REPUBLIC OF KENYA
MINISTRY OF HEALTH

NORMS AND STANDARDS
For Health Service Delivery

Health Sector Service Delivery Team
2006

Norms and Standards for Health Service Delivery

Published by: Ministry of Health
Health Sector Reform Secretariat
Afya House
PO Box 3469 - City Square
Nairobi 00200, Kenya
Email: secretary@hsrsmoh.go.ke

Contents

List of Abbreviations

AIDS	Acquired immune deficiency syndrome
AOP 2	NHSSP II Second Annual Operational Plan, 2006/07
CDF	Constituency development fund
CHEW	Community Health Extension Worker
CO	Clinical Officer
CORP	Community-Owned Resource Person
DCL	Data Clerk
DFID	Department for International Development
DHMT	District Health Management Team
DMOH	District Medical Officer of Health
EPI	Expanded Programme of Immunization
FP	Family planning
HIV	Human immuno-deficiency virus
HRH	Human resources for health
ICTs	Information and communication technologies
KEPH	Kenya Essential Package for Health
LST	Lab Technologist
LTN	Lab Technician
MCH	Mother/child health
MDGs	Millennium Development Goals
MO	Medical Officer
MOH	Ministry of Health
MSP	Medical Specialist
NHSSP II	Second National Health Sector Strategic Plan, 2005–2010
OPD	Outpatient department
P	Pharmacist
PHMT	Provincial Health Management Team
PHT	Physiotherapist
PMOH	Provincial Medical Officer of Health
PSP	Pharmacy Specialist
PT	Pharmaceutical Technologist
RCN	Registered Comprehensive Nurse
RRI	Rapid Results Initiative
Sida	Swedish International Development Cooperation Agency
SP	Specialist
SWAp	Sector-wide approach
TB	Tuberculosis
WHO	World Health Organization
WHO	World Health Organization
WISN	Workload Indicator Ratio

Message from the Director of Medical Services

The Ministry of Health has elaborated its second National Health Sector Strategic Plan (NHSSP II, 2005–2010), which outlines the strategic objectives the sector is focusing on in the medium term to enable it to achieve its expectations outlined in the Kenya Health Policy Framework, the Economic Recovery Strategy, and the health-related targets of the Millennium Development Goals (MDGs). NHSSP II has also proposed the rationalization of service delivery, from level 1, where community-based services are to be provided, to level 6, which provides services at the national level.

Significant effort has been made to re-define the service delivery strategic objectives, outlined in the Kenya Essential Package for Health (KEPH). This package elaborates the expected services the sector will deliver Kenyans, by lifecycle cohort and service delivery level, during the period of NHSSP II.

However, the sector has to-date been operating in an environment where there are differences in activities offered at similar levels of the systems, with differences in type and quality of services. Investments, particularly in infrastructure and human resources, have not been appropriately coordinated, with the result that these inputs are not rationalized or equitably distributed across country.

The mix of inputs was not appropriately coordinated at the different levels, such that in many areas, some inputs available, but not used as others needed were lacking. For example, health workers posted to facilities with inadequate equipment or commodities. This is all in an environment where increasing investments are being made in the sector, through Government, local resources (such as CDF funds) and funding partners.

The sector has therefore developed this booklet, *Norms and Standards for Health Service Delivery*, to help provide a rational framework to guide investment in health sector inputs across the country, to ensure equity in availability of investments needed for service delivery.

The norms and standards were developed through a technical consultative process over an eight-month period. They are a presentation of the expected inputs that are needed to ensure efficient and effective delivery of defined health services at the different levels of the health system, to the Kenyan population.

Norms and standards refer to the ***minimum*** and ***appropriate*** mix of human resources and infrastructure that is needed to exist to serve the expected populations at the different levels of the system with the defined health services. They define:

- The health system structure needed to deliver the defined health services to the population in an efficient, equitable and sustainable manner.

- The expected service standards for different activities to be delivered at the different levels of the health system to ensure comprehensive health service delivery.

- The minimum human resources and infrastructure needed to ensure that the different levels of the system are able to offer the expected service standards.

- The process and expectations for supervision and monitoring for adherence to the norms and standards.

The Ministry of Health acknowledges the concerted effort of the Rapid Results Initiative (RRI) Working Group on Service Delivery, other individuals and numerous institutions at different levels of the health system that have worked tirelessly to develop these norms and standards. Acknowledgements also go to the members of the Joint SWAp Steering Committee for their dedication to this process.

The Ministry of Health would like to specifically acknowledge the World Health Organization (WHO), together with the Department for International Development (DFID), and the Swedish International Development Cooperation Agency (Sida) for technical and financial assistance to plan, organize and coordinate the technical development of this process.

Dr. James Nyikal
Director of Medical Services
MINISTRY OF HEALTH
June 2006

1. Background

The health sector has, through the second National Health Sector Strategic Plan (NHSSP II), defined its strategic direction for the period 2005–2010, in the context of the Kenya Health Policy Framework. NHSSP II outlines the strategic focus of results to be delivered for the period of the strategic plan, and the process to achieve this. the strategic focus is defined in a paradigm shift, with the emphasis on ensuring a healthy population , as opposed to managing illness. Additionally, a sector-wide approach is introduced to guide the coordination of activities amongst sector partners to maximize inputs from all.

To achieve this, the planned defined a common service delivery package, the Kenya Essential Package for Health (KEPH). KEPH is a unique combination of integrated activities that will be provided to all the citizens of the country to enable the achievement of the health results. To make it work, however, there must be an appropriate mix of inputs – human resources, infrastructure and commodities.

This document sets out the norms and standards that are established to guide efficient, effective and sustainable delivery of this package of services. Service delivery ***standards*** relate to the expectations of each level of care with regard to service delivery and the human resources needed to provide these expectations. Service delivery ***norms*** define the quantities of these resource inputs needed to efficiently effectively and sustainably offer the service delivery package.

Norms and standards
are a statement of the inputs that are necessary to ensure efficient, and effective delivery of health services to the population in Kenya. They define:

- The health system structure needed to deliver the defined health services in an efficient, equitable, and sustainable manner.
- The expected service standards for different activities to be delivered at the different levels of the health system to ensure comprehensive health service delivery.
- The minimum human resources and infrastructure needed to ensure that the different levels of the system are able to offer the expected service standards.
- The process and expectations of supervision and monitoring for adherence to the norms and standards.

1.1 Challenges to Developing and Implementing Norms and Standards

Kenya's health care services have been delivered through dispensaries and health centres, complemented by hospital services provided at the district, provincial and national levels. A lack of guidance on the norms and standards for these different levels has resulted vastly different capacities across the system – facilities are of different sizes and the activities offered at the respective levels of the system vary widely.

Additionally, investments have not been appropriately coordinated, with the result that service inputs are not rationalized or equitably distributed across the country. Locally mobilized funds, such as through the constituency development funds (CDFs), have further contributed to uncoordinated investment in health service inputs. The mix of inputs at the different levels has not been coordinated. Thus some inputs are available but not used in some facilities, while others are needed but lacking.

These service delivery norms and standards intend to redress this imbalance. They define the expected inputs required to efficiently and effectively deliver the KEPH at the different levels of the health system. They refer to the minimum appropriate mix of human resources, infrastructure and commodities required to service the expected populations at the different levels of the system.

1.2 Justification for Norms and Standards

The paradigm shift in the services to be delivered, from managing health conditions to ensuring health, is associated with differences in services being delivered. Additionally, the health sector is working towards maximum efficiency and equity in service delivery through a rights-based approach aimed at ensuring that all clients have an equal access to defined results from the

health sector. This calls for the need to adjust the health service inputs to better be able to ensure defined services are provided.

Additionally, as the Ministry of Health is now focusing on building partnerships with other health sector actors, a rational approach is needed in the:

- Definition of standards to achieve with regard to service delivery, at each level of the service delivery.
- Quantities of the mix of inputs necessary to deliver expected services.
- Provision of guidance on how to work towards this mix of inputs for the different levels of service delivery.

This booklet provides that guidance. It presents:

- Descriptions of the rationalization of service delivery by level of service delivery, for different populations.
- Descriptions and roles of each service delivery levels of care, in relation to populations being served.

