ASSESSMENT OF HOW THE CURRENT DISTRICT SURGEON'S SERVICES CAN BE TRANSFORMED FOR COST EFFECTIVENESS AND EFFICIENCY IN THE NORTH WEST PROVINCE

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Declaration

I declare that this dissertation for the degree of Master of Business Administration at the University of North West hereby submitted, has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and execution and that all material contained herein has been duly acknowledged.

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Abstract

This research intended to assess the services provided by the current district surgeons in the North West Province with the view of suggesting ways of transforming these services to be cost effective and efficient.

The study involved a review and analysis of the services provided by the district surgeons in the province and whether or not the managers who pay for the services were satisfied with the provision of service by the district surgeons.

The techniques used to collect data in this study were structured interviews for district surgeons and questionnaires for district managers. Semi structured interviews were conducted with participants who are knowledgeable about the policy governing the services provided by the district surgeons.

The data collected revealed that there was a general dissatisfaction among district managers about the services provided by the district surgeons. One of the major complaints was that the district surgeons did not attend to the victims of crime immediately. In fact there were cases where the district surgeons would not turn up after promising that he would. The level of efficiency in the provision of services was very low. In terms of cost effectiveness, the number of patients that the surgeons saw were too low and therefore did not justify the fees that the district managers paid them. Further, the medication provided by the district managers was not controlled and could therefore be used for purposes other than the ones intended.

The conclusion drawn from the presented data was that there was a serious need for transformation of the current services. The recommendations drawn from this study are that efficiency and cost effectiveness should be improved by using government employed health providers and monitoring and evaluating the provision of district surgeon services. The research study concludes that the service of district surgeons must be transformed to make the service accessible, effective through capacity building, appropriate evaluation and monitoring of the service to ensure quality of care and value for money.

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I. Abbreviations in the document

ANC	African National Congress
CBO	Community Based Organisation
DHS	District health Services
D/S	District Surgeons
DOH	Department of Health
EDL	Essential Drug List
PDS	Part-time District Surgeons
PHC	Primary Health Care
NGO	Non Governmental Organisation
M/O	Medical Officer
MEC	Member of the Executive Council

RDP	Reconstruction Development Programme
UK	United Kingdom
PFMA	Public Finance Management Act

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Chapter 1: Introduction and orientation

1.1 Background Information to the problem

There are 24 medical district surgeons who have contracts in the North West Province. The contracts used by these district surgeons were issued during apartheid and the terms have not been revised yet. There are, however, other doctors who are subcontracted by those that have contracts.

The districts surgeons provide a number of services to the public that include the following:

(a) Primary Health Care (Personal Health), which provides curative with regards to personal health and ex-officio services which includes the completion of official forms e.g. disability grant application form.

(b) Clinical Medico Legal Services, which consists of services to survivors of crime e.g. sexual offences, child abuses, assault and drunken driving.

(c) Forensic Medical Services, which consists of autopsy services and crime scene investigations.

(d) Prison Medical Services, which includes all services to detainees.

(e) Dental Services, which includes services to school children, prison and indigent patients.

(f) Pharmaceutical services, which includes supply of medicines to patients of the District Surgeons.

1.1.1 Background of the Health consumers and North West Province

The province of the North West is largely made up by parts of the former western Transvaal, former Bophuthatswana areas and has a population of about 3,355,250 million according to 1996 population census and this constitutes about 8.2% of the total population of South Africa. Africans constitutes about 90% of the Northwest population.

Two thirds of the population is living in rural areas where poverty and unemployment are very high among men and women, particularly among black people.

The North West province has about 40% of young people who are under the age of fifteen. According to Human Science Research Council's 1995 report, most people affected by poor health services are depended on district surgeon's services and for recommendation of the social grant and pension. Only after1995 did primary health care services become freely delivered through clinics. There are currently about 330 PHC clinics in the North West Province in 2001. The province covers 118 710 kilometre of South African surface area and the population density is about 29 people per square kilometre (Km' 2).

1.1.2 Problem Statement

The objective of this research is to assess the efficiency and cost effectiveness of the district surgeons' service in the North West Province with a view to making recommendations for improvement.

The North West Province is constituted by, various areas in the former Bophuthatswana, the (ex-TPA) Transvaal Provincial Administration and (Ex-CPA) Cape Provincial Administration. The District Surgeon System is inherently fragmented and unsatisfactory in terms of provision of cost-effective, efficient and comprehensive basic health services. The following salient points, convinces one of the need to change or rather transform the system.

- The existing District Surgeon Contractors are mainly white males (almost 100 %). The growing number of black health professionals in the province, in itself makes the status quo unacceptable.
- The remuneration packages seem to be grossly inflated for some District Surgeons. The Ex-Bophuthatswana side receive marginal allowances whilst their counterparts in former South African Regions seem to make a lot more money. The concept of Equity needs to be part of the restructured system.
- The introduction of the national policy of Universal Primary Health Care, in a restructured health system put more emphasis on delivery of Comprehensive basic health services through District Health System. The District Health System entails the following principles:
  - Free Health Care Services to all communities
  - Accessibility and Equity in terms of basic services
  - Non-fragmented and cost effective approach to service delivery
  - Infra structural development in previously disadvantaged areas i.e. rural, urban and peri-urban e.g. the Clinic Upgrading Programme.

- The decentralisation programme of the provincial department entails development of fully autonomous health districts run by District Managers and their teams. The provincial legislature has already passed an Act on governance structures and this Act number 2 of 1997 ensures community participation as well as participation of private health care practitioners. The District Managers manage their District's budgets and ensure payments or claims to private or contracted providers.
- There is a need to control and monitor the way the services are rendered. To have proper accountability channels, the District Manager has to know and understand the services delivered in his/her District.
- Finally, the availability of public health facilities in previously disadvantaged areas necessitates a rethinking in terms of usage of private facilities for routine medical consultations. There is a great need for regular sessions or visits to clinics, health centres and district hospitals by Medical Doctors.

From the above stated factors, the problem statement can be briefly outlined as:

The existing District Surgeon system is inherently unsuitable and fragmented to serve the interest of a transforming health sector in the North West Province and therefore in this study data was collected to proof the problem statement.

1.2 Research Objectives

The objectives of the study are to achieve the following:

- To review relevant and available policy frameworks on District Surgeon's services in relation to cost effectiveness and efficiency.
- To identify and analyse the cost-effectiveness and efficiency of the current services rendered by District Surgeons in the North West Province.
- To make recommendations on how District Surgeon services can be restructured in the North West Province to ensure efficient and cost effective services.

1.3 Delimitation of Study

On the basis of the urgency of the research report by policy makers (the Provincial Health Executive) in the North West and the fact that there has been one evaluation study on three provinces i.e. Western Cape, Free State and Northern Cape, and not North West Province. Due to the unique historical background, rural nature of the North-West Province there is a need to provide a well-informed research paper. The study focused on the services rendered by Part-time district surgeons in the North West province.

1.4 Rationale

The introduction of the new national health system, with Primary Health Care as a vehicle for District Health System necessitated the assessment and relevance of the old District Surgeon Services that was based on magisterial

boundaries and old apartheid health system (Health Act 63 of 1977) which was characterised by duplication, fragmentation and inequitable distribution of Medical, Professionals and resources.

The cost effectiveness of the current system of District Surgeons services was highly questionable and this study attempts to investigate service delivery that is accessible, affordable effective and efficient within provincial budget constraints.

The assessment of the district surgeon's service in the North West Province in this study will assist the province to come up with relevant and more realistically conceptualised service to support the District Health System. Certainly the study will conceptualise the service of the district surgeons within the framework of different polices that underpin the transformation of health service, in the country for example patient right, Batho Pele and the researcher will in reviewing these policy framework also raise issues that are relevant or link with district surgeons' services within the context of District health system

The study will, as expected, add value to available information to policy makers and senior management that will effect possible improvements and the restructuring of district surgeon's services for effective service delivery. The study may also benefit the national effort on questions of district surgeons' services within the new district health system, and this to confirm or disproof service perceptions in all provinces.

1.5 Definition of terms

District health system policy: a major strategy explored by the South African government to achieve health for all through the primary health care approach whereby management responsibility is decentralised to the lowest level of management at the local district level.

District surgeon's services: The services rendered for the state by part time general medical practitioners in respect of forensic medico-legal service, clinical forensic services, primary health care service to pensioners, prisoners or the indigent patients for a fee paid to a district surgeon by the state. The district surgeon is a South African term used for medical officers doing the abovementioned services in terms of the Health Act number 63 of 1977.

Primary health care approach: is the underlying philosophy for the rendering of health services to the community based on the Alma Ata declaration of 1977 to provide accessible, affordable effective, efficient, and sustainable comprehensive health care service at the cost that the country can afford using local resources.

Decentralisation: the process of devolving accountability and authority for planning organisation and management of resources to those who are implementing policy at the lowest level that is closer to the people served. In

the context of the North West province this is the level of regional management office district offices and sub district level.

Operational definitions

All of factors below have helped spawn a variety of the terms to describe performance in the delivery of health services: -

Effectiveness, transformation, and efficiency because, these terms are often ill defined sometimes, used interchangeably and occasionally inappropriate for evaluating organisational performance, it is important to define them for present purpose. For example, a productive or efficient organisation is not necessarily an organisation, which is efficient in some activities or necessarily efficient at all.

The three terms widely used in assessing health service delivery are generally used to describe the potential of a health service to provide the desired effect.

Appropriateness focuses on whether an efficacious treatment was applied to the right patient (client) at the right time.

Effectiveness: How well does a process or intervention work?

In this context, effectiveness involves ascertaining the quality with which a service is carried out, assuming that the service was both efficacious and appropriate.

Efficiency is defined as the cost per unit of output. An example is the average total labour cost per admission. Efficiency in this research study will refer to

the relationships between input and output; maximizing the output for a given input.

Existing studies indicates or suggest "that the factors associated with increased efficiency include use of: -High standard goals; information and feedback; compensation system oriented towards rewarding productivity and efficiency. Ownership and governance input (.Shortell and Arnold k Kaluzuy: 386—387)

Accessibility: Geographical, financial, social and physical access to health services provided.

Acceptability: This refers to the match between clients or patients and community expectations and the care provided.

Transformation is defined in English Oxford school dictionary as meaning "changing the form or appearance or character of a person or thing".

For the purposes of this research paper I prefer the definition of transformation as conceptualised in the White Paper on Transforming the Public Service (1997:3) as "a practical difference people see in their everyday lives and a view or experience of service in an entirely new way". According to the White Paper on Transformation of Public Services, transformation is primarily about how public services are provided and especially about improving the efficiency and effectiveness of the way in which services are delivered. Transformation, change or reform will be used in the context of this

paper as having corresponding meaning as the expression of change towards improving service delivery for efficiency and cost effectiveness.

1.6 Dissemination of Results

Report is discussed at Senior Management meeting of the Department that takes place once 1st Wednesday of the month.

This is done realising that the key to successful health system research is its impact on policy. The Senior Management Meeting of the Province has the capacity to accept recommendation and influence policy formulation to bring about change.

Upon conclusion of the research report the findings is summarised and discussed to give a conclusive view of the researcher and contradictions or commonality where it exist. Finally the last chapter also deals with recommendations based on critical fact from this study.

This chapter one was dealing with the introduction of the assessment of the current d district surgeons system in the Northwest and also pointing key background information to the research problem. This chapter has also succeeded in providing the scope of this research ,aims/objectives and organisation of the study towards assessing the cost-effectiveness and efficiency of the district surgeons' services in the province.

Chapter 2: Literature review

2.1 Introduction

This chapter will focus on the readings, findings, interpretations and evaluation of a selected literature carried with a view to finding out in previous research and written materials that give any information on district surgeons or forensic medico legal services in South Africa. ***There is a dearth of literature on district surgeon's services in the country.*** The topic under review seeks to assess how the services of the district surgeons can be transformed for cost effectiveness and efficiency in the northwest province.

