9 (1.2)	10.2 (2.0)	8.5 (2.6)	1 (0.4)	0	6 ⁺
Vulamehlo	5.1 (0.5)	4.4 (0.9)	3.7 (1.1)	1 (0.4)	0	3 ⁻
uMuziwabantu	5.7 (0.6)	4.9 (1.0)	4 (1.2)	2 (0.8)	2	4 ⁺
Total (Ugu district council)					31	35
UMKHANYAKUDE district council						
Hlabisa	10.8 (1.1)	9.4 (1.9)	2.8 (0.9)	5 (2.0)	5	6 ⁻
Jozini	11.3 (1.1)	9.7 (1.9)	2.9 (0.9)	2 (0.8)	2	5 ⁻
Mtubatuba	2.2 (0.2)	1.9 (0.4)	0.6 (0.2)	1 (0.4)	1	1 ⁻
The big five false bay	1.9 (0.2)	1.6 (0.3)	0.5 (0.2)	1 (0.4)	1	1 ⁺
Umhlabuyalingana	8.6 (0.9)	7.5 (1.5)	2.2 (0.7)	1 (0.4)	0	3 ⁺
Ukhnyakude	0.3 (0.0)	0.3 (0.1)	0.1 (0.0)	1 (0.4)	0	0 ⁺
Total (Umkhanyakude district council)					9	16
UMZINYATHI district council						
Endumeni	3.1 (0.3)	2.7 (0.5)	0.7 (0.2)	3 (1.2)	3	2 ⁺
Msinga	10.3 (1.0)	8.9 (1.8)	2.2 (0.7)	1 (0.4)	0	4 ⁻
Nqutu	8.9 (0.9)	7.7 (1.5)	1.9 (0.6)	1 (0.4)	1	3 ⁺
Umvoti	5.6 (0.6)	4.9 (1.0)	1.2 (0.4)	2 (0.8)	2	3 ⁻
Total (Umzinyathi district council)					6	12

Table E.4.2: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2008 (continued)

UTHUKELA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Emnambithi/ Ladysmith	13.8 (1.4)	11.9 (2.4)	5.8 (1.7)	8 (3.2)	8	9 ⁺
Imbazane	7.3 (0.7)	6.3 (1.3)	3.1 (0.9)	1 (0.4)	0	3 ⁺
Indaka	7.0 (0.7)	6.0 (1.2)	2.9 (0.9)	1 (0.4)	0	3 ⁺
Okhahlamba	8.4 (0.8)	7.2 (1.4)	3.6 (1.1)	3 (1.2)	3	4 ⁺
Umtshezi	3.7 (0.4)	3.2 (0.6)	1.6 (0.5)	6 (2.4)	6	4 ⁺
Uthukela	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0	0 ⁺
Total (Uthukela district council)					17	23
UTHUNGULU district council						
Mbonambi	6.5 (0.7)	5.7 (1.1)	3.9 (1.2)	1 (0.4)	1	3 ⁺
Mthonjaneni	3.1 (0.3)	2.7 (0.5)	1.8 (0.5)	1 (0.4)	1	2 ⁺
Nkandla	8.2 (0.8)	7.1 (1.4)	4.8 (1.4)	1 (0.4)	1	4
Ntambanana	5.2 (0.5)	4.5 (0.9)	3.1 (0.9)	1 (0.4)	0	3 ⁺
uMhlathuze	17.7 (1.8)	15.3 (3.1)	10.4 (3.1)	24 (9.6)	24	18
uMlalazi	13.5 (1.4)	11.7 (2.3)	8.0 (2.4)	5 (2.0)	5	8 ⁺
Total (Uthungulu district council)					32	38
ZULULAND district council						
Abaqulusi	11.7 (1.2)	10.1 (2.0)	3.9 (1.2)	9 (3.6)	9	8
Nongoma	12.1 (1.2)	10.5 (2.1)	4.0 (1.2)	2 (0.8)	2	5 ⁺
Ulundi	13.0 (1.3)	11.3 (2.3)	4.3 (1.3)	1 (0.4)	1	5 ⁺
eDumbe	5.0 (0.5)	4.4 (0.9)	1.7 (2.0)	1 (0.4)	0	4 ⁺
uPhongolo	7.3 (0.7)	6.3 (1.3)	2.4 (0.7)	1 (0.4)	1	3 ⁺
Total (Zululand district council)					13	25

Table E.4.2: Evaluation of the availability of community pharmacies in KWAZULU-NATAL PROVINCE, 2008 (continued)

ILEMBE district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
KwaDukuza	9.7 (1.0)	8.4 (1.7)	5.2 (1.6)	14 (5.6)	14	10
Mandeni	7.9 (0.8)	6.8 (1.4)	4.2 (1.3)	3 (1.2)	3	5
Maphumulo	7.4 (0.7)	6.4 (1.3)	4.0 (1.2)	1 (0.4)	0	4
Ndwendwe	9.3 (0.9)	8.1 (1.6)	5.0 (1.5)	1 (0.4)	0	4
Total (iLembebe district council)					17	23

E.5: LIMPOPO PROVINCE

Table E.5.1: Evaluation of the availability of community pharmacies in LIMPOPO PROVINCE, 2003

