SUMMARY

COMPREHENSIVE SERVICE PLAN

FOR THE IMPLEMENTATION OF

HEALTHCARE 2010

DRAFT FOR CONSULTATION

Healthcare 2010
Equal Access to Quality Health Care

SEPTEMBER 2006

INDEX

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1. INTRODUCTION

1.2 Following the submission to the Provincial Cabinet on 26 March 2003, in Minute 49/2003, Cabinet resolved that it supported Healthcare 2010 in principle and mandated the Department of Health to proceed with the detailed planning and implementation of Healthcare 2010.

1.2 Healthcare 2010 concluded the restructuring process that commenced in 1994, however, this was not a detailed plan but rather a conceptual framework that flowed from the Department's Strategic Position Statement.

1.3 The aim of Healthcare 2010 is to provide equal access to quality healthcare by reshaping the health service and optimally utilizing allocated resources.

1.4 The underlying principles of Healthcare 2010 are:

1) Quality care at all levels;
2) Accessibility of care;
3) Efficiency;
4) Cost effectiveness;
5) Primary health care approach;
6) Collaboration between all levels of care; and
7) Reduction of chronic institutional care.

1.5 **A fundamental assumption of Healthcare 2010 is that the number of patient contacts would not be reduced but that patients would be treated at the level of care that is most appropriate to their need within a seamless service**.

1.6 Four component plans are required to give effect to Healthcare 2010 of which the Service Plan is the key. The other plans are the Human Resource Plan, the Finance and the Infrastructure Plans which will be developed when the Service Plan is finalized.

1.7 The First Draft of the comprehensive document was released to a limited audience in May 2005. Feedback on the first draft and subsequent work that was done were incorporated into the document which was discussed with top management and other managers representing the services in September 2005. More feedback was provided and further areas of work identified following which there was consultation with both divisions and where the feedback was incorporated as far as possible.

1.8 The guiding principles followed in developing the plan have been to base the recommendations on factual data and consultation to develop a logical, robust and objective plan.

1.9 The Second Draft of the document was work-shopped intensively with the members of top management in Caledon from 7-9 February 2006 in order to further refine and co-ordinate the plan before finalizing the discussion document for external consultation. The changes to the sub-district boundaries in the Cape Town Metro district in December 2005 that were approved by the Provincial Minister of Health were discussed at Caledon and subsequently incorporated into the Fourth Draft of the document and required a revision of the previous proposals for the Cape Town Metro district.

1.10 Extensive work has been done on the Service Plan for the Emergency Medical Services since the Caledon meeting.

2. OVERVIEW OF THE SERVICE PLAN

The Service Plan consists of five main parts, i.e.

Part A: District Health Services
Part B: Plan for the reshaping of acute hospitals
Part C: Specialised hospitals
Part D: Emergency Medical Services
Part E: Forensic Pathology Services

3. PART A: DISTRICT HEALTH SERVICES (DHS)

3.1 The role and importance of District Health Services

The aim of the Service Plan is to realistically but significantly strengthen the District Health Service. Primary Health Care (PHC) is delivered within the DHS and is the foundation of an effective and efficient public health service as:

- It is frequently the first point of contact between the patient and the health service, i.e. it is the gateway to the health service;
- It should provide a comprehensive and integrated package of essential PHC services; and
- Efficiencies or inefficiencies at this level impact significantly on the entire health system.

3.2 Facility-based services

3.2.1 Methodology: Facility based services in the Cape Town Metro

- DHS facility-based services are delivered in clinics, community health centers (CHCs) and district hospitals.
- The plan aims to improve access to the full package of Primary Health Care (PHC) services as determined by the National Department of Health.
- A clinic has been allocated for every 30,000 people and in the densely populated Cape Town Metro district the average walking distance to a clinic is within a radius of 3-4 km.
- A clinic serving 30,000 people is regarded as the optimal size for a clinic and the 18 staff allocated to such a clinic is designed to provide the correct number and skill mix of personnel.
- It is planned that there be sufficient management, administrative and pharmacy staff in the mix to enable the clinical nurse practitioners and clinical support staff to optimally use their available time for clinical work.
- Each clinic will be linked to a CHC which will in turn link to a district hospital, this will ensure a continuum of care. Clinical outreach and support from district hospitals to CHCs and from CHCs to clinics will ensure quality of care and adherence to prescribed service standards. Non-clinical outreach within the mentioned context will ensure the efficient utilization of support and administrative staff.
- The size of CHCs varies from units serving ±30,000 people to large units serving up to 120,000 people.
- Hospital maternity beds have been allocated to each sub-district on a normative base. Midwife obstetric units (MOUs) which provide a 24-hour service are allocated to at least one CHC per sub-district. The clinical governance of MOUs will be the responsibility of the district hospital to which it is affiliated.
- It is planned that there be at least one CHC-based clinic per sub-district that provides extended hours of clinic service until 21:30, seven days per week, to relieve the burden of non-emergency after hour visits at trauma and emergency units at hospitals. All trauma and emergency patients will be treated in the trauma and emergency units provided at all the acute hospitals in the Cape Town Metro district.
- The eight sub-districts of the Cape Town Metro district were mapped to provide appropriate drainage and referral routes for patients from clinic to CHC to district hospital and the number and location of facilities were determined by a combination of factors such as population size and utilization rates per geographical area. Annexure A illustrates the proposed clinic and drainage areas per sub-district. It is essential to note that most of the current service points are clinics that only provide limited services, whereas all the proposed facilities will provided the comprehensive package of care. Therefore although there appear to be more clinics at present than in the proposed future service this is misleading as current multiple fragmented service points will be reconfigured to provide accessible comprehensive services.
- A PHC workload and utilization calculator was developed to determine the staffing of facilities. Key variables used in the calculator are utilization rates and workload variables such as:
    - The direct patient care factor which is the percentage of time spent in direct contact with patients.
    - Minutes per consultation per category of staff.

- Number of contacts of a patient with health workers at different service points during one visit to a facility. This is particularly important as a patient may have multiple contacts with health personnel e.g. doctor or clinical nurse practitioner, member of PAMS, pharmacy, etc during one visit to a facility, therefore it is the number of contacts that determine the workload.

- The outcome of the workload calculator in proposed staff numbers is reflected in Table 1 below.

Table 1: Metro DHS: post allocation to clinics and CHCs

HEALTH PROFESSIONALS	Number of filled posts		
	Current posts	Planned posts	(Surplus)
Facility manager	102	88	-14
Medical officer	117	140	24
Clinical Nurse Practitioner	71	466	395
Pharmacist	46	126	80
Psychiatric nurse	30	50	20
Professional nurse	698	340	-358
Dentist and oral hygienist	32	65	33
School health: Professional nurse	20	42	22
Enrolled nurse	242	271	29
Subtotal	**1357**	**1588**	**231**
MEDICAL ANCILLIARY SERVICES			
Allied health professions & technical staff*	87	160	73
Radiographer		61	61
Subtotal	**87**	**221**	**134**
CLINICAL SUPPORT			
Pharmacy assistant	59	151	92
Enrolled nursing assistant	329	202	-127
Health Counselor	100	202	102
Dental assistant	7	51	44
Subtotal	**495**	**606**	**111**
ADMIN & SUPPORT			
Clerical staff	340.0	592.0	252.0
Porters, drivers and groundsman	7.0	36.0	29.0
Cleaner	406.5	300.0	-106.5
Subtotal	**753.5**	**928**	**174.5**
Total	**2,693**	**3,343**	**650**

- There is a significant increase in the number of Clinical Nurse Practitioners and a decrease in the number of Professional Nurses required in order to provide the proposed services. This implies that a number of Professional Nurses will need to be given the opportunity to be re-skilled or to be redeployed.
- The increased number of administrative posts reflects the intention to provide sufficient administrative support to enable professional health workers to focus on the provision of health care.
- There will also be non-clinical outreach from the district hospitals to ensure effective management of financial, procurement and information systems.

3.2.2 **District Health System: Management structures in the Metro district**

- Currently the management of the whole District Health Services in the Metro is vested in the office of one Director: Metro DHS who reports to the Chief Director: District Health Services.
- However, in terms of the National Health Act, Act 61 of 2003 the DHS must be managed per health district. Four sub-structure offices/directorates will be created in the Metro, each of which will manage two sub-districts. The particular combination of sub-districts per sub-structure office/ directorate is based on the size of the population, geographical area, drainage areas as far as possible and the extent of the management responsibility.
- The four directors will report to a Chief Director: Metro district health services who will in turn report to the Deputy Director-General: District Health Services and Programmes.
- The office of the Chief Director: Metro DHS provides for over-arching Professional and Administrative Support Services.
    - Professional Support Services are located at Chief Directorate level with outreach to each of the substructure offices.
    - The Finance function is decentralized to the sub-structure/Directorate level with only a co-ordination function at Chief Directorate level; whereas
    - The Human Resource function is centralized at the Chief Directorate level with co-ordination capacity at substructure/ Directorate level.
- It is envisaged that the district hospitals will play an important role in the DHS in terms of support and outreach within specific sub-districts.
    - Some of the additional administrative capacity allocated to the Sub-structure offices will be detached to an identified district hospital that will provide support to the two sub-districts.
    - Professions Allied to Medicine (PAMS) staff are allocated to each sub-district.
    - The PHC manager in each sub-district, supported by other personnel, will be responsible for the management of the PHC services within the sub-districts and will report to the Director of the sub-structure office.
    - Existing management capacity within the district hospitals is therefore used to create economies of scale and promote efficiency.
- The envisaged structures for the Chief Directorate Metro District Health Services as well as an example of one of the four substructure offices are attached as Annexure B.

3.2.3 **Methodology**: **Facility-based services in the rural districts**

3.2.3.1 The rural local authority clinics and the related management structures were transferred to the Western Cape Department of Health with effect from 1 July 2005. Currently there is an inequitable allocation of the PHC resources between the various health districts and the district hospitals are not staffed according to Healthcare 2010 requirements and therefore the service had to be redesigned.

3.2.3.2 In designing the rural DHS model similar methodology to that of the Cape Town Metro district was used. However, the substantial difference in population density necessitates a slightly different approach with the emphasis on accessibility.

- The rural DHS consists of mobile clinics, satellite clinics, clinics, CHCs and district hospitals within each sub-district which are described as the “map” of health facilities. The optimal size of a rural clinic was determined by the number and skills mix of staff in relation to the population size. The aim is to create a balance between the number of various categories of staff (skills mix) and their optimal utilization in rendering the full package of PHC services.
- The criteria used to allocate service units to a particular sub-district are the size of the population in the drainage area and the current utilization statistics. Existing infrastructure was used as a point of departure but where there is insufficient access additional service units were added. As in the Metro each clinic is linked to a CHC where the service is provided on a referral basis. The CHCs are required to provide operational support to the clinics and are in turn linked to the district hospitals.
- District hospitals play an important role in the DHS in terms of outreach and support and additional Professions Allied to Medicine and administrative staff has been added to the

district hospitals' establishments to accommodate this function. Although the posts are organizationally linked to the PHC Manager the incumbents will work under the functional supervision of the existing hospital components.