2.1.1 Literature Review

The following documents were review in particular interest to district surgeons general scope of practice to assess the prescripts regarding what has to be done by any person designated as district surgeon in south African context. The literature search was also used to verify information received from key informants and to put the study in context and to formulate questions with regard to the practical assessment of the services in question.

In accordance with the study objectives policy and legislative framework that relate to the health services and surgeons key performance areas were critically reviewed as selected literature.

2.1.2 White Paper for the Transformation of Health System in South Africa

The object of the White Paper on Transformation of Health Services in South Africa, Notice 667 of 1997 is to present the people of South Africa a set of policy objectives and principles upon which the United National Health System will be based. The White Paper makes provision for establishment of District Health System at local government level. In a way supportive to the Reconstruction and Development Programme (RDP) view of local accountability and service delivery (ANC 1994).

The White Paper carries a mission of creating District Health System based on Primary Health Care approach for delivery of all health care services including medico legal services (currently provided by District Surgeons) with a particular health district.

2.1.3 Policy on Medico Legal Services in South Africa

Non-medically trained persons ordered equipment and this has possibility for wrong equipment used for Medical or Medico Legal Procedures (1998:1).
The document is dealt with at length in the chapter of literature review.

2.1.4 District Health System in South Africa

The decentralisation of health services to district level management depends on the delivery; management and control of all health services within the district and this include public and private health care providers. It is therefore imperative for the district surgeon services and or medico legal services to be aligned with the District Health System's approach. The document of DHS gives a policy framework.

2.2 Historical background of district surgeon service

Prior to 1994, the health care services in the country were fragmented, unequal and delivered along racial lines with poor quality health services being provided to blacks. Through out the years of apartheid rule, blacks were grossly disadvantaged. Separate health systems allowed those who could not afford to pay for their health care to be referred as indigent patients where therefore to seen by district surgeons who were mainly private practitioners, Afrikaner white males who worked part time or session service to the state.

According to the study by Vivian (2000), on governance, South Africa is one of the most inequitable countries of the world. White South Africa on its own, would rank 24th among the highly developed nations in terms of socio-economic development.

Salaries were grossly inflated and poor services rendered to the people who in most cases were not examined in certain instances. Findings

misrepresented or were used to hide the evidence in favour of the perpetrators of human rights violations within the apartheid's government machinery.

The need for change is facilitated by an enabling policy and legislative framework that supports the transformation of the public services towards primary health care. (White Paper on Transformation of Health Services in South Africa 1997:12-15).

There is a dearth of literature on district surgeon's services. Although there are many books and literature on medico legal services, little research has been done on the functions of district surgeons, despite the fact that for the very long time they have been employed to render forensic medico legal services in South Africa. Sometimes this was at high cost to the provincial and state departments, in spite of that the services rendered to the poor were of a poor quality.

2.3 Policy and legislative framework

The development of policies that are relevant to the demands of the new dispensation must be understood within the context of reconstruction and development programme, which was started to address the legacy of apartheid centred policies. The study will, therefore, discuss this in the context of service needs for cost effectiveness and efficiency.

For the purposes of this research efficiency will refer to the process in the practice of rendering and provision of the service the expected right way to the satisfaction of the cliental.

2.3.1 The Constitution of the republic of South Africa (Act 108 of 1996) has something to offer that relates to health service delivery although not specifically district surgeons. Chapter 2 of the constitution deals with "***the bill of rights*** "and health care is a right to all citizens, irrespective of race, colour or creed. The right of access to health services should progressively be realised as determined by Section 27 of the Constitution, Act number 108 of 1996.

The supreme law of the country raises question on how the services of the district surgeon are in line with the prescriptions of the constitution in terms of the right of access to the services. The major challenge relates to how the public facilities deal comprehensively with all services including forensic services and further issues relating to the services of district surgeons, especially how accessible to those who need them in terms of friendliness and affordability.

The challenge to health care also require of the district surgeons to provide access to health care for pensioners and those awaiting trial, for provision of general comprehensive clinical care to state patient in accordance with the rights as stated in the constitution of the country.

2.3.2 White paper on the Transformation of the health system in South Africa

In reviewing policies special attention was given to the founding policies of the government regarding services of district surgeons in the framework of exiting policies and the need to realign the two.

Part of the process of health reform, initiated by the minister of health Dr Nkosazana Dlamini-Zuma was the appointment of the ministerial committee, which made recommendations that brought about the White paper for the transformation of the health system in South Africa (government gazette No 66 of1997). This paper records the fundamental issues for transformation of health care delivery system and gives direction towards decentralised management of health services with emphasis on the district health system.

The district surgeons medico legal services are delivered according to the old magisterial boundaries while the health district boundaries which are aligned to new local government the for coherent service are managed by the district health managers. This new arrangement seems to be more appealing.

The challenge is to increase access to services, improve the quality of care, availability of essential drugs in the health facilities and rational health financing so as to ensure Primary Health Care to all citizens.

The above policy framework is a challenge to district surgeons to transform toward District Health System (DHS). The principle of the DHS emphasizes a unified, accessible, efficient and effective service through the following: -

- Overcoming fragmentation
- Comprehensiveness of service
- Effectiveness
- Efficiency
- Quality
- Access to services
- Local accountability
- Decentralisation
- Sustainability
- Community participation and development of intersectoral approach.

Against this background, a need for restructuring district surgeon's services to the benefit of victims of crime/violence cannot be over-emphasised.

There is urgent need to prioritise this service as a matter of extreme urgency so as to shape it in the spirit of the White Paper on Transformation of Health Services in South Africa (1997:28---31).

The White Paper on Transformation of Health Services in South Africa, (1997: 47) states that budget prioritisation be towards a shift to Primary Health Care, improved efficiency with regard to the use of resources and to reduce wastages and loss of drugs.

The above statement from the white paper demands a re-look into the services of public sector, and suggest the district surgeon's services to be monitored in terms of rational drug usage and value for money paid to salaries for session work. It is apparent that the cost of medicine is ever escalating and much is spent on medicines. One of the questions asked, therefore relate to how the district surgeon's salaries compare to the services rendered by full time medical officers in the state. The document of primary health care emphasises the cost effectiveness of the service to both clients and providers.

Currently there seems to be little control over services rendered by district surgeons in the province and therefore, a high possibility of fraudulent claims and misappropriation of medications, as was highlighted in a public report from forensic audit in the province in 1998/99. (Minutes of the forensic audit conducted in 1999.)

2.3.3 Use of Essential Drug list (EDL) and standard treatment guideline

The essential drug committee of experts, formulated standard treatment guidelines (STG) for rational prescribing and appropriate use of drugs according to levels of care:(Essential drug list document, December 1999: 5-10)

- EDL for district hospital
- Primary health care clinic/level
- Adult and children treatment protocols.

Currently private medical officers and district surgeons have been reluctant to use standard treatment/ EDL and as a result the cost effectiveness of the service becomes questionable. The tradition of health being equated to medicines or quality of care being gauged by the number of items or packets of medicines one brings from a doctor seem to be a factor in increasing cost in health care. District surgeons should be prescribing according to EDL as Primary Health Care service and public hospitals are using a revised EDL as from December 1999.

A conflict of interest was most obvious in the department's effort to reduce the cost of drugs by promoting the use of generic drugs; parallel importation and changes in the way drugs are being dispensed, notwithstanding the ongoing controversy, amendment version of the related legislations was finally passed by the end of 1997(Vivian 2000: 9).

2.3.4 White Paper on Transformation of the Public Service: Batho Pele and its relevance to efficiency (1997: 1-10)

The quality of service can be evaluated through the use of qualitative approach and Batho Pele document seemed relevant to the services of district surgeons as well.

This white paper lays the basis for people oriented health service delivery and the questions of value for money, patient rights; client satisfaction; redress acceptable service standards and courtesy are key principles for the

transformation of all public service. How satisfied are the clients that visit district surgeons was a question to district managers in the questionnaire and it has appeared from pilot study of questionnaire that it will draw interest and high response from the majority of respondents.

Are they treated with courtesy and are they given quality service?
Batho Pele has redress as a principle that refers to the correcting of wrongs of the past and provision of an opportunity to tender an apology or alternative intervention or remedies.

Is the service of district surgeons effective? There is sufficient qualitative expression of good attitude of employees or providers of health care and there is little or nothing on qualitative information such as cost effective measures. The information on principles of Batho Pele is relevant to transformation of district surgeons 'services in context of the district health. Effectiveness, efficiency and transformation are primary concepts in the white paper of department of public service and administration and national health system reform as a whole.
The relevance of this policy framework becomes more important because public monies are spend on the services of private practitioners rendering service to the state at a fee for services or on contract. A further investigation of the public finance management legislation will bring more light on the reasons these policies are reviewed as to give meaning to transformation of district surgeons in the province.

2.3.5 Public Finance Management Act no.1 of 1999(as amended)

The latest legislation, Act number 1 of 1999, seeks to regulate financial management, to ensure that all revenue expenditure, assets and liabilities of the government are managed efficiently and effectively, provide for the responsibilities of persons entrusted with financial management in government to account for all money spend in the provision of services PFMA (1999:1—3).

According to this piece of legislation, the accounting officer may set terms and conditions for the transfer of funds for services provided to the department. How this relate to the topic, is more to the fact that although this applies to the public entities, the district surgeons are part time employees of the state.

Payment by health authorities such as district health offices for services rendered by part time district surgeons create a necessity to ensure that the value for money is received and that the services need to be evaluated on a regular basis to account for public money e.g. salaries and stock.

The object of PFMA (Public Finance Management Act) is to secure transparency, accountability and sound management of the revenue, and expenditure of institutions that applies the act e.g. district health office responsible for payment of expenditures for services rendered by district surgeons(PFMA 1999:1—10).

The last but not the least policy document reviewed is policy on medico legal service in South Africa. This policy paper is the most relevant as it concentrate on major aspects of the key performance area of the current district surgeons.

2.3.6 Policy on medico-legal services in South Africa

In the overview of the current service dispensation, in the country the document provide a view that part time or session officers are rendering the district surgeon's services or a hospital-based appointment. These functions are classified as primary health care, medico legal functions, and ex- officio functions.

2.4 Resource utilisation and facilities

Historically district surgeons' service in medico legal services has much to do with political scenario and different governments departments e.g. Justice. Police services have been taking care of mortuaries in terms of provisioning of facilities and purchase of equipment. At times this service is done by personnel who are not medically qualified to understand appropriateness of such apparatus, medico -legal procedures (1998:1). Clearly this document indicates areas where in certain state mortuary medical officers who do not hold postgraduate qualifications in forensic medicines or forensic pathology perform autopsies.

Other services that complement the district surgeons are laboratory that perform forensic biology to support clinical forensic medical post mortem services. These laboratories are a scarce resource and are limited in the country. There are one each at Pretoria Johannesburg and Cape Town.

Frew Benson argues, in a report on a study tour about similar service in the United Kingdom; Germany and France, that clinical medico-legal services need centres that are victim friendly. The survivor of violence needs health care, judicial reports, counselling and ongoing support.

The report further indicates the following:

The service support the police and Justice Department to bring perpetrators of crime to book and to ensure punishment.

Although in South Africa district surgeons' service is rendered under the auspices of the Department of Health while it is an agency service to the Police and Justice system, a budget for travelling to courts must be claimed from the Justice Department. The report states that in the countries visited, laboratory services i.e. forensic science are well established to enable the medical officers charged with this functions to provide good and professional evidence in court and being supported by independent National DNA databank in countries like Britain. Excellent facilities are cited by Benson as conducive to providing family counselling rooms, an identification room that allow family members full family contact with the deceased- and good daylight lighting in the dissection room, electricity operated tables and audio and video recording facilities.

Unlike the UK and Germany as indicated in Bensons report, the services of district surgeons in the province according to reports of forensic specialist, is very much under developed and need upgrading as well as training of medical officers in performing the services effectively.

Nationally there are debates to transfer the mortuary service to the Department of Health from police services in line with the district health system. This approach will ensure appropriate delivery of this specialist service and further more ensure that police are not both the custodian of criminal evidence and custodian of the dead as indicated in the policy of medico legal services in South Africa.