BOHLABELA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Bushbuckridge	27.9 (2.8)	9.2 (1.8)	3.4 (1.0)	2 (0.8)	2	6 ⁺
Kruger Park	0.1 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Maruleng	5.3 (0.5)	1.7 (0.3)	0.6 (0.2)	2 (0.8)	2	2 ⁺
Total (Bohlabela district council)					4	8
CAPRICORN district council						
Aganang	8.3 (0.8)	2.7 (0.5)	3.3 (1.0)	1 (0.4)	1	3 ⁺
Blouberg	9.0 (0.9)	3.0 (0.6)	3.6 (1.1)	1 (0.4)	1	3
Lepele-Nkumpi	12.7 (1.3)	4.2 (0.8)	5.1 (1.5)	1 (0.4)	1	4
Molemole	6.1 (0.6)	2.0 (0.4)	2.5 (0.8)	1 (0.4)	0	2 ⁺
Polokwane	28.4 (2.8)	9.3 (1.9)	11.4 (3.4)	23 (9.2)	23	17 ⁺
Total (Capricorn district council)					26	29
MOPANI district council						
Ba-Phalaborwa	7.3 (0.7)	2.4 (0.5)	3.0 (0.9)	5 (2.0)	5	4 ⁺
Greater Giyani	13.3 (1.3)	4.4 (0.9)	5.4 (1.6)	5 (2.0)	5	6 ⁺
Greater Letaba	12.3 (1.2)	4.0 (0.8)	5.0 (1.5)	2 (0.8)	2	4 ⁺
Greater Tzaneen	21.0 (2.1)	6.9 (1.4)	8.6 (2.6)	10 (4.0)	10	10 ⁺
Total (Mopani district council)					22	24
SEKHUKHUNE cross boundary municipality						
Fetakgomo	5.2 (0.5)	1.7 (0.3)	0.1 (0.0)	1 (0.4)	0	1 ⁺
Greater groblersdal	5.1 (0.5)	1.7 (0.3)	0.1 (0.0)	1 (0.4)	0	1 ⁺
Greater Marble Hall	3.7 (0.4)	1.2 (0.2)	0.1 (0.0)	1 (0.4)	0	1
Greater Tubatse	13.0 (1.3)	4.3 (0.9)	0.3 (0.1)	1 (0.4)	0	3 ⁺
Makhuduthamaga	14.7 (1.5)	4.8 (1.0)	0.4 (0.1)	1 (0.4)	1	3
Total (Sekhukhune cross boundary municipality)					1	9

Table E.5.1: Evaluation of the availability of community pharmacies in LIMPOPO PROVINCE, 2003 (continued)

VHEMBE district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Makhado	27.8 (2.8)	9.1 (1.8)	7.5 (2.3)	9 (3.6)	9	10 ⁺
Musina	2.2 (0.2)	0.7 (0.1)	0.6 (0.2)	2 (0.8)	2	1 ⁺
Mutale	4.4 (0.4)	1.5 (0.3)	1.2 (0.4)	1 (0.4)	0	1 ⁺
Thulamela	32.7 (3.3)	10.8 (2.2)	8.8 (2.6)	7 (2.8)	7	11 ⁺
Total (Vhembe district council)					18	23
WATERBERG district council						
Bela-Bela	2.9 (0.3)	1.0 (0.2)	2.2 (0.7)	2 (0.8)	2	2
Lephalela	5.4 (0.5)	1.8 (0.4)	4.1 (1.2)	6 (2.4)	6	4 ⁺
Modimolle	4.1 (0.4)	1.3 (0.3)	3.1 (0.9)	4 (1.6)	4	3 ⁺
Mogalakwena	16.7 (1.7)	5.5 (1.1)	12.6 (3.8)	7 (2.8)	7	9 ⁺
Mookgopong	1.7 (0.2)	0.6 (0.1)	1.3 (0.4)	1 (0.4)	1	1 ⁺
Thabazimbi	3.6 (0.4)	1.2 (0.2)	2.7 (0.8)	6 (2.4)	6	4 ⁺
Total (Waterberg district council)					26	23

Table E.5.2: Evaluation of the availability of community pharmacies in LIMPOPO PROVINCE, 2008

CAPRICORN district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Aganang	9.0 (0.9)	4.3 (0.9)	4.3 (1.3)	2 (0.8)	2	4 ⁻
Blouberg	9.8 (1.0)	4.7 (0.9)	4.9 (1.5)	1 (0.4)	1	4 ⁻
Lepele-Nkumpi	13.9 (1.4)	6.6 (1.3)	6.9 (2.1)	2 (0.8)	2	6 ⁻
Molemole	6.7 (0.7)	3.2 (0.6)	3.3 (1.0)	1 (0.4)	0	3 ⁻
Polokwane	31.0 (3.1)	14.8 (3.0)	15.4 (4.6)	30 (12)	30	23 ⁻
Total (Capricorn district council)					35	40
GREATER SEKHKHUNE district council						
Elias Motsoaledi	13.5 (1.4)	6.4 (1.3)	5.0 (1.5)	9 (3.6)	9	8 ⁺
Fetakgomo	5.6 (0.6)	2.7 (0.5)	2.1 (0.6)	1 (0.4)	0	2 ⁺
Greater Marble hall	7.4 (0.7)	3.5 (0.7)	2.8 (0.8)	4 (1.6)	4	4 ⁻
Greater Tubatse	16.5 (1.7)	7.8 (1.6)	6.1 (1.8)	8 (3.2)	8	8 ⁺
Makhuduthamaga	16.0 (1.6)	7.6 (1.5)	6.0 (1.8)	1 (0.4)	1	5 ⁺
Total (Greater Sekhkhune district council)					22	27
MOPANI district council						
Ba-Phalaborwa	8.0 (0.8)	3.8 (0.8)	4.7 (1.4)	9 (3.6)	9	7 ⁻
Greater Giyani	14.5 (1.5)	6.9 (1.4)	8.5 (2.6)	8 (3.2)	8	9 ⁺
Greater Letaba	13.4 (1.3)	6.4 (1.3)	7.9 (2.4)	2 (0.8)	2	6 ⁺
Greater Tzaneen	22.9 (2.3)	10.9 (2.2)	13.5 (4.1)	15 (6.0)	15	15 ⁻
Maruleng	5.8 (0.6)	2.7 (0.5)	3.4 (1.0)	4 (1.6)	4	4 ⁺
Total (Mopani district council)					38	41
VHEMBE district council						
Makhado	30.3 (3.0)	14.4 (2.9)	9.1 (2.7)	10 (4.0)	10	13 ⁻
Musina	2.4 (0.2)	1.1 (0.2)	0.7 (0.2)	3 (1.2)	3	2 ⁻
Mutale	4.8 (0.5)	2.3 (0.5)	1.4 (0.4)	1 (0.4)	0	2 ⁻
Thulamela	35.6 (3.6)	17.0 (3.4)	10.7 (3.2)	9 (3.6)	9	14 ⁻
Total (Vhembe district council)						