Table 2: Overview of current and proposed staff allocation per rural district

HEALTH PROFESSIONALS	OVERBERG		CAPE WINELANDS		WEST COAST		CENTRAL KAROO		EDEN		GRAND TOTAL		
	Current posts	Recom posts	Current posts	Recom posts	Current posts	Recom posts	Current posts	Recom posts	Current posts	Recom posts	Current posts	Recom posts	Total post diff.
Facility Manager (SL 9)	0	5	0	11	0	7	0	1	1	11	1	35	34
Medical Officer	24	12	23	30	1	14	6	7	19	21	73	84	11
Medical Officer	0	0	0	0	0	0	0	0	0	0	0	0	0
Prin. Pharmacist	6	5	8	11	1	7	2	1	3	11	20	35	15
Pharmacist	5	1	10	11	1	1	1	1	10	13	27	27	0
Dentist		4		11		6		1		8		30	30
Clinical Nurse Practitioner	91	68	188	177	50	92	37	20	158	142	524	498	-27
Prof Nurse	17	5	91	15	43	7	3	1	20	13	174	41	-133
Professional Nurse (Midwife)	0	5	0	12	0	7	0	1	0	11	0	36	36
Enrolled Nurse	17	45	53	114	40	64	5	14	46	83	161	319	158
Professional Nurse (Psychiatry)		3		8		3		2		6		22	22
Professional Nurse (Orthopaedics)		3		5		3		1		4		16	16
Subtotal	**160**	**155**	**373**	**404**	**136**	**210**	**54**	**50**	**257**	**323**	**980**	**1142**	**162**
MEDICAL ANCILLARY SERVICES													
Subtotal		**19**		**30**		**24**		**9**		**27**		**109**	**109**
CLINICAL SUPPORT													
Oral Hygienist		4		11		6		2		8		31	31
Dental Assistant		4		11		6		1		8		30	30
Enrolled Nursing Assistant	39	6	96	17	23	9	18	2	54	15	230	49	-181
Pharmacy Assistant	6	15	6	38	0	24	4	2	6	34	22	113	91
Auxiliary Services Officer	9	23	30	79	41	33	7	7	28	58	115	200	85
Auxiliary Services Officer sessions	0	3	0	2	0	2	0	2	0	0	0	8	8
Subtotal	**54**	**55**	**132**	**158**	**64**	**80**	**29**	**16**	**88**	**123**	**367**	**431**	**64**
ADMIN & SUPPORT													
PHC Manager		3		5		3		1		5		17	17
Admin Clerk		3		5		3		1		5		17	17
Program Coordinator		8		10		10		2		14		44	44
Prof Nurse		4		5		5		1		7		22	22
Admin Officer Information		3		5		3		1		4		16	16
Admin Clerk		12		23		13		4		20		72	72
Driver		4		5		4		1		7		21	21
Chief Admin Clerk	0	5	0	11	0	7	0	1	0	11	0	35	35
Admin Clerk	29	33	95	117	27	42	10	13	42	86	203	291	88
Admin Clerk sessions	0	3	0	3	0	1	0	1	0	0	0	6	6
Cleaner	31	25	85	82	45	38	12	8	59	65	232	218	-14
Cleaner Sessions	0	3	0	2	0	2	0	2	0	0	0	9	9
Subtotal	**60**	**106**	**180**	**273**	**72**	**131**	**22**	**35**	**101**	**224**	**435**	**768**	**333**
TECHNICAL SUPPORT SERVICES													
Artisan		1		3		2		1		2		9	9
Handyman		3		7		5		1		7		23	23
Tradesman Aid		1		3		2		1		2		9	9
General worker		3		7		5		1		7		23	23
Subtotal	**0**	**8**	**0**	**20**	**0**	**14**	**0**	**4**	**0**	**18**	**0**	**64**	**64**
GRAND TOTAL	**274**	**342**	**685**	**885**	**272**	**458**	**105**	**114**	**446**	**715**	**1782**	**2513**	**731**

Note on Table 2:
The rural PHC service was recently taken over from local authorities which has different staffing categories. Problems were experienced with the translation of the different nursing staffing categories to those applicable to the Provincial Department of Health and which has skewed the comparison of the current and recommended staff numbers.

However, the allocation of posts per category of staff should not be evaluated in isolation but within the context of the proposed skill mix. For example there are currently more professional nurses and clinical nurse practitioners than on the proposed establishments but these professional nurse are currently required to perform administrative, management and dispensing tasks. The result is that they can only spend 45 –55% of their time on direct patient care. Table 2 indicates that there is an increase in management, administrative and other support staff to enable the nursing professionals to spend 65% or more of their time on direct patient care.

In addition specialized professional nurses, e.g. midwives, psychiatric and orthopaedic nurses as well as facility managers were also added. Nursing support services were also substantially enhanced by the addition of staff nurses in place of nursing assistants, thus improving the skills mix and the scope of practice of the nursing support unit.

3.2.3.3 DHS management in the rural districts

The current regional management structures will be replaced by district structures, i.e.

- The current three regional structures, namely, West Coast/Winelands, Boland/Overberg and Southern Cape/Karoo will be replaced by the following district management structures: West Coast, Cape Winelands, Overberg, Central Karoo and Eden.
- The main components of the rural district management structures will include comprehensive health programmes, professional support, pharmaceutical services, human resources, finance and administrative and technical support (Refer to Annexure C).
- A post of district manager is provided for each district and their responsibility is to ensure service delivery in line with the District Health Plan. The five district managers of the rural districts will report to a Chief Director.
- In addition to the above management capacity, the existing management structures of the identified district hospitals will be strengthened with a PHC manager and other support personnel. In the rural districts the PHC manager will report to the Medical Superintendent who will manage the PHC services within the sub-district. This differs from the proposed structure in the Metro district where the respective PHC managers report directly to the relevant sub-structure directorate.

3.3 District hospital services (Level 1)

3.3.1 Level one hospital services in the Cape Town Metro district

- Level 1 hospital services are regarded as an integral part of the District Health Services (DHS) and are usually provided by district hospitals. Ideally there should be a district hospital within the boundaries of each of the Metro sub-districts, however, this is not possible due to the existing infrastructure and also economies of scale.
- Approximately 1,246 level 1 beds are required to provide 0,59 beds per 1,000 uninsured population in the Cape Town Metro district. The distribution per sub-district is dependent on the uninsured population in the sub-district.
- Until such time that the required infrastructure is created the bed requirements will have to be accommodated within existing infrastructure. It is anticipated that the hospitals planned for the Khayelitsha and Mitchell's Plain sub-districts will be completed by 2010. Table 3 overleaf illustrates the proposed allocation of level 1 beds in the interim and in 2010.

Table 3: Distribution of acute level 1 beds in the Cape Town Metro district

Hospital	2004/05	2005/06 – 2006/07	2007/08	2010
Eerste River Hospital	112	112	112	90
False Bay Hospital	65	70	70	40
GF Jooste Hospital	-	120	180	180
Hottentots Holland Hospital	-	60	90	90
Karl Bremer Hospital	-	150	270	210
Somerset Hospital	-	85	95	95
Victoria Hospital	-	70	65	90
Wesfleur Hospital	31	31	31	31
Khayelitsha Hospital				210
Mitchell' s Plain Hospital				210
Mowbray Maternity Hospital	-			
Groote Schuur Hospital	-	-	-	-
Red Cross Children's Hospital	-	-	-	-
Tygerberg and other hospital	-	100	338	-
Total: Cape Town Metro district	**208**	**798**	**1,246**	**1,246**
Year on year increase		**590**	**448**	

- It is accepted that a significant proportion (40-45%) of services currently provided in regional hospitals should be classified as level 1 services.
- The target for level 1 beds will be addressed by the reclassification some of the current Level 2 beds and by the building of two new district hospitals on the Cape Flats, i.e. Khayelitsha and Mitchell's Plain.
- The nature of district hospital services is:
  1) The full package of services will be provided in all the level 1 beds.
  2) There will be trauma and emergency units at each of the district hospitals.
  3) The hospital OPD will focus on referred patients. The extended hours of service, i.e. until 21:30 at 25 of the CHCs will relieve the Trauma and Emergency units of many routine PHC visits after hours.
  4) The maternity units at the hospitals will provided outreach and support to the MOUs within the sub-districts.
  5) The appointment of Family Medicine Practitioners (specialists) and registrars at district hospitals will promote effective service delivery and quality of care.
  6) The proposed distribution of level 1 beds will significantly improve access to district hospital services.

3.3.2 A rural bed plan for acute hospitals by level of care

- The proposed decrease of 194 level 1 beds in the rural districts is offset by an increase of 370 level 2 beds resulting in a nett increase of 176 acute beds in hospitals in the rural districts. The reason for decreasing the number of level 1 beds is the current low bed occupancy of approximately 64% and the need to strengthen the level 2 platform.
- Level 2 beds have been allocated to most of the large district hospitals in the rural areas by replacing some of the beds that were previously designated as level 1.
- It is anticipated that this will have a positive impact on the quality of care and the ability of the rural district hospitals to deliver the full package of district hospital services and improve the utilization and cost effectiveness of rural hospitals.
- The level 2 capacity should enable district hospitals to treat non-acute level 2 patients within the context of outreach and support from the rural regional hospitals and therefore reduce the number of referrals from rural level 1 to level 2 beds.

3.3.3 Summary of facility-based DHS

3.3.3.1 Cape Town Metro district

Table 4: Population density and accessibility based on allocation of clinic service points

DISTRICT	Area in Sq Km	Total Population 2010	Persons per sq km	Km Radius (Walking distance)	Persons within walking distance from a clinic	Clinic Service points
Cape Town	2,500	3,324,209	1,330	2.80	32,734	102

Table 5: Clinic services (including satellites and mobiles): Gateway to comprehensive health care

Sub District	Number clinic components open 40 hours per week	Number of Extended hours clinics: 94.5 hours per week	Total number of model clinic components	Population served per clinic (Total population 2010)	Estimated Headcount per annum 2010	Estimated Contacts per annum 2010
Northern	6	2	8	37,666	893,618	1,488,781
Western	10	2	12	31,402	1,117,486	1,861,747
Southern	9	4	13	37,882	1,460,451	2,433,131
Klipfontein	11	3	14	28,285	1,174,326	1,956,444
Mitchell's Plain	13	2	15	30,737	1,367,292	2,277,927
Tygerberg	10	5	15	35,370	1,573,365	2,621,247
Khayelitsha	9	4	13	29,091	1,121,536	1,868,494
Eastern	8	3	11	35,256	1,150,113	1,916,104
Total: Cape Town Metro District	**76**	**25**	**101**	**32,913**	**9,858,186**	**16,423,875**
Estimated full utilisation of clinic protocols per capita						**2.97**
Average contacts per headcount						**1.67**

Table 6: Community Health Centres

Sub District	CHCs : 40 hours per week	24 hrs MOU	Population served per CHC (Total population)	Estimated Headcount per annum 2010	Estimated Contacts per annum 2010
Northern	4	1	75,333	238,487	609,215
Western	5	1	75,364	298,232	761,835
Southern	5	1	98,494	389,762	995,648
Klipfontein	5	2	79,197	313,402	800,585
Mitchell's Plain	4	2	115,264	364,900	932,137
Tygerberg	7	2	75,792	419,896	1,072,625
Khayelitsha	4	2	94,546	299,313	764,596
Eastern	5	1	77,564	306,940	784,078
Total: Cape Town District	**39**	**12**	**85,236**	**2,630,933**	**6,720,719**
Estimated full utilisation of CHC protocols per capita					0.79
Average contacts per headcount					2.55

Table 7: District hospitals

Service Indicators	
Total L1 beds	1,246
Total admissions	134,694
Total out patient headcount per annum (including trauma and emergencies)	386,572
Total patient day equivalents	515,429
Estimated utilisation of district hospital OPD per capita (2010)	0.12

Table 8: Utilisation: Total facility-based PHC services in the Cape Town Metro district, including L1 out patients

Total headcount per annum	12,875,691
Utilisation per capital	3.87

3.3.3.2 Rural districts

Table 9: Population density and accessibility based on location of clinic service points

DISTRICT	Area in Sq Km	% of Total	Total Population 2010	Persons per sq km	Km Radius (Walking distance)	Persons within walking distance from a clinic	Clinic Service points
Cape Winelands	22,289	17.2%	723,150	32	9.70	9,642	75
Overberg	11,391	8.8%	233,741	21	9.80	6,151	38
Eden	23,323	18.0%	522,619	22	10.10	7,159	73
Central Karoo	38,853	30.0%	69,490	2	25.90	3,861	18
West Coast	31,101	24.0%	324,683	10	11.90	4,638	70
Cape Town	2,500	1.9%	3,324,209	1330	2.80	32,734	102
Western Cape	**129,457**	**100.0%**	**5,197,892**	**40**	**11.00**	**15,255**	**341**

Table 9: above shows the average walking distance to a clinic service point based on total square kilometres per district. However, population density based on total area in rural areas is misleading because the population is not evenly distributed over the entire area but concentrated in smaller or larger settlements and towns. Densely populated areas in and around Paarl, Worcester and George amongst others, compare with urban and suburban density resulting in easy access for this rural population

Table 10: Allocation of clinic service units to rural districts

DISTRICT	Mobiles & Satellite Clinics (a)	Clinics (b)	Gateway Clinics (c)	Total number of fixed clinics = (b) + (c)	Total number of clinic service points =(a)+(b)+(c)	Population per fixed clinic	Population per service unit
Cape Winelands	27	37	11	48	75	15,066	9,642
Overberg	15	18	5	23	38	10,163	6,151
Eden	33	29	11	40	73	13,065	7,159
Central Karoo	9	8	1	9	18	7,721	3,861
West Coast	43	20	7	27	70	12,025	4,638
TOTAL: RURAL	**127**	**112**	**35**	**147**	**274**	**12,746**	**6,838**

Table 11: CHC services in rural districts

District	CHCs : 40 hours per week	Total: Service delivery units	Population per service unit	Population per CHC
Cape Winelands	11	75	9,642	15,066
Overberg	5	38	6,151	10,163
Eden	11	73	7,159	13,065
Central Karoo	1	18	3,861	7,721
West Coast	7	70	4,638	12,025
TOTAL: RURAL	**35**	**274**	**6,838**	**12,746**

Table 12: Utilisation of clinic and CHC services in the rural districts

Total headcount per annum	6,735,702
Estimated utilisation of PHC services per capita	3.60
Average contacts per headcount	2.15

Table 13: Level 1 hospital services

District	L1 Beds	Admissions	OPD	Patient day equavalents	OPD Utilisation per capita
Cape Winelands	332	34,334	103,003	137,337	0.14
Overberg	137	14,168	42,504	56,672	0.18
Eden	300	31,025	93,075	124,100	0.18
Central Karoo	102	10,549	31,646	42,194	0.46
West Coast	250	25,854	77,563	103,417	0.24
Total	**1,121**	**115,930**	**347,790**	**463,720**	**0.19**

Table 14: Utilisation: Facility based PHC services in the rural districts including level 1 out patients

Total headcount per annum	7,083,492
Utilisation per capita	3.79

Table 15: Utilisation of facility-based services in the Western Cape

Total headcount per annum	19,959,183
Utilisation per capita	3.84

Note: The urban utilisation rate is higher than the rural rate due to the fact that urban services are geographically more accessible due to high population density.