2.5 The need for change in district surgeon service

The system and the structure of district surgeon service that include medico legal investigation of death by medical officers and district surgeons in South Africa was developed over many decades and under apartheid system as service or function of complex political constitutional dispensation that prevailed for the last century or more.

Change seems inevitable to create a more competent, easily accessible, user-friendly services that are cost effective and efficient, medico legal service is described as essential in the policy document to enhance the rights of the individuals in the community. The policy document further suggest that, in the interest of efficiency, the service should be rendered by skilled professionals

and assistants who are well and adequately trained in the speciality of forensic and medico legal services and whose independence or autonomy are neither compromised nor questioned.

What is adequately trained means is not known in this context. The policy, however, stipulates postgraduate or specialist in forensic medico legal is a necessity to provide effective and efficiency service that the country can be proud of. Does this mean that the current district surgeons are not specialist? The policy document further raises questions through the mention of autonomy and independence.

Post-mortem examination is normally carried as part of medico legal procedure of unnatural death to provide for answers in the investigation of serious crime. Does the service provide such answers in the North West or do murderers escape the law. The clear answer from South African document by Professors Coetzer and Fosseus, indicate the current district surgeons have acquired experience and developed skills through the years and that any over-hasty decision to change the existing district surgeon's service is a mistake (Coetzer et all.1998: 11).

International norms indicate that medical practitioners or pathologist should not do more than 200 post mortem examination per annum (Policy on medico-legal services in South Africa: 1998).

The figures in South Africa are more than triple. To change the service towards efficiency demands skill audit and increase of skilled professional states the policy document as medico legal investigation of death is today a science in itself and revolve around medical and pathological evidence to be presented by an expert in court.

The policy document on medico legal services does give this as vision for the service in South Africa: -

"To ensure the development of a just South African society, endeavour to protect the rights of persons, establish the independence of medical and related scientist...ensure that service is equitable, efficient ,cost effective and provide for specific needs of those persons rendering the service and establish adequate data, collection and processing"

The above vision necessitates the assessment of the current service of the district surgeons with an aim of improving the quality of care and the cost of services should be what the district health authority can afford to a sustainable level.

The sustainability of service of the district surgeons is the question that has to be answered through the process of this study because a similar evaluation was done by Mc Intyre in the Western Cape but fall short of making a conclusive statement as to the generalisation of the findings to areas such as the North West Province which is rural and has different contracts existing due to the past administration in this part of the country. (Mc Intyre's evaluation of part time district surgeons in Western Cape: 1997)

Not all districts including rural district have equitable service to the services of district surgeon states press release of the Member of Executive Council for health in the North West legislature. Other questions raised in the public hearing were, do persons in distress see district surgeons when they need their services- and these as many seemed to have occurred in the evaluation study conducted in the Western Cape. Are these services rendered in an environment that is conducive for stress relieve ought to be answered in an affirmative.

The policy seems to suggest that post mortem services should be rendered at regional level at a central district with surrounding districts of the region. This will be cost effective as it may not be the case if less than 150 post mortem examinations are performed per year. Ancillary services such as microbiology, chemistry and specialised forensic services could be outsourced (Policy on medico-legal services in South Africa: 1998).

2.6 Monitoring of service standards

An emphasis on training for medical officers and undergraduates is evident in the policy and the need for further professional development need to be a priority. Monitoring performance standards should be done on an ongoing basis to ensure the quality assessment, quality control and peer review among those that do medico legal services in areas of the country such as

North West Province. The sad facts are that there are only 15 forensic pathologists practising in the discipline in South Africa.

The equipment and assistant for post mortem examination have a variation from town to town. In some areas equipment vary from fully equipped dissection room to bare essentials such as a room with cooling facilities for corpses and a trolley for dissection. The above-mentioned scenario does not favour the efficient or effective district surgeon services, if shortage of skilled forensic pathologist, medical officers with appropriate postgraduate training and appropriate equipment are unavailable in the country and the provinces e.g. North West, KwaZulu Natal, Northern Cape Northern Province etc.

Again the scenario also put a challenge on funding medico legal services to provide adequate equipment, rationalisation of mortuaries, providing assistance for re-skill of medical officers in the field of forensic and medico legal services. The need for alternative service in clinical forensic medico legal services such as examination of sexual assaults drunken driving and dealing with request for choice on termination of pregnancy (CTOP) can be performed by occupational classes of professional nurses with special training that include forensic nursing; primary health care, diagnosis treatment and care qualification than only medical officers as is currently the case, medico legal service (1998: 1-5).

The policy document does not point any prior knowledge of nursing profession providing medico legal service in the country. How can nurses provide this

service? Will the community accept it? This may be cost effective and provide efficient service per category of medico legal service than providing the seemingly ineffective service that is currently provided to the majority of the South African communities.

The policy document on medico legal services in South Africa, 1998, spells out major challenges; it does not seem to suggest or indicate any urgency on the transformation process. There is no time frame indicative of short or medium term. The policy is silent in role of the provinces in terms of transformation of district surgeons. There is no clear intention of doing away with the district surgeons and replacing them with full time medical officers after sufficient training or introduction of specialists.

There is a mention of forensic pathologist and chief examiners in the document with out mention of national intervention to set standards and norms. There is a gap in strategies for transformation of medico legal services. The White Paper on Transformation of Health System in South Africa is silent on medico legal service.

2.7 Organisational Effectiveness

The recurrent question that emanates from health departments and preoccupies health managers at district level over the years has been effectiveness. Various answers are given depending on the underlying models adopted. Chiefly, the role of effectiveness has been overstated in documents

leading to a neglect of higher order levels of fitness, despite growing body of literature in corporate strategy regarding issues of effectiveness (Berge et al 1989:25).

2.8 Strength and Weakness of district surgeons service

There is no full agreement by various stakeholders on the sustainability and cost effectiveness of district surgeons services bearing in mind that there are several flaws in the existing services, pointed Kinghorn A (1996:4-6).
According to Kinghorn' s findings there seems to be an agreement on the fact that district surgeons provided access to medical care to those who need medical officers at rural areas where no alternative providers exist.

The average cost per district surgeon according to the report of Kinghorn is generally comparable with that of the public service. The views expressed in departmental financial review and evaluation of these variations of part time district surgeons and rigorous assessment of cost effectiveness of the district surgeons and relative cost of public sector provided services will need further detailed studies to examine all factor such as quality of care which is not the objective of this research study. This view is expressed adequately by Kinghorn study.

The strength of the service is centred on the fact that district surgeons are prepared to stay in rural parts of the province. Most of the experienced or newly qualified medical doctors are not prepared to go there and ensure

delivery of medical service to the rural poor and the previously disadvantaged masses of the North West Province.

Often than not district surgeons have been observed to be staying longer in rural areas than any other medical officers mainly because of incentive of alternative income from fees or salary drawn from part-time work to the state as district medical officer to take care of state patients.

This chapter of literature review has provided with the opportunity to review policy framework inline with the objective of the research to be informed by current policy direction in the absence of sufficient documentary data in literature. Sufficient information that supports the need to transform all health service point to the fact that district surgeon services must be restructured in line with the government policy. Recent studies in the field of district surgeons service seem to have started very late in the late 1997 when already there was wide spread dissatisfaction about district surgeon services. Literature and documentary review showed that there is little written information on the service that has long started in South Africa.

In the following chapter the research design that is the most crucial stage in this research process will be clarified and the techniques for the study will be discussed including sampling procedures, data collection and finally analysis technique that is employed in this study.

Chapter 3: Research Methodology

3.1 Introduction

The methodology followed is to a greater extent qualitative. However, some quantitative data was obtained using certain methods because of the nature of the problem under review particularly because the assessment of service delivery was reviewed through seeking opinions of managers interviewed. The interviews require time on the part of both the researcher and respondents

A qualitative research style involved more than looking at qualitative data. It is empirical in that it involves documenting real events, recording what people say, focussing on with words, gestures, tone and observing specific behaviour such as attitudes. It also includes studying written documents (Neuman p.329).

In summary qualitative research methodology relies largely on the interpretative and critical approaches to social science and therefore non-positivists perspective (Neuman: 329).

Furthermore a case study approach was utilised to gain information on the current district surgeons services in the North West Province as it allows the researcher to get in-depth, knowledge and to get more details on the cases examined and selected by being immersed in it through familiarising with district surgeons and their operations.

3.2 Research design

A structured scheduled in-depth interview and self administered questionnaire were tools used to get data for the purpose of assessment of cost effectiveness and efficiency services of the district surgeons in the North West Province.

The method used in this study allows the researcher to target key informants to tap into the data relevant to evaluate the assumption of respondents on efficiency of the current district surgeon services and to subject them to critical thinking, emotional and intellectual energy (Leeds 1993).

Qualitative method of data collection, analysis and interpretation of data is not easily reduced to figures or liable of being destroyed by any attempt to do so. This method is particularly appropriate at assessing the perception of different stakeholders, managers and district surgeons as service providers themselves. Further more this study design is utilised because there is no need for measurement of statistical nature.

3.3 Study population

The study population is made up of policy makers, district managers, managers at different levels in the North West Province and current district surgeons practising in the North West Province. This is logical in that these managers are relevant for assessment of cost effectiveness as this is required

of them by Treasury instructions and the prescripts of the PFMA as Accounting Officers of the Department of Health. Other people included in this study are experts in the field of forensic medicines.

3.3.1 Study sample

The study sample is made up of eighteen (18) district managers, four (4) regional managers, and senior managers of the department of health North West Province who have sufficient information on district surgeons in the province.

Pilot study

The pilot questionnaire was administered to five other managers who were not included in the sample for the study. All five pilot respondents returned the questionnaires and some of the questions were later deleted because they were ambiguous and some questions were found by respondents to be a repetition.

3.3.2 Research Instruments

Measuring tool

- Structured interviews schedule
- Self administered questionnaire

The in-depth interview was conducted with key informants drawn from a population of managers at different level at district and provincial level with a

focus on those managers that have direct or indirect information on district surgeons and medico legal services. Questionnaires were sent to all 18-district managers. Further interview schedule was conducted with all four regional managers senior managers, specialist and representatives of district surgeons in the province. The sample used was mainly convenient sample in that people targeted were those who have more information and knowledge of the services of the district surgeon.

3.4 Data collection technique:

- Face to face interview with district surgeons and senior managers and other selected specialists and experts.
- A questionnaire was distributed to each district manager in the province and it was expected of them to return it to the researcher by a specific date. Fortunately most of them responded.

3.4.1 Primary data

The primary data was collected from key informants interviewed on a face-to-face approach that allowed structured probing on questions that were predetermined to get more qualitative data from the informants.

Other primary data was collected through structured questionnaire with both closed ended and few open ended questions that required, for example, the

opinion of the respondent on the issue The questionnaire generated both qualitative as well as quantitative data.

In depth interview schedule were held with the following key informants in the North West Provincial Administration of the Department of Health:

- Regional managers for the four regions in the province.
- Senior managers responsible for policy and planning.
- A manager in the office of the MEC for health.
- A programme manager in district development.
- Two forensic and medico-legal experts at the Medical University of Southern Africa (MEDUNSA).
- A regional forensic specialist.

Each interviewee had special knowledge on medico-legal services in South Africa.

Finally eleven district surgeons out of the total twenty four (24) were interviewed.

The area covered in the focus in–depth interviews were including standard of service:

- Affordability of services
- Efficiency measures,
- Advantages and disadvantages of the current district surgeon services were identified.

The interview focussed in the following areas as well:

- Workload of district surgeons;

- Cost of the service;
- Availability for emergency cases;
- Response time of district surgeons;
- Satisfaction of the Department of Health about the services rendered to clients.
- Transformational issues and what problems exist in the current District /Surgeon service
- Time spent on state patient etc.

3.4.2 Secondary data

- Secondary data was searched from reports of task team,
- District managers' quarterly reports,
- Public hearing minutes provincial legislature North West for May 1997
- National forensic and medico-legal restructuring committee.