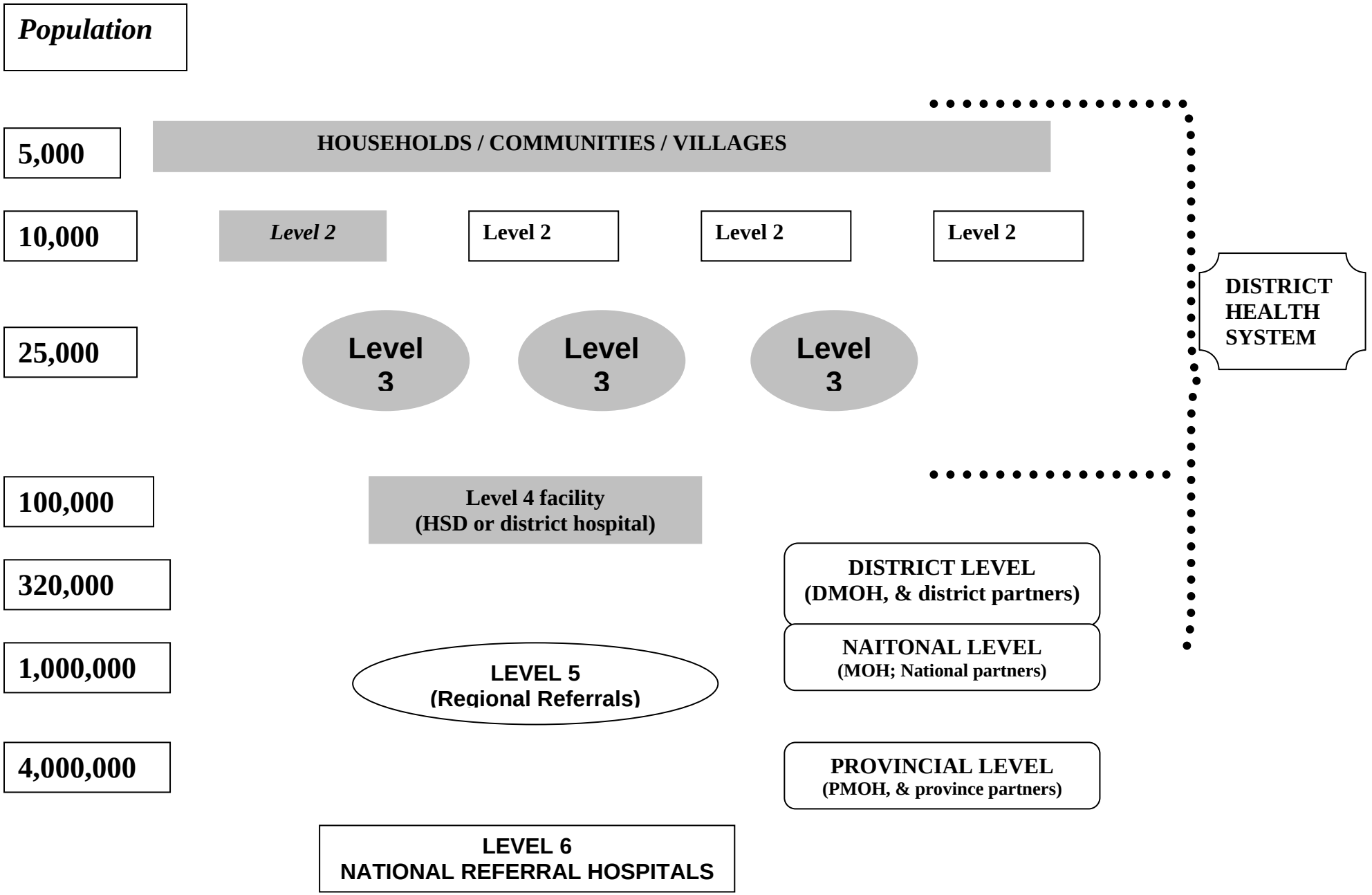
This document defines ***minimum*** resources for each level, recognizing that in many facilities, these may not be the same because of the lack of an implementable basic package and defined service delivery catchment areas. It is this lack that has resulted in differences in packages of services being provided, even by facilities supposedly of the same category, and wide variations in catchment populations. As such, facilities may have service delivery inputs above the defined norms and standards, as a result of high workloads. For equitable service delivery, the document also defines solutions the different levels of the sector should undertake to ensure appropriate distribution of these inputs

1.3 The Health System Structure Needed to Deliver the Essential Package

For efficient and effective service delivery, each defined level of the system is expected to provide KEPH services for a defined population cohort. This cohort is defined by population numbers that adequate for the delivery of the defined services, taking into consideration other access-limiting factors such as natural barriers to services. The defined services to be focused on are elaborated in the KEPH matrix.

NHSSP II defines six levels of the health care system. Each level has both service delivery and management functions to ensure efficient and effective delivery of health services. The health system's organizational structure is elaborated in Figure 1.

Figure 1.4: HEALTH SECTOR PYRAMID



At levels 1–3 of the system, service delivery and management functions are combined at the health facilities. Service delivery staff also carry out management functions related to planning, monitoring and supervision activities.

More extensive management functions are provided at levels 4–6. Overall coordination roles are introduced at these levels, which calls for more dedicated structures. These are the:

- Office of the District Medical Officer of Health, at level 4 (district level), to coordinate activities in addition to planning, monitoring and supervision roles at district level.
- Office of the Provincial Medical Officer of Health, at level 5 (provincial level), to coordinate activities in addition to planning, monitoring and supervision roles at provincial level.
- Ministry of Health headquarters, at level 6 (national level), to coordinate activities in addition to planning, monitoring and supervision roles at national level, and the development and enforcement of guidelines, standards and norms for different activities at the different levels of the system.

1.3.1 Guiding principles in definition of services of different levels of care delivery

Basic principles guiding definition of levels of care include:

- ***Units of service delivery:*** The focus is on the function, as opposed to the physical level, for example, a level 3 function, as opposed to a level 3 facility. This is because the function may also be provided by a higher level facility.
- ***Equity in access and utilization:*** All inhabitants of the country and its respective districts have not only equal right to access health services, but also to use them equally for equal need. Important determinants are geographical, demographic (age and gender), socio-cultural and economic factors.
- ***Relevance and acceptability:*** Health care must take account of the demand for care and respond to the real and priority needs of the population. Health care needs to be rooted in the cultural and social reality of the communities and to include user satisfaction in the health care delivery equation.
- ***Continuity of care:*** A person who seeks assistance for a health problem (whether to cure or to prevent illness when at risk) is taken care of from the start of the illness or the risk episode until its resolution. This means that a functional referral and counter-referral system should exist to make sure that services are availed to the sick person or person at risk. Continuity also includes the active follow-up of certain patients/persons at risk in order to protect the patient/person and/or the community at large.
- ***Integration of care:*** Every contact with individuals, households and communities is used to ensure that a comprehensive set of defined services is made available. This is different from using “every opportunity to do everything”.
- ***A comprehensive/holistic approach:*** The health problems of individuals are taken care of while considering all the dimensions of the persons and their environment (this means the household and the community and their social, cultural, economic and geographic characteristics). In order to do so, the health providers in direct contact with the community have to ‘know’ the population. They will maintain a permanent interaction and dialogue with individuals, households and the community at large.
- ***The involvement of individuals, households and communities:*** Involvement is expressed in people taking up responsibility for their own health; it provides them with a sense of ownership of all they undertake relating to their health. Such involvement includes individual participation in health activities, as well ascollective participation through management of health facilities. The establishment of a functioning health (unit management) committee, constituted of interested and informed community members, is an example of how this collective involvement can take shape.

1.3.2 Definitions of service delivery units for each level of care

For each level of service, the specific activities and populations served are defined on the basis of the need for equity and efficiency in carrying out the activities.

Level 1

Level 1 is the community level, which is the foundation of service delivery. Activities here are focused on ensuring individuals, households and communities carry out appropriate healthy behaviours, and recognize signs and symptoms

of conditions that need to be managed at other levels of the system. Each level 1 unit is to take care of 5,000 persons.

Level 2

Level 2 is the interface between the community and the physical health system. It is expected to organize and coordinate structured, permanent dialogue and interaction with community and its structures by ensuring provision of:

a) Curative activities:
- Case management of suspected malaria cases, acute respiratory infections, fevers, diarrhoea, simple skin conditions and other simple common illnesses
- Case management of chronic illnesses (TB, AIDS)
- Dressing of wounds, simple stitching
- Case management of simple conditions in schoolchildren by the "health teacher" with first aid kit
- Limited (emergency) normal delivery services (clients found in stage 2)

b) Rehabilitative activities:
- Identification of cases needing application of assistive devices and rehabilitative therapies through the curative and preventive health activities and visits to villages
- Proper information on referral for those who need referral

c) Preventive activities:
- Antenatal care (screening for risk factors, administration of iron and folic acid, chemo prophylaxis ("intermittent presumptive treatment") against malaria)
- Immunization, administration of Vitamin A
- Under-5 growth development follow-up
- Family planning

d) Promotive activities:

These involve social mobilization through health education for behaviour change. Activities may range from *group health education* during integrated sessions of preventive and promotive activities, to *succinct individual health education* as appropriate during the curative activities. Such activities will focus on:
- Safe water and sanitation
- Child nutrition
- Prevention of blindness, deafness and injuries
- Counselling
- Bednets
- Mobilization, for preventive health activities, EPI, antenatal care, growth and development follow-up of under-fives, voluntary counselling and testing (which is primarily the responsibility of the Health Centre 3 in collaboration with the Health Centre 2), etc.

e) Health census of the population in the catchment area

f) Record-keeping and reporting on activities:
- Keeping and utilizing family files and a tickler system for operational charts
- Follow up of registration of births and deaths to guide planning and follow up of services
- Information on the activities carried out
- Information on the management of resources

g) Micro-planning to ensure that all communities in the catchment area are receiving the integrated services

Considering the roles and activity package of the level 2, a population basis of up to 10,000 inhabitants is required in rural areas and about 15,000 or more in urban areas. The Kenya Services Provision Assessment survey, 2004, estimates these services are available to 7,989 persons on average in the country.

Level 3

Level 3 provides the services detailed above for the 10,000 persons in its immediate catchment area (its level 2 function). Level 3 also provides the following additional support services for level 2 facilities. These are:

a) Health activities:
- Additional outpatient care, largely limited to minor surgery on outpatient basis
- Limited emergency inpatient services (emergency inpatients, awaiting referral, 12-hour observation, etc,)
- Limited oral health services
- Individual health education
- Maternity for normal deliveries
- Specific laboratory tests (routine lab, including malaria; smear test for TB; HIV testing)

b) Recognizing the need for and facilitating referral of clients to and from appropriate levels
- Providing logistical support to the level 2I facilities in the catchment area (e.g., EPI cold chain with the fridge and vaccines that are kept there to cover the immunization needs of the catchment area)
- Coordinating information flow from facilities in catchment area

The catchment area for the level 2 service delivery functions remains as above. For the additional functions, however, the catchment area is larger, at 30,000 persons (up to 40,000 in urban areas), allowing for an average of three normal deliveries per day to be conducted at each unit, assuming all clients were to come to deliver at the units. The Kenya Services Provision Assessment survey, 2004, estimates these services are available to 19,898 persons on average in the country.