Table E.5.2: Evaluation of the availability of community pharmacies in LIMPOPO PROVINCE, 2008 (continued)

WATERBERG district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Bela-Bela	3.2 (0.3)	1.5 (0.3)	2.4 (0.7)	2 (0.8)	2	2 ⁺
Lephalela	5.9 (0.6)	2.8 (0.6)	4.4 (1.3)	6 (2.4)	6	5
Modimolle	4.4 (0.4)	2.1 (0.4)	3.3 (1.0)	4 (1.6)	4	3 ⁺
Mogalakwena	18.2 (1.8)	8.7 (1.7)	13.6 (4.1)	8 (3.2)	8	11 ⁺
Mookgopong	1.9 (0.2)	0.9 (0.2)	1.4 (0.4)	1 (0.4)	1	1 ⁺
Thabazimbi	3.9 (0.4)	1.9 (0.4)	2.9 (0.9)	7 (2.8)	7	4 ⁺
Total (Waterberg district council)					28	26

E.6: MPUMALANGA PROVINCE

Table E.6.1: Evaluation of the availability of community pharmacies in MPUMALANGA PROVINCE, 2003

BOHLABELA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Bushbuckridge	0.0 (0.0)	0.0 (0.0)	0.3 (0.1)	1 (0.4)	1	0 ⁺
Kruger park	0.1 (0.0)	0.1 (0.0)	0.7 (0.2)	1 (0.4)	0	1 ⁻
Total (Bohlabela district council)					1	1
EHLANZENI district council						
Lowveld	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Mbombela	26.8 (2.7)	21.9 (4.4)	16.6 (5.0)	21 (8.4)	21	20 ⁺
Nkomazi	18.9 (1.9)	15.4 (3.1)	11.7 (3.5)	4 (1.6)	4	10 ⁺
Thaba Chweu	4.6 (0.5)	3.7 (0.7)	2.8 (0.8)	6 (2.4)	6	4 ⁺
Umjindi	3.0 (0.3)	2.5 (0.5)	1.9 (0.6)	2 (0.8)	2	2 ⁺
Total (Ehlanzeni district council)					33	36
GOVAN MBEKI district council						
Albert Luthuli	10.6 (1.1)	8.7 (1.7)	9.2 (2.8)	4 (1.6)	4	7 ⁺
Dipaleseng	2.2 (0.2)	1.8 (0.4)	1.9 (0.6)	2 (0.8)	2	2
Highveld East	12.5 (1.3)	10.2 (2.0)	10.8 (3.2)	17 (6.8)	17	13 ⁺
Lekwa	5.8 (0.6)	4.8 (1.0)	5.0 (1.5)	5 (2.0)	5	5 ⁺
Mkhondo	8.1 (0.8)	6.6 (1.3)	7.0 (2.1)	4 (1.6)	4	6 ⁻
Msukaligwa	7.0 (0.7)	5.8 (1.2)	6.1 (1.8)	10 (4.0)	10	8
Seme	4.6 (0.5)	3.7 (0.6)	3.9 (1.6)	2 (0.8)	2	3 ⁻
Total Govan Mbeki district council)					44	44
METSWEDING district council						
Kungwini	1.8 (0.2)	1.5 (0.3)	1 (0.3)	1 (0.4)	0	1 ⁺

Table E.6.1: Evaluation of the availability of community pharmacies in MPUMALANGA PROVINCE, 2003 (continued)

NKANGALA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Delmas	3.2 (0.3)	2.6 (0.5)	2.8 (0.8)	3 (1.2)	3	3 ⁻
Dr JS Moroka	13.7 (1.4)	11.2 (2.2)	12.5 (3.8)	1 (0.4)	0	8 ⁻
Emalahleni	15.6 (1.6)	12.7 (2.5)	13.8 (4.1)	27 (10.8)	27	19
Highlands	2.4 (0.2)	2.0 (0.4)	2.1 (0.6)	4 (1.6)	4	3 ⁻
Middelburg	8.1 (0.8)	6.6 (1.3)	7.1 (2.1)	16 (6.4)	16	11 ⁺
Thembisile	14.6 (1.5)	11.9 (2.4)	12.9 (3.9)	1 (0.4)	1	8 ⁺
Total (Nkangala district council)					51	52
SEKHUKHUNE cross boundary municipality						
Greater Groblersdal	7.3 (0.7)	6.0 (1.2)	8.8 (2.6)	6 (2.4)	6	7 ⁻
Greater Marble Hall	3.1 (0.3)	2.5 (0.5)	3.7 (1.1)	3 (1.2)	3	3 ⁺
Greater Tubatse	2.1 (0.2)	1.7 (0.3)	2.5 (0.8)	6 (2.4)	6	4 ⁻
Total (Sekhukhune cross boundary municipality)					15	14