The context of the medico-legal service is mainly obtained from policy document as presented in the chapter on literature review. Most of the qualitative cost effectiveness data were very scarce and no documentation could be found. It is apparent from this study that only responses from district managers could give some figures in this regard

Data verification

Preliminary reflection was done by comparing data/statistics gathered from district surgeons and those from district managers of the same health

district or magistrate district to check trustworthiness for the information such as patients seen per month. Verbal face-to-face and telephonic requests for all assessment information were checked with the task team.

The process of data verification mentioned above found that there were clerical errors that occurred during recording as well as omission with an error rate of between 6% and 10%. Time was not taken to attempt to verify all data obtained from in-depth interviews.

3.4.3 Data capturing and analysis

Firstly the data was collected by questionnaire and then encoded using "Epi-info" (Epidemiological Information Data Analysis software programme), there after raw data was captured manually through telly method into tables and telly sheet. Only then was the analysis done.

The researcher went through all data for familiarisation and understanding of the concepts and views expressed by different participants. Data was grouped or classified into sections and main themes for critical analysis and interpretation within the context of the research problem.

The three methods used in the data collection i.e. interviews; questionnaires, and literature review assisted in comparing different ideas, data source, against theoretical framework to ensure reliability and validity of data gathered in the process of collection.

Data analysis proceeded from extracting meaning from main themes developed from responses in the data collection. It was organised in generalisation from common viewpoints and sometimes evidence that presented a coherent and consistent picture (Neuman L.W, 1997:329). Reliability based on replication was not measured. However, consistency of data in themes was checked.

3.5 Limitations

- The different key informants interviewed seemed to be biased in favour of national parliament's announcement to terminate district surgeon's services.
- Written information about district surgeon's services is very limited.
- Different respondents have different views about district surgeons.
- Effectiveness and efficiency being confused in health care system during interviews.
- The number of full- time district surgeons very small in the province.
- The researcher's bias existed as data being collected was based mainly on his own perception of the service provided by part time district surgeons.
- There is very little literature on district surgeon services.

In this chapter the research design, data collection technique, data analysis were described extensively. Method of analysis consistent with research

design was described and various aspects of study investigated. The gaps were identified and considered for noting in discussion and recommendation of this study.

The following chapter deals with the findings or results of the study based on the methodology described in this chapter.

CHAPTER 4: ANALYSIS AND INTERPRETATION.

4.1 INTRODUCTION

In the previous chapter, on research methodology, the research designed was clarified at great length. Procedure to be followed in sampling and collection of data to be presented, were also outlined. This chapter will start with presentation of results of the primary and secondary data collected.

In this chapter result of the questionnaire that was sent to eighteen (18) districts health managers and results of the structured in depth interview schedule will be presented, analysed and then interpreted. The aim of this chapter is to familiarise the research with qualitative and quantitative data.

The results of the secondary data which is mainly related to literature review and the policy framework review has been dealt with and presented in literature review chapter of this document and other findings will be presented under the central themes that includes workload, cost of services of district surgeons, effectiveness and efficiency.

4.2 OBJECTIVES

The structured questionnaire and interview schedule were constructed to achieve the research objectives as outlined in the previous chapters. Response rate of questionnaire is 78% i.e. Out of eighteen (18) questionnaires distributed fourteen (14) were returned. On the other hand,

focused in-depth interview schedule targeted twenty-four (24) part-time district surgeons of which eleven (11) were interviewed.

- Three Medico-legal/forensic Experts from Medical University were interviewed.
- One Forensic Specialist was interviewed and five (5) key informants who are members of Provincial Health senior management level. All of the above were required to respond to a standard structured interview schedule.

4.3 PRESENTATION OF RESULTS

4.3.1 Annexure 1, which is a questionnaire distributed to eighteen (18) district health managers, will be summarised and only key responses from basic themes categories will be presented on the chapter.

TABLE 4.1.1

Response rates to questionnaire and interview schedule by District Managers and District Surgeons respectively.

RESPONSE RATE QUESTIONNAIRE

RESPONDENTS	QUESTIONNAIRE		
District health Managers	**Distributed**	**Returned**	**% Returned**
	18	**14**	**78%**

Of **the 14 respondents 12** have Districts Surgeons in their employment and **2** do not have districts surgeons.

Number or District Surgeon with or without contracts **= 30**

TABLE 4.1.2 QUESTION 2

(a) Areas which services are rendered	**Surgery**	**Hosp/clinic**	**Mobile**	**Uncertain**	**Total**
	6	**6**		**2**	**14**

(b) Rating of accessibility of District surgeons services	**Good**	**Fair**	**Poor**	**Uncertain**	**Total**
	4	**4**	**2**	**4**	**14**

Only two of the fourteen respondents rated access to district surgeon's services as poor and equal number of four each rated access good and fair.

TABLE 4.1.3 QUESTION 3 COST OF SERVICES OF DISTRICT MANAGEMENT TEAM BY DISTRICT SURGEON SERVICES

Categories of Expenditures to District Management expressed in Rand categories

1. Salaries R104.444 220

50000 – 80000	80000-10000	101000-110000	110000-above	Uncertain	Total
0	0	0	10= 71,4%	4 = 29%	14

2. Allowance R378, 056 076

70000 – 90000	91000-10000	101000-above	Uncertain	Total
4 = 29%	2 = 14,2%	1	7 = 50%	14

3. Medical Allowance R245 301 451

2000 – 5000	6000-10000	11000-above	Uncertain	Total
1 =7%	1 = 7%	5= 35,7%	7 = 50%	14

4. Travelling Allowance R36,440 341

2000 – 5000	6000-10000	11000-above	Uncertain	Total
4 = 29%	1 = 7,1%	2=15,2%	7= 50%	14

5. Rentals R3 500

1000 – 5000	5100-10000	10100 -above	Uncertain	Total
1 = 7,1%	0	0	13 =92,8%	14

6. Overheads expense R126 600

1 – 5000	5000-10000	10100-above	Uncertain	Total
0	0	1	13=92,8%	14

7. Other expenses R939 736

1 – 1000	1001-5000	5010-above	Uncertain	Total
0	1 =7,1%	1=7,1%	12=85,7%	14

TOTAL EXPENDITURE TO DISTRICT MANAGEMENT = R1 060 438 084

QUESTION 3.1 TABLE 4.1.3

R1060438847	Opinion of District managers on the cost of service
More or less the same	0
More than the cost above	0
Less than the cost	8 = 57,14% *
	6 uncertain = 42,85%

In Table 4.1.3 results in response to question 3.1 are presented: testing the opinion of district managers on the perceived cost of district surgeons. 57%14 i.e. 8 out of 14 respondents indicated that they should be spending much less than the actual cost indicated above.

Six managers did not respond to the above question however most district manager are of the opinion that the current district surgeon annual cost should be less than the amount they spent on district surgeons currently.
57.4% of managers feel that the total cost as mentioned in question3 should be less.

WORKLOAD

TABLE 4.1.4 AVERAGE HOURS OF DISTRICTS SURGEONS FOR STATE SERVICE

Respondent	8 hours	5/8 hours	Less than 4 hours	No response	Total
14	3	1	7	3	
Percentage	21,43%	7,14%	50%	21,43%	100%

NB: More than **50%** of the District Surgeons work for **less than 4 hours per day** to service of state patients/District Surgeons patients. The question of availability of district surgeons to public patients and easy access is answer indicating that only 21.43% of district surgeons are available for 8 hours in a day.

QUESTION 5

TABLE 4.1.5 Submission of monthly statistics for 1999 – 2000 to district offices.

Yes	No	No response	Total
10	2	2	14
71,4%	14,3%	14,3%	100%

The district managers confirmed that they receive statistics from the district surgeons. There was a general believe that district surgeons receive money/salary from the state with out providing health districts with statistics.

Only 14% of district managers did not receive statistics.
The responses from managers therefore indicate that district surgeons in the North West province comply with the request of monthly submission of statistics.

QUESTION 6

TABLE 4.1.6

Problem cases to District Surgeons	**No of patients per categories**										
	1	No	2	No	3	No	4	No	5	No	Totals
1. PHC	<500	**2**	**501-700**	**2**	**701-800**	**1**	>801	**2**			**7**
2. Minor ailments	<500	**4**	**501-700**	**0**	**701-800**	**1**	>801	**1**			**6**
3. Assaults	<10		**11-20**	**3**	21-30	**1**	31-40	**0**	>40	**6**	**10**
4. Rape	>10	**3**	**11-20**	**2**	21-30	**0**	31-40	**0**	>40	**2**	**7**
5. Post Mortem	<10	**3**	**11-20**	**2**	21-30	**2**	31-40	**2**	>40	**1**	**10**
6. Drunken - Driving	<10	**4**	**11-20**	**3**	21-30	**1**	31-40	**0**	>40	**0**	**8**
7. Court appearance	<5	**6**	6-10	**3**	>10	**1**	0	**0**	0	**0**	**10**
8. Average prison cells visits	<10	**2**	11-20	**1**	720	**5**	0	0	0	**0**	**8**
TOTAL											

The above table 4.1.6 reflects that head counts per category of programme of district surgeon service package. The table also reflect less number of clients seen by district surgeons in PHC, minor ailments, rape assaults and drunken driving. Majority of district surgeons do on average between 11-20 post mortem, per month and visit prison or police cells once a week.

QUESTION 7
TABLE 4.1.7 RESPONSE TIME BY DISTRICT SURGEONS FOR EMERGENCY

Less than 30 minutes	**6**	**43%**
Response of more than 30-60 minutes	**5**	**36%**
No response	**3**	**21,4%**
Total	**14**	**100%**

The district surgeons' response time of less than 30 minutes.
NB: Majority of District Surgeons responds to emergencies within 30 minutes.

EFFECTIVENESS AND EFFICIENCY QUESTIONS

QUESTION 8

This question wanted to know the opinion of managers to check whether district surgeons provide efficient service to clients? **YES / NO**

- **Out of eleven (11) managers the respond to this question was, 50% = YES and 50% said NO.**
- **3 out of 11** respondents representing **27.28%** agreed that the clients are satisfied with the service by district surgeons.
- **72.725%** disagreed district surgeons do not satisfactorily serve these clients. This represented 8 out of 11 respondents to question 8 of annexure 1.
- The question on whether victims of violence receive the same care from district surgeons as their private patients: **55%** of 14 respondents said victims do not receive same care as private patients, and **45%** agree that victims receive same care from district surgeons.

QUESTION 9

Complaints received by district office: All respondents received between 1 and 5 complaints against district surgeons in the last 6 months.

QUESTION 10

How satisfied are you with the following aspects of service delivery by districts surgeons?

NB: On average 78,5% of respondents were very dissatisfied with the following services.

- Handling of patients, the use of EDL, time spend on state patients, reliability of service, quality of care, first came first serve, consultation session, privacy of patients, and value for money.
- 21,4% was very satisfied with all of the above.

QUESTION 11

How accessible is the services of the district surgeon?

The majority said the service is accessible i.e. nine (9) respondents out of fourteen (14) said the services of district surgeons are accessible

QUESTION 12

This question asks whether district surgeons' services should be done away with?

- 53% said district surgeons' services should be done away with
- 47% said NO the services of the district surgeons should not be done away with
- 53% of Those that said district surgeons services should be done away with given the following as reasons: -
  * That the service is very expensive
  * Full time Medical Officers should perform the service, and that district surgeon services is inefficient

QUESTION 13

Table 4.1.13 This question was asked to determine whether or not full time Medical Officers with training should perform the service of district surgeons.

Yes	No	Uncertain	Total
13		1	14
92,85%	-	7,14%	100%

NB: The following services were sited as appropriate for full time Medical Officers

- Clinical Forensic services by 38,4%
- Medico-Legal services and Clinical Forensic by 38,4%
- And 23,2% said Medico-Legal services only

QUESTION 14.

Table 4.1.14 Should nurses be trained to do Medico-Legal services? If yes which services can be done by nurses.