Level 4 facilities focus on appropriate curative care and constitute the principal referral level for all KEPH interventions. Their functions are again provision of level 2, and level 3 services for 10,000 and 30,000 persons, respectively. In addition to these, level 4 also provides the following services:

a) Clinical supportive supervision to lower level facilities

b) Health activities:

- Referral level outpatient care
- Inpatient services
- Emergency obstetric care
- Oral health services
- Surgery on inpatient basis
- Client health education
- More specialized laboratory tests
- Radiology services

c) Recognizing the need for and facilitating referral of clients to and from appropriate levels, to include

- Proper case management of referral cases through the provision of the four main clinical specialties (internal medicine, general surgery, gynae-obstetrics, paediatrics) by general practitioners backed by appropriate technical devices)
- Proper counter-referral

d) Providing logistical support to the lower facilities in the catchment area

e) Coordinating information flow from facilities in the catchment area

For effective provision of these additional services, a population of 100,000 persons in rural areas and up to 200,000 in urban areas will be the defined catchment area for the level 4 services. The Kenya Services Provision Assessment survey, 2004, estimates these services are available to 100,539 persons on average in the country.

The management related activities that support level 4 are coordinated through the office of the District Medical Officer of Health. These activities relate to additional coordination and management roles for the facilities in the district in question. District level partner activities are also coordinated through this office, in line with its stewardship role for district health system management. Each DMOH's office will be managing on average four level 4 facilities, implying a total population of approximately 400,000.

Level 5

This level introduces a broader spectrum of specialized referral curative services. It aims to ensure that a wide scope of potential health needs of the communities is addressed at a point where they have access. Level 5 also includes training facilities for cadres of health workers who function at the primary care level (nursing staff and clinical officers). They also serve as internship centres for all staff, up to Medical Officers.

The expected population served by each level 5 facility is 1,000,000 persons. However, population is not the only determinant of the expected services for this level, as with the previous levels. Available workload, particularly for the specialized services is another. This is because it is necessary to avail specialized services based on the defined need, and not just the expected demand.

Management related activities that support level 5 are coordinated through the office of the Provincial Medical Officer of Health. These activities relate to additional coordination and management roles for the districts in the province. Provincial level partner activities are also coordinated through this office, in line with its stewardship role for provincial health system management. Each PMOH's office will be managing on average 12 districts, implying a total population of approximately 400,000. This implies that each province will have a number of level 5 service delivery units.

Level 6

This level completes the spectrum of specialized referral curative services. It contains all the remaining specialized services that are most efficiently provided at a national level. It includes training facilities for cadres of specialized health workers that function at the secondary and tertiary care, up to degree and postgraduate levels. Level 6 centres also serve as internship centres for all other staff not served at the level 5 facilities.

Level 6 aims to complete the scope of expected services to cater for the potential health needs of the communities. The level 6 facilities will be defined on the basis of need, as expressed by prevailing workload regarding specialized services. This is because of the need to avail such services according to defined needs, and not just the expected demand.

The management related activities that support level 6 are coordinated through the Ministry of Health headquarters. These activities relate to additional coordination and management roles for the provinces, with specific district support in the form of backstopping the provincial teams in identified weak districts for a respective intervention. National level partner activities are also coordinated through the Ministry of Health, in line with its stewardship role for overall health system management.

In addition to super specialized care and training, level 6 serves as a centre for research, with clinical research coordinated through the health facilities and operations research through the management level.

1.3.3 Summary of Needed Units

The sector therefore requires a total of 6,400 level 1 service delivery units, 3,200 level 2 service delivery units, 1,067 level 3 service delivery units, 320 level 4 service delivery units and 32 level 5 service delivery units. In terms of the average number of available facilities, additional investment in facilities will be minimal in the sector, as overall there appear to be adequate numbers. The situation is different across the different provinces, however, as illustrated in Table 1.1.

Table 1.1: Service delivery units needed and available, by level of care

Province	Population		Service delivery units				
			Level 1	Level 2	Level 3	Level 4	Level 5
Central	3,909,728	Required service delivery units	782	391	130	39	4
		Existing health facilities	-	372	89	65	
		Gaps in service delivery units	-	**19**	**41**	-26	**4**
Coast	2,801,356	Required service delivery units	560	280	93	28	3
		Existing health facilities	-	334	42	64	
		Gaps in service delivery units	-	-54	**51**	-36	**3**
Eastern	5,103,110	Required service delivery units	1,021	510	170	51	5
		Existing health facilities	-	692	80	65	
		Gaps in service delivery units	-	-182	**90**	-14	**5**
Nairobi	2,563,297	Required service delivery units	513	256	85	26	3
		Existing health facilities	-	381	54	58	
		Gaps in service delivery units	-	-125	**31**	-32	**3**
North Eastern	1,187,767	Required service delivery units	238	119	40	12	1
		Existing health facilities	-	68	12	8	
		Gaps in service delivery units	-	**51**	**28**	**4**	**1**
Nyanza	4,804,078	Required Service Delivery Units	961	480	160	48	5
		Existing health facilities	-	333	117	98	
		Gaps in service delivery units	-	**147**	**43**	-50	**5**
Rift Valley	7,902,033	Required service delivery units	1,580	790	263	79	8
		Existing health facilities	-	1,006	161	100	
		Gaps in service delivery units	-	-216	**102**	-21	**8**
Western	3,853,936	Required service delivery units	771	385	128	39	4
		Existing health facilities	-	196	94	68	
		Gaps in service delivery units	-	**189**	**34**	-29	**4**
National Total	**32,125,305**	Required service delivery units	6,425	3,213	1,071	321	32
		Existing health facilities	-	3,382	649	526	20
		Gaps in service delivery units	-	-169	**422**	-205	**12**

It should be noted that:

- The levels of care and service packages have been redefined for efficient and effective service delivery. These norms relate to the delivery of the sector's defined package of services, delivered through these defined levels of care. For example, the level 4 norms do not necessarily relate to a district hospital, as has been conventionally known, but rather to a level 4 facility serving 100,000 persons (this may or may not be a district hospital). The different levels of the system still have to review, and grade their respective facilities as per the norms.

- Additionally, the norms refer to the ***minimum*** expectations not the ***optimal***. Optimal norms would be derived on the basis of actual workload at the facility, as defined in Section 4.

- Finally, as each proceeding level of care offers the services of those levels below it, staff of lower levels should automatically be included at the level being defined to offer that service. For example, a level 4 facility has level 3 functions (such as offering normal delivery) for a defined 30,000 persons, level 2 functions (OPD outpatients for first contact) for a defined 10,000 persons, and level 1 functions (health promotion on the community) for a defined 5,000 persons. These are in addition to its level 4 functions for its defined 100,000 persons. All these different functions will need to be rationalized at the health facility to enable it to concentrate on its core function (as defined by its level).

2. Human Resources for Health Norms and Standards

Human resource norms are rationally defined for different levels of the system in order to ensure an adequate and appropriate work force for the workload, and vice versa. What is therefore presented is:

- Standard human resources needed for each level of care
- Expected standards with regard to service delivery that need to be kept for the different staff cadres at each level of care
- Quantities of each staff cadre needed to deliver the defined package of services, packaged as the norms

2.1 Methodology for Deriving HRH norms and standards

The norms of human resources for health are derived using a two- step approach:

1. To qualify the expected types of staff cadres needed at each level
2. To quantify the numbers of the different identified staff cadres needed at every level.

The qualification of staff required at each level is based on the services that need to be provided. The services to be provided are detailed in the KEPH matrix, derived during development of the NHSSP II. The necessary staff cadres derived from this process are detailed below.

The next step, the quantification of the numbers needed, is based on two different methods:

- Determining the expected workload based on the activities to be performed, and
- Rules of thumb

The workload is a function of the expected activities to be carried out at each level and the time it takes to carry out the activities. This provides the total time needed for each activity of service delivery, within a given period (one year). This is then correlated with the available time the respective staff cadre has to carry out the activities over the same period, so as to determine the total numbers of staff needed for the activity. Expected activities are based on expected services to be delivered, while time taken for each activity is based on WHO standards. This methodology is largely used to determine staff needs for primary care technical personnel.

Definition of norms for some staff is based on rules of thumb. This is largely used for primary care support staff and hospital technical personnel.

2.2 Proposed Standards for HRH by Level of Care

On the basis of the defined activities to be carried out at each level of care, then, the required staff cadres are as elaborated in Table 2.1.

Table 2.1: Staff required to deliver KEPH services, by level and category

Level of care	Key staff by level of care		Key management support staff
	Service delivery staff	**Support staff**	
1	Community-Owned Resource Person (CORP)		
2	Registered Comprehensive Nurses Community Health Extension Worker	General attendants Watchman	
3	Nursing staff Clinical officers Lab technicians Pharmaceutical technologists Community oral health officers	***Above staff, plus:*** Statistical clerks Clerk/ cashier Cooks	
4	***Above staff, plus:*** Medical Officers Clinical officers (general and specialized) Nursing staff Lab technologist Radiographer Pharmacist	***Above staff, plus:*** Drivers Health Administrator Officer Store attendant	District Medical Officer of Health District Public Health Officer District Public Health Nurse District Health Administrative Officer District Health Information Officer

Level of care	Key staff by level of care		Key management support staff
	Service delivery staff	**Support staff**	
	Dental technologist Dentist		
5	***Above staff, plus:*** Medical specialists (physician, obstetrics/gynae, surgeon, paediatrician) rehabilitative specialists (physiotherapist, Occupational therapist, orthopaedic technologist, social workers) Nursing staff (intensive care)	***Above staff, plus:*** Accountant Medical Engineer	Provincial Medical Officer of Health Provincial Public Health Officer Provincial Public Health Nurse Provincial Health Administrative Officer Provincial Health Information Officer
6	***Above staff, plus:*** Medical super specialists within each discipline	***Above staff***	Health promotion support Environmental health support Disaster management support Disease outbreak management support Non communicable diseases support Clinical services support Nursing programme support Pharmaceutical programme support Mental health programme support Oral health programme support Rehabilitative therapy support Malaria programme support Tuberculosis programme support Child health support HIV/AIDS programme support Nutrition programme support Reproductive health programme support Laboratory services support Diagnostics radiology support Health administration support Health services management support

Note: The staff standards at each level refer to those needed for the core function of that level. The facility will therefore need the defined staff, plus those of the lower facilities to provide the function of those lower facilities. For example, the lab technicians are only reflected in level 3, as they offer a level 3 function. They are also needed at the level 4 facilities to offer this level 3 function. Where staff appear in higher levels of the system (such as RCNs), the implication is that they have additional functions at that level, over and above what they are doing at the lower level.