3.4 Community-based services

3.4.1 Community-based services complement and enhance the facility-based services by providing services in a community setting and creating mechanisms through which communities can become aware of their health needs. This empowers the community which can then participate in preventive and adherence health programmes. If community-based services function effectively there will be a significant reduction in the number of patients requiring hospitalization.

3.4.2 In terms of the National Health Act, health facilities are required to establish community participation structures to facilitate community participation in the delivery of health services. It is envisaged that these structures will enhance the delivery of community-based services by creating a framework within which diverse community resources can be harnessed to complement the work of the Department.

3.4.3 Principles and criteria applied in the development of the CBS service model

3.4.3.1 The service model is based on the Primary Health Care approach and focuses on:

- Disease prevention and health promotion;
- Community and individual involvement and self-reliance;
- Intersectoral action for health; and
- Improvement of disease morbidity and mortality.

3.4.3.2 The following principles were applied in the development of the CBS plan:

- Community-based services are an integral part of the District Health Services and will be managed as such.
- The providers of CBS will be mainly Non-Profit Organisations (NPOs) supported by outreach from the facility-based services.
- NPOs will be procured and contracted by means of formal agreements in compliance with the PFMA.
- The health workers providing CBS will be predominantly generic community-based workers who have been trained by accredited training providers in accordance with accredited curricula as per SAQA approved unit standards.

3.4.3.3 **Service model for community-based services**

These services will be provided via two mains streams.

1) Services delivered by health personnel to non-health institutions where health personnel will provide mainly preventive and promotive health interventions at various institutions such as schools, crèches, prisons and old age homes.

2) Services delivered by Non-profit organizations (NPOs) which will include:

- Services for de-hospitalised clients:
  - These are patients who have been discharged from acute/sub-acute/chronic hospital beds but who still require care other than in provincial hospital beds. There is a continuum of such services, i.e.:
    - Sub-acute or step-down centers where patients are referred according to standard treatment guidelines. These centers will provide care to patients who are ill and who require an average length of stay for approximately 6 weeks, e.g. Booth Memorial.
    - Respite centers will provide care to terminally or chronically ill patients in the care of families and where a short period of 'in-patient' respite/palliative care is needed. The average length of stay is two weeks, e.g. Hospice/St Luke's beds.
    - Chronic or life-long care is for patients who require life long or long-term care such as those who are profoundly intellectually disabled or permanently brain damaged.
    - Home-based care (HBC) is for patients who need basic care or rehabilitation and will be provided to patients in their homes.

        - Community mental health centers, e.g. group homes and licensed homes. These facilities will provide care for de-hospitalised mental health patients in order to assist individuals to live more independently in natural community settings of their choice and to help prevent hospitalization.
    - Expanding community-based rehabilitation services will provide a safety net for patients discharged from hospital but still in need of care and will facilitate an increased pick-up rate of these patients as many are currently lost in the system following discharge from acute hospitals. Clearly defined entry and exit criteria and referral pathways between the different service levels will ensure the appropriate utilization of all rehabilitation resources and better outcomes for patients.
    - To address these needs health therapists and related health professionals have been allocated to each sub-district office in the Cape Town Metro district to co-ordinate, supplement and support the services provided by NPOs. In the rural districts these health professionals are attached to designated district hospitals as PHC outreach and support staff.

- Adherence support
    - This refers to support to patients to improve adherence to medications, particularly for HIV and TB but also diabetes, hypertension and mental illness which will decrease the mortality and morbidity. Therefore adherence to treatment will not only result in a better outcome for the patient but is also more cost effective for the Department by preventing the need for more extensive and expensive interventions.
    - There are currently models for daily DOT (directly observed treatment) for TB and for patients on anti-retroviral (ARV) treatment. The policy framework of the Department enables the development of a generic adherence support model for all patients with chronic diseases.
    - The adherence support function will be performed by:
        - A comprehensive community-based worker in sparsely populated areas and areas with a low burden of disease; and
        - An adherence support community-based worker in densely populated areas with a high burden of specific chronic diseases.

- Disease prevention and health promotion
    - These services will focus on community education and interventions that influence change in behaviour to reduce the impact of risk factors that cause a significant burden of disease, e.g. childhood morbidity and mortality, unsafe sex, inter-personal violence, smoking, substance abuse including alcohol, unhealthy diet and lack of exercise. This will be informed in due course by the outcomes of the Burden of Disease study.
    - A fundamental aspect of the PHC approach is to engage members of the community in key risk factors that cause disease. The disease prevention and health promotion function will be performed by:
        - A comprehensive community-based worker in sparsely populated areas and areas with a low burden of disease for specific chronic diseases; and
        - A disease prevention /health promotion community-based worker in densely populated areas with a high disease profile.

3.4.3.4 **Human resource plan for community-based services**

- The proposed organizational structure for District Health Services has made provision for management capacity for community-based services. The Divisional management structure will provide strategic and policy direction and monitoring and evaluation.
- The District Manager, assisted by dedicated CBS programme management staff, will be responsible for implementing the service plan for community-based services in the district and will also manage the support that will be provided to the mid-level workers based at the NPOs by the professional multi-disciplinary teams.

- As part of the Expanded Public Works Programme (EPWP) community-based workers who are currently employed will be upskilled and new recruits will be trained as community-based workers contributing to the building of human and social capital.

3.5 Rehabilitation and disability management in community-based services

3.5.1 Healthcare 2010 provides the opportunity to develop a service plan for rehabilitation services across all levels of the service platform, encompassing both facility and community-based services.

3.5.2 Rehabilitation is defined as a goal orientated and time limited process aimed at enabling an impaired person to reach an optimal level of mental, physical and/or social functioning therefore providing the person with the tools to improve their lives.

3.5.3 The goal of rehabilitation is to enable individuals to return home to their communities with the highest possible level of functional independence and the best possible quality of life, while at the same time reducing as far as possible the burden of care on family members and significant others.

3.5.4 Rehabilitation starts at the patient's first point of entry into the health care system and continues along the continuum of care until the person is re-integrated back into their community. Rehabilitation is therefore provided on both and in and out patient basis and can be initiated in acute, sub-acute or chronic phase of a condition and at any level of the service platform. Rehabilitation services are therefore an integral component of all service plans at all levels of care.

3.5.5 The intensity of rehabilitation interventions is determined by the frequency and duration of the patient-therapist contacts per day. The Western Cape Rehabilitation Centre is the only high intensity rehabilitation facility in the Western Cape at present and provides services to whole of the Western Cape and neighbouring provinces. These services provide comprehensive rehabilitation/disability management services to people who are physically disabled with complex conditions or multiple system involvement, e.g. traumatic brain injury or spinal cord injury.

3.5.6 Low intensity rehabilitation services are provided at all the service points staffed with rehabilitation professionals, i.e. from level 3 hospitals to CHCs and other community-based rehabilitation services.

3.5.7 **Service plan for community-based rehabilitation services**
The service plan for rehabilitation is based on clinical outcome levels, ranging from physiological instability to productive activity, and are linked to the respective levels of health care facilities. The core packages of rehabilitation services are also defined and linked to the respective levels of health care.

3.5.8 Rehabilitation therapists are regarded as integral members of the health care team in District Health Services. Health professionals for community based rehabilitation services are attached to the four sub-structure office in the Cape Town Metro district whereas in the rural districts these professionals are attached to designated district hospitals as PHC outreach and support staff and will be supported by mid-level workers who will be employed by NGOs.

3.6 Service plan for Tuberculosis

3.6.1 According to the Actuarial Society of South Africa (ASSA) 2002 statistics the estimated prevalence of HIV infection is estimated to be 6% in 2010 when there will also be a projected incidence of TB of 56,590 new cases. Of the total cases approximately 70% will be first episode of TB and 30% will be re-treatment cases. Approximately 4% of first episode of TB patients and 1% of re-treatment patients will present with multi-drug resistant (MDR) TB.

3.6.2 Because of HIV co-infection TB patients are more acutely ill than previously and therefore provision has been made that 6% of all case finding will require hospitalization for acute level care with an average length of stay of 3.5 days.

Table 16: TB beds per district based on regional drainage

Districts	Incidence and distribution			Beds 2010			
	Current: 2004	% of Total Incidence	Projected 2010	ACUTE	SUB-ACUTE	CHRONIC	TOTAL
Cape Town Metro	25,755	56%	31,685	55	25	641	721
Cape Winelands	4,693	10%	5,773	10	5	117	131
Overberg	2,434	5%	2,994	5	2	61	68
Eden	5,404	12%	6,648	12	5	134	151
Central Karoo	641	1%	789	1	1	16	18
West-Coast	7,072	15%	8,701	16	6	176	198
Province	**45,999**	**100%**	**56,590**	**99**	**44**	**1,145**	**1,287**

Table 17: Recommended TB beds per district based on current regional hospital drainage.

Regional centre	Hospital	Total beds
Metro Centre	Brooklyn Chest + DP Marais Hospitals	721
Cape Winelands Centre	Brewelskloof Hospital	199
South Cape Centre	Harry Comay Hospital	169
West Coast Centre	Sonstraal + ID Hospitals	198
Province		**1,287**

3.7 Mental health services in community-based services

3.7.1 It is estimated that mental and behavioural disorders account for 12% of the global burden of disease and mental disorders represent four of the top ten leading causes of disability worldwide. Two epidemics that impact significantly on mental health care resources are HIV and AIDS, and substance abuse.

3.7.2 Healthcare 2010 aims to shift the primary site of mental health services from institutions to communities and to promote a more comprehensive and integrated approach to mental health care delivery.

3.7.3 **Community mental health facilities**

These services are divided into three major types of facilities, i.e.

- Type A facilities: Outpatient and emergency services including, clinics, satellites, mobile clinics and CHCs.
- Type B facilities: Residential care which includes group homes, boarding houses and halfway houses.
- Type C facilities: Day care includes sheltered employment, supported independent living, home-based care and support groups.

3.7.4 **Hospital based mental health services**

- The community-based mental health care services are supported by hospital based mental health services. Designated psychiatric beds provide for emergency admissions as well as for patients with more serious psychiatric conditions.
- There is provision at all hospitals for the management of psychiatric emergencies with the appropriate physical infrastructure until the appropriate referral to designated unit or hospital can be effected. This includes the 72-hours assessment of involuntary patients, assisted and voluntary patients.
- District hospitals will have the capacity to manage emergencies but patients with more complex conditions will be referred to regional level beds.

4. PART B: PLAN FOR THE RESHAPING OF ACUTE HOSPITAL SERVICES

4.1 Methodology used to determine the bed plan

4.1.1 Number of beds required

- The number of hospital admissions per level of care was determined using uninsured population figures and together with a target average length of stay were used to calculate the number of beds required to accommodate the required inpatient days at a bed occupancy of 85%.
- The distribution of beds between regions was based on population distribution.