Table E.6.2: Evaluation of the availability of community pharmacies in MPUMALANGA PROVINCE, 2008

EHLANZENI district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Bushbuckridge	31.3 (3.1)	21.4 (4.3)	16.9 (5.1)	7 (2.8)	7	15 ⁺
Ehlanzeni	0.3 (0.0)	0.2 (0.0)	0.1 (0.0)	1 (0.4)	0	0 ⁺
Mbombela	29.8 (3.0)	20.3 (4.1)	16.1 (4.8)	28 (11.2)	28	23 ⁺
Nkomazi	21.0 (2.1)	14.3 (2.9)	11.3 (3.4)	4 (1.6)	4	10
Thaba Chweu	5.1 (0.5)	3.5 (0.7)	2.7 (0.8)	8 (3.2)	8	5 ⁺
Umjindi	3.4 (0.3)	2.3 (0.5)	1.8 (0.5)	2 (0.8)	2	2 ⁺
Total (Ehlanzeni district council)					49	55
GERT SIBANDE district council						
Albert Luthuli	11.8 (1.2)	8.0 (1.6)	9.4 (2.8)	4 (1.6)	4	7 ⁺
Dipaleseng	2.4 (0.2)	1.7 (0.3)	1.9 (0.6)	2 (0.8)	2	2 ⁺
Govan Mbeki	13.9 (1.4)	9.5 (1.9)	11.1 (3.3)	17 (6.8)	17	13 ⁺
Lekwa	6.5 (0.7)	4.4 (0.9)	5.2 (1.6)	6 (2.4)	6	6 ⁺
Mkhondo	9.0 (0.9)	6.1 (1.2)	7.1 (2.1)	4 (1.6)	4	6 ⁺
Msukaligwa	7.8 (0.8)	5.3 (1.1)	6.2 (1.9)	9 (3.6)	9	7 ⁺
Seme	10.1 (1.0)	6.9 (1.4)	8.1 (2.4)	3 (1.2)	3	6
Total (Gert Sibande district council)					45	41
NKANGALA district council						
Delmas	3.5 (0.4)	2.4 (0.5)	2.8 (0.8)	3 (1.2)	3	3 ⁺
Dr JS Moroka	15.3 (1.5)	10.4 (2.1)	11.9 (3.6)	1 (0.4)	0	8 ⁺
Emakhazeni	2.7 (0.3)	1.8 (0.4)	2.1 (0.6)	1 (0.4)	1	2 ⁺
Emalahleni	17.3 (1.7)	11.8 (2.4)	13.5 (4.1)	27 (10.8)	27	19
Steve Tshwete	8.9 (0.9)	6.1 (1.2)	7.0 (2.1)	16 (6.4)	16	11 ⁺
Thembisile	16.2 (1.6)	11.1 (2.2)	12.7 (3.8)	3 (1.2)	3	9 ⁺
Total (Nkangala district council)					50	52

E.7: NORTH WEST PROVINCE

Table E.7.1: Evaluation of the availability of community pharmacies in NORTH WEST PROVINCE, 2003

BOJANALA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Kgetlengrivier	2.0 (0.2)	1.5 (0.3)	1.5 (0.5)	2 (0.8)	2	2 ⁻
Madibeng	18.8 (1.9)	14.0 (2.8)	14.0 (4.2)	16 (6.4)	16	15 ⁺
Moretele	9.9 (1.0)	7.4 (1.5)	7.4 (2.2)	1 (0.4)	0	5 ⁺
Moses Kotane	13.2 (1.3)	9.8 (2.0)	9.8 (2.9)	2 (0.8)	2	7
Pilansberg National Park	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Rustenburg	22.0 (2.2)	16.4 (3.3)	16.4 (4.9)	29 (11.6)	29	22
Total (Bojanala district council)					49	51
BOPHIRIMA district council						
Greater Taung	10.1 (1.0)	7.5 (1.5)	4.1 (1.2)	1 (0.4)	0	4 ⁺
Kagisano	5.4 (0.4)	4.0 (0.8)	2.2 (0.7)	1 (0.4)	0	2 ⁺
Lekwa-Taemane	2.4 (0.2)	1.8 (0.4)	1.0 (0.3)	3 (1.2)	3	2 ⁺
Mamusa	2.7 (0.3)	2.0 (0.4)	1.1 (0.3)	3 (1.2)	3	2 ⁺
Molopo	0.7 (0.1)	0.5 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Naledi	3.2 (0.3)	2.4 (0.5)	1.3 (0.4)	4 (1.6)	4	3 ⁻
Total (Bophirima district council)					10	14
CENTRAL district council						
Ditsobotla	8.2 (0.8)	6.1 (1.2)	0.5 (0.2)	5 (2.0)	5	4 ⁺
Mafikeng	14.4 (1.4)	10.7 (2.1)	0.8 (0.2)	8 (3.2)	8	7
Setla-Kgobi	5.8 (0.6)	4.3 (0.9)	0.3 (0.1)	1 (0.4)	0	2
Tswaing	6.3 (0.6)	4.7 (0.9)	0.4 (0.1)	7 (2.8)	7	4 ⁺
Zeerust	7.7 (0.8)	5.7 (1.1)	0.4 (0.1)	4 (1.6)	4	4 ⁻
Total (Central district council)					24	21
CITY OF TSHWANE metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)		Existing	Required
City of Tshwane	25.5 (7.7)	19.0 (5.7)	13 (5.2)		13	19 ⁻