In keeping with the rationalization of KEPH service delivery, the higher the level of care (level 1 towards level 6), the higher the specialization of the staff cadres. As such, more general staff cadres are found at levels 1 and 2, with specialization increasing at other levels.

For each of these levels, expected service standards are defined in line with expected KEPH services. Service standards for staff cadres at the different levels are detailed in Annex A. This ensures that:

- There are specified staff cadres at each level to deliver each component of the KEPH, and
- The identification of areas for strengthening staff skills is clear, on the basis of matching available skills with service standards to illustrate gaps.

2.3 Proposed Norms for HRH by Level of Care

Following the definition of the staff cadres based on expected services, the next step is to quantify the numbers needed to further refine the norms. Staffing needs are defined as the relationship between annual workload and the standard workload for the staff cadre at the defined level of care.

The standard workload for each staff category at each level of the system refers to the volume of work involved in delivering health services that can be accomplished during the course of one year by a competent and motivated health worker working to acceptable professional standards. The standard workload is

a function of the available time for work and the time it takes to carry out the respective activities. Available time for work takes into account the time the health workers are legitimately not available to offer services. This may be due to leave absence, public holidays, off the job training or sickness. On the other hand, activity time for each staff category is defined based on standards for carrying out their tasks that have been defined in extensive assessments in similar countries.

Calculations for the standard workload are summarized in Annex B for each staff cadre at each level of the system, illustrating how each staff cadre is quantified at each level of care.

Each level of the system can therefore determine its staff availability according to the expected norms. Note that the norms are based on provision of services for a given population. Not all facilities will be serving the expected populations; more often, population catchment areas for respective facilities are much larger than the defined norms. We therefore define the process for staff deployment/redistribution to guide movement towards more equitable distribution of human resources.

For nursing staff, for example, the workload parameters defined above yielded an estimate of one RCN for each 5,000 population (two at each level 2 facility). This was modified for higher levels to ensure that:

- A nurse is available for each ten inpatient beds
- At least two nurses are available per operating theatre table, and
- Three nurses are needed every 24 hours (eight-hour shifts)
- A nurse is not responsible for more than 1,000 inpatients annually (ten inpatients for every three nurses, each covering an eight-hour shift)

Norms for the key human resources at each level are presented in the following sections.

2.3.1 Overall Norms for Key Staff

The minimum numbers and types of service delivery staff needed at each level are presented in Table 2.2.

Table 2.2: Norms for key service delivery cadres, by level of care

Level	Population	Level of function	Minimum human resources			
			Service delivery staff	**No.**	**Support staff**	**No.**
1	5,000	Level 1	CORPs	50		
2	10,000	Level 2	Nursing staff (RCNs)	2	General attendants	2
			Community Health Extension Worker	2	Watchman	1
3	30,000	Level 3	Clinical officers	2	Statistical clerks	2
			Outpatient support	*1*	Clerk/cashier	1
			Management support	*1*	General attendants	2
			Nursing staff	14	Cook	1
			Outpatients	*3*	Watchmen	2
			Delivery/inpatients	*4*		
			MCH activities	*4*		
			Dressing room	*2*		
			Overall coordination	*1*		
			Community Oral Health Officer	1		
			Laboratory technician	1		
			Pharmaceutical technologist	1		
4	100,000	Level 3 function	Clinical officers (outpatient filtering)	2		
			Nursing staff	8		
			General outpatients	*2*		
			Delivery/MCH activities	*6*		
			Laboratory technician	2		
			Pharmaceutical technologist	2		
		Level 4 (core) function	Medical Officers	6	Statistical clerks	2
			Outpatients	*2*	Clerk/cashier	1
			Inpatients	*3*	General attendants	10
			Management	*1*	Drivers	2
			Dentist	1	Cooks	4
			Pharmacist	1	Watchmen	3
			Clinical officers	5	Store attendant	1
			Specialized clinics	*4*	Health Administrative Officer	1

Level	Population	Level of function	Minimum human resources			
			Service delivery staff	**No.**	**Support staff**	**No.**
			Anaesthesiologist	*2*		
			Nursing staff	60		
			In charge	*1*		
			Specialized outpatient clinics	*8*		
			Wards	*30*		
			Theatre	*10*		
			Nursery	*3*		
			Radiographer	1		
			Dental technologist	1		
			Laboratory technologists	1		
5	1,000,000	Level 3 function	Clinical officers (outpatient filtering)	4		
			Nursing staff	22		
			General outpatients	*10*		
			Delivery/MCH activities	*12*		
			Laboratory technicians	4		
			Pharmaceutical technologist	4		
		Level 4 function	Medical Officers	15		
			Outpatients	*4*		
			Wards	*8*		
			Maternity	*2*		
			Management	*1*		
			Dentists	2		
			Pharmacists	2		
			Specialized clinical officers	12		
			Anaesthesiologists	*4*		
			Paediatric clinical officer	*1*		
			Psychiatrist clinical officer	*2*		
			Dermatology clinical officer	*1*		
			ENT clinical officer	*1*		
			Ophthalmology clinical officer	*3*		
			Nursing staff	178		
			Management	*4*		
			Specialized outpatient clinics	*10*		
			Wards	*120*		
			Theatre	*40*		
			Nursery	*4*		
			Radiographers	3		
			Dental technologists	4		
			Laboratory technologists	3		
		Level 5 (core) function	Medical specialists	24	Statistical clerks	2
			Physicians	*3*	Clerk/cashier	2
			Obstetricians/ Gynaecologists	*4*	General attendants	20
			Paediatricians	*3*	Drivers	2
			Surgeons	*3*	Cooks	4
			Psychiatrists	*1*	Watchmen	3
			Ophthalmologists	*2*	Health Administrative Officer	2
			ENT specialist	*1*	Accountants	2
			Dermatologist	*1*	Store men	2
			Anaesthetists	*3*	Medical Engineer	1
			Pathologist	*1*		
			Radiologist	*1*		
			Orthopaedic surgeon	*1*		
			Rehabilitative therapists	4		
			Physiotherapist	*1*		
			Occupational therapist	*1*		
			Orthopaedic technologist	*1*		
			Social worker	*1*		
			Medical officers (Intensive care unit)	1		
			Nursing staff (Intensive care unit)	12		
			Clinical pharmacist	1		

2.3.2 Rationalization of Staffing

Regarding levels 4 and 5, rationalization of staff at these levels is leading to the defined norms. The MOH policy prior to the definition of KEPH was to work towards having specialized services at each district hospital (one of the level 4 hospitals). This policy is not changed. However, as the focus and aim relate to services, as opposed to the actual cadres:

- Medical Officers will run the specialized clinics at level 4 for the four general specialities.
- Medical specialists will be concentrated at the level 5 facilities, to ensure they provide:
  - Specialized care at this level
  - Outreach to the level 4 facilities in the catchment area of the level 5 facility, with at least 1 outreach per month in each level 4 facility. These will provide specialist care for cold cases, or in clinics, and offer on-the-job training for the Medical Officers to improve their skills.
- Nursing staff will provide the backbone of first contact services at the outpatients, in line with the level 2 function of services.
- Clinical officers will provide the first referral level for outpatients, managing the clients as referred by the nurses. This will largely be at the outpatients.
- Medical officers will provide the first referral level for inpatients and second referral level for outpatients, managing clients referred by clinical officers (whether from same or other facility). Outpatient referral management will be through the specialized clinics at level 4 facilities.
- Specialists will provide second level referral for inpatients and third level referral for outpatients. Outpatient referral management will be at specialized clinics at level 5 and outreaches to the same clinics at level 4 facilities.

Finally, regarding level 6, this provides a variety of nationally determined services. Some facilities, like Kenyatta National Hospital, offer a wide range of such services, while others are more specialized, such as the National Mental Hospital. The staffing is determined by the expected services the particular level 6 is providing, guided by the defined rules of thumb for the staffing.

3. Infrastructure Norms and Standards

For efficient utilization of human resources, appropriate infrastructure is required to ensure they have the necessary tools to employ their skills. Infrastructure refers to four different components of these "tools":

- Buildings: Medical and non-medical
- Equipment: Medical and hospital equipment
- Information and communication technologies (ICTs): Radio calls (two-way radios), telephones, networks
- Transport services of various types

These four components of the health infrastructure must be integrated into a harmonious whole, together with other required inputs (especially human resources) to avoid mismatches in their development and ensure that health services are delivered efficiently, equitably and effectively in a sustainable manner.

The sector appreciates the fact that, at present, there is a variety of infrastructure at the different levels of care. Therefore, as with the human resources, the standards defined are meant as a guide to the ***minimum*** infrastructure needs at the defined levels. They correlate with the defined scope of services and expected populations to access these services, as defined in the KEPH. The MOH prioritization of investment will be based on availing these minimum infrastructure standards.

However, as many facilities were established prior to setting of the present population-based levels of service delivery, optimal levels of infrastructure are also defined. This relates to the desired infrastructure a particular level may aspire to if it is operating in a less resource-constrained environment. Minimum standards define the least infrastructure needed to define a level of facility, while the optimal standards define the desirable infrastructure. Prioritization of investment by the sector will be based on the minimum standards up to a point where infrastructure investment ensures adequate access to minimum health services. Facilities that have, or communities that seek, infrastructure over and above the minimum standards will be advised that such investments will be considered secondary to the need for availing the minimum standards to the whole country.