4.1.2 A weighting factor was applied to the allocation of beds to compensate for the fact that beds are geographically less accessible than in the Cape Town Metro district. Rural level 1 beds were weighted according to population density and level 2 beds were weighted according to the distance of the rural regional hospitals from Cape Town.

4.1.3 **Definitions of levels of care**

- **Level 1 care** is delivered by general practitioners, medical officers or primary health care nurse in the absence of any specialist other than a family medicine specialist. Primary health care clinics, community health centers and district hospitals function at this level.

- **Level 2 care** is care that requires the expertise of specialist led teams which include general surgery, orthopaedics, general medicine, paediatrics, obstetrics and gynaecology, psychiatry, emergency medicine, radiology and anaesthetics.

- **Level 3 care** is care that requires the expertise of a specialist working in a registered sub-speciality.

- **Level 4 care** is provided by sub-specialities and includes services which are very new, require scarce expertise, require highly expensive technology, and are found in only one or two centers in the country. For planning purposes levels 3 and 4 are combined.

- The gap between the current number of beds per level of care and the Healthcare 2010 targets is in large measure due to the definitions of levels of care as it is accepted that a significant proportion (40-45%) of the services currently provided in the regional hospitals can be classified as level one services and similarly that a significant proportion of the services rendered in the central hospitals can be classified as level two services.

4.1.4 **Conditional grants**

- Tertiary services are funded from the National Tertiary Services Grant (NTSG) and 50% of the Health Professions Training and Development Grant (HPTDG).
- The number of affordable tertiary beds increased from the 1,290 proposed in the original Healthcare 2010 model to 1,460 due to an increase in the NTSG from 2004/05. These funds are ring-fenced and cannot be shifted to other levels of care.
- There are grey areas in the definitions applied by the National Department of Health to distinguish between secondary and tertiary services. A set of 'exclusion options' was applied by the National Department of Health to facilitate the development of tertiary hospitals in under developed provinces. This meant that some services that were classified as secondary in more developed provinces were classified as tertiary services in less developed provinces. The decrease of the NTSG from the year 2000 onwards forced the Western Cape to apply very stringent definitions that resulted in some complex conditions/procedures being classified as a level 2 service.
- The increase in the NTSG has required the Department to review the classification of services and to move complex procedures, temporarily classified as level 2 services, back to the tertiary platform. Therefore the increase in tertiary beds was deducted from the original number of level 2 beds allocated in the original Healthcare 2010 model.

4.2 Proposed bed plan

4.2.1 Cape Town Metro district

- **Level 3 beds**
  It is proposed that the 1,460 level 3 beds be distributed as follows:

Groote Schuur Hospital	685
Tygerberg Hospital	515
Red Cross Children's Hospital	260
Total	**1,460**

  It is important that the Level 3 beds be managed separately from the level 2 beds in these hospitals in order to manage the particular level 3 allocation of staff numbers and skill mix, and the requirements of the conditional grant funding.

- **Level 2 beds**
  The principle that level 2 beds are referral services led to the decision to centralize most of these services in the central hospitals. However, the existing infrastructure in the central hospitals is insufficient, therefore 405 level 2 beds were allocated to other hospitals in the Metro.

- **Level 1 beds**
  The method for determining the number of level 1 beds relates directly to the District Health System previously described. It is planned that the new Khayelitsha and Mitchell's Plain Hospitals each have 210 beds but until such time as they are built there are 344 level 1 beds that must be accommodated within the current infrastructure. Possible interim location of the new level 1 beds include Karl Bremer, Stikland, Tygerberg and Lentegeur Hospitals.

4.2.2 Rural bed plan by level of care

- The derivation of the level 1 beds was previously described in paragraph 3.4.2.

- It would be ideal to centralize all the rural Level 2 beds in the rural regional hospitals. However, the existing infrastructure of the rural regional hospitals does not allow for this as these hospitals also have to provide Level 1 beds for the population of Paarl, Worcester and George where there are currently no district hospitals.

- Level 2 beds have been allocated to most of the larger district hospitals in the rural areas effectively replacing previous L1 beds. The purpose is to provide a specific framework for structured outreach and support from the rural regional hospitals to the district hospitals. It is accepted that there is a need to assist in the skills development and training of the medical officers in the rural areas. Access to and visits from specialists from the regional hospitals should have a significant impact in this regard.

4.3 Disciplines per level of care

4.3.1 Level 3 services

- A Tertiary Services Workgroup was established in 2004 to achieve agreement on a database for planning purposes. This workgroup represented personnel form the Western Cape Department of Health, the three central hospitals, the University of Cape Town and the University of Stellenbosch and resulted in:
  - A dataset of specialist patient care activities on the central platform, including level 2 services which included both inpatient and outpatient services;
  - A set of assumptions regarding the proportionate split between level 3 and 2 services on the central hospital platform;
  - An agreed grouping regarding a classification of departments, divisions, units and interest groups; and
  - Identified intensive care unit (ICU), high care and special care beds per specialty and sub-specialty.

- The Tertiary Services Workgroup also used interdepartmental transfer data to determine the critical interdependencies between the disciplines and sub-disciplines.
- The Tertiary Services Workgroup also developed the Clinical Activity Unit which is based on outpatients, inpatients and procedure outputs and reflects the relative size of the clinical services and which assists in determining the viability and critical mass of services. The Clinical Activity Unit was also used to identify which of the services should be organized into single clinical service units to eliminate fragmentation of services and duplication of cost inefficient units. Single service units are defined as a clinical service which is rendered by a single clinical team with a single clinical head and single clinical governance structure. The aim of organizing tertiary clinical services into a Single Service is to achieve efficient utilization of skills and resources and to delivery high quality specialized services.

4.3.2 Level 2 services

- The beds of patients requiring more complex and expensive level 2 services will be concentrated in the central hospitals. The beds allocated for level 2 services outside of the central hospitals operate in an environment that consists mainly of level 1 beds and are allocated to general disciplines which will not require highly specialized and expensive equipment.
- The outcomes of the data set developed by the Tertiary Services Workgroup were used as guidelines for the future allocation of beds per discipline in the central hospitals. The existing level 2 platform in the Central Hospitals remains unchanged except for the addition of 66 beds from the Metro Regional Hospitals.

4.3.3 Level 1 services

- Level 1 beds are usually not regarded as discipline specific but provision has been made for maternity, paediatric, male and female wards which is necessary to ensure that the hospitals are correctly staffed in terms of number and skill mix of personnel. Maternity beds are the only level 1 beds that are linked to a specific discipline.

Table 18: Number of beds per level of care in the Cape Town Metro district

Acute Hospitals: Cape Town Metro	Current				Service Plan: 2010 Target			
	L1	L2	L3	Total	L1	L2	L3	Total
Eerste River Hospital	112	-	-	112	90	-	-	90
False Bay Hospital	65	-	-	65	40	-	-	40
GF Jooste Hospital	-	184	-	184	180		-	180
Hottentots Holland Hospital	-	121		121	90	30		120
Karl Bremer Hospital	-	238		238	210			210
Somerset Hospital	-	288		288	85	120		205
Victoria Hospital	-	159		159	100	90		190
Wesfleur Hospital	31	-		31	31	-		31
Khayelitsha Hospital				-	210			210
Mitchell's Plain Hospital				-	210			210
Mowbray Maternity Hospital	-	175		175		165		165
Groote Schuur Hospital	-	-	906	906	-	350	685	1,036
Red Cross Children's Hospital	-	-	281	281	-	50	260	310
Tygerberg Hospital	-	-	1,287	1,287	-	680	515	1,194
Total: Metro	**208**	**1,165**	**2,474**	**3,847**	**1,246**	**1,485**	**1,460**	**4,191**
Shift per level of care from current to target					**1,038**	**320**	**-1,014**	**344**

Table 19: Number of beds per level of care in the rural districts

Acute hospitals in the rural districts	New districts	Current [2004/05]			Service Plan: 2010 Target		
		L1	L2	Total	L1	L2	Total
Ceres Hospital	Cape Winelands	76		76	55	10	65
Montagu Hospital	Cape Winelands	49		49	30	-	30
Robertson Hospital	Cape Winelands	46		46	60	20	80
Eben Donges Hospital	Cape Winelands		213	213	52	255	307
Stellenbosch Hospital	Cape Winelands	95		95	50	35	85
Paarl Hospital	Cape Winelands		250	250	85	242	327
Sub Total	**Cape Winelands**	**266**	**463**	**729**	**332**	**562**	**894**
Caledon Hospital	Overberg	65		65	50	-	50
Hermanus Hospital	Overberg	37		37	40	20	60
Otto Du Plessis Hospital	Overberg	40		40	10	-	10
Swellendam Hospital	Overberg	51		51	37	10	47
Sub Total	**Overberg**	**193**	**-**	**193**	**137**	**30**	**167**
Beaufort West Hospital	Central Karoo	57		57	47	10	57
Laingsburg Hospital PAH	Central Karoo	20		20	20	-	20
Murraysburg Hospital PAH	Central Karoo	14		14	15	-	15
Prince Albert Hospital PAH	Central Karoo	29		29	20	-	20
Sub Total	**Central Karoo**	**120**	**-**	**120**	**102**	**10**	**112**
Knysna Hospital	Eden	98		98	50	40	90
Ladismith Hospital	Eden	35		35	30	-	30
Mossel Bay Hospital	Eden	90		90	50	40	90
Oudtshoorn Hospital	Eden	127		127	70	53	123
Riversdale Hospital	Eden	50		50	40	-	40
Uniondale Hospital PAH	Eden	20		20	10	-	10
George Hospital	Eden		202	202	50	215	265
Sub Total	**Eden**	**420**	**202**	**622**	**300**	**348**	**648**
Citrusdal Hospital	West Coast	34		34	25	-	25
Clanwilliam Hospital PAH	West Coast	32		32	30	-	30
LAPA Munnik Hospital	West Coast	15		15	10	-	10
Radie Kotze Hospital	West Coast	33		33	30	-	30
Swartland Hospital	West Coast	85		85	50	35	85
Vredenburg Hospital	West Coast	56		56	55	25	80
Vredendal Hospital	West Coast	84		84	50	25	75
Sub Total	**West Coast**	**339**	**-**	**339**	**250**	**85**	**335**
Total: Rural		**1,338**	**665**	**2,003**	**1,121**	**1,035**	**2,156**
Shift of beds per level of care from current to target					**-217**	**370**	**153**

4.4 Staffing of acute hospitals

4.4.1 Generic model staff establishments were developed for each type of acute hospital and in order to estimate workload the following assumptions were made:

- The target bed occupancy rate in acute hospitals is 85%;
- The optimal size for a hospital ward is 30 beds;
- Ranges for the average length of stay: Level 1 beds from 2.5 to 3 days
  Level 2 beds from 3.6 to 4 days
  Level 3 beds 6 days

These generic models have been applied to all the acute hospitals in the Province and in the rural areas adjustments have been made to accommodate particular local circumstances, e.g. unfavourable hospital outlay, small wards, etc. This adjustment process still needs to be applied to the hospitals in the Cape Town Metro district.

4.4.2 A planning tool was developed to ensure that the correct skill mix and number of staff is allocated to specific types of wards to ensure that each ward is staffed to meet the needs of the patients for which it caters.

4.4.3 Hospitals were staffed ward/unit by ward/unit to ensure that the correct ratio of professional nurses to other categories of staff is maintained for each type of ward and level of care. Provision has also been made for nursing management structures, e.g. the allocation of nursing services area managers. A relief factor of 14% was applied for all categories of nursing staff excluding nursing managers.

4.4.4 **Allocation of medical professionals**

- The process of determining the number of clinical posts in relation to patient workload is complex. It was decided to adopt a team approach in the allocation of clinical posts where each specialist is responsible for a clinical team and where the composition of the team is determined by the relevant discipline or sub-discipline and the required ratio of registrars and medical officers per specialist post. The aim of the model is therefore to determine the number of specialist posts required to render a specific service. The other categories of clinical posts are then factored in as a function of the number of specialist posts required. This approach addresses the integrated nature of service delivery and teaching and training platforms.
- In determining the number of staff required it was assumed that a specialist has 40 normal working hours per week of which 20 are spent on direct patient care and 6 and 14 hours are spent respectively on indirect patient care and formal teaching, training and administration.
- The clinical staffing model was constructed primarily from a service delivery perspective but from a training perspective has ensured the required ratio of registrars to specialists and Chief Specialists for management purposes.
- The costs of establishing and maintaining the service platform in terms of infrastructure, capital and current costs is considerable but as the service and training platforms are intertwined it is not possible to determine exactly what should be allocated to the training account.