Yes	No	Uncertain	Total
69%	31%	-	100%

NB: Majority of respondents are of the view that nurses should be trained to perform medico-legal services for such cases as rape, assaults, family violence etc. From table 4.1.14 it is indicated that 69% of respondents (Out of 14 respondents) believe that professional nurses be trained to provide forensic medico-legal services

QUESTION 15

Table 4.1.15 Can part-time Medical officers or full-time Medical officers deliver forensic services? **YES/NO**

Full-time Medical Officers		Part-time /session Medical Officers		Total
Yes	No	Yes	Uncertain	
57%	43%	45%	55%	

The question was asked to check the preferred option of service delivery of medico legal service currently provide by district surgeons, between part time medical officers and full time medical officers

NB: There is no significant difference between session and full-time Medical officers in terms of this service.

QUESTION 16

How else can the services be restructured? The results from the respondents are illustrated bellow:

- 50% said drawing new service contracts that includes PHC could restructure services.
- 28% says by appointment of forensic specialist
- 36% were uncertain of the services can be restructured

- 7% says the introduction of strict monitoring and evaluation of service and the last 7% says appointing forensic nursing will change the service.

QUESTION 17

Give additional suggestion on how efficiency of Medico-Legal services can be improved?
Fourteen (14) respondents answered this question, which was an open-ended question of how the district surgeon's services could be transformed in the North West province.

64,2% of respondents indicated that skills development and training of Medical officers should be prioritised to improve district surgeons' services
A further 21,4% said regular evaluation and monitoring would add to the improvement of the service.

4.3.2 Annexure 2: Analysis of in-depth interviews with key informants

4.3.2
Current View: **A:\annexure 2 INTER VIEW SCHEDULE**
QUESTION 1. **Table 4.2.1(a)** SKILLS AND QUALIFICATIONS OBTAINED

Course Obtained	Frequency	Percent	Cum Percent
MBBS	1	9.1%	9.1%
MBCHB	10	90.9%	100.0%
Total	11	100.0%	100.0%

Institution	Frequency	Percent	Cum Percent
NON RSA	1	9.1%	9.1%
RSA	4	36.4%	45.5%
RSA university	6	45.5%	90.9%
RSA university	1	9.1%	100.0%
Total	11	100.0%	100.0%

Table 4.2.1 reflect the qualifications and skills of district surgeons in the service of the North West province. The table also indicates that 90% of them have South African medical qualifications.

Table 4.2.1 (b) ADDITIONAL COURSES BY DISTRICT SURGEONS

Any Additional courses attended	Frequency	Percent	Cum Percent	
1=No	6	54.5%	54.5%	
2= YES	5	45.5%	100.0%	
Total	11	100.0%	100.0%	

Almost all district surgeons are white males with S.A university qualifications in the North West Province according to observations. District surgeons to keep themselves abreast with new medical developments for improved and efficient district surgeon services in the province attended no additional courses or seminar and this represented 54.5%.

Table 4.2.1(c) ANY RECENT SHORT COURSES ATTENDED BY DISTRICT SURGEONS

Recent Short course attended	Frequency	Percent	Cum Percent	
1=No	10	90.9%	90.9%	
2=Yes	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

NB About 90% of those interviewed had not attended short or refresher course in the last year before this study ***

QUESTION 2

Table 4.2.2 Do you have use of own equipment? Yes /No

N2 Do You Have	Frequency	Percent	Cum Percent	
1=YES	9	81.8%	81.8%	
2=NO	2	18.2%	100.0%	
Total	11	100.0%	100.0%	

Majority of district surgeons use their own equipment and facilities according to this table. Only 2% of the total of 11 interviewed do not have own equipment.

Question 3
Table 4.2.3 Are you available 24 hrs?

N3 Are You Available	Frequency	Percent	Cum Percent
1=YES	7	63.6%	63.6%
2=NO	4	36.4%	100.0%
Total	11	100.0%	100.0%

Table 4.2.3 confirms that district surgeons are available 24 hours around the clock. This is also reflected that response in the data received from district managers. Accordingly 63.6% of eleven respondents are 24 hours available.

QUESTION 5
Table 4.2.5 DO YOU HAVE A RELIEVE PRACTITIONER?

N5 Do You Have A	Frequency	Percent	Cum Percent
1 YES	6	60.0%	60.0%
2 NO	4	40.0%	100.0%
Total	10	100.0%	100.0%

Table 4.2.5District surgeons operate from their private practice, using their surgery and own equipment for the service. 63.6% of district surgeons said, they are available 25 hours around the clock or alternatively represented by relieve medical practitioner

QUESTION 6
Table 4.2.6 DO YOU DISPENSE MEDICINES

N6 Do You Dispense	Frequency	Percent	Cum Percent
1= YES	3	27.3%	27.3%
2=NO	8	72.7%	100.0%
Total	11	100.0%	100.0%

Only a minority of the current district surgeons dispenses from their private

facilities, the majority of them sent patients to state facilities with prescription letter for dispensing since1998.

QUESTION 7
Table 4.2.7 AVAILABILITY OF POLICE MORTUARY

N7 Police Mortuary availability	Frequency	Percent	
1=YES	3	27.3%	
2=NO	8	72.7%	
Total	11	100.0%	

Table 4.2.7 above indicated that only (3) three of the (11) eleven respondents district surgeons indicated that there are police mortuary available. It seems from these results that mortuaries are few in the North-West Province.

QUESTION. 8
Table 4.2.8 HOW WOULD YOU RATE MORTUARY EQUIPMENT? 1 GOOD, 2 FAIR 3 POOR

N8 How Would rate mortuary equipment	Frequency	Percent	Cum Percent	
2 FAIR	6	60.0%	60.0%	
3 POOR	4	40.0%	100.0%	
Total	10	100.0%	100.0%	

The 60% of mortuary equipment in the northwest is fair in terms of quality and usefulness of the facilities.
The mortuaries are either situated at hospitals or police stations.
Only 40% said mortuary equipment are in poor state of repair.

QUESTION. 9

Table 4.2.9 IS YOUR RMATION COMPUTERIZED OR MANUAL

N9 Is You Information	Frequency	Percent	Cum Percent	
1 Computerized	1	9.1%	9.1%	
2 Manual	10	90.9%	100.0%	
Total	11	100.0%	100.0%	

District surgeons in their surgeries manually capture the statistical information and this reflects 90% of respondents in the North West Province.

D. Workload NB These questions were asked to determine output in relation to inputs e.g. Cost of service v/s workload

QUESTION.10
Table 4.2.10 DO YOU HAVE CLERICAL SUPPORT FOR YOUR SERVICES?

N10 Do You Have clerical support	Frequency	Percent	Cum Percent	
1 YES	10	90.9%	90.9%	
2 NO	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

Most district surgeons have appointed clerical staff to support them in their duties
90% of the district surgeon's interview has clerical staffs that support them in the service.

QUESTION. 11
Table 4.2.11 DO YOU SUPPLY DISTRICT OFFICE STATISTICS EVERY MONTH?

N11 YES/NO	Frequency	Percent	Cum Percent	
1 YES	9	90.0%	90.0%	
2 NO	1	10.0%	100.0%	
Total	10	100.0%	100.0%	

NB: The majority of district managers agree to the district surgeon's submission that they submit on regular basis monthly statistics to district office This result confirms what the response by district manager in (questionnaire) **table 4.1.5** where 71.4% said they receive monthly statistics.

QUESTION. 12

Table 4.2.12 AVERAGE NUMBER OF POST MORTEM DONE BY D/SURGEON PER MONTH IN YEAR 2000

1-10=1; 11-20=2 ; 21-30=3; 31-40=4; ABOVE 41=5

N12 Average		Frequency	Percent	Cum Percent	
1	1-10=1	4	**36.4%**	36.4%	
2	11-20=2	4	**36.4%**	72.7%	
3	21-30=3	1	**9.1%**	81.8%	
5	31-40=4	2	**18.2%**	100.0%	
Total		11	**100.0%**	100.0%	

According to table 4.2.12, respondents indicated that about 73% of the district surgeons performs between 1 and 20 post mortems per month during the financial year 2000

The question was asked to determine the number of post mortem done per month by district surgeons. It appears that the post mortem are more between 31-40 per month only in 18% of the areas in the province.

QUESTION. 13

Table 4.2.13 AVERAGE NUMBER OF COURT APPEARANCES BY D/SURGEONS IN YEAR 2000

N13 Average court appearance	Frequency	Percent	Cum Percent	
1 =1-5	7	63.6%	63.6%	
2 =6-10	2	18.2%	81.8%	
3 =10 and above	2	18.2%	100.0%	
Total	11	100.0%	100.0%	

On average the district surgeons interviewed had appeared between 1- 5 to give expert evidence in court per year.

The question was determining the workload related to court cases.

From the additional obtained, district surgeons indicated that good medical report for the court reduces the chances of district surgeons being called to personally appear before the court.

QUESTION 14

Table 4.2.14 (a) average number of patient per month/ categories Apr.99—Mar 2000

PHC

PHC patient numbers	Frequency	Percent	Cum Percent
1=Less 500	8	72.7%	72.7%
2=501-700	2	18.2%	90.9%
3=701-800	1	9.1%	100.0%
Total	11	100.0%	100.0%

NB D/Surgeons confirms that they see less than 500 PHC patient per month in district managers response this is confirmed.
73% of district surgeons seen less 500 PHC patients per month

Table 4.2.14 (b) MINOR AILMENTS

Minor Ailments	Frequency	Percent	Cum Percent
1 Less than 500	10	90.9%	90.9%
3=701-800	1	9.1%	100.0%
Total	11	100.0%	100.0%

The **table 4.2.14** reflects that district surgeons see less that 500 patients for minor ailments treatment.
Only 9.1% of district surgeons see 701 and 800 patients with minor ailments.
NB There is correlation between patient with minor ailments and PHC because the difference between Minor ailments and what PHC could be.

Table 4.2.14 (c) ASSAULTS

Assaults	Frequency	Percent	Cum Percent
1=<10	6	54.5%	54.5%
2=11-20	2	18.2%	72.7%
3=21-30	1	9.1%	81.8%
5=>40	2	18.2%	100.0%
Total	11	100.0%	100.0%

The interview revealed in table 4.2.14 (c) that most district surgeons (54.5%) see less than ten (10) assaults cases per month.

There seems to be correlation between numbers of assaults cases seen by district surgeons and post mortem done per month, see table 4.2.12. In both tables 4.2.12 (c) and 4.2.14, 18% see above 40 assaults and about 40 post mortem.

Table 4.2.14 (d) RAPE CASES

Rape Cases	Frequency	Percent	Cum Percent	
1=<10	7	63.6%	63.6%	
2=11-20	2	18.2%	81.8%	
4=>40	2	18.2%	100.0%	
Total	11	100.0%	100.0%	

63.6% district surgeons interviewed see less than ten (10) rape cases per month.
18% of respondent's district surgeons see between 11-20 and about 18% see more than 40 rape cases per month.

Table 4.2.14 (e) POST-MORTEM

Post Mortem per month	Frequency	Percent	Cum Percent	
1=<10	6	60.0%	60.0%	
2=11-20	1	10.0%	70.0%	
4=31-40	1	10.0%	80.0%	
5=>40	2	20.0%	100.0%	
Total	10	100.0%	100.0%	

The majority of district surgeons (60%) do less than ten (10) post mortem per month and only 20% do more than 40 post mortem per month.
The question was asked to check consistency of statistics received by district managers and that kept by district surgeons.

Table 4.2.14 (f) DRUNKEN DRIVING

Drunken Driving	Frequency	Percent	Cum Percent	
1=<10	10	90.9%	90.9%	
2=11-20	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

90% of district surgeons said they see less than 10 drunken driving cases per month

Table 4.2.14 (g) COURT APPEARANCES

Court Appearances per month	Frequency	Percent	Cum Percent	
1=<5	9	81.8%	81.8%	
2=6-10	2	18.2%	100.0%	
Total	11	100.0%	100.0%	

81% of the district surgeons go to court less than 5 times per month and 18.2% attended court between 6-and- 10 per month.
This also correlates with response of district manager.