3.1 Methodology for Deriving Infrastructure Norms and Standards

The services and human resources at the different levels largely determine the required infrastructure, equipment and ICT. The health infrastructure is designed to support the implementation of the Kenya Essential Package for Health. We now define the methodology of ensuring appropriate infrastructure is available at the different levels.

Similarly, equipment is defined by infrastructure together with human resources and services. The standard list of equipment needed for the different levels of the system is to be detailed by the sector during the second Annual Operational Plan (AOP 2 – 2006/07) for NHSSP II. This serves as a guide for budgeting and planning at the different levels of care.

3.2 Proposed Standards for Infrastructure by Level of Care

Section 2 already has defined the expected standards with regard to physical infrastructure, by level of care. It is expected that a level 2 facility will be available for each 10,000 population, a level 3 for each 30,000, a level 4 for each 100,000 and a level 5 for each 1,000,000, or as defined by the workload for the level 5 function.

The level 1 facility will have no physical infrastructure. However, it will have equipment and commodities to support the CORPs and CHEWs in their activities.

The level 2 service provision unit will be on a minimum plot size of 1 acre and will consist:

- A medical services provision unit
- A pit latrine
- Staff housing
- Communication equipment

The level 3 service provision unit will require a minimum of 2 acres and will consist of:

- A medical services provision unit with maternity and inpatient facilities
- A pit latrine
- Staff housing
- Supplies services unit
- Communication equipment

The level 4 service provision unit will require a minimum of 5 acres and will consist of:

- Outpatient service provision unit
- MCH/FP service provision unit
- Inpatient service provision unit
- Radiology unit
- Administration unit
- A pit latrine
- Staff housing
- Supplies services unit
- Communication equipment
- Transport facilities

3.3 Proposed Norms for Infrastructure by Level of Care

Standard physical infrastructure for each of these levels is illustrated in Table 3.1. Note that the district health office complements service delivery by having equipment for communication with facilities and one support ambulance to complement the level 4 facilities' support to referral services in the district.

Table 3.1: Minimum infrastructure for delivery of KEPH, by level of care

Level	Population	Minimum physical infrastructure
1	5,000	No physical infrastructure
2	10,000	Medical services provision unit of 6 rooms:
		1 Waiting room
		1 consultation, with an OPD shed
		1 Treatment room
		1 Community services room
		1 MCH/FP services room
		1 store
		Labour bed and low-cost delivery bed
		Staff houses for 2
		Pit latrine (2 stance)
		Simple incinerator
		Simple transport (1 bicycle primarily for OR, and motorcycle for supplies collection)
		Locally defined referral transport (bicycle ambulance, etc.) to facility from community
		Communication equipment
		Water storage for roof catchment
		Fence and gate
		Composite pit
		Minimum acreage, 1 acre
3	30,000	Medical services provision unit with:
		3 consultation rooms
		1 treatment room
		1 minor theatre at outpatients
		1 records room
		2 rooms with total of 11 inpatient beds
		2 stores; 1 for drugs, 1 general
		1 laboratory room
		1 labour ward for two, and delivery room
		1 community services room
		Staff housing for 2
		4 stance pit latrine
		1 Simple Incinerator
		1 placenta pit
		1 motorcycle
		Communication equipment
		Water storage for roof catchment
		Fence and gate
		Composite pit
		Minimum acreage, 2 acres
		Supply services unit with
		Kitchen
		Laundry

Level	Population	Minimum physical infrastructure
4	100,000	OPD block with:
		1 waiting room
		4 consultation rooms
		1 Registration room
		1 injection room
		1 plaster room
		1 minor theatre
		1 dental unit room
		1 ENT services room
		1 laboratory room
		MCH/FP unit with
		1 immunization services room
		1 FP coordination room
		1 antenatal coordination room
		1 maternity ward for 3 deliveries
		1 nursery room with 3 cots
		Inpatient services
		50 beds for male inpatients
		50 beds for female and children inpatients
		2 operating theatre beds
		Administration unit with
		1 pharmacy/drug dispensing room
		1 cash office
		2 stores
		2 administration offices
		1 room for health records
		1 community services room
		1 Mortuary
		Staff quarters for 4 persons on duty
		Radiology unit
		1 x-ray room
		1 USS room
		Ablution block
		4 stance pit latrine
		Source of running water
		Water reservoir
		1 placenta pit
		1 generator house
		1 incinerator
		1 motorcycle
		Communication equipment
		2 vehicles
		1 ambulance
		1 support vehicle
		Supply services unit with
		Kitchen
		Laundry
		Fence and gate
		Composite pit
		Water storage for roof catchment
		Minimum acreage – 5 acres
5	1,000,000	OPD block with
		1 waiting room
		6 consultation rooms
		1 Registration room

Level	Population	Minimum physical infrastructure
		2 injection rooms
		1 plaster room
		1 minor theatre
		1 dental unit room
		1 ENT services room
		1 laboratory room
		MCH/FP unit with
		1 immunization services room
		1 FP coordination room
		1 Antenatal coordination room
		1 maternity ward for 6 deliveries
		1 high dependency unit with 6 cots
		Inpatient services
		200 beds for male inpatients
		200 beds for female and children inpatients
		4 Operating theatre beds (1 Gynae emergencies, 1 cold case, 1 general emergencies, 1 ophthalmic)
		1 Intensive care unit with 4 beds
		Administration unit with
		1 pharmacy
		1 drug dispensing room
		1 cash office
		4 stores
		2 administration offices
		1 room for health records
		1 community services room
		1 Mortuary
		Staff quarters for 8 persons on duty
		Radiology unit
		1 x-ray room
		1 USS room
		Ablution block
		10 stance pit latrine
		Source of running water
		Water reservoir
		1 placenta pit
		1 generator house
		1 incinerator
		1 motor cycle
		Communication equipment
		2 vehicles
		1 ambulance
		1 support vehicle
		Supply services unit with
		Kitchen
		Laundry
		Fence and gate
		Composite pit
		Water storage for roof catchment
		Minimum acreage – 10 acres
		Medical engineering unit

4. Supervision and Monitoring for Adherence to Norms and Standards

Just as standards are required for the physical resources, so are they necessary for the supervisory and monitoring mechanisms that intend to keep them in place. This section provides guidelines for ensuring that the norms and standards for both human resources and infrastructure are maintained.

4.1 Guidelines and Interventions for Achieving HRH Norms and Standards

The guidance towards prioritization of staff movement is aimed at ensuring a more equitable distribution of workload across the health workers in the system. Guidance on planning for where new staff should be posted and how staff can be redeployed is defined here on the basis of a rational methodology. This is based on prioritizing situations where the comparative work pressure is highest.

A Workload Indicator Ratio (WISN) defines the workload on the staff. This ratio is based on the relationship between the actual and the expected staff numbers per population served.[1] A WISN of 1.0 indicates staffing is per norms. If, for example, facility A has 7 nurses against an expected 10, its WISN ratio is 0.7; or 70% staffed (30% understaffed). Facility B, with 85 nurses against an expected 100, has a WISN ratio of 0.85 (85% staffed; 15% understaffed). As such, facility A receives higher prioritization compared with facility B, as its understaffing situation is greater (workload of missing staff is spread over fewer staff in facility A than B, meaning they are under much greater work pressure).

The same logic applies for redistribution of staff away from facilities with staff over the establishment. As an example, facility C has 15 nurses, against an expected norm of 10, implying its WISN ratio is 1.5 (50% overstaffed). On the other hand, facility D has 120 nurses against an expected norm of 100, implying a WISN ratio of 1.2 (20% overstaffed). The extra staff at facility C give a higher degree of overstaffing (50%) and so redeployment will start there.

This method helps to identify staffing inequities between facilities, even if there is an overall staff shortage, and guides specific actions that should be taken to remedy this. It provides clarity on:

- How the workload pressure at each measured unit (facility/district) can be compared with others
- Where staff shortages or workload pressures are concentrated for the different staff categories, and therefore
- Where new staff in each category should best be posted or where transfers would improve the overall situation.

This analysis should be carried out on a regular basis for the national and district levels. The national level defines movements between districts on the basis of the methodology described above. This could then be summarized in a table like the one provided below.

Example of national summary of staff workload at national level

	Staff category								
District	Category 1			Category 2			Category 3 (etc.)		
	Actual staff (A)	Staff reqd. (B)	WISN ratio (A/B)	Actual staff (A)	Staff reqd. (B)	WISN ratio (A/B)	Actual staff (A)	Staff reqd. (B)	WISN ratio (A/B)

[1] The actual population served is used because at present, most facilities are serving populations that do not necessarily coincide with the expected population levels. As such, it limits the situations where staff are removed from high volume facilities.

Redistribution/deployment is based on moving staff from districts with highest WISN ratios to those with lowest ratios. Districts at WISN ratio of 1.00 indicate staffing as per norms.

At the district level, a similar summary is produced for all the facilities at each level of care. Staff redistribution/deployment is based on the analysis, prioritized according to changes made through process at the national level. The dummy table used is the same as above, with facilities, instead of districts as the categorization used.

4.2 Guidelines and Interventions for Achieving Infrastructure Norms and Standards

A review of Kenya Service Provision Assessment Survey (2004) data on available facilities, including non-government ones, shows that on average, if the public–private partnership is appropriately utilized, limited additional facilities are required, as those available should by and large be able to provide the services for the different levels of care. Table 4.1 illustrates the average populations served by available health facilities.

Table 4.1: Average populations served by various health facilities

Level of care	Median population in catchment area
Hospital	100,539
Health centre	19,898
Maternity	7,989
Clinic	10,973
Dispensary	7,937
Stand alone VCT	150,400

Source: Adapted from *Kenya Service Provision Assessment Survey*, 2004. Maternal & Child Health, Family Planning and STIs volume, P. 30.

However, because of differences between districts and regions, some areas have inadequate infrastructure, and therefore investment is called for. Identification and prioritization of this investment is done at defined levels of service delivery: district level for investments at levels 1–4; provincial level for investments at district level; and national level for investments at provincial level. Information to guide each is based on summaries derived from the lower level. National level is based on information from provinces and provincial level on information from districts. The resource envelope at each level is applied to the highest prioritized investments.