4.4.5 Inputs from the Professions Allied to Medicine (PAMS) Workgroup were used to determine the number of medical ancillary posts required at each hospital.

4.4.6 The administrative posts initially allocated by means of the Generic Models were based on a number of workstudy investigations done in recent years. These models have been tested in the rural hospitals and found to be sufficient.

Table 20: Current and proposed staff allocation to the acute hospitals in the Western Cape

Acute Hospital	Type of Hospital	Health District	Total Staff		
			Current Filled Posts	Target 2010	Shift
Eerste River Hospital	District	Cape Town Metro	220	178	-42
False Bay Hospital	District	Cape Town Metro	167	77	-90
GF Jooste Hospital	District	Cape Town Metro	504	347	-157
Hottentots Holland Hospital	District	Cape Town Metro	275	243	-32
Karl Bremer Hospital	District	Cape Town Metro	559	404	-155
Somerset Hospital	Regional	Cape Town Metro	554	459	-95
Victoria Hospital	Regional	Cape Town Metro	330	411	81
Wesfleur Hospital	District	Cape Town Metro	119	60	-59
Khayelitsha Hospital	District	Cape Town Metro	-	404	404
Mitchell's Plain Hospital	District	Cape Town Metro	-	404	404
Mowbray Maternity Hospital	Regional	Cape Town Metro	293	450	157
Groote Schuur Hospital	Central	Cape Town Metro	3,595	3,618	23
Red Cross Hospital	Central	Cape Town Metro	1,069	1,162	93
Tygerberg Hospital	Central	Cape Town Metro	3,865	3,708	-157
Sub Total	**Cape Town Metro**		**11,550**	**11,925**	**375**
Ceres Hospital	District	Cape Winelands	95	121	26
Montagu Hospital	District	Cape Winelands	61	60	-1
Robertson Hospital	District	Cape Winelands	74	159	85
Eben Donges Hospital	Regional	Cape Winelands	560	773	213
Stellenbosch Hospital	District	Cape Winelands	186	168	-18
Paarl Hospital	Regional	Cape Winelands	558	790	232
Sub Total		**Cape Winelands**	**1,534**	**2,071**	**537**
Caledon Hospital	District	Overberg	78	99	21
Hermanus Hospital	District	Overberg	75	113	38
Otto Du Plessis Hospital	District	Overberg	62	58	-4
Swellendam Hospital	District	Overberg	66	98	32
Sub Total		**Overberg**	**281**	**368**	**87**
Beaufort West Hospital	District	Central Karoo	114	113	-1
Laingsburg Hospital	District	Central Karoo		40	40
Murraysburg Hospital PAH	District	Central Karoo		40	40
Prince Albert Hospital PAH	District	Central Karoo		40	40
Sub Total		**Central Karoo**	**114**	**233**	**119**
Knysna Hospital	District	Eden	174	178	4
Ladismith Hospital	District	Eden	50	60	10
Mossel Bay Hospital	District	Eden	161	180	19
Oudtshoorn Hospital	District	Eden	231	223	-8
Riversdale Hospital	District	Eden	82	78	-4
Uniondale Hospital PAH	District	Eden		40	40
George Hospital	Regional	Eden	484	746	262
Sub Total		**Eden**	**1,182**	**1,505**	**323**
Citrusdal Hospital	District	West Coast	43	60	17
Clanwilliam Hospital PAH	District	West Coast		60	60
LAPA Munnik Hospital	District	West Coast	26	29	3
Radie Kotze Hospital	District	West Coast		60	60
Swartland Hospital	District	West Coast	191	168	-23
Vredenburg Hospital	District	West Coast	122	158	36
Vredendal Hospital	District	West Coast	104	145	41
Sub Total		**West Coast**	**486**	**680**	**194**
Sub Total: Rural			**3,597**	**4,857**	**1,260**
Grand Total			**15,147**	**16,782**	**1,635**

Assumption: All provincial aided hospitals (PAH) will be provincialised by 2010

Table 21: Planned staffing profile per category of staff in acute district and regional hospitals

	Total: Metro	Total: Overberg	Total: Cape Winelands	Total: Eden	Total Central Karoo	Total: West Coast	Total L1 and L2	
L1 Beds	1246	137	332	300	102	250	**2367**	
L2 Beds	405	30	562	348	10	85	**1440**	
Total Beds	**1651**	**167**	**894**	**648**	**112**	**335**	**3807**	
Category of Staff	**Posts**	**Posts**	**Posts**	**Posts**	**Posts**	**Posts**	**Posts**	**Profile**
Therapists	82	6	53	33	6	16	**196**	**2.4%**
Technical Support	76	14	51	46	10	25	**222**	**2.7%**
General Support	592	74	305	253	44	124	**1,392**	**16.8%**
Pharmacists	50	7	40	29	5	13	**144**	**1.7%**
Nursing Services	1,794	166	1,090	740	91	305	**4,186**	**50.5%**
Medical Professionals	144	10	153	102	6	22	**437**	**5.3%**
General Management	36	8	18	17	8	13	**100**	**1.2%**
Catering	129	21	85	68	18	39	**360**	**4.3%**
Auxiliary workers	51	3	29	17	1	3	**104**	**1.3%**
Administrative Staff	483	59	247	200	44	120	**1,153**	**13.9%**
Grand Total	**3,437**	**368**	**2,071**	**1,505**	**233**	**680**	**8,294**	**100.0%**
Staff per Bed	**2.08**	**2.20**	**2.32**	**2.32**	**2.03**	**2.03**	**2.18**	

Table 22 : Planned staffing profile per category of staff in the central hospitals

	Groote Schuur Hospital	Tygerberg Hospital	Red Cross Hospital	Total: Central Hospitals	
L2 Beds	350	680	50	**1,080**	
L3 Beds	686	514	260	**1,460**	
Total Beds	**1,036**	**1,194**	**310**	**2,540**	
Category of Staff	**Posts**	**Posts**	**Posts**	**Posts**	**Profile**
Therapists	147	146	42	**335**	**3.9%**
Technical Support	80	78	20	**178**	**2.1%**
General Support	502	485	144	**1131**	**13.3%**
Pharmacists	28	27	12	**67**	**0.8%**
Nursing Services	1718	1800	578	**4096**	**48.3%**
Medical Professionals	450	465	125	**1040**	**12.3%**
General Management	14	15	6	**35**	**0.4%**
Clinical Technical Support	50	50	16	**116**	**1.4%**
Clinical Management	14	14	8	**36**	**0.4%**
Catering	138	138	26	**302**	**3.6%**
Auxiliary workers	105	104	32	**241**	**2.8%**
Administrative Staff	372	386	153	**911**	**10.7%**
Grand Total	**3618**	**3708**	**1162**	**8488**	**100.0%**
Staff per bed	**3.47**	**3.09**	**3.75**	**3.33**	

3. PART C: SPECIALISED HOSPITALS

5.1 Western Cape Rehabilitation Centre

The Western Cape Rehabilitation Centre (WCRC) is the only high intensity rehabilitation center in the Western Cape at present and is characterized by:

- Rehabilitation services that are provided by a multi-disciplinary team;
- There is a high frequency of contacts, i.e. 4-6 hours of rehabilitation per person per day;
- Services may be provided on an in or out patient basis;
- The majority of patients have long-term activity limitations/participation restrictions;
- Services should be rendered for at least 5 days per week per patient for inpatients or according to the patient's need for outpatients;
- Interdisciplinary team assessment and disability management planning; and
- The length of stay varies from an average 28 days (e.g. traumatic brain injury or stroke) to 90 days or longer for patients with paraplegia or quadriplegia.

Table 23: Planning parameters: Western Cape Rehabilitation Centre

KEY PLANNING VARIABLES:	2010 TARGETS
TOTAL: BEDS L2	204
CAPITAL: MAINTENANCE & REPLACEMENT	
Capital as % of total expenditure	2.5%
HUMAN RESOURCES	
Total Staff : Bed ratio	1.94
Total Number of Staff (Including out-sourced services)	395
FINANCE	
Personnel as % of Tot Exp	76.00%
EFFICIENCY	
Bed occupancy rate	90.0%
Outpatients per Inpatient day	0.95
Average length of stay	80
OUTPUT	
Total Admissions	838
Total Outpatients treated	63,663
Total Inpatient Days	67,014
Total Patient day equivalents (PDE's)	88,235

5.2 Psychiatric hospital services

For specialist psychiatric hospital services Healthcare 2010 represents a continuation of the process of downsizing and consolidation of services commenced in 1997 and confirmed in Cabinet Resolution 419 of 1998. At that stage there were 3,500 psychiatric beds and the target for 2010 is 1,568 beds within the specialized psychiatric hospitals

Table 24: Bed plan: psychiatric services

HOSPITAL	SERVICE	2010
General psychiatric services		
Lentegeur	Acute Adult	130
	Adult therapeutic unit	15
	Adolescent unit for Psychosis management	18
	Adolescent therapeutic unit for non psychotic illness	12
	Intensive rehabilitation	40
	Long Term	0
	Frail ill	10
	Total	**225**
Stikland	Acute Adult	130
	Adult therapeutic unit	28
	Psychogeriatric	40
	Alcohol Detoxification	30
	Opiate Detoxification unit (Additional to 2010 plan)	10
	Rehabilitation Psychogeriatric	20
	Intensive rehabilitation adult	30
	Residential care	0
	Frail ill	10
	Total	**298**
Valkenburg	Acute Adult	132
	Adult therapeutic unit	15
	Intensive rehabilitation adult	40
	Residential care	0
	Frail ill	8
	Total	**195**
GRAND TOTAL		**718**
FORENSIC SERVICES		
Valkenberg	**Observation Services**	
	Male	30
	Female	10
	Juvenile	10
	Intellectual Disability	10
	State Patients	
	Maximum secure male	50
	Medium secure male	65
	Low secure male	30
	Total	**205**
Lentegeur	**State Patients**	
	Medium secure Female	20
	Male Rehabilitation	85
	Male step down (new for possible NGO partner)	20
	Medium secure Juvenile and Intellectual disability	20
	Total	**145**

HOSPITAL	SERVICE	2010
GRAND TOTAL		**350**
INTELLECTUAL DISABILITY SERVICES		
Alexandra	Acute Adult	36
	Medium term dual diagnosis / behaviour disturbance	95
	Psychosocial Rehabilitation	95
	Respite & assessment for frail patients	24
	Residential	0
	Total	**250**
Lentegeur	Acute children's assessment & training	15
	Medium term dual diagnosis / behaviour disturbance	110
	Psychosocial Rehabilitation	85
	Respite & assessment for frail patients – children	20
	Respite & assessment for frail patients – geriatric & multiple handicapped children	20
	Residential	0
	Total	**250**
GRAND TOTAL		**500**
Total planned beds in Psychiatric beds		**1568**

6. PART D: EMERGENCY MEDICAL SERVICES

6.1 The Constitution of South Africa, Chapter 2, Section 27 (3) states that no one may be refused emergency medical treatment and the Health Act, Chapter 2, Section 5 states that a Healthcare Provider, health worker or health institution may not refuse a person emergency medical treatment.

6.2 Service norms and standards

6.2.1 Information communication technology services

- EMS must receive and process emergency calls throughout the Province in all six Districts. Once registered, the emergency calls received must be dispatched via a communication system to a responding ambulance or emergency vehicle and the responding vehicle must be able to return communication immediately wherever its location in the Province.
- The composite vehicle resource available to EMS must be rationalized between the responses required and managed across the geographic area of each district to ensure the most appropriate, efficient and effective response.

6.2.2 Emergency ambulance services

- All communities in the six districts (5 rural and the Cape Town Metro district) of the Western Cape must have access to Emergency Ambulance Response within the service targets. In built up, town or so-called urban environments the nationally determined target response time is 15 minutes and EMS must meet this target in 90% of responses. In rural or agricultural areas (outside of built up areas) the response time target is 40 minutes for all priorities achieved in 90% of all cases.
- Emergency Ambulance Services are also required to transfer acutely ill patients between hospitals, so called Inter-Hospital Transfers, within the same response time targets appropriate to the respective emergency.

6.2.3 Medical rescue services

- All communities in the six districts of the Western Cape must have access to Emergency Medical Rescue Response within the service targets. All rescue responses are Priority 1 responses and must therefore be achieved in 15 minutes in urban areas and 40 minutes in rural areas 90% of the time.
- Medical rescue means the medical release from entrapment e.g. in a motor vehicle accident where patients are trapped by the compressed frame and body of the vehicle.