Table E.7.1: Evaluation of the availability of community pharmacies in NORTH WEST PROVINCE, 2003 (continued)

FRANCES BAARD district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Phokwane	1.2 (0.1)	0.9 (0.2)	1 (0.3)	1 (0.4)	0	1
KGALAGADI district council						
Ga-Seganyana	3.1 (0.3)	2.3 (0.5)	1 (0.3)	1 (0.4)	0	1 ⁺
Moshaweng	4.7 (0.5)	3.5 (0.7)	1 (0.3)	1 (0.4)	0	2 ⁻
Total (Kgalagadi district council)					0	3
SOUTHERN district council						
City council of Klerksdorp	20.0 (2.0)	14.9 (3.0)	31.7 (9.5)	29 (11.6)	29	26 ⁺
Maquassi Hills	3.8 (0.4)	2.9 (0.6)	6.1 (1.8)	4 (1.6)	4	4 ⁺
Potchefstroom	7.1 (0.7)	5.3 (1.1)	11.3 (3.4)	19 (7.6)	19	13 ⁻
Ventersdorp	2.4 (0.2)	1.8 (0.4)	3.8 (0.9)	1 (0.4)	1	2 ⁻
Total (Southern district council)					53	45
WEST RAND district council						
Merafong City	3.4 (0.3)	2.5 (0.5)	3 (0.9)	3 (1.2)	3	3 ⁻

Table E.7.2: Evaluation of the availability of community pharmacies in NORTH WEST PROVINCE, 2008

BOJANALA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Kgetlengrivier	2.3 (0.2)	1.8 (0.4)	1.8 (0.5)	2 (0.8)	2	2 ⁻
Madibeng	20.9 (2.1)	16.9 (3.4)	16.3 (4.9)	18 (7.2)	18	18 ⁻
Moretele	11.0 (1.1)	8.9 (1.8)	8.6 (2.6)	1 (0.4)	0	6 ⁻
Moses Kotane	14.6 (1.4)	11.9 (2.4)	11.4 (3.4)	2 (0.8)	2	8
Pilansberg National Park	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0	0 ⁺
Rustenburg	24.4 (2.4)	19.8 (4.0)	19.0 (5.7)	35 (14)	35	26 ⁺
Total (Bojanala district council)					57	60
BOPHIRIMA district council						
Greater Taung	11.3 (1.1)	9.1 (1.8)	4.1 (1.2)	1 (0.4)	0	4 ⁺
Kagisano	6.0 (0.6)	4.8 (1.0)	2.2 (0.7)	1 (0.4)	0	3 ⁻
Lekwa-Taemane	2.7 (0.3)	2.1 (0.4)	1.0 (0.3)	3 (1.2)	3	2 ⁺
Mamusa	3.0 (0.3)	2.4 (0.5)	1.1 (0.3)	3 (1.2)	3	2 ⁺
Molopo	0.7 (0.1)	0.6 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Naledi	3.6 (0.4)	2.9 (0.6)	1.3 (0.4)	4 (1.6)	4	3
Total (Bophirima district council)					10	15
DR KENNETH KAUNDA district council						
City of Matlosana	22.2 (2.2)	18.0 (3.6)	30.6 (9.2)	30 (12.0)	30	27
City of Tlokwe	7.9 (0.8)	6.4 (1.3)	10.9 (3.3)	20 (8.0)	20	13 ⁺
Maquassi Hills	4.3 (0.4)	3.5 (0.7)	5.9 (1.8)	3 (1.2)	3	4 ⁺
Merafong City	13.0 (1.3)	10.5 (2.1)	17.9 (5.4)	15 (6.0)	15	15 ⁺
Ventersdorp	2.7 (0.3)	2.2 (0.4)	3.7 (1.1)	1 (0.4)	1	2 ⁺
Total (Dr Kenneth Kaunda district council)					69	61

Table E.7.2: Evaluation of the availability of community pharmacies in NORTH WEST PROVINCE, 2008 (continued)

NGAKA MODIRI MOLEMA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Ditsobotla	9.1 (0.9)	7.4 (1.5)	4.6 (1.4)	7 (2.8)	7	7
Mafikeng	16.0 (1.6)	13.0 (2.6)	8.2 (2.5)	10 (4.0)	10	11 ⁺
Ramotshere Moila	8.5 (0.9)	6.9 (1.4)	4.3 (1.3)	3 (1.2)	3	5 ⁻
Ratlou	6.4 (0.6)	5.2 (1.0)	3.3 (1.0)	1 (0.4)	0	3
Tswaing	7.1 (0.7)	5.7 (1.1)	3.6 (1.1)	4 (1.6)	4	4 ⁺
					24	30

E.8: NORTHERN CAPE PROVINCE
Table E.8.1: Evaluation of the availability of community pharmacies in NORTHERN CAPE PROVINCE, 2003