Table 4.2.14 (h) AVERAGE POLICE CELL VISIT

Ave Police Visit	Frequency	Percent	Cum Percent	
1=<10	9	81.8%	81.8%	
2=11-20	2	18.2%	100.0%	
Total	11	100.0%	100.0%	

About 18% of respondents do 11-20 police visits per month

QUESTION. 15

Table 4.2.15 RESPONSE TIME BY D/SURGEONS FOR EMERGENCY

N15 Response time in minutes	Frequency	Percent	Cum Percent	
1=Less than 30 minutes	11	100.0%	100.0%	
Total	11	100.0%	100.0%	

District surgeons indicated that when police call they respond within 30 minutes. This Table 4.2.15 disproof the perception held that victims wait for more that two hours for district surgeons to respond.

QUESTION 16

Table 4.2.16 AVERAGE HOURS SPENT BY DISTRICT SURGEON PER DAY IN PUBLIC SECTOR SERVICE

N16 Average Time spent	Frequency	Percent	Cum Percent	
1=8 hrs per day	2	18.2%	18.2%	
2=5 hrs per day	1	9.1%	27.3%	
3=Less than 4 hrs per day	8	72.7%	100.0%	
Total	11	100.0%	100.0%	

NB: 72% of district surgeons indicated that they spent less than four (4) hours to state patients i.e. more or less 28% of district surgeons work for more than half a day for the state patients. The majority of the current district surgeons spent more than five (5) hours attending to their private patients

QUESTION 17

Table 4.2.17 HOW OFTEN DO YOU VISIT PRISONS

N17 How Often	Frequency	Percent	Cum Percent	
1 once a week	7	70.0%	70.0%	
2 Twice a week	3	30.0%	100.0%	
Total	10	100.0%	100.0%	

70% of the district surgeons had a once a week visit to the police or prison cells.

QUESTION 18

AVERAGE TIME SPENT BY DISTRICT SURGEON ON PATIENT.

NB: this question was asked to determine the effectiveness of service.

Table 4.2.18 (a) RAPE

Rape	Frequency	Percent	Cum Percent	
3=20-30 Minutes	7	63.6%	63.6%	
4=Above 40 minutes	4	36.4%	100.0%	
Total	11	100.0%	100.0%	

Rape cases examination for majority of respondents 63% (7 out of 11) perform this examination for 20 to 30 minutes less. There has been observation on some district surgeons, that the time taken differs per case for example in adults victims district surgeons spent less time than with examination of children.

Table 4.2.18 (b) AUTOPSY

Autopsy	Frequency	Percent	Cum Percent	
2=10-20 minutes	1	9.1%	9.1%	
3=20-30 minutes	6	54.5%	63.6%	
4=Above 30 minutes	4	36.4%	100.0%	
Total	11	100.0%	100.0%	

Majority of district surgeons (54.5%) do post mortem within 20 to 30 minutes and only 36% i.e. for out of 11 interviewed perform post mortem for over 30 minutes.

Table 4.2.18 (c) PRISONERS

Prisoners	Frequency	Percent	Cum Percent	
1=>10 minutes	4	36.4%	36.4%	
2=10-20	6	54.5%	90.9%	
3=20-30	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

Table 4.2.18 (d) PHC

PHC	Frequency	Percent	Cum Percent	
1= >10	2	22.2%	22.2%	
2=10-20	7	77.8%	100.0%	
Total	9	100.0%	100.0%	

EFFECTIVENESS AND EFFICIENCY OF SERVICE.

QUESTION. 19

Table 4.2.19 DO YOU PROVIDE FOLLOW UP TO PATIENTS

N19 Do You Provide follow up	Frequency	Percent	Cum Percent	
1=YES	6	54.5%	54.5%	
2=NO	5	45.5%	100.0%	
Total	11	100.0%	100.0%	

Question 20

Table 4.2.20 IN THE LAST 5 YEARS WAS YOUR SERVICE EVALUATED?

N20 In The Last	Frequency	Percent	Cum Percent	
1=YES	2	18.2%	18.2%	
2=NO	9	81.8%	100.0%	
Total	11	100.0%	100.0%	

Most district surgeons 81% said their services were never evaluated

QUESTION. 21

Table 4.2.21 DO YOU HAVE COPY OF EDL DOCUMENT:

NB this was asked to determine the use of essential drugs recommended by government and therefore ensure cost effective use of pharmaceuticals.

N21 Do You Have a copy?	Frequency	Percent	Cum Percent	
1=YES	5	45.5%	45.5%	
2=NO	6	54.5%	100.0%	
Total	11	100.0%	100.0%	

NB 54.5 % of district surgeon does not have copy of EDL for rational prescribing and treatment according to standard treatment guidelines. The use of essential drug list is to ensure the use of equally effective treatment through affordable medicines.

QUESTION. 22

Table 4.2.22 OUT OF 100 % INDICATE PROPORTION OF SEEING STATE PATIENTS

N22 Proportion Out Of 100%	Frequency	Percent	Cum Percent	
15%	1	9.1%	9.1%	
20%	1	9.1%	18.2%	
30%	4	36.4%	54.5%	
50%	4	36.4%	90.9%	
70%	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

The proportion of time spent by the district surgeon to the service of the state is less than 50% i.e. less than four hours service in a working day.

QUESTION 23

Table 4.2.23 WHAT MEASURE MUST BE IN PLACE TO TRANSFORM DISTRICT SURGEONS TO BE EFFECTIVE.

N23 What Measure need in place	Frequency	Percent	Cum Percent	
1=Creation of effective crises centre	1	9.1%	9.1%	
2=Separation of forensic service with clinical	4	36.4%	45.5%	
3=Training, capacity building in full time medical officers	5	45.5%	90.9%	
6=Drawing up new service level contracts	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

NB 46% of district surgeons believe that full-time medical officer must be trained for the services and 36% indicated the need to separate forensic from clinical services

QUESTION 24

Table 4.2.24 IN YOUR OWN OPINION HOW CAN THE SERVICE BE IMPROVED FOR COST EFFECTIVENESS.

N24 In Your Opinion of district surgeons	Frequency	Percent	Cum Percent	
1=Utilisation of full-time medical officers	2	18.2%	18.2%	
2=Regular evaluation and monitoring of services of D/Surgeons	6	54.5%	72.7%	
4=Making state facilities and equipment available for use for district surgeons service	3	27.3%	100.0%	
Total	11	100.0%	100.0%	

NB The majority of district surgeon regarded regular monitoring and evaluation as necessary to improve the cost effectiveness of their service.

- The following observations were made during the in-depth interviews that majority of district surgeons have not attended regular additional courses or training
- Most of them were more than ten (10) years in the service.
- Most did their studies in South African medical universities.
- Only one has a foreign qualification and is not white.
- Were not happy about the salaries and allowances they received.
- They felt that community service doctors will not be available for court cases that sometimes take six months to be in court.
- Most agree that the service must be transformed and orientation and in-service in medico-legal be part of continuous professional development plan for medical officers.

Table 4.2.25 NB Experiences of Key informants in district surgeon's services

C year after Study	Frequency	Percent	Cum Percent	
Less than 10 yrs	2	18.2%	18.2%	
More than 10 yrs	1	9.1%	27.3%	
More than 10 yrs	7	63.6%	90.9%	
More than 20 yrs	1	9.1%	100.0%	
Total	11	100.0%	100.0%	

The question was asked to determine the experience in years of district surgeons in the North West province and table 4.2.25 revealed that 63.6% of them have ten(10) years after basic qualification as medical officers.

4.3.3 Annexure 3 - In-depth interview schedule with managers and experts

- The majority of key informants interviewed are of a view that the current district surgeons' service has cost the state much more because some surgeons have abused the system. They indicated that there are district surgeons who have done a good job over the years but because of lack of proper monitoring and control few rendered inefficient service to the unsuspecting clients particularly along racial lines. (See response to annexure 1, question 8), i.e. 55% said district surgeons do not provide efficient service.
- The majority feel that the current contracts be terminated to be replaced with appropriate service level agreement that has specific time frame and key performance areas. On question 12 of annexure 1,

of the total respondent of 14 district managers, 53% said the feel that the current district surgeon's services be done away with or terminated and full-time medical officers be employed to do medico legal services currently performed by district surgeons.

There is also a view that the district surgeons have acquired skills and experience through the years and that should their service be terminated, the expertise of dealing with court cases will be lost and perpetrators of rape, drunken driving may win court cases due to lack of expert evidence in justice system. (Table 4.2.25) indicates that 63% of district surgeons have more that 10 years experience in the district surgeon's service.

4.4.Other findings

The findings from the policy documents, literature review and key informants are presented here below. All key informants interviewed are of the opinion that district surgeon's services must be restructured to be cost effective and efficient, stating that output does not match input (refer to table 4.1.3) in which of 14 respondents 58% felt that they can spent less than the current total expenditure to the district management team.

- A response to question 16 of Annexure 1, 50% indicates that new contract or service level agreement was necessary to improve efficiency.
- Table 4.1.14 reflects that 69% cited other measures like appointment of forensic nurse and evaluation of services from D Mc Intyre are on the evaluation study in the Western Cape, Free State, on district surgeon (1997:4) the following are found: -

- There is a general dissatisfaction with the current district surgeons system as can be seen in Annexure 1, question number eight (8) that 8 out of 11 (representing 72.7%) respondents disagree to the statement that district surgeons give service to clients satisfactorily.
- Changes in the system should include in new service agreement, PHC and forensic services (refer to response to annexure 1 question 16) in that 50% of 14 respondents restructuring should include changes to the current district surgeon's contract.
- That clients are prepared to consult PHC nurses especially with in the referral health system
- The Provincial administration in accordance with Mc Intyre also expressed growing concerns of district surgeons services and therefore confirm the findings in this research study in the North West Province
- The evaluation report of Mc Intyre, suggests that the old contracts must be changed and be time-bound to include monitoring of services.
- From the interviews and question 13 of Annexure 1, sent to respondents in the North West, 92.85% respondents in this research support this view that full-time medical officers in the employment of the state should be prepared through training to perform district surgeon's services. (refer to table 4.1.13).

At the time of the study, the Department of health North West, through the political decision by the MEC for Health, terminated all old contracts of district surgeons. That termination was effected in June 2001. It was the first bold step taken by provincial department regarding the district surgeon's services in the country.

The following were cited as problems associated with old contracts:

- The contracts did not make provision for the change in health service delivery system such as DHS and Free Primary Health Care (PHC) and Essential Drug List (EDL) treatment guideline.
- The availability of Community Service Doctors to rural areas.
- There were no monitoring and evaluation to curb misuse of drugs and over-prescribing to patients.
- Contracts seemed hereditary in that when the department knew of only 24 District Surgeons, there were additional affiliates subcontracted to the district surgeons with signed contracts.
- Poor and discriminatory service was provided to Africans as compared to private patients and white clients.
- The cost of services was unsustainable considering that the department is under budgetary constraints.

A significant number of key informants expressed agreement that, the current district surgeons have build in skills and experience over the years and could be useful provided, there are checks and balances on cost effectiveness of service provided by district surgeons.

The district surgeons interviewed are of the opinion that the state did nothing to orientate them to the service they provide, neither did they receive any kind of a forensic in-service training, let alone the back-up of a forensic Pathologist.

District surgeons felt that they were not supported with transport / vehicles, premises and staff.

The district surgeons themselves feel that even the national department had not provided any national policy framework; this feeling by the district surgeons in the North West is also confirmed by the study by Mc Intyre. In this chapter the results has been presented and the findings of the three sources of data from questionnaire, in-depth interview with key informants and district surgeons.

The results of interview with key informants have been presented in a narrative approach encapsulating key ideas and themes. Significantly the table are presented with salient narration to interpret the data. Both district surgeons and district managers feel that to improve the services of district surgeons some evaluation and monitoring should be put in place(Table 4.1.12 ;4.1.13 and table 4.2.24). The district surgeons however believe that, the services they provide is easily accessible and efficient although ,the data collected indicated that they spent less time for service to the state and cost more to patient ratio(table 4.1.3)

The following chapter will discuss the findings , contrasting and comparing opinions against facts from different documentary review and finally making informed choices for recommendations.