6.2.4 Patient transport services

- All patients referred for consultation, from one health institution to another, must be transported by the Non Emergency Transport Services (HEALTHNET) and reach their referral hospital by the appointment time.

6.2.5 Aero-medical services

- An air service to transport acutely ill patients from distant referring centres is required to keep ambulance services in local towns, reduce transfer time and improve the quality of care to rural patients.
- These services may include a combination of fixed and rotor wing aircraft. Rotor wing aircraft provide the added advantage of being able to assist with medical rescue because of the capacity to winch patients up into the aircraft.

6.2.6 Emergency medicine

- Emergency Medical Services is responsible for the co-ordination of the development of policy, protocol, clinical governance and quality management within the Emergency Departments across the Province as well as coordinating the education and training for specialists and undergraduates in emergency care.

6.2.7 Management, administration and support

- In order to manage the above EMS functions EMS requires:
    - Strategic and general management

- Financial management and supply chain management
- Human resource management and development
- Public liaison and communication
- Operational management (included in the Ambulance Services)

6.2.8 Infrastructure

- **Vehicle fleet**
  Emergency Medical Services has a fleet of several hundred vehicles that must be monitored and managed to keep them in an operational condition.
- **Facilities**
  Emergency Medical Services requires fixed facilities from which Emergency Resources and Support functions can be launched. These facilities must be optimally located to facilitate appropriate response but do not necessarily form the only static point from which resources respond.

6.3 Service plan for Emergency Medical Services

6.3.1 Methodology

An electronic modeling tool was developed to assist in the planning process. This tool correlates indicators that are interdependent e.g. population size and the expected number of emergency cases per geographical area; ambulance hours required; the number of ambulances; ambulance staff, etc. The tool was applied to develop a scenario that would address the need for emergency services within the context of the optimal utilization of human and other resources. The proposed scenario will enable EMS to meet the required service delivery standards in terms of response time, mission time, quality of care, etc. In the table below the scenario is summarised in terms of a set of interrelated indicators illustrating the estimated need and the resources required in terms of vehicles and human resources.

Table 25 : Set of planning indicators for Emergency Medical Services

Total projected population in 2010	5,197,892
Population based utilization indicators related to ambulance services:	
Emergency rate per 1000 population	33%
Emergencies serviced by ambulance	25.0%
Emergency missions per annum	426,227
Inter-hospital transfer rate based on admissions	13%
Inter-hospital transfers	117,776
Total ambulance missions per annum	544,003
Ambulance utilization rate per 1000 population	104.66
Percentage of total population utilizing ambulance services	10.5%
Response and Mission time in minutes:	
Response time: Urban	13
Response time: Rural	32
Mission Time: Urban	60
Mission Time: Rural	110
Calculation of ambulances required:	
Total ambulance hours required per annum	697,606
Total ambulance hours required per day	1,911
Total missions per day	1,490
Operational fleet size	166
Allowance for maintenance per ambulance per annum (days)	20

Additional ambulances required		9
Total number of ambulances required (Fleet size)		175
Average missions per ambulance per day		8.5
Average ambulance hours per ambulance per day		10.92
Vehicle utilization indicators		
Average distance traveled per mission: Urban		18
Average distance traveled per mission: Rural		49
Average kilometers per ambulance per annum		98,253
Total ambulance km per annum		17,194,324
Ambulance Staff Required		
Profiled Staff		1462
Skill mix: Ambulance Staff	**Skill Mix**	
Emergency Care Practitioner Advanced	20%	292
Emergency Care Practitioner Intermediate	50%	731
Emergency Care Practitioner	30%	439
	Total Staff	1462
Rescue Staff Required:		
Rescue Vehicles		36
Total Staff		232
Skill mix: rescue staff	**Skill Mix**	
Emergency Care Practitioner Advanced	20%	46
Emergency Care Practitioner Intermediate	80%	186
	Total Staff	232
Communication Centre: Staff Required		
Call Taker/Dispatcher		25
Call Taker		29
Dispatcher		21
	Total Staff	75
Management and support staff		597
TOTAL PROPOSED STAFF ESTABLISHMENT FOR EMS		**2,366**
Current staff establishment of EMS		**1,280**
Difference		**1,086**

7. PART E: FORENSIC PATHOLOGY SERVICES

7.1 For the past 30 years the police have been responsible for the custody the bodies of persons presumed to have died from unnatural causes. The South African Police Services (SAPS) was responsible for the 'medico-legal mortuaries' and for the transport of bodies to these facilities. The Departments of Health have always provided the medical expertise of pathologists and doctors for the medico-legal investigation of death. Now in terms of section 27(2) of the Health Act, 2003, the provincial Departments of Health (Heads of Department) will be responsible for the implementation of the entire Forensic Pathology Service, excluding Forensic Laboratories which is a national responsibility, in compliance with national policies and law. This is the culmination of a Cabinet decision on 29 April 1998 to transfer the medico-legal mortuaries from SAPS to Health.

7.2 This transfer took place with effect from 1 April 2006 creating the new Forensic Pathology Service (FPS) which provides a service via two M6 Academic Forensic Pathology Laboratories in the Metro district and three Regional Referral FPS Laboratories and smaller FPS Laboratories and Holding Centres in the rural districts

7.3 Mortuaries are categorized according to annual workload, i.e.: autopsies per annum

- M1 <250
- M2 251 – 500
- M3 501 – 750
- M4 751 – 1000
- M5 1001 – 1250
- M6 >1250

7.4 In terms of human resources it is a national objective to develop a professional cadre of competent Forensic Officers who will assist the forensic pathologist and medical practitioner with the medico-legal investigation of death. The post levels of these personnel will range from levels 5 and 6 to Chief Forensic Officers at level 8.

Table 26: Forensic Pathology Services: Human Resources: Proposed staff establishment: 2006/07 to 2008/09

Mortuary Grade	District: location of mortuary	Forensic Officer			Forensic Medical Officer			Forensic Specialist			All other personnel			Total Personnel		
		06-07	07-08	08-09	06-07	07-08	08-09	06-07	07-08	08-09	06-07	07-08	08-09	06-07	07-08	08-09
N/A	**WESTCOAST REGION**	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2
M1	Malmesbury	3	3	3	0.6	0.6	0.6	0	0	0	0	0	1	3.6	3.6	4.6
M1	Vredendal	3	3	3	0.6	0.6	0.6	0	0	0	1	1	1	4.6	4.6	4.6
M1	Vredenburg	3	3	3	0.6	0.6	0.6	0	0	0	0	0	1	3.6	3.6	4.6
M3	Paarl	4	5	6	0	0	0	2	2	2	4	4	4	10	11	12
M3	Stellenbosch	6	7	7	0	0	0	1	1	1	2	2	2	9	10	10
N/A	**BOLAND REGION**	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2
M2	Hermanus	3	4	5	0.6	0.6	0.6	0	0	0	2	2	2	5.6	6.6	7.6
Holding	Robertson	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1
Holding	Wolseley	2	2	2	0	0	0	0	0	0	0	0	0	2	2	2
M3	Worcester	4	5	7	0	0	0	1	1	2	4	4	4	9	10	13
M1	Swellendam	1	1	1	0.5	0.5	0.5	0	0	0	0	0	0	1.5	1.5	1.5
N/A	**SOUTHERN REGION**	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2
M2	Knysna	3	4	5	0.6	0.6	0.6	0	0	0	2	2	2	5.6	6.6	7.6
M2	Mosselbay	3	4	5	0	0	0	0	0	0	2	2	2	5	6	7
Holding	Riversdale	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1
M1	Beaufort West	2	2	2	0	0	0	0	0	0	0	0	0	2	2	2
Holding	Ladismith	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M2	Oudtshoorn	4	5	7	0	0	0	1	1	1	4	4	4	9	10	12
Holding	Prince Albert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holding	Uniondale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M3	George	4	5	7	0	0	0	2	2	2	4	4	4	10	11	13
M1	Laingsburg	2	2	2	0	0	0	0	0	0	0	0	0	2	2	2
M6A	Salt River	30	30	30	4	4	4	5	5	5	18	19	20	57	58	59
M6A	Tygerberg	30	30	30	4	4	4	5	5	5	18	19	20	57	58	59
PROV	**HEAD OFFICE**	0	0	0	0	0	0	0	0	0	7	7	7	7	7	7
TOTAL ESTABLISHMENT		109	117	127	14	14	14	17	17	18	74	76	80	211	221	236

Table 27: Forensic Pathology Services: Human Resources: Growth of the staff establishment: 2006/07 to 2008/09

PROVINCE	FORENSIC OFFICERS			MEDICAL OFFICERS			FORENSIC PATHOLOGISTS INCLUDING CMOs			ALL OTHER PERSONNEL			ALL PERSONNEL		
	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09
WESTERN CAPE	109	117	127	14	14	14	17	17	18	74	76	80	**214**	**224**	**239**
NATIONAL TOTAL	**761**	**864**	**999**	**100**	**109**	**116**	**104**	**112**	**123**	**529**	**561**	**604**	**1494**	**1647**	**1842**
% Growth		7.3	8.5						5.9		2.7	5.3		4.7	7
% of Total	50.9	52.2	53.1	6.5	6.3	5.9	7.9	7.6	7.5	34.6	33.9	33.5	100	100	100

8. CONCLUSION AND WAY FORWARD

The Service Plan provides the framework for the implementation of Healthcare 2010 which is essential for the provision of a sustainable and quality health service in the Western Cape.

This draft of the document also accommodates the new sub-district boundaries as agreed between the province and the City of Cape Town. This exercise illustrates the fact that the planning tools that have been developed to model the Service Plan are flexible, integrated and enable the Department to accommodate adjustments, such as adjustments to the population figures and develop sensitivity analyses to evaluate different scenarios and outcomes.

The foundation of the plan is to realistically but significantly strengthen the District Health Services (DHS). In the Cape Town Metro district the proposed configuration of primary health care services aims to increase access to the full package of services rendered at clinic level. Extended *clinic* services, i.e. until 21:30 at twenty-five Community Health Centres will replace the existing nine 24- hour trauma and emergency units at the large CHCs. All trauma and emergency cases will be consolidated in the trauma and emergency units provided at all the acute hospitals in the Cape Town metro district. It is envisaged that these changes will increase the utilization of nurse-driven clinic services for non-emergency visits and decrease the number of non-emergency visits after hours to doctor-driven trauma and emergency units.

It is anticipated that the appointment of Family Medicine Practitioners (specialists) at the larger CHCs and district hospitals will improve the quality of care at primary health care level. Maternity units have been provided at all the acute hospitals and will be responsible for the clinical management of the midwife obstetric units (MOUs) in their drainage areas. The service plan also outlines the development of a comprehensive and integrated community-based service delivery plan to cater for the needs of de-hospitalized patients and people suffering from chronic diseases. Another important focus of community-based services is the rendering of preventative and promotive health programmes.

The strengthening of the DHS will enable the Department to rationalize the existing acute hospitals in the Cape Town Metro district. Most of the required level one beds will be provided by the reclassification of existing level two beds. However, the ideal configuration of level one beds in the Cape Town Metro district will only be possible once the two new hospitals in Khayelitsha and Mitchells Plain have been completed. The majority of level two beds are centralized in the central hospitals with the remaining 405 allocated to four other acute hospitals. A large proportion of the required level two beds will be accommodated by the reclassification of 1,014 beds currently designated as level three beds. The Service Plan also aims to facilitate the allocation of the appropriate resources that are aligned with the reconfigured services.

The current under utilization and, consequent inefficiency of a number of rural district hospitals is addressed in the plan. In the larger rural district hospitals level one beds were decreased and replaced by level two beds. The purpose of these beds is to provide a structured framework for sustainable outreach and support from the rural regional hospitals to the district hospitals and therefore medical specialists are not allocated to the establishment of the district hospitals. This will have a positive impact on the quality of care in district hospitals as well as the ability of these hospitals to deliver the full package of district hospital care.

It is intended that the provision of specialist support and outreach will provide the basis for the development of the skills and expertise of the doctors working in the rural areas. Access to specialists also presents the opportunity to treat less complicated, non-acute conditions requiring specialist expertise in district hospitals. The outcome of these arrangements should facilitate the optimal utilization of rural district hospitals and a decrease of referrals from these hospitals to regional hospitals. It is hoped that the opportunity for on-going professional development will be a positive factor in the retention of scarce skills in the rural areas.