FRANCES BAARD district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Diamondfields	0.3 (0.0)	0.3 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Dikgatleng	2.0 (0.2)	2.1 (0.4)	2.5 (0.8)	1 (0.4)	1	2 ⁻
Magareng	1.2 (0.1)	1.3 (0.3)	1.5 (0.5)	1 (0.4)	0	1 ⁺
Phokwane	2.2 (0.2)	2.3 (0.5)	2.8 (0.8)	2 (0.8)	2	2 ⁺
Sol Plaatjie	11.4 (1.1)	11.8 (2.4)	13.9 (4.2)	18 (7.2)	18	15 ⁻
Total (Frances Baard district council)					21	21
KAROO district council						
Bo Karoo	0.2 (0.0)	0.2 (0.0)	0.2 (0.1)	1 (0.4)	0	0 ⁺
Emthanjeni	2.0 (0.2)	2.1 (0.4)	1.7 (0.5)	3 (1.2)	3	7 ⁻
Kareeberg	0.5 (0.1)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Renosterberg	0.5 (0.1)	0.5 (0.1)	0.4 (0.1)	1 (0.4)	0	1 ⁻
Siyancuma	2.0 (0.2)	2.1 (0.4)	1.7 (0.5)	1 (0.4)	1	1 ⁺
Siyathemba	1.0 (0.1)	1.0 (0.2)	0.9 (0.3)	1 (0.4)	1	1
Thembelihle	0.8 (0.1)	0.8 (0.2)	0.7 (0.2)	1 (0.4)	1	1 ⁻
Ubuntu	0.9 (0.1)	1.0 (0.2)	0.8 (0.2)	1 (0.4)	0	1 ⁻
Umsobomvu	1.3 (0.1)	1.4 (0.3)	1.1 (0.3)	2 (0.8)	2	1 ⁺
Total (Karoo district council)					8	14
KGALAGADI district council						
Ga Segonyana	0.8 (0.1)	0.8 (0.2)	1.5 (0.5)	2 (0.8)	2	2 ⁻
Gamagara	0.4 (0.0)	0.4 (0.1)	0.7 (0.2)	2 (0.8)	2	1 ⁺
Kalahari	0.4 (0.0)	0.4 (0.1)	0.7 (0.2)	1 (0.4)	0	1 ⁻
Total (Kgalagadi district council)					4	4

Table E.8.1: Evaluation of the availability of community pharmacies in NORTHERN CAPE PROVINCE, 2003 (continued)

NAMAKWA district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Hantam	1.1 (0.1)	1.2 (0.2)	0.9 (0.3)	1 (0.4)	1	1
Kamiesberg	0.6 (0.1)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Karoo Hoogland	0.6 (0.1)	0.6 (0.1)	0.5 (0.1)	1 (0.4)	0	1 ⁻
Khai-Ma	0.6 (0.1)	0.7 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Nama Khoi	2.5 (0.3)	2.6 (0.5)	2.1 (0.6)	2 (0.8)	2	2 ⁺
Namaqualand	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Richtersveld	0.6 (0.1)	0.6 (0.1)	0.5 (0.2)	2 (0.8)	2	1 ⁺
Total (Namakwa district council)					5	7
SIYANDA district council						
IKheis	0.9 (0.1)	0.9 (0.2)	0.8 (0.2)	1 (0.4)	0	1 ⁻
Benede Oranje	0.5 (0.1)	0.5 (0.1)	0.4 (0.1)	1 (0.4)	0	1 ⁻
Kai IGarib	3.3 (0.3)	3.4 (0.7)	2.7 (0.8)	2 (0.8)	2	3 ⁻
Kgatelopele	0.9 (0.1)	0.9 (0.2)	0.7 (0.2)	2 (0.8)	2	1 ⁺
Mier	0.4 (0.0)	0.4 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Tsantsabane	1.8 (0.2)	1.8 (0.4)	1.5 (0.5)	1 (0.4)	1	2 ⁻
Khara Hais	4.2 (0.4)	4.3 (0.9)	3.5 (1.1)	5 (2.0)	5	4 ⁺
Total (Siyanda district council)					10	13

Table E.8.2: Evaluation of the availability of community pharmacies in NORTHERN CAPE PROVINCE, 2008

FRANCES BAARD district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Dikgatleng	2.1 (0.2)	2.1 (0.4)	2.8 (0.8)	1 (0.4)	1	2 ⁻
Frances Baard	0.3 (0.0)	0.3 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Magareng	1.3 (0.1)	1.3 (0.3)	1.7 (0.5)	1 (0.4)	0	1 ⁺
Phokwane	3.7 (0.4)	3.6 (0.7)	4.7 (1.4)	2 (0.8)	2	3 ⁺
Sol Plaatjie	12.1 (1.2)	11.9 (2.4)	15.5 (4.7)	22 (6.6)	22	15 ⁻
Total (Frances Baard district council)					25	22
KGALAGADI district council						
Ga Segonyana	4.2 (0.4)	4.1 (0.8)	2.4 (0.7)	2 (0.8)	2	3 ⁻
Gamagara	1.0 (0.1)	1.0 (0.2)	0.5 (0.2)	4 (1.6)	4	2 ⁺
Kalahari	0.4 (0.0)	0.4 (0.1)	0.2 (0.1)	1 (0.4)	0	1 ⁻
Moshaweng	5.1 (0.5)	4.9 (1.0)	2.9 (0.9)	1 (0.4)	0	3 ⁻
Total (Kgalagadi district council)					6	9
NAMAKWA district council						
Hantam	1.2 (0.1)	1.2 (0.2)	0.9 (0.3)	1 (0.4)	1	1
Kamiesberg	0.6 (0.1)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Karoo Hoogland	0.6 (0.1)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Khai-Ma	0.7 (0.1)	0.7 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Nama Khoi	2.7 (0.3)	2.6 (0.5)	2.1 (0.6)	2 (0.8)	2	2 ⁺
Namakwa	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0	0 ⁺
Richtersveld	0.6 (0.1)	0.6 (0.1)	0.5 (0.2)	2 (0.8)	2	1 ⁺
Total (Namakwa district council)					5	7

