



MINISTRY OF HEALTH

# ROLE DELINEATION POLICY



## ACKNOWLEDGMENT

This policy paper reflects an extensive consultation process with stakeholders, both within and outside of the Ministry of Health (MOH). Within the MOH this included senior executives, program managers, provincial managers, community health staff, hospital clinicians, nursing staff, allied health staff, and corporate services representatives. Beyond the MOH, it involved Development Partner (DP), Non-Governmental Organisation (NGO), Faith-Based Organisation (FBO) and Civil Society Organisation (CSO) representatives.

The content and principles of the Policy are based on the observations and ideas of the many people, and organisations, who have contributed to its development. The MOH and Role Delineation Policy (RDP) Working Group wishes to express their gratitude and appreciation to all.

Specific acknowledgement is extended to the World Health Organization (WHO) and Government of Australia for provision of technical advisory support through support arrangements, so as to enable the role delineation policy review to be completed in a timely fashion.

In particular, the MOH would like to recognise the Australian Volunteers for International Development (AVID), Phillipa Milne (Health Service Planning Consultant, WHO), and the Vanuatu Health Resource Mechanism (VHRM) for their technical advisory support.

## **ACKNOWLEDGMENT**

This policy paper reflects an extensive consultation process with stakeholders, both within and outside of the Ministry of Health (MOH). Within the MOH this included senior executives, program managers, provincial managers, community health staff, hospital clinicians, nursing staff, allied health staff, and corporate services representatives. Beyond the MOH, it involved Development Partner (DP), Non-Governmental Organisation (NGO), Faith-Based Organisation (FBO) and Civil Society Organisation (CSO) representatives.

The content and principles of the Policy are based on the observations and ideas of the many people, and organisations, who have contributed to its development. The MOH and Role Delineation Policy (RDP) Working Group wishes to express their gratitude and appreciation to all.

Specific acknowledgement is extended to the World Health Organization (WHO) and Government of Australia for provision of technical advisory support through support arrangements, so as to enable the role delineation policy review to be completed in a timely fashion.

In particular, the MOH would like to recognise the Australian Volunteers for International Development (AVID), Phillipa Milne (Health Service Planning Consultant, WHO), and the Vanuatu Health Resource Mechanism (VHRM) for their technical advisory support.

## ABBREVIATIONS

ABG	Arterial Blood Gas	MW	Midwife
AP	Aid Post	NA	Nurse Aide
ASO	Antistreptolysin O	NCD	Non-Communicable Disease
BP	Blood Pressure	NICU	Neo-natal Intensive Care unit
CD	Communicable Disease	NGO	Non-Government Organisation
CHS	Community Health Services	NP	Nurse Practitioner
CSO	Civil Society Organisations	NPH	Norther Provincial Hospital
DNA	Deoxyribonucleic Acid	NRH	National Referral Hospital
ECG	Electrocardiogram	NTD	Neglected Tropical Diseases
EEG	Electroencephalogram	O&G	Obstetrics and Gynaecology
EPI	Expanded Programme of Immunisation	OPD	Out-Patients Department
ED	Emergency Department	PACS	Picturing Archiving and Communications System
EDL	Essential Drugs List	PICU	Paediatrics Intensive Care unit
EENC	Early Essential Newborn Care	PHC	Primary Health Care
EH	Environmental Health	PMS	Performance Management System
EOC	Emergency Operations Centre	RDP	Role Delineation Policy
EMT	Emergency Medical Teams	RP	Rural Physician
ENT	Ear, Nose & Throat	RN	Registered Nurse
FBO	Faith Based Organisations	RRH	Regional Referral Hospital
FTE	Full Time Equivalent	SBA	Skilled Birthing Attendant
GOPD	General Out-Patients Department	SCN	Special Care Nursery
HDU	High Dependency Unit	SHW	Skilled Health Worker
HIS	Health Information Systems	SMO	Senior Medical Officer
HIV	Human Immunodeficiency Virus	STI	Sexually Transmitted Infection
HPU	Health Promotion Unit	SV	Supervisory Visits
HSS	Health Sector Strategy	TB	Tuberculosis
ICU	Intensive Care Unit	ToE	Tables of Equipment
IUD	Intrauterine Device	UHC	Universal Health Care
INGO	International Non-Government Organisation	VCH	Vila Central Hospital
ISV	Integrated Supervisory Visits	VBD	Vector Borne Diseases
LIS	Laboratory Information Systems	VHW	Village Health Worker
MOH	Ministry of Health	VHWP	Village Health Worker Program
MICU	Maternity Intensive Care Unit	WASH	Water, Sanitation and Hygiene
MO	Medical Officer	WHO	World Health Organization