Provision has been made for specialists in all the general disciplines as well as ENT, ophthalmology and pathology in the rural regional hospitals. Sufficient resources have allocated to enable these hospitals to provide the full package of regional hospital services to

the population in their drainage areas and to provide planned outreach to the district hospitals with no referrals to regional hospitals in Cape Town.

The central hospitals will provide tertiary (level three) services, which are funded by national conditional grants, to referred patients from the Western Cape and other provinces, mostly the Eastern Cape and Northern Cape provinces. Groote Schuur and Tygerberg Hospitals will physically accommodate extensive level two service components whereas Red Cross Children's Hospital will provide mostly level three services. The two levels of service in these hospitals will be managed separately to ensure efficiency and accountability.

Although the Service Plan focuses on service delivery, provision has been made for an extensive but balanced teaching and training platform for medical professionals. Registrar posts are allocated on the secondary and tertiary services platforms with dedicated time allowances for formal teaching and training for specialists and registrars. The teaching platform includes level one services, where Family Medicine Practitioner (specialist) posts are provided for. Medical Officer posts are interchangeable with registrar posts according to training and service needs. The teaching and training of other health professionals are not explicitly addressed in this document. However, the additional cost to the service related to the teaching and training requirements for these professionals (including medical students) should be provided within the context of the Health Professionals Training and Development Grant.

The differences between urban and rural service delivery patterns are highlighted in the plan. Services in rural areas are more expensive because of decreased population density, greater distances, lack of public transport and poor road infrastructure. Despite the lack of efficiencies (unit costs, workload per worker, etc.), resources have been allocated to all the rural communities to ensure relatively easy access to the full package of Primary Health Care services, including 24-hour access to a medical doctor in the case of emergencies.

The continuum of care for acute patients is addressed in the referral patterns between PHC facilities and district, regional and central hospitals. For chronic and sub-acute patients the continuum of care is ensured by the provision of a well-developed community-based system supported by specialized hospitals for TB, mental health and rehabilitation. The provision of these services should alleviate current issues such as chronic patients being treated in acute beds and level one patients admitted to level two beds due to the current lack of resources at the appropriate levels.

The Service Plan is service-driven and not budget or infrastructure driven and aims to determine the resources required to deliver an acceptable package of healthcare services in line with the nationally accepted packages of health care. The Service Plan is also aligned with the Millennium Development Goals, the priorities of the National Department of Health and the transvsersal Provincial strategy of social capital formation and of course the principles of Healthcare 2010.

A cabinet submission on the Service Plan was approved by the Provincial Cabinet on 19 July 2006 for consultation with relevant stakeholders including organized labour and the universities in particular.

ANNEXURE A

Existing service delivery units and drainage areas versus the planned service delivery units and drainage areas in the Metro DHS.

EXISTING SERVICE DELIVERY POINTS	NEW SUB-DISTRICT	PLANNED DRAINAGE		
Northern, sub-district A				
Bothasig Clinic	A	Bothasig	Clinic	
		Joe Slovo/Sanddrift/Marconi Beam	Clinic	
		Joe Slovo/Sanddrift/Marconi Beam	CHC	Extended Hours
Bloekombos Clinic	A	Brigthton/Harmonie/Bloekombos	Clinic	Satellite
Brackenfell Clinic	A	Wallacedene	Clinic	Brackenfell
Brighton Clinic	A	Wallacedene	CHC	Northpine
Harmonie Clinic	A			
Northpine Clinic	A			
Wallacedene Clinic	A			
Kraaifontein CHC & Kraaifontein MOU	A	Scottsdene	Clinic	
Scottsdene CHC	A	Kraaifontein	Clinic	
Scottsdene Clinic & Oostenberg Mobile	A	Kraaifontein	Clinic	
		Kraaifontein	CHC	Extended Hours & MOU
Durbanville CHC	A	Durbanville	Clinic	
Durbanville Clinic	A	Durbanville	CHC	
		Level 1 district beds:	**Beds**	**OPD**
		Somerset hospital	30	9,308
Summary: Northern Sub-district A		Karl Bremer	35	**10,859**
		Total	**65**	**20,166**
		Total number of model clinic components	8	
		Total number of CHC's	4	

Western, sub-district B				
Factreton Clinic	B	Factreton	Clinic	Satellite
Kensington CHC	B	Maitland	Clinic	Kensington
Maitland CHC	B	Maitland	CHC	
Maitland Clinic	B			
Pinelands Satellite Clinic	B			
Vanguard CHC and MOU	B	Langa	Clinic	
Vanguard Clinic	B	Vanguard	Clinic	
Langa Clinic	B	Vanguard	Clinic	
		Vanguard	CHC	Extended Hours & MOU
Cape Town Station RHC	B	Woodstock/Chapel Street	Clinic	Satellite
Chapel Street Clinic	B	Greenpoint	Clinic	Civic Centre/
Queen Victoria Street	B	Distrix Six (ex Robbie Nurock)	Clinic	CT Station
Robbie Nurock CHC	B	Distrix Six	CHC	Extended Hours
Green Point CHC	B			
Schotscheskloof Satellite Clinic	B			
Spencer Road Clinic	B			
Woodstock CHC	B			
Table View Clinic	B	Table View / Du Noon	Clinic	
Good Hope CHC	B	Good Hope	Clinic	
Du Noon	B	Good Hope	CHC	
Albow Gardens Clinic	B			
Mamre CHC	B	Pella/Protea Park/Saxon Sea/Mamre	Clinic	Satellite
Melkbosstrand SatelliteClinic	B	Wesfleur	Clinic	Melkbos
Melkbosstrand Mobile	B	Wesfleur	CHC	
Pella Satellite Clinic	B			
Protea Park Clinic	B			
Saxon Sea Clinic	B			
Hope Street Dental	B			
		Level 1 district beds:	**Beds**	**OPD**
		Wesfleur	31	9,618
Summary: Western Sub-district B		Somerset hospital	65	20,166
		Total	**96**	**29,784**
		Total number of model clinics	12	
		Total number of CHC's	5	

EXISTING SERVICE DELIVERY POINTS	NEW SUB-DISTRICT	PLANNED DRAINAGE		
Southern, sub-district C				
Hout Bay Harbour CHC	C	Houtbay	Clinic	
Hout Bay Main Road Clinic	C	Houtbay	CHC	Extended Hours
Strandfontein Clinic	C	Strandfontein	Clinic	Satellite
Retreat CHC	C	Seawind/Lavender Hill	Clinic	Tokai
Retreat Clinic	C	Retreat	Clinic	Westlake
Seawind Clinic	C	Retreat	Clinic	
Lavender Hill Clinic	C	Retreat	CHC	Extended Hours & MOU
Westlake Clinic	C			
Claremont Clinic	C	Claremont/Wynberg	Clinic	Satellite
Alphen Clinic	C	Lady Michaelis	Clinic	Dieprivier
Lady Michaelis CHC	C	Lady Michaelis	CHC	Alphen
Diep River Clinic	C			
Wynberg Clinic	C			
Grassy Park CHC	C	Parkwood	Clinic	
Grassy Park Civic Centre Clinic	C	Grassy Park	Clinic	
Klip Road Clinic	C	Lotus River	Clinic	
Lotus River CHC	C	Lotus River	CHC	Extended Hours
Lotus River Clinic	C			
Parkwood Clinic	C			
Pelican Park Satellite Clinic	C			
Fish Hoek Clinic	C	Nomzamu (Masiphumelele)	Clinic	Satellite
Redhill Mobile	C	Fish Hoek	Clinic	Muizenberg/
Simonstown Satellite Clinic	C	Ocean View	Clinic	Simonstown
Muizenberg Clinic	C	Ocean View	CHC	Extended Hours
Masiphumelele Clinic	C			
Ocean View CHC	C			
Ocean View Clinic	C			
		Level 1 district beds:	**Beds**	**OPD**
Summary: Southern Sub-district C		Victoria hospital	90	27,923
		False Bay hospital	40	12,410
		Total	**130**	**40,333**
		Total number of model clinics	13	
		Total number of CHC's	5	

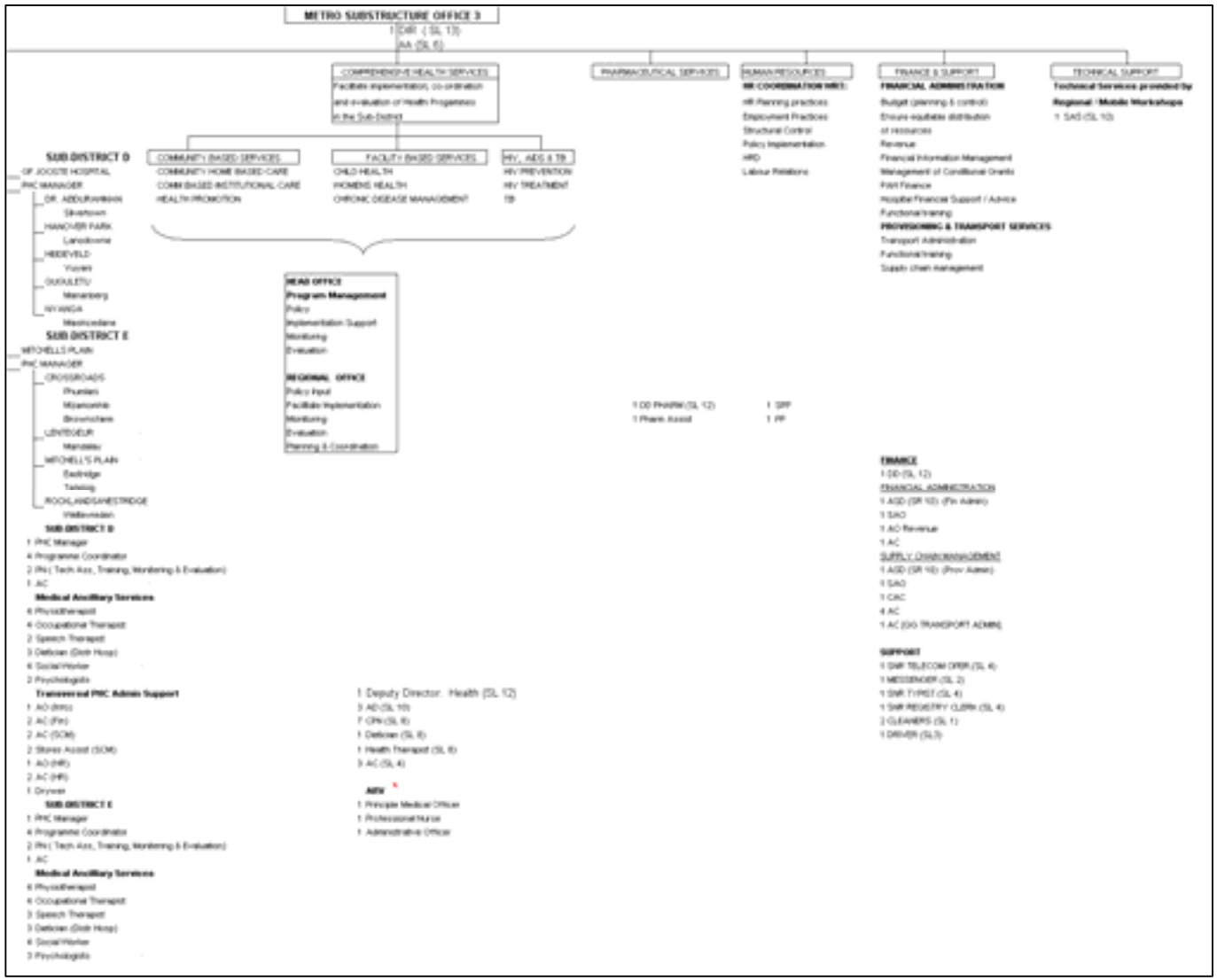
Klipfontein, sub-district D				
Dr. Abdurahman CHC	D	Silvertown	Clinic	
Hazendal SatelliteClinic	D	Dr Aburahman	Clinic	
Honeyside Satellite Clinic	D	Dr Aburahman	CHC	
Silvertown Clinic	D			
Lansdowne Clinic	D	Lansdowne	Clinic	
Hanover Park CHC	D	Hanover Park	Clinic	
Hanover Park Clinic	D	Hanover Park	Clinic	
Hanover Park MOU	D	Hanover Park	CHC	Extended Hours & MOU
Newfields Satellite Clinic	D			
Philippi Clinic	D			
Philippi Mobile	D			
Vuyani Clinic	D	Vuyani	Clinic	
Heideveld CHC	D	Heideveld	Clinic	
Heideveld Clinic	D	Heideveld	Clinic	
Heideveld MOU	D	Heideveld	CHC	Extended Hours
Manenberg Clinic	D	Mannenberg	Clinic	
Guguletu CHC	D	Guguletho	Clinic	
Guguletu Clinic	D	Guguletho	Clinic	
Guguletu MOU	D	Guguletho	Clinic	
		Guguletho	CHC	Extended Hours & MOU
Masincedane Clinic	D	Masincedane	Clinic	
Nyanga CHC	D	Nyanga	Clinic	
Nyanga Junction RHC	D	Nyanga	CHC	
Nyanga Clinic	D			
Uluntu RHC	D			
		Level 1 district beds:	**Beds**	**OPD**
Summary: Klipfontein Sub-district D		GF Jooste	180	55,845
		Total number of model clinics	14	
		Total number of CHC's	5	