Table E.8.2: Evaluation of the availability of community pharmacies in NORTHERN CAPE PROVINCE, 2008 (continued)

PIXLEY KA SEME district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Emthanjeni	2.1 (0.2)	2.1 (0.4)	1.9 (2.2)	2 (0.8)	2	4 ⁺
Kareeberg	0.6 (0.1)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁺
Pixley ka Seme	0.2 (0.0)	0.2 (0.0)	0.2 (0.1)	1 (0.4)	0	0 ⁺
Renosterberg	0.5 (0.1)	0.5 (0.1)	0.5 (0.2)	1 (0.4)	1	1 ⁺
Siyancuma	2.2 (0.2)	2.1 (0.4)	2.0 (0.6)	1 (0.4)	1	2 ⁺
Siyathemba	1.1 (0.1)	1.0 (0.2)	1.0 (0.3)	1 (0.4)	1	1
Thembelihle	0.8 (0.1)	0.8 (0.2)	0.8 (2.4)	1 (0.4)	1	3 ⁺
Ubuntu	1.0 (0.1)	1.0 (0.2)	0.9 (0.3)	1 (0.4)	0	1
Umsobomvu	1.4 (0.1)	1.4 (0.3)	1.3 (0.4)	3 (1.2)	3	2
Total (Pixley ka Seme district council)					9	15
SIYANDA district council						
!Kheis	1.0 (0.1)	1.0 (0.2)	1.0 (0.3)	1 (0.4)	0	1
Kai !Garib	3.5 (0.1)	3.4 (0.7)	3.6 (1.1)	2 (0.8)	2	1 ⁺
Kgatelopele	0.9 (0.1)	0.9 (0.2)	1.0 (0.3)	2 (0.8)	2	1 ⁺
Mier	0.4 (0.0)	0.4 (0.1)	0.4 (0.1)	1 (0.4)	0	1 ⁺
Siyanda	0.5 (0.1)	0.5 (0.1)	0.6 (0.2)	1 (0.4)	0	1 ⁺
Tsantsabane	1.9 (0.2)	1.8 (0.4)	1.9 (0.6)	3 (0.9)	3	2 ⁺
Khara Hais	4.4 (0.4)	4.3 (0.9)	4.6 (1.4)	6 (2.4)	6	5 ⁺
Total (Siyanda district council)					13	12

E.9: WESTERN CAPE PROVINCE

Table E.9.1: Evaluation of the availability of community pharmacies in WESTERN CAPE PROVINCE, 2003

CITY OF CAPE TOWN metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)		Existing	Required
City of Cape Town	166.5 (50.0)	268.6 (80.6)	282 (112.8)		282	243⁺
BOLAND district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Breede River	0.4 (0.0)	0.6 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Breede River/ Winelands	9.4 (0.9)	15.1 (3.0)	11.9 (3.6)	4 (1.6)	4	9 ⁺
Breede Valley	8.4 (0.8)	13.6 (2.7)	10.7 (3.2)	13 (5.2)	13	12 ⁻
Drakenstein	11.2 (1.1)	18.0 (3.6)	14.2 (4.3)	13 (5.2)	13	14 ⁺
Stellenbosch	6.8 (0.7)	10.9 (2.2)	8.6 (2.6)	12 (4.8)	12	10 ⁺
Witzenberg	4.8 (0.5)	7.8 (1.6)	6.1 (1.8)	4 (1.6)	4	5 ⁺
Total (Boland district council)					46	51
CENTRAL KAROO district council						
Beaufort West	2.1 (0.2)	3.4 (0.6)	1.8 (0.5)	2 (0.8)	2	2 ⁺
Central Karoo	0.4 (0.0)	0.6 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Laingsburg	0.4 (0.0)	0.6 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Prince Albert	0.6 (0.1)	1.0 (0.2)	0.5 (0.2)	1 (0.4)	1	1 ⁻
Total (Central Karoo district council)					3	5
EDEN district council						
George	7.8 (0.8)	12.6 (2.5)	14.9 (4.5)	16 (6.4)	16	14 ⁺
Kannaland	1.4 (0.1)	2.2 (0.4)	2.6 (0.8)	2 (0.8)	2	2 ⁺
Knysna	3.0 (0.3)	4.8 (1.0)	5.7 (1.7)	7 (2.1)	7	5 ⁺
Langeberg	2.5 (0.3)	4.1 (0.8)	4.9 (1.5)	5 (2.0)	5	5 ⁻
Mossel Bay	4.1 (0.4)	6.6 (1.3)	7.9 (2.4)	10 (4.0)	10	8 ⁺
Outdtshoorn	4.9 (0.5)	7.9 (1.6)	9.3 (2.8)	4 (1.6)	4	6 ⁺

Table E.9.1: Evaluation of the availability of community pharmacies in WESTERN CAPE PROVINCE, 2003 (continued)