Development of health infrastructure should be such as to ensure that it is first located in those areas that are under-served. Furthermore, any upgrading of infrastructure should be aimed at achieving the respective facility's prescribed level of service in accordance with the definitions in Section 1.3.2. The following are exceptions:

- Where a level 3, 4, 5 or 6 facility is located, a new one of a lower level for the respective catchment population need not be established. Such units will also serve the functions of the appropriate lower level facility for the respective catchment population. For example, if a level 5 facility exists, it also provides for the level 4 functions for its immediate 100,000–250,000 persons, level 3 functions for its immediate 25,000–40,000 population, and level 2 functions for its immediate 10,000–15,000 population.

- Areas where access to the appropriate health centre level is grossly impaired because of terrain, water bodies, etc., another health unit of the same level may need to be provided to serve the affected area. For example, an island with 5,000 persons may be provided with a level 3 facility, which is meant for 25,000–40,000 persons.

Standard basic infrastructure requirements and designs (for new constructions) at the respective levels have been developed and are available on request from the Ministry of Health Infrastructure Department. The process to select areas for new infrastructure is done in a series of steps:

1. Define the catchment areas
2. Identify the critical problems for the different catchment areas
3. Determine solutions for the respective catchment areas
4. Prioritize solutions for the catchment areas

4.2.1 Define Catchment Areas

This is part of the overall planning and service organization process for the respective level of care. The aim is to facilitate categorization of service delivery from administrative areas to catchment areas. The catchment areas define units of populations that require a defined level

of services. From the service delivery norms, we see the defined populations for each service delivery level.

Each level of service delivery is assessed independently. The exercise involves review of the approximate administrative level in terms of defining how many catchment areas it has, for the respective level of care. For example: sub location for level 2 facilities; location for level 3 facilities; and division for level 4 facilities. The district health team, following the defined guidelines, determines these catchment areas for the different levels. This analysis needs to take into account the criteria to demarcate such areas, such as population base and natural barriers and density. As much as is feasible, facilities of the same level should be in separate catchment areas.

A catchment area may therefore be categorized as:

- Similar to its corresponding administrative level.
- Smaller than its corresponding administrative level (each administrative level made up of more than one catchment area).
- Larger than its corresponding administrative level (each administrative level making up part of a catchment area).

Note that it may be necessary to merge villages from different administrative levels into one catchment area.

Where the population of an administrative level is greater than one and a half times that stated above, such an administrative level qualifies for a second facility of the same level. For example, a district with 500,000 persons having an existing district hospital qualifies for a second level 4 facility (to be established as per minimum standards, and not as another "district hospital").

If two neighbouring administrative levels each have populations under one and a half times that stated above, but their combined populations are over this, a new facility may be justifiable to serve populations across this administrative level.

The dummy table below summarizes this review of catchment areas.

Definition of catchment areas for the level of care being reviewed

Name of catchment area	Complete administrative level included[2]		Villages included of incomplete administrative levels		Total population of catchment area = (2) + (4)	Administrative levels involved in catchment area
	Names (1)	Population of administrative level (2)	Name of sub locations (names of villages for each sub location) (3)	Population from each sub location (4)		

Following this, the respective catchment areas that require services are defined for the different levels of care. What is left is to define their situation and plan how to address it.

[2] Villages for level 2; sub locations for level 3 and locations for level 4

4.2.2 Identify Critical Problems for the Different Catchment Areas

This is done for each level of service delivery to determine the respective infrastructure needs. This is defined using two approaches based on the presence or the absence of a health facility for each corresponding administrative level. These approaches are:

- The "activity" approach, which means that there is a health facility but it may or may not be fully functional. It means that some of them require minimum infrastructure that is not available.
- The "facility" approach, which means that some of the defined catchment areas are not covered with a level 2 health centre.

We have summarized these approaches in Figure 4.1, which presents six distinct situations.

Figure 4.1: The facility analysis

		Infrastructure available		
		Yes	Partly	No
Facility	Present	1	2	3
	Absent	4	5	6

- Situation 1 implies that there is a facility with adequate infrastructure as per the norms.
- Situation 2 implies that there is a facility, but with inadequate infrastructure as per the norms
- Situation 3 implies that there is a facility, but with no infrastructure. These are usually facilities that exist, but are hardly used.
- Situation 4 is not feasible, as there cannot be a lack of a facility if there is adequate infrastructure.
- Situation 5 implies that there is no facility, but there is some infrastructure available, for example through donations.
- Situation 6 implies there is no facility and no infrastructure

Using the same table as in Figure 4.1, each catchment area is reviewed and its situation category is defined (last column) as 1–6, depending on the review.

4.2.3 Determine Solutions for the Respective Catchment Areas

There are two types of solutions according to the approaches used for the identification of the critical problem areas: either the revitalization of a facility or the establishment of a new facility:

- The critical problem areas identified under the "activity" approach (situation category 2 or 3) will require revitalization of one sort or another as the solution in order for the health unit to become fully functional.
- The critical problem areas identified under the "facility" approach (situation categories 4–6) will require the establishment of a new health unit.

4.2.4 Prioritize Solutions for the Catchment Areas

In order to prioritize over a time period which health units will be taken on first, we need a series of selection criteria. Table 4.2 presents a tentative list of five criteria on which the selection should be based. For each criterion, there are three factors to be taken into account:

a) The specific description of the criterion.
b) As not every criterion may be of similar importance, each criterion is given a weight between 0 and 1 with increments of 0.25.
c) A score (for instance from 1 to 3: 1 being the least favourable and 3 the most favourable condition) is further used to appraise each criterion for each catchment area. For example, for the criterion "distance", understood as access of health care by the population of the area of responsibility, a score of 3 means farther away from any health unit. For the criterion "total population", a score of 1 means lower total population and a score of 3 the highest total population.

For the health units to be revitalized, one more criterion is proposed, namely the relative importance of the resources required for revitalization. Multiplying factors 2 and 3 then produces the calculation of the score for each criterion (Table 4.3).

Once all criteria one catchment areas are scored, a total score can be made by adding up the calculation results for each criterion and filled in the bottom row of the table. See the next page for a dummy table for the scoring of each individual catchment area.

The information to be calculated can be summarized into the dummy table provided below, one for the catchment area with revitalizations of health units and on for the catchment areas with new establishments.

Table 4.2: Prioritization of solutions for the critical problem areas: Interpretation of the selection criteria for scoring catchment areas

Description of criterion	Weight	Score interpretation (1 to 3)
Distance (~ access to health care by pop of the catchment area)	1	1 = nearer to health unit (other facility of similar or higher level in neighbouring catchment area) 3 = further from a health unit (no nearby other facility of similar or higher level)
Access to catchment area by DHMT (Weighted by distance, and terrain)	0.25	3 = nearer to DHMT 1 = further from DHMT
Population of catchment area	0.5	1 = lower population than the defined norm 3 = higher population than the defined norm
Population readiness	1	3 = populations that have expressed willingness to support establishment of a facility (CDF funds, or other source of additional funding available) 1 = No expressed willingness to support establishment of a facility (will most likely be sole responsibility of the sector)
Strength of existing community structures	0.25	3 = stronger community structures and involvement 1 = weak community structures and involvement
"Solution" required (revitalization or establishment of a facility)	1	Health unit to be revitalized: 3 = if catchment area is of situation 2 (some equipment available) 1 = if catchment area is of situation 3 (no equipment available) Health unit to be established: 3 = if catchment area is of situation 5 (there is some available equipment for facility) 1 = if catchment area is of situation 6 (no available equipment)
For units to be revitalized only		
Input required to revitalize	0.75	1 = If substantial input required 3 = if minimal input is required

Table 4.3: Scoring of the selection criteria for each catchment area

Name of CATCHMENT AREA SOLUTION: (Revitalization/establishment) _____			
Description of criterion	Weight (2)	Score (3)	Calculation for each criterion = (2) x (3)
1. Distance (~ access to health care by pop of the catchment area)	1		
2. Access to catchment area by DHMT (Weighted by distance, and terrain)	0.25		
3. Population of catchment area	0.5		
4. Population readiness	1		
5. Strength of existing community structures	0.25		
6. 'Solution' required (revitalization or establishment of a facility)	1		
For H units to be revitalized only			
7. Input required to revitalize	0.75		
TOTAL SCORE			

Summary table for calculating the total scores for each catchment area (prepare one table for revitalizations, one table for new establishments)

Name of catchment area	Calculation for each criterion							Total score	Rank
	1	2	3	4	5	6	7		

Once the exercise of scoring is done for each catchment area, the information is recorded in a summary table while subdividing the health units by solution (revitalization or establishment) and ranking them according to their total scores.

Note that the scoring of some of these criteria may change over time, for example "readiness of the population in the catchment area to collaborate" in the revitalization/establishment of a level 2 health centre. *Therefore, the ranking of the health units should be reviewed annually during the operational planning exercises.* even during the year, however, some communities may for whatever reason become active and plan to start the revitalization/establishment of a health unit. This should only be allowed after sufficient interaction with the community and the agreement to a contract on the roles and responsibilities of the community (as is the routine practice for each revitalization or establishment of a health unit).

4.3 Focus for the Coming Three Years

The sector will focus on:

- Disseminating these norms and standards to all levels of the sector.
- Developing training modules for provincial and district levels on the application of these norms and standards to rationalize their service delivery systems.
- Supporting the provincial and district levels on guiding their respective districts and health facilities in the use of these modules and guidelines.
- Providing specific support to districts as may be determined.
- Reviewing strategies to adopt norms and standards at different levels.
- Monitoring adherence to norms and standards.

Activities and timelines to achieve these objectives are illustrated in Table 4.4.