CHAPTER 5: SUMMARIES, FINDINGS AND RECOMMENDATIONS

5.1 INTRODUCTION

This study investigated the policy framework applied in the North West with regard the services of the district surgeons. It involved the analysis of primary data; obtained from key informants who were interviewed, namely district surgeons. The sample was made up of at least two practising district surgeons from each of the four regions of the Province. The previous chapters also presented finding/results from questionnaire, which was distributed to eight health district managers and also interviews with forensic experts and members of the Provincial Senior Management as emphasis of study was on purposive sample.

This chapter will further summarise analysis of previous chapters with effort to comparing findings and reflecting on observations as well as information that emerged from the literature review.

This chapter will also inform the conclusions, interpretation analysis and finally the recommendations of this study to the North West Health Department.

The summaries of findings are detailed around the main variables and themes that emerged from the study particularly from the chapter, of literature and document review.

5.2 SUMMARY OF FINDINGS

i) Workload v/s cost of service

ii) Analysis or Cost Effectiveness and Efficiency

iii) Policy framework

iv) Availability and Accessibility of service

5.2.1 WORKLOAD OF DISTRICT SURGEONS

Analysis of workload revealed that the district surgeons are spending in majority of cases less than 4 hours in the service of district surgeons and the rest of the time and effort is spent with private patients who receive better care and effective service.

Most district surgeons are historically from advantaged racial group and opted for the service of district to make a living in rural communities where very few private patients exist.

The majority (90%) of district surgeons submitted monthly statistics to District Health Offices and have clerical staff supporting their service. The workload however indicated that, 90% of district surgeons see less than 500 PHC and minor ailments per month i.e. less than 20 patients per day.

Many of the district surgeon's patients for the 99/2000 financial year, were people applying for social grants or pension. The professional nurse and/or

assistant see majority of cases without proper examination from the Medical doctor/District surgeon - although the pensioner must be examined and treated by a district surgeon.

Court cases and appearance seemed to be higher in the more densely populated towns such as Brits and Rustenburg. While others have appeared in court less than five times for the year 1999 - 2000.(refer to Table 4.2.13 and table 4.2.14(a). Over 60% of District surgeons have less than 10 post mortems per month reference to table 4.2.14.(e).and spent on average between 20 to 30 minutes per post mortem as indicated by table 4.2.18(b).

The literature review suggests that there is no one formula to determine the number of patients that the district surgeon should see per day. The number depends on the quality of care and service circumstances including case mix. There are suggestions that the district surgeons must do more than 200 post mortem examinations per year in order to build up skill and expertise. To ensure efficiency demands increased skills in district surgeons to deal with victim's problems effectively and ensure that those charged are prosecuted. Contrary to the idea, numbers of cases, the District Health System put more emphasis on quality of care through Primary Health Care approach (DHS policy 1995).

Lack of refresher course and poor attendance of in service training seem to influence the attitude of pushing clients to be examined by professional nurses and these give rise to concern about the uncaring district surgeons.

5.2.2 COST OF SERVICES TO DISTRICT HEALTH MANAGERS

The Department of Health, through the decentralised management system pay enormous amount of money to District surgeons in the form of salaries, medicine allowance, Travelling allowances and other allowances.

On average a district surgeon earns more than ± R135 000 only, and ± R90 000 for other allowances related to salary such as annual bonus, honorarium etc. Considering the patient case mix of patient treated, by district surgeons, the total to cost for a salary of one district surgeon is not cost effective. (Refer to table 4.1.6 and table 4.1.3) for number of patient per category and the total cost involved to the district management respectively.

77 % of district surgeons salary only is above R110 000 per annum to and 50% work less than 4 hrs per day as compared to 11 hrs worked by full time medical officers in state employ at principal medical officers salary of **R125 000** per year.

The researcher revealed that the Department of Health North West paid about ± R104, 444 220 to (30) thirty district surgeons for 1999/2000 financial year. (See table 4.2.3).

Lack of sufficient monitoring and evaluation, district surgeons adds burden to Department as 54% of 11 district surgeons interviewed revealed that they did

not have a copy of essential drug list and therefore, do not use rationale drug prescribing (table 4.2.21) and cost of drugs are uncontrolled.

An average cost per patient visit at Primary Health Care is around R48,00 and where full time medical officers are deployed is at R85 per patient visit. Efficiency is about doing things right. The key concern here is to optimise the mix of inputs to produce the greatest out put. Using the following as indicators cost per visit to district surgeon facilities, such as, referral rates or pattern to higher levels of care, use of hospital services and workloads.

Further investigation is necessary in this field to look at other factors such quality of care; patient rights and case mix in health care, District Health Expenditure Review (Taung District, 2001: 18 - 20) by Health Systems Trust.

5.2.3 EFFECTIVENESS AND EFFICIENCY

Effectiveness is about doing the right thing at the cost that the provider and consumer can afford. The research study revealed, that more than **78.5%** of District Managers are very dissatisfied with the service provided by district surgeons as reflected by response of managers.

Patients are not seen in time by district surgeons and when they do consult them **77%** are examined in less than 10 minutes. One of the functions of district surgeons is to examine victims of violence and crime to give expert

evidence in court. Reports investigated indicated that reports and evidence given by some district surgeon leaves much to be desired.

The study also indicated that there are good district surgeons around 36%, who do their work efficiently and provided service to the expectation of their clients.

About sixty four percent (63,6 %) of District surgeons have expertise and experience that it not found in full time medical officers. Fifty five percent (55%) of District surgeons provide their patient/clients with follow up service that is very good. (Refer to table 4.2.19)

5.2.4 POLICY FRAME WORK

The North West Province has an established Governance Act and Health bill that provide considerable strides in translating the overarching framework of the RDP into more specific health policies. The Governance Act is a politically and ideologically inspired new policy that intends to introduce sweeping changes with regards to community participation in health. (Vivian: 2000:66).

The National Department of Health has made a policy decision to transfer medico legal services/forensic services from police to health and restructure district surgeons' service for quality of care and this confirms an evaluation by McIntyre in the Western Cape.

This study confirms that the current district surgeons' services, which operate in magisterial district, do not match the current DHS service and National Health Plan. It also appears that the current district surgeon system must change. There is a need for new service level agreement based on policy framework.

In summary, the service of the district surgeons must be transformed to fit the health service needs of a specific health district within the policy framework that is in alignment with the National and Provincial policies. Literature supports the view that legislature and policy framework represent the foundation of a viable service delivery.

5.2.5 AVAILABILITY AND ACCESSIBILITY OF SERVICE

Majority of district surgeons are reasonably available 24 hrs around the clock and have relieve (partners) practitioners to stand in for them when out of the area of operation. Although, senior managers view the district surgeons' availability as questionable - it seems that in most areas of North West their response time is within 30 minutes and this can be improved.

Literature defines accessibility as geographical, financial, social and physical access to health care services. The district surgeons are, for the majority of the poor the only medical officers available to them in rural areas.

Some district surgeons (about 45%) provide clinic visit outside their normal surgery.

Problems of availability in small rural towns are mostly during weekends and public holidays, where victims suffer when the district surgeon is not available.

There has been no monitoring of services of district surgeons in most parts of the North West Province.

- Contracts were not appropriate for effective service delivery.
- Workloads due to pensioners / and social grants applicants contributed to long waiting time at district surgeon since there is no appointment system.

In summary district surgeons who operate alone in small towns cannot be available for 24 hours - it is practically impossible and therefore the need for multi disciplinary team approach seems to be imperative if clients needs are to be met.

The introduction of new support cadres in the form of forensic nurses seem to be appealing and a viable option to deal with rape cases, drunken driving, assault cases while forensic autopsies can be done by more skilled and experienced medical officers in full time or part time employment to the state.

The study shows that of critical importance, is that the district surgeons' service must be open to a more competitive market if the quality of care is to improve. Creation of a workable interface between the current district surgeon system and the new, affordable, sustainable and caring health service is a challenge. This means a need for value for money and quality of care.

A more accommodative service level agreement with private sector experienced general practitioners can provide a pool of skills for clinical medical services.

The study also brought to light the need for regionally deployed Forensic Pathologist to support - medico legal and forensic services in the decentralised health system.

To ensure quality of care a need for Programme Manager at a Provincial Office to ensure monitoring evaluation, setting of performance standards and development of protocols for district surgeon's services.

5.3 RECOMMENDATIONS

The district surgeons have been performing the most important work without proper orientation and training that ensures quality of service.

This study recommends that the following implementation strategies be put in place to restructure the district surgeons' services: -

1. Skills audit of all medical officers with a view to identify competencies among full time medical officers and part time district surgeon in each district.

2. Negotiate training (in-service or full time) with Medical Universities such as MEDUNSA and Witwatersrand - targeting interested medical officers and professional nurses. It is clear that although all Medical Officers can be

encouraged to perform district surgeons duties, they do not possess the necessary expertise - District surgeons can be contracted for short period to orientated full time interested Medical Officers whilst being given an allowance for the service. The work is stressful especially when dealing with courts proceedings.

3. Termination of all old contracts of current district surgeons. In the interim, new sessional arrangements must be put in place.

4. To investigate incentives for medical officers who perform medico-legal and forensic services as part of their normal duties.

5. A multi disciplinary team must be set up for the handling of services, such as counselling and care of the abused children.

6. Appointment of a Programme Manager at senior level to deal with standards, protocols and measures of control and technical support.

7. Appointment of a Forensic Specialist per region to support district medical officers responsible for district surgeon's designated service. This will create a sustainable organisational arrangement and ensure affordability and efficiency of this important service.

8. Investigation of regionally based post mortem services for cost effectiveness.

5.3 AREA OF FURTHER RESEARCH

- Against the background of this research there is a need for further research on questions of separation or combining of forensic pathology, medico-legal and clinical forensic services. There seems to be debates and various opinions on the merit and demerit of clinical and forensic being separated.

- Exploring further district surgeons' service financing or funding is it for Health Department or Justice Department.

5.4 CONCLUSIONS

The purpose or objective of this study is to assess the cost effectiveness and efficiency of the current district surgeons' services in the North West Province.

Document and policy review indicate that the inputs, are higher and not compatible to the outputs and hence the study discovers that in fact the service is very costly for the Department of Health.

The clients, District Managers, are unhappy with the service they receive from the part time district surgeons who give their private patients preferential treatment at the expense of the state.

Reflection of policy documents confirms that like in other parts of the country, key problem is poor quality services that is neither supported nor monitored. The fact that there is no person accountable for this service at the provincial level shows the root cause of declining quality of service against rising cost of service. The information received from key informants and interviewees as well as from experts consulted during the study confirms these findings broadly.

Successful implementation of these recommendations relies heavily on the urgent recruitment and appointment of an accounting manager for the programme at the provincial level.

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Annexure

I. Copy of letter-requesting stakeholders to participate in a questionnaire.

II. Annexure 1 questionnaire for district managers.

III. Annexure 2 interview schedule with district surgeons

IV. Annexure 3 Semi structured in-depth interview for managers, experts and forensic specialist.

V. Encoding of responses

Valued stakeholder. **13 May 2001**

Assessment of efficiency and cost effectiveness of district surgeon's services in the North West province.

Sir/madam,

Your opinions on the services rendered by the part time district surgeons in the province are important for the improvement of cost-effectiveness and efficiency of this important service within the district health system.

You are one of the valued stakeholders asked to participate in this assessment questionnaire to help with important information that will ensure the department of health in the NW province to better understand your service need. **You are not required to give your name.**

Please complete this questionnaire and return it as soon as possible **but not later than 31 May 2001.**
Fax to the Attention of K K Motlhabane at Fax 053-9270009 or E-mail: Kmotlhabane@nwpg.org.za

If you have any questions regarding this assessment questionnaire, please contact the aforementioned at Cell 0825784045 or through the Email.