EDEN district council...continued						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Plattenberg Bay	1.7 (0.2)	2.7 (0.5)	3.2 (1.0)	6 (2.4)	6	3 ⁺
South Cape	0.8 (0.1)	1.4 (0.3)	1.6 (0.5)	1 (0.4)	0	1 ⁺
Total (Eden district council)					50	44
OVERBERG district council						
Cape Agulhas	1.5 (0.2)	2.4 (0.5)	2.3 (0.7)	2 (0.8)	2	2 ⁺
Overberg	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1 (0.4)	0	0 ⁺
Overstrand	3.2 (0.3)	5.2 (1.0)	4.9 (1.5)	8 (3.2)	8	6
Swellendam	1.6 (0.2)	2.6 (0.5)	2.5 (0.8)	2 (0.8)	2	2 ⁺
Theewaterskloof	5.4 (0.5)	8.7 (1.7)	8.2 (2.5)	6 (2.4)	6	7 ⁺
Total (Overberg district council)					18	17
WEST COAST district council						
Bergrivier	2.7 (0.3)	4.3 (0.7)	3.8 (1.1)	3 (1.2)	3	3 ⁺
Cederberg	2.3 (0.2)	3.7 (0.7)	3.2 (1.0)	3 (1.2)	3	3 ⁺
Matzikama	2.9 (0.3)	4.7 (0.9)	4.1 (1.2)	3 (1.2)	3	4 ⁺
Saldanha Bay	4.1 (0.4)	6.5 (1.3)	5.8 (1.7)	7 (2.8)	7	6 ⁺
Swartland	4.2 (0.4)	6.7 (1.3)	5.9 (1.8)	5 (2.0)	5	5 ⁺
West Coast	0.2 (0.0)	0.4 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁺
Total (West Coast district council)					21	22

Table E.9.2: Evaluation of the availability of community pharmacies in WESTERN CAPE PROVINCE, 2008

CITY OF CAPE TOWN metropolitan						
	National (30%)	Provincial (30%)	Municipality (40%)		Existing	Required
City of Cape Town	193.9 (57.9)	300 (90.0)	321 (128.4)		321	276⁺
CAPE WINELANDS district council						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Breede River/Winelands	5.4 (0.5)	8.4 (1.7)	6.2 (1.9)	5 (2.0)	5	6 ⁺
Breede Valley	9.8 (1.0)	15.1 (3.0)	11.1 (3.3)	15 (6.0)	15	13 ⁺
Cape Winelands	0.4 (0.0)	0.7 (0.1)	0.5 (0.2)	1 (0.4)	0	1 ⁻
Drakenstein	13.0 (1.3)	20.2 (4.0)	14.8 (4.4)	12 (4.8)	12	14 ⁺
Stellenbosch	7.9 (0.8)	12.2 (2.4)	9.0 (2.7)	11 (4.4)	11	10 ⁺
Witzenberg	5.6 (0.6)	8.7 (1.7)	6.4 (1.9)	5 (2.0)	5	6 ⁺
Total (Cape Winelands district council)					48	50
CENTRAL KAROO district council						
Beaufort West	2.5 (0.3)	3.8 (0.8)	1.8 (0.5)	2 (0.8)	2	2 ⁺
Central Karoo	0.4 (0.0)	0.6 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Laingsburg	0.4 (0.0)	0.7 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Prince Albert	0.7 (0.1)	1.1 (0.2)	0.5 (0.2)	1 (0.4)	1	1 ⁻
Total (Central Karoo district council)					3	5
EDEN district council						
Bítou	2.0 (0.2)	3.0 (0.6)	3.6 (1.1)	7 (2.8)	7	5 ⁻
Eden	1.0 (0.1)	1.5 (0.3)	1.8 (0.5)	1 (0.4)	0	1 ⁺
George	9.1 (0.9)	14.0 (2.8)	16.7 (5.0)	17 (6.8)	17	15 ⁺
Hessequa	3.0 (0.3)	4.6 (0.9)	5.4 (1.6)	5 (2.0)	5	5 ⁻
Kannaland	1.6 (0.2)	2.5 (0.5)	3.0 (0.9)	1 (0.4)	1	2
Knysna	3.5 (0.4)	5.3 (1.1)	6.3 (1.9)	9 (3.6)	9	7

Table E.9.2: Evaluation of the availability of community pharmacies in WESTERN CAPE PROVINCE, 2008 (continued)

EDEN district council...continued						
Local Municipality	National (10%)	Provincial (20%)	District council (30%)	Local municipality (40%)	Total	
					Existing	Required
Mossel Bay	4.8 (0.5)	7.4 (1.5)	8.8 (2.6)	12 (4.8)	12	9 ⁺
Outdtshoorn	5.7 (0.6)	8.8 (1.8)	10.4 (3.1)	5 (2.0)	5	7 ⁺
Total (Eden district council)					56	51
OVERBERG district council						
Cape Agulhas	1.8 (0.2)	2.7 (0.5)	2.3 (0.7)	2 (0.8)	2	2 ⁺
Overberg	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)	0	0 ⁺
Overstrand	3.7 (0.4)	5.8 (1.2)	5.5 (1.7)	10 (4.0)	10	7 ⁺
Swellendam	1.9 (0.2)	2.9 (0.6)	2.8 (0.8)	2 (0.8)	2	2 ⁺
Theewaterskloof	6.3 (0.6)	9.7 (1.9)	9.2 (2.8)	6 (2.4)	6	8 ⁻
Total (Overberg district council)					20	19
WEST COAST district council						
Bergervier	3.1 (0.3)	4.8 (1.0)	3.4 (1.0)	3 (1.2)	3	3 ⁺
Cederberg	2.6 (0.3)	4.1 (1.2)	2.9 (0.9)	3 (1.2)	3	4 ⁻
Matzikama	3.4 (0.3)	5.2 (1.0)	3.7 (1.1)	3 (1.2)	3	4 ⁻
Saldanha Bay	4.7 (0.5)	7.3 (1.5)	5.2 (1.6)	7 (2.8)	7	6 ⁺
Swartland	4.8 (0.5)	7.5 (1.5)	5.3 (1.6)	5 (2.0)	5	6 ⁺
West Coast	0.3 (0.0)	0.4 (0.1)	0.3 (0.1)	1 (0.4)	0	1 ⁻
Total (West Coast district council)					21	24

*****END*****