EXISTING SERVICE DELIVERY POINTS	NEW SUB-DISTRICT	PLANNED DRAINAGE		
Mitchell's Plain, sub-district E				
Brown's Farm CHC	E	Crossroads	Clinic	
Crossroads 1 Clinic	E	Crossroads	Clinic	
Crossroads 2 Clinic	E	Phumlani	Clinic	
Crossroads CHC	E	Mzamomhle	Clinic	
Mzamomhle Clinic	E	Browns Farm	Clinic	
Phumlani Clinic	E	Crossroads	Clinic	
		Crossroads	CHC	Extended Hours & MOU
Lentegeur Clinic	E	Mandalay	Clinic	
Mandalay Satellite Clinic	E	Lentegeur	Clinic	
		Lentegeur	CHC	
Mitchells Plain CHC (Day Hospital)	E	Eastridge	Clinic	
Mitchells Plain MOU	E	Tafelsig	Clinic	
Mitchells Plain Youth Health Centre	E	Mitchell's Plain	Clinic	
Tafelsig CHC	E	Mitchell's Plain	Clinic	
Eastridge Clinic	E	Mitchell's Plain	Clinic	
		Mitchell's Plain	CHC	Extended Hours & MOU
Rocklands Clinic	E	Weltevreden	Clinic	
Weltevreden Valley Clinic	E	Rocklands/Westridge	Clinic	
Westridge Clinic	E	Rocklands	CHC	
Summary: Mitchell's Plain Sub-district E		**Level 1 district beds:**	**Beds**	**OPD**
		New Mitchell's Plain hospital	210	65,153
		Total number of model clinics	15	
		Total number of CHC's	4	
Tygerberg, sub-district F				
St Vincent CHC	F	Belhar	Clinic	
St Vincent Clinic	F	Belhar	CHC	
Chestnut Satelite Clinic	F			
Bellville South CHC	F	Reed Street	Clinic	Satellite
Bellville South Clinic	F	Bellville-Suid	Clinic	Volk centre
Bellville Youth Centre RHC	F	Bellville-Suid	Clinic	
Groenvallei Satellite Clinic	F	Bellville-Suid	CHC	Extended Hours
Reed Street CHC	F			
Bishop Lavis CHC/MOU	F	Netreg	Clinic	
Bishop Lavis Clinic	F	Valhalla Park	Clinic	
Netreg Clinic	F	Bishop Lavis	Clinic	
Valhalla Park Clinic	F	Bishop Lavis	CHC	Extended Hours & MOU
Adriaanse Clinic	F	Elsiesrivier	Clinic	
Elsies River CHC/MOU	F	Elsiesrivier	Clinic	
Elsies River Clinic	F	Elsiesrivier	CHC	Extended Hours & MOU
Leonsdale Satellite Clinic	F			
Matroosfontein Satellite Clinic	F			
Dirkie Uys CHC	F	Parow	Clinic	
Dirkie Uys Clinic	F	Ruyterwacht (Halt road)	Clinic	
Parow CHC	F	Dirkie Uys	Clinic	
Parow Clinic	F	Dirkie Uys	CHC	Extended Hours
Ruyterwacht CHC	F			
Uitsig Clinic	F	Ravensmead	Clinic	
Ravensmead CHC	F	Ravensmead	CHC	
Ravensmead Clinic	F			
Delft CHC	F	Delft South	Clinic	
Delft Clinic	F	Delft	Clinic	
		Delft	CHC	Extended Hours
Summary: Tygerberg Sub-district F		**Level 1 district beds:**	**Beds**	**OPD**
		Karl Bremer hospital	175	54,294
		Eerste River Hospital	30	9,308
		Total	205	63,601
		Total number of model clinics	15	
		Total number of CHC's	7	

EXISTING SERVICE DELIVERY POINTS	NEW SUB-DISTRICT	PLANNED DRAINAGE		
Khayelitsha, sub-district G				
Khayelisha Site B Youth Centre	G	Khayalitsha	Clinic	
Khayelitsha (Site B) CHC	G	Khayalitsha	Clinic	
Khayelitsha (Site B) Clinic	G	Khayalitsha	Clinic	
Khayelitsha (Site B) MOU	G	Khayalitsha	CHC	Extended Hours & MOU
Zibomlene Town 2 Clinic	G			
Luvuyo Clinic	G	Luvuyo	Clinic	
Matthew Goniwe CHC	G	Barney M	Clinic	
Mayenzeke Clinic	G	Mathew Goniwe	Clinic	
		Mathew Goniwe	CHC	Extended Hours
Nolungile CHC	G	Nolungile	Clinic	
Nolungile Youth centre	G	Nolungile	Clinic	
Nolungile Clinic	G	Nolungile	Clinic	
		Nolungile	Clinic	
		Nolungile	CHC	Extended Hours
Michael Mapongwana CHC	G	Zakhele	Clinic	
Michael Mapongwana MOU	G	New Kuyasa	Clinic	
Zakhele Clinic	G	Michael Mapongwana	Clinic	
Kuyasa Clinic	G	Michael Mapongwana	CHC	Extended Hours & MOU
Summary: Khayelitsha Sub-district G		**Level 1 district beds:**	**Beds**	**OPD**
		New Khayelitsha hospital	210	65,153
		Total number of model clinics	13	
		Total number of CHCs	4	
Eastern, sub-district H				
Fagan Street Clinic	H	Strand	Clinic	Satellite
Gordon's Bay Clinic	H	Somerset West	Clinic	
Gustrouw CHC	H	Rusthof/Gustrouw	Clinic	Godons Bay
Gustrouw Clinic	H	Rusthof/Gustrouw	CHC	Extended Hours
Somerset West Clinic	H			
Strand/ Boland Bank CHC	H			
Ikwezi CHC	H	Ikwezi	Clinic	Satellite
Ikwezi Clinic	H	Ikwezi	CHC	Sir Lowrey's
Sir Lowry's Pass Clinic	H			
Hillcrest Clinic	H	Malibu	Clinic	Satellite
Kleinvlei CHC	H	Wesbank	Clinic	
Kleinvlei Clinic	H	Mfuleni	Clinic	
Blue Downs Clinic	H	Eerste Rivier	Clinic	Russels Rest
Russel's Rest Clinic	H	Kleinvlei	Clinic	
Wesbank Clinic	H	Kleinvlei	CHC	Extended Hours
Mfuleni CHC	H			
Mfuleni Clinic & Driftsands Satelite Clinic	H			
Driftsands Satelite Clinic	H			
Carinus Clinic	H	Sarepta	Clinic	
Sarepta Clinic	H	Sarepta	CHC	
Macassar CHC	H	Macassar	Clinic	
Macassar Clinic	H	Macassar	CHC	Extended Hours & MOU
Macassar Mobile	H			
Macassar MOU	H			
Summary: Eastern Sub-district H		**Level 1 district beds:**	**Beds**	**OPD**
		Hottentots Holland hospital	90	27,923
		Eerste Rivier hospital	60	18,615
		Total	150	46,538
		Total number of model clinics	11	
		Total number of CHC's	5	
SUMMARY: CAPE TOWN METRO DISTRICT		Total number of model clinic components*	101	
		Total number of CHC's	39	
		Total number of MOUs	12	
		Total number of PHC service units	152	
		*Total number of extended hour service points		25
		Level 1 district beds:	1,246	
		Level 1 hospital out patient services	386,572	

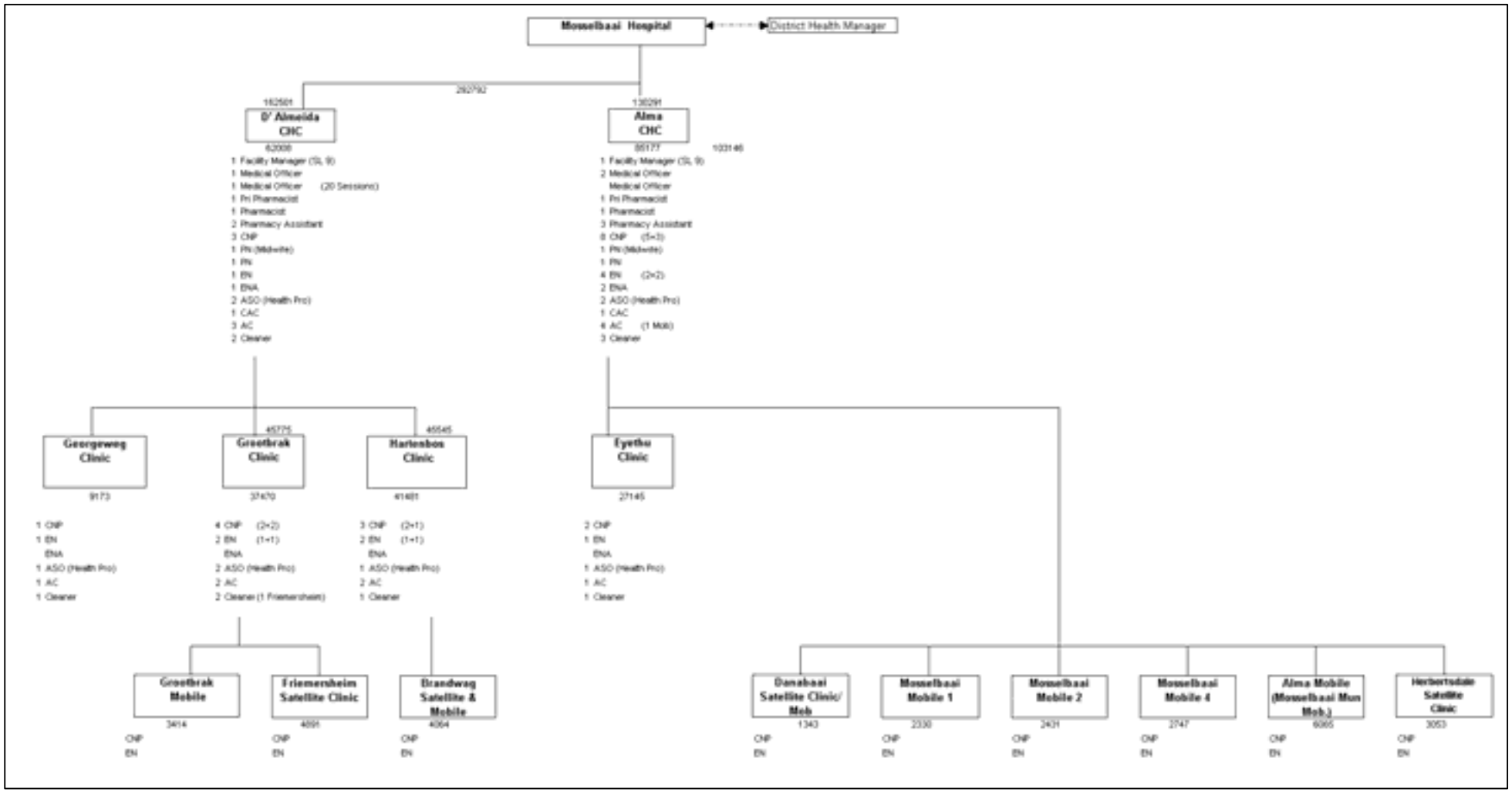
ANNEXURE B

Example of a sub-structure management structure in the DHS in the Cape Town Metro district



ANNEXURE C

Directorate:DHS: Eden District; Mossel Bay: Sub-district: Example of a rural DHS facility-based service map



ANNEXURE D

Directorate: DHS: Eden District: Example of a district management structure for rural DHS