Yours sincerely

KKMotlhabane

Annexure 1. Questionnaire for District health managers

DISTRICT SURGEONS SERVICES IN THE NORTH WEST

COST EFFECTIVENESS AND EFFICIENCY

A. Availability of district surgeon services

1. Do you have a District Surgeon in your District? /Magisterial area?

   Yes ☐ No ☐

2. Number of District Surgeons? =

From where are services rendered? - At surgery

- Public facility e.g. Hospital, Clinics ☐
- Mobile ☐

How would you rate the services accessibility? Good ☐ Fair ☐ Poor ☐

B Cost of District surgeon's services

3. How much did the services of District Surgeons cost per District Surgeon per year **99/2000 financial years**?

Salary	1	50 000 - 80 000	☐	2	80 000 - 100 000	☐	3	101 000 - 110 000 ☐
Allowances	1	70 000 - 90 000	☐	2	91 000 - 100 000	☐	3	101 000 - Above ☐
Med. Allow	1	2000 - 5000	☐	2	6000 - 10 000	☐	3	11 000 - Above ☐
Travelling	1	2000 - 5000	☐	2	6000 - 10 000	☐	3	11 000 - Above ☐
Rentals	1		☐	2		☐	3	☐
Other exp.	1	1 - 1000	☐	2	2000 - 5000	☐	3	6000 - Above ☐

3.1 In your opinion how much should the service be costing you over the same period mentioned above?.....

.....

.....

C. Work load

4. Average hours of services per day? 8/8hours 5/8hours less than 4 hours

5. Did your district receive statistics for 99/2000? .....**YES** **NO**.....

6. If yes average number of patients per categories April '99-- -March 2000

PHC **1** <500 **2** 501-700 **3** 701-800 **4** >801 p.m

Minor ailments 1 <500 2 501-700 3 701-800 4 >801 p. m

Assaults 1 <10 2 11-20 3 21-30 4 31-40 5 >40 p. m

Rape cases **1** 10 **2** 11-20 **3** 21-30 **4** 31-40 **5** >40 p .m

Post mortem 1 10 2 11-20 3 21-30 4 31-40 5 >40 p. m

Drunken driving 1 10 2 11-20 3 21-30 4 31-40 5 >40 p .m

Court appearance **1** <5 **2** 6 - 10 **3** >10 p.m

Average police cell visit per month. 1 <10 2 11 - 20 3 >20 p.m

7. Response time during emergency e.g. less than- 30 minutes ☐

More than- 30 - 60 minutes ☐

D. EFFECTIVENESS AND EFFICIENCY

8 .In your opinion do District Surgeons provide efficient service for the clients?

YES ☐ NO ☐

- District Surgeons service clients to their satisfaction.

  Agree ☐ Disagree ☐

- Victims of violence receive the same care from District Surgeons as his private patients.

Agree ☐ Disagree ☐

9. Complaints received by your office in the past six months? 1—5: 5—10

10. How satisfied are you with the following aspects of the service?

	Very satisfied				Very dissatisfied
Performance	5	4	3	2	1
Handling of patient	☐	☐	☐	☐	☐
The use of Essential drug list	☐	☐	☐	☐	☐
Time spent on state patient	☐	☐	☐	☐	☐
Reliability of service	☐	☐	☐	☐	☐

Other factors	5	4	3	2	1
Quality of service	☐	☐	☐	☐	☐
First come first serve	☐	☐	☐	☐	☐
Consultation session	☐	☐	☐	☐	☐
Privacy of patients	☐	☐	☐	☐	☐
Value for money (service)	☐	☐	☐	☐	☐

11. How accessible is the service? Accessible ☐ Not at all ☐

12. District Surgeon services should be done away with in this province.

YES ☐ NO ☐

If Yes Why?

_____

_____

_____

13. These services can be done by a full time Medical Officer with appropriate Training: YES ☐ NO ☐

If yes which services?

_____

14. Nurses should be trained to do some medico-legal services efficiently.

YES □ NO □

If yes which services?

_____

_____

15. Can Forensic services be delivered by:

- Part time/ Session Medical Officers Yes □ No □
- Full time Medical Officers Yes □ No □

16. How else can District Surgeon services be restructured? -

.....

.....

.....

.....

.....

.....

17. Give additional suggestion on how efficiency of medico legal services can be improved.....

.....

.....

.....

.....

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

ANNEXURE 2: Interview schedule with District Surgeons in the Northwest province

Hello, Dr----------, I am conducting a research study to determine the efficiency and cost effectiveness of the current district surgeon services in the northwest. The purpose of the research study is to help in the improvement of medico legal service and forensic service in the province. The information you give will be kept in the strictest confidence neither your name nor your practice shall be identified in any report .**Do I have your permission to continue with this interview?**

I would like to ask you the following questions about the services you provide as a district surgeon.

Skills and Qualification

1. Appropriate training in Forensic Medicines/ Medico legal and Forensic pathology

a) Course obtained.

_____

b) Institution _____

c) Year of study

_____

d) Additional courses attended?

_____

e) Recent short courses attended?

_____

_____

B. Availability of services

2. Do you have use your own equipment? Yes ☐ No ☐

3. Are you available for 24hrs? ----YES -------NO----------

4. Is your contact telephone number known by? Hospital ☐ Clinic ☐ Police ☐ Community ☐

5. Do you have a relieve practitioner, always when you are not available?

Yes No ☐

6. Do you dispense? Yes ☐ No ☐

If No who provides the service?

_____

7. Police Mortuary available Yes ☐ No ☐

Other ☐ Specify_____

8. How would you rate mortuary equipment you use?

Good☐ Fair ☐ Poor ☐

C. RECORD KEEPING

9. Is your information system computerised or Manual? _____

10. Do you have Clerical support available? Yes ☐ No ☐

11. Do your supply district office with statistics? Yes ☐ No ☐

D. Workload

12. Average number of post mortem examinations done per month in the **year 2000?**

1-10 ☐ 11-20 ☐ 21-30 ☐ 31-40 ☐ 41 + above ☐

13. Average number of court appearances per month by you in the past year? =

1-5 ☐ 6-10 ☐ 10 and above ☐

14. Average number of patients per categories April '99-- -March 2000

PHC 1 <500 2 501-700 3 701-800 4 >801 p.m

Minor ailments 1 <500 2 501-700 3 701-800 4 >801 p. m

Assaults 1 <10 2 11-20 3 21-30 4 31-40 5 >40 p. m

Rape cases 1 <10 2 11-20 3 21-30 4 31-40 5 >40 p .m

Post mortem 1 10 2 11-20 3 21-30 4 31-40 5 >40 p. m

Drunken driving 1 [10] 2 [11-20] 3 [21-30] 4 [31-40] 5 [>40] p .m

Court appearance 1 [<5] 2 [6 - 10] 3 [>10] p. m

Average police cell visit per month. 1 [<10] 2 [11 - 20] 3 [>20] p. m

15. Response time during emergency e.g. less than- 30 minutes ☐

More than- 30 - 60 minutes ☐

E. Time spent at district surgeon work?

16. Average hours spent on district surgeon service per? 8hrs 5/8hours less4hrs

17. How often do you visit prisons?

F. Time spent on clients:

18. Average time spend on patient is

	1	2	3	4
- Rape	> 10 min	10-20	20-30	above
- Drunken driving	> 10 min	10-20	20-30	above
- Autopsy	> 10 min	10-20	20-30	above
- Prisoners	> 10 min	10-20	20-30	above
- PHC	> 10 min	10-20	20-30	above

G. Effectiveness and efficiency

19. Do you provide any follow up to your clients? Yes☐No☐.....

...

20 .In the last five years was your services ever been evaluated? Yes or No

21 .Do you have a copy of Essential drug list (EDL)? Yes or No

22 .Out of 100% what proportion of time do you attend to both your private patient ant District surgeon patients?

23. What measure can be put in place to make sure that district surgeon services is transformed to the level of effectiveness?.....

24 In your opinion how can this service be improved to be cost effective and efficient?

.....

<u>Annexure</u> 3: Semi structured interview for Forensic specialist, Director policy, regional managers, and chief director: health services, Child protection unit, and social welfare manager.

Hello, ...I am busy with research study to assess cost effectiveness and efficiency of the services of district surgeons in the North West province. I request **about 30 minutes** of your time in this interview.

The information you give will be used to write up a report on how this service can be restructured and improved to be cost effective and efficient while your views will be held confidential. **Do I have your permission to continue?**

NB Questions will be short, closed ended and some open ended. Questions may be varied according to respondent expertise.

1. **E.g. what is your view of the service, in terms of effectiveness?**
2. **Are district surgeons providing service to your expectations?..... Can you elaborate?**
3. **How can the service be made more efficient for the clients?**
4. **Is the service of district surgeon accessible?**
5. **According to you what is the problem with this service?**
6. **What are the major advantages of the current service?**

.....

.....

.....

Encoding of responses

Annexure 1. Questionnaire to district managers

Question 3.1

In your opinion how much should the services be costing you over the same period?

- More or less the same. = 1
- More than the cost indicated. = 2
- Less than the cost indicated. = 3

Question 12

District surgeons should be done away with in the province? **(1) Yes/ (2) No**

If yes Why?

- Expensive and contracts not user friendly 1
- There is a need to have new SLA to include DHS 2
- Medical officer can do the service and involved other M/o 3

Question 13

Fulltime medical officers can do the services. Yes/No

If yes which services?

- Clinical forensic services only. = 1
- Forensic pathology e.g. medico legal post-mortem= 2

Both medico-legal pathology and clinical forensic = 3

Question 14

Nurses should be trained to do some medico legal services Yes/No.

If yes which services? 1

- For clinical forensic services e.g. rape, assaults, etc.

- Non medico-legal e.g. pensions, medical disabilities etc 2

Question 16

How else can the district surgeon services be restructured?

- New contracts that include PHC through DHS. = 1

- Appointment of forensic specialist and fulltime M/O. 2

- Allowing forensic nursing in clinical cases. 3

Strict monitoring and evaluation of service. 4

Question 17

Suggestions on how efficiency of medico-legal service can be improved.

- Evaluation and monitoring on regular basis. 1

- Strict control of medical and pharmaceuticals. = 2

- Training & skill development of fulltime Medial officers M/O= 3

Annexure 2 Interview schedule to District surgeons

Question 23

What measures can be put in place to make sure district surgeon service is transformed to level of effectiveness?

- Creation of an effective crises centre. 1
- Separation of forensic pathology from clinical forensic. 2
- Training, capacity. Building of fulltime medical officers 3
- Appointment of forensic specialist at regional basis for medico-legal services= 4
- Training of professional nurses for forensic services. 5
- Drawing of session service contract for needed services. 6

Question 24

In your opinion how can this service be improved to be cost effective and efficient?

- Utilisation of fulltime M/O. = 1
- Regular evaluation and monitoring. = 2
- Strict Compliance with EDL and STGs.= 3
- Making state facilities & equipment available for use. 4

Annexure 3. Semi-structured interview schedule to Managers

Question 1.

What's your view of D/Surgeon services in terms of effectiveness?

- Good quality service. 1
- Effective and efficient service 2
- Racial group disparities. 3
- Poor quality service 4
- Ineffective and inefficient service 5

Question 2.

Are district surgeon providing services to your expectation? **Yes /No**

Question 3

How can the service be made more cost effective to clients?

- Strict supervision and monitoring 1
- Performance evaluation /targets 2
- Utilisation of state equipment and facilities 3
- Training and skill development 4

Question 4

Is the service of the district surgeon accessible?

- Accessible 1
- Partly accessible 2
- Not accessible at all 3

Question 5

What are the problems with the services?

- Old and outdated service contracts. 1
- Unaffordable and not sustainable service 2
- No clear performance target 3
- Service open to abuse 4

Question 6

Advantages of District surgeon service

- Availability of skills and expertise 1
- Available medical service to rural areas 2
- They serve more complicated and serious cases. 3

Disadvantages of district surgeon services

- Difficulties in control of drugs 4
- Very expensive service and there unaffordable 5
- Service not readily available for victims 6