Table 4.4: Activity outline for implementation of norms and standards for the sector

Objective	Activity	Respon-sible unit	Time frame											
			Year 1				Year 2				Year 3			
			1	2	3	4	1	2	3	4	1	2	3	4
Disseminating these norms and standards to all levels of the sector	Development of dissemination package	Level 6												
	Definition of dissemination process	Level 6												
	Dissemination process	Level 4,5,6												
	Monitoring and review of dissemination process	Level 5,6												
Developing training modules	Development of training modules	Level 6												
	Incorporation of module in planning guidelines	Level 6												
	Typesetting and printing of modules	Level 6												
Supporting the provincial, and district levels on	Training of provincial level	Level 5,6												
	Training of district level	Level 5, 6												
	Technical support to training process	Level 5, 6												

Objective	Activity	Respon-sible unit	Time frame											
			Year 1				Year 2				Year 3			
			1	2	3	4	1	2	3	4	1	2	3	4
guiding their respective districts and health facilities in use of these modules and guidelines	Review of training impact	Level 5, 6												
Providing specific support to districts as may be determined	Identification of specific districts needing support	Level 5												
	Provision of support to specific districts	Level 5, 6												
Monitoring adherence to norms and standards	Development of monitoring and review framework	Level 6												
	Application of monitoring and review framework	Level 4, 5, 6												
	Discussion of outputs from monitoring and review process with respective stakeholders	Level 4, 5, 6												

Annex A: Service Standards for Different Staff Cadres, in Line with KEPH

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
Control of communicable diseases	Malaria	Proper diagnosis of malaria		RCN	RCN	RCN	RCN	RCN
		Appropriate management following standard treatment guidelines		RCN	RCN	MO	MO	MO
		Appropriate referral	CORP	RCN	CO	MO	MO	MO
		Health education	CORP	CORP	CORP	CORP	CORP	CORP
		Case follow up where indicated		RCN	RCN	RCN	RCN	RCN
		Emergency inpatient service support (IV fluids/medication)			RCN	RCN	RCN	RCN
		Inpatient management			CO	MO	MSP	MSP
		Appropriate dispensing for adherence according to standard treatment guidelines				PT	PT	PT
		Malaria medicines management for availability and appropriate use				PT	P	P
		Pharmacovigilance and drug use monitoring, e.g. HIV/TB/malaria drug interactions					PSP	PSP
	STI/HIV/AIDS services	Diagnosis & treatment of STIs according to standard STI treatment guidelines		RCN	RCN	MO	MO	MO
		Promotion & provision of condoms to prevent STIs		RCN	RCN	RCN	RCN	RCN
		Referral of STI cases where indicated		RCN	RCN	RCN	RCN	RCN
		Voluntary counselling and testing (VCT) for HIV			RCN	RCN	RCN	RCN
		Inpatient services				MO	MSP	MSP
		Specialized treatment				MO	MSP	MSP
		Appropriate dispensing for adherence according to standard treatment guidelines				PT	PT	PT
		HIV/AIDS medicines management for availability and appropriate use				PT	P	P
		Pharmacovigilance and drug use monitoring, e.g., HIV/TB/malaria drug interactions					PSP	PSP
	TB & leprosy	Case detection, treatment and referral		RCN	RCN	RCN	RCN	RCN
		Act as a focal point for DOTS implementation	CORP	CORP	CORP	CORP	CORP	CORP

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Health education (including for contacts)		RCN	RCN	RCN	RCN	RCN
		Tracing of irregular attendees & defaulters		RCN	RCN	RCN	RCN	RCN
		Provision of follow up treatment		RCN	RCN	RCN	RCN	RCN
		Coordination of DOTS implementation			CO	CO	CO	CO
		Specialized treatment				MO	MSP	MSP
		Appropriate dispensing for adherence according to standard treatment guidelines			PT	PT	PT	PT
		TB medicines management for availability and appropriate use			PT	PT	P	P
		Pharmacovigilance and drug use monitoring, e.g., HIV/TB/malaria drug interactions, commodities for MDRTB)					PSP	PSP
Child health		Treatment of childhood illnesses following IMCI guidelines		RCN	RCN	RCN	RCN	RCN
		Immunization (BCG, DPT, OPV, measles) available daily plus at least one outreach per week		RCN	RCN	RCN	RCN	RCN
		Functional ORT corner		RCN	RCN	RCN	RCN	RCN
		Health education on key messages for control of childhood illnesses		RCN	RCN	RCN	RCN	RCN
		Growth promotion and monitoring		RCN	RCN	RCN	RCN	RCN
		Vitamin A supplementation		RCN	RCN	RCN	RCN	RCN
		Nutrition education and promotion for exclusive breastfeeding (BF) for 6 months & proper nutrition thereafter according to guidelines		RCN	RCN	RCN	RCN	RCN
		Follow up of malnourished cases and referral where indicated		RCN	RCN	RCN	RCN	RCN
		Specialized diagnosis and treatment				MO	MO	MO
		Management of severe malnutrition				MO	MO	MSP
		Micronutrient supplementation			RCN	RCN	RCN	RCN
		Appropriate dispensing of medicines according to IMCI protocols		RCN	PT	PT	PT	PT
		Management of IMCI medicines & supplements for appropriate use		RCN	PT	PT	PT	PT
Sexual & reproductive health & rights	Antenatal & obstetric care	Registration; examination; BP recording		RCN	RCN	RCN	RCN	RCN

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Identification of high risk cases		RCN	RCN	RCN	RCN	RCN
		Promotion of good nutrition	CORP	CORP	CORP	CORP	CORP	CORP
		Provision of iron, folic acid, tetanus vaccination		RCN	RCN	RCN	RCN	RCN
		Presumptive intermittent treatment of malaria		RCN	RCN	RCN	RCN	RCN
		Management and dispensing of antenatal medicines for appropriate use		RCN	PT	PT	P	P
	Obstetric care	Unexpected deliveries		RCN	RCN	RCN	RCN	RCN
		Referral system in place; radio call/village ambulance	CORPS	CORP	CORP	CORP	CORP	CORP
		Normal deliveries			RCN	RCN	RCN	RCN
		Management of minor obstetric complications according to guidelines			RCN	RCN	RCN	RCN
		Referral of obstetric emergencies and complications of mother or baby			CO	MO	MO	MO
		Resuscitation and care of the newborn (BCG, OPV 0, tetracycline eye ointment)			RCN	RCN	RCN	RCN
		Post-abortion care including MVA for incomplete abortions			RCN	RCN	RCN	RCN
		Treatment of concurrent illness of the mother			RCN	MO	MO	MO
		Regular maternal & peri-natal mortality review meetings			RCN	MO	MO	MO
		Management of prematures and low birth weight babies			RCN	MO	MSP	MSP
		Provision of emergency obstetric care				MO	MO	MSP
		Manual vacuum extraction of incomplete abortion				MO	MO	MO
		Blood transfusion				MO	MO	MO
		Post-abortion care (MVA or sharp curettage)				MO	MO	MO
		Management of complicated pregnancies and deliveries				MO	MO	MSP
		Laparotomy, laparoscopy				MO	MO	MSP
		Major obstetric surgery				MO	MO	MSP
		Management and dispensing of obstetric medicines for availability and appropriate use			PT	PT	P	P
	Post-natal care	Implementation of the 12 steps to successful BF	CORP	RCN	RCN	RCN	RCN	RCN
		Vitamin A supplementation to mothers within 6 weeks post delivery		RCN	RCN	RCN	RCN	RCN
		Examination of mother & baby		RCN	RCN	RCN	RCN	RCN

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Identification of complications, cervical examination (unaided or aided visual inspection) and detection of STDs		RCN	RCN	RCN	RCN	RCN
		Weighing of babies		RCN	RCN	RCN	RCN	RCN
		Management and dispensing of post-natal medicines for appropriate use		RCN	PT	PT	PT	PT
	Family planning services	Provision of FP counselling and selected FP methods		RCN	RCN	RCN	RCN	RCN
		Health education on MCH/FP	CORP	CORP	CORP	CORP	CORP	CORP
		Identification and management of minor gynaecological problems		RCN	RCN	RCN	RCN	RCN
		Referral of gynaecological problems where indicated		RCN	RCN	RCN	RCN	RCN
		Insertion & removal of IUDs			RCN	RCN	RCN	RCN
		Norplant insertion & removal ((mobile or static)			RCN	RCN	RCN	RCN
		Long-term permanent methods				MO	MO	MSP
		Management and dispensing of family planning medicines for appropriate use		RCN	PT	PT	PT	PT
		Pharmacovigilance and drug use monitoring, e.g., HIV/TB/malaria drug interactions with family planning medicines					PSP	PSP
	Adolescent reproductive health	Provision of integrated ARH services (FP, STI/HIV/AIDS counselling, prevention & treatment, ANC, tetanus toxoid)	CORP	CORP	CORP	CORP	CORP	CORP
	Violence against women	Counselling and treatment of minor physical and psychological trauma		RCN	RCN	RCN	RCN	RCN
		Referral		RCN	RCN	RCN	RCN	RCN
		Legal procedures (e.g., assessments, police statements)				MO	MO	MSP
Public health measures	Environmental health	Promotion of hygiene practices in households, institutions and public places	CORP	CORP	CORP	CORP	CORP	CORP
		Control of mosquito breeding sites and other vectors	CORP	CORP	CORP	CORP	CORP	CORP
		Surveillance of water and food quality		CHEW	CHEW	CHEW	CHEW	CHEW

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Promotion of construction and improvement of healthy houses		CHEW	CHEW	CHEW	CHEW	CHEW
		Community sensitization to promote compliance to environmental health laws and regulations		CHEW	CHEW	CHEW	CHEW	CHEW
	School health	School health outreaches to promote hygiene and healthy lifestyles among children		CHEW	CHEW	CHEW	CHEW	CHEW
		School supervision to ensure adequate latrines and water facilities		CHEW	CHEW	CHEW	CHEW	CHEW
		Regular medical examination of school children		RCN	RCN	RCN	RCN	RCN
	Epidemics and disaster prevention, preparedness and response	Accurate, complete and proper records keeping according to HMIS guidelines		RCN	RCN	RCN	RCN	RCN
		Timely reporting of records summary to higher levels	CHEW	RCN	RCN	RCN	RCN	RCN
		Surveillance system in place	CHEW	RCN	RCN	RCN	RCN	RCN
		Provision of adequate logistics and supplies for management of epidemics and disasters	CHEW	RCN	PT	P	P	PSP
		Provision of reports to local administrative officials on prevailing local health problems	CORP	CHEW	CO	MO	MO	MO
		Institutional disaster preparedness systems and plans		RCN	CO	MO	MSP	MSP
	Improving nutrition	Established demonstration gardens	CORPS	RCN	RCN	RCN	RCN	RCN
		Demonstrations on preparation of nutritious meals	CHEW	CHEW	CHEW	CHEW	CHEW	CHEW
	Interventions against diseases targeted for eradication	Health education for prevention and control of targeted diseases	CORP	CORP	CORP	CORP	CORP	CORP
		Community mobilization for preventive measures	CORP	CORP	CORP	CORP	CORP	CORP
		Treatment (mobile or static)		RCN	RCN	RCN	RCN	RCN

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Inpatient services		RCN	CO	MO	MO	MSP
	Integrated outreaches	Monthly support outreaches	CHEW	RCN	RCN	RCN	RCN	RCN
		Education of health workers and the public on appropriate use of medicines			PT	P	P	P
		Regular drug use studies to assess medicines use			PT	P	PSP	PSP
Mental health services		Case detection, provision of first aid and referral of cases		RCN	RCN	RCN	RCN	RCN
		Review and follow up of patients with epilepsy		RCN	RCN	RCN	RCN	RCN
		Follow up treatment of identified patients with mental health in the community	CHEW	RCN	RCN	RCN	RCN	RCN
		Health education and raising awareness on mental health in the community	CORP	RCN	RCN	RCN	RCN	RCN
		Diagnosis and treatment of mental health patients			CO	MO	MSP	MSP
		Regular mental health clinic (weekly)				MO	MSP	MSP
		Management and dispensing of mental health medicines for appropriate use			PT	PT	PT	PT
		Pharmacovigilance and drug use monitoring (e.g., HIV/TB/malaria drug interactions with mental health medicines)				P	PSP	PSP
Clinical care	Care of injuries and other common conditions including non-communicable diseases	Treatment of common diseases (communicable and non-communicable) following standard treatment guidelines.	CORP	RCN	RCN	RCN	RCN	RCN
		Health education on common diseases and injuries in the community	CORP	RCN	RCN	RCN	RCN	RCN
		Provision of prompt and urgent treatment of including IV fluids)		RCN	RCN	RCN	RCN	RCN
		Appropriate referral where indicated	CORP	RCN	RCN	RCN	RCN	RCN
		Short-term in-patient care		RCN	CO	MO	MO	MSP
		Selected surgical procedures (e.g., herniorraphy, appendectomy)				MO	MO	MSP
		Treatment of acute medical emergencies and non-communicable diseases				MO	MO	MSP
		Major and minor surgical operations including, but not limited to:				MO	MO	MSP
		Acute traumatic emergencies (injuries)				MO	MO	MSP

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Acute abdominal surgery				MO	MO	MSP
		Elective abdominal surgery				MO	MO	MSP
		Burr holes				MO	MO	MSP
		Management and dispensing of NCD medicines for appropriate use		RCN	PT	PT	PT	PT
		Pharmacovigilance and drug use monitoring, e.g., HIV/TB/malaria drug interactions with NCD medicines					PSP	PSP
	Disabilities and rehabilitative health	Identification and referral of PWDs		RCN	RCN	RCN	RCN	RCN
		Review and follow-up PWDs		RCN	RCN	RCN	RCN	RCN
		Diagnosis & clinical management of common disabilities			CO	MO	MO	MO
		Provision of appliances and aids				PTH	PTH	PTH
		Referral	CHEW	RCN	CO	MO	MO	MO
	Palliative care	Provision of symptomatic care (for pain relief, anaemia, secondary infection)	CORP	RCN	RCN	RCN	RCN	RCN
		Specialized palliative care including pain therapy				MO	MO	MO
		Management and dispensing of palliative care medicines for appropriate use				MO/PT	P	P
		Pharmacovigilance and drug use monitoring, e.g. ,interactions of palliative care and other medicines					PSP	PSP
	Oral/Dental health	Promotion of public oral health care through health education		RCN	RCN	RCN	RCN	RCN
		Pain relief for dental/oral problems including simple extraction			COHO	DEN	DEN	DEN
		Referral where indicated		RCN	RCN	RCN	RCN	RCN
		Diagnosis and management of dental/oral health problems according to treatment guidelines (includes but not limited to: extractions, fillings, scaling and polishing, root canalling)				DEN	DEN	DEN
		Referral	CHEW	RCN	CO	MO	MO	MSP
Laboratory services	Investigations	Lab tests: Urine for protein, sugar			LTN	LTN	LTN	LTN
		Syphilis screening test (rpr - carbon antigen)			LTN	LTN	LTN	LTN
		Blood: Parasitology			LTN	LTN	LTN	LTN

Area of work	Component of service delivery	Expected service standards	Level of service provision, and health staff needed					
			1	2	3	4	5	6
		Blood: Haemogram, blood grouping & cross-matching, syphilis screening, pregnancy test, HIV screening,				LST	LST	LST
		Urine: protein, sugar, microscopy				LST	LST	LST
		Stool: microscopy				LST	LST	LST
		Skin: microscopy of skin scrapings for leprosy bacilli				LST	LST	LST
		Lumbar puncture				LST	LST	LST
		Sickle cell screening				LST	LST	LST
		CSF examination				LST	LST	LST
		Blood glucose				LST	LST	LST
		Pus swabs for culture & sensitivity				LST	LST	LST
		Urine qualitative chemistry				LST	LST	LST
		Transportation of specimen for TB culture				LST	LST	LST
		Fixation of cytological smears				LST	LST	LST
		Histological specimens				LST	LST	LST
		Plain radiographs				LST	LST	LST
		Barium radiographs				LST	LST	LST
		Ultrasound for obstetric and other abdominal investigations				LST	LST	LST
		Any other investigation for which equipment is available.				LST	LST	LST
		TB lab diagnosis (skin scrapings/sputum for AAFBs)			LTN	LTN	LTN	LTN
		Management of commodities for laboratory investigations			LTN	LTN	LTN	LTN
Management		Coordination and supervision support	CHEW	RCN	CO	MO	MSP	MSP
		Reporting and monitoring of health information	CHEW	RCN	CO	MO	MSP	MSP
		Data management for information			DCL	DCL	DCL	DCL
		Overall medicines and health commodities management			PT	PT	P	PSP

Abbreviations:

CHEW	Community Health Extension Worker	SP	Specialist	MSP	Medical Specialist
CORP	Community-Owned Resource Person	LTN	Lab Technician	PT	Pharmaceutical Technologist
RCN	Registered Comprehensive Nurse	LST	Lab Technologist	P	Pharmacist
CO	Clinical Officer	MO	Medical Officer	PSP	Pharmacy Specialist
DCL	Data Clerk	PHT	Physiotherapist		

Annex B: Standard Activities for Different Cadres

Table B2.1: Derivation of available working time

	Specialists	Medical Officers	Clinical officers	Matron	RCNs	Lab technician	Pharmacy technicians	Statistical clerks	Clerk/ cashier	General attendants	Drivers	Cooks	Watchmen
Number of days in a year	364	364	364	364	364	364	364	364	364	364	364	364	364
Holidays	12	12	12	12	12	12	12	12	12	12	12	12	12
Leave days	21	21	21	21	21	21	21	21	21	21	21	21	21
Off the job trainings	30	30	21	30	30	10	21	10	10				
Sick days	7	7	7	7	7	7	7	7	7	7	7	7	7
Average number of days/year	294	294	303	294	294	314	303	314	314	324	324	324	324
Average working days/month	24.50	24.50	25.25	24.50	24.50	26.17	25.25	26.17	26.17	27.00	27.00	27.00	27.00

Table B2: Standard activities for different staff cadres

Staff category	Staffing cadre	Component of workload
Medical officer category	Clinical Officer	Outpatients
		Ward rounds
		Medical/surgical procedures
		Administrative activities
	Medical Officer (Doctor)	Ward rounds
		Procedures
		Outpatients
		Post mortems
		Administration
		Clinical meetings
	Specialists	Ward rounds
		Procedures
		Outpatients

Staff category	Staffing cadre	Component of workload
		Post mortems
		Administration
		Clinical meetings
Nursing category	RCN	Immunization
		Outpatients
		Inpatients
		Under 5 examinations
		School health
		Nutrition education
	Midwife	Antenatal examinations
		Supervised deliveries
		Health education
		Family Planning
		Post natal care
		Counselling services
	Matron	Ward rounds
		Supervision of ward
Laboratory category	Lab assistant/technicians	Haematology
		Bacteriology
		Parasitology
		Other procedures
		Procurement of laboratory commodities
Pharmacy category	Pharmaceutical technologist	Dispensing medication
		Inventory management
	Pharmacist	Pharmaceutical procurement
		Formulary management
		Supervision of lower facilities
		Analysis of drug use

Staff category	Staffing cadre	Component of workload
		Drug Information
		Dispensing for specialized services
		Pharmaceutical care – ward rounds
		Medicines & therapeutics committees - Coordination
Public health services category	CORP	Home inspections
	Extension Health Worker	Supervision of CORPs
		Health promotion activities
		Health education activities
Medical support staff	General attendant	Attending outpatients
	Records assistant	Registration of clients
	Records officer	Analysis of records
Non medical support staff	Cook	Feeding inpatients
	Laundry attendant	Laundering
	Driver	Driving vehicles
	Watchman	Guard duties