## Contents

ACKNOWLEDGMENT .....	2
ABBREVIATIONS .....	3
Appendices.....	4
Purpose of Role Delineation .....	5
1. Background .....	5
2. Applicability.....	5
2.1 Guiding principles for the Role Delineation Policy .....	7
2.2 Models of Care in Vanuatu .....	7
2.3 Levels of care delivered through health facilities .....	7
2.4 Services and policy platforms for PHC delivery .....	10
2.5 Decentralisation .....	10
3. Resources .....	11
4. Definitions .....	12
5. The Policy .....	13
5.1 Accessibility and Classification Criteria .....	13
5.2 Health Services.....	15
5.3 Staffing Standards .....	15
5.4 Functional Space .....	16
5.4.1 Community Care Facilities.....	17
5.4.2 Primary Care Facilities.....	17
5.4.3 Secondary and Tertiary Care Facilities .....	18
5.5 Equipment.....	18
5.6 Supervision and Monitoring.....	19

## Appendices

A - Accessibility and Classification Levels

B - Health Services

C - Staffing Standards

D - Functional Space Requirements

E - Minimum Essential Equipment

## Purpose of Role Delineation

Role Delineation is a tool that is used in many countries to describe and define their health facilities and services. A Role Delineation Policy (RDP) should:

*.....clearly define the roles of different levels of health facilities and identify the relationships between these. This includes defining essential service packages for primary care facilities. The RDP should also provide a basis for linking service planning to population, taking account of geography and isolation factors<sup>1</sup>.*

## 1. Background

This Role Delineation Policy (RDP) draws on the policy developed in 2004, and the review conducted from 2017 to 2018, to identify the minimum package of services that should be delivered through all health facilities in Vanuatu. This policy also identifies the staff requirements – skills, qualifications and experience - to deliver these services, and the facility functional space, utilities and equipment requirements to support safe and effective delivery of clinical and public health services.

The Ministry of Health (Vanuatu) has lead responsibility for many traditional public health functions, including, communicable disease prevention, Expanded Package of Immunisation (EPI), environmental health and food safety regulation and also provides, funds and manages a wide range of preventive healthcare, health promotion and disease prevention programs, and screening initiatives.

Alongside private health providers, the Ministry of Health takes the lead in providing curative care services to the people of Vanuatu, including: emergency and critical care; medical services, surgical services, maternal and reproductive health services, newborn and adolescent services, mental health services, and allied health & clinical support services. In addition to public services provided the MOH also has established management, general support services and education, training and supervision services for clinical service delivery.

This RDP focusses on those activities that the Ministry of Health (Vanuatu) fully funds or sponsors, and articulates the Ministry's expectations for the delivery of these functions through the complete Model of Care. However, the health system is made up of 'all the activities whose primary purpose is to promote, restore and/or maintain health'<sup>2</sup> and there are many organisations outside government that make a very significant contribution to improving the health of the population including Faith Based Organisations (FBOs), Non-Government Organisations (NGOs) and other Civil Society Organisations (CSOs). This RDP will assist collaboration across sectors to assess the unmet needs, and ensure people's equitable access to health resources delivered in accordance with national standards.

A full list of the MoH policies, legislation and references used in the review and development of this policy can be seen in **Section 3: Resources**.

## 2. Applicability

The Health Sector Strategy (HSS), 2017- 2020 has recommended a review of the 2004 RDP as one of the actions required to strengthen service planning and improve resource allocation. The RDP, once established will become the aspirational standard for provision of health care services in Vanuatu,

---

<sup>1</sup> Health Sector Strategy, 2017-2020

<sup>2</sup> World Health Organization, Health Systems Strengthening Glossary, [http://www.who.int/healthsystems/hss\\_glossary/en/index5.html](http://www.who.int/healthsystems/hss_glossary/en/index5.html), sighted on 14<sup>th</sup> December 2017

guiding planners and implementers to provide functional space, equipment fit for purpose and trained human resources in order to offer a defined package of essential services at every level.

Desired outputs of the policy are to:

- Define health services to be provided at primary, secondary and tertiary care levels
- Define designations of health facilities within each care model, reflective of access by population and proximity to higher level health facilities
- Define staffing levels, skills, qualifications and experience for health providers to match the health services
- Define minimum functional space requirements and utilities, reflective of facility designations
- Define minimum equipment requirements for provision of safe and effective health services
- Reflect consideration of gender and vulnerable groups, inclusiveness, sustainability, climate change and disaster risk.

Objectives of the MOH in utilizing this policy framework are:

- Improve equitable distribution of health facilities with consideration to population catchment and access to health services
- Strengthen health service delivery through appropriate assignment of trained health professionals and support staff
- Improve facility infrastructure and provision of essential equipment

This RDP can be utilised:

- By communities who are able to see the range and quality of services they should expect
- By health sector staff to help assess their own performance and that of their health facility.
- As planning guidelines by national and provincial health planners to help assess the unmet needs of the population, and establish plans to bring services up to minimum acceptable levels.
- By government to determine annual development priorities and guide resource allocation<sup>3</sup>.

This RDP is to be used in the preparation of operational National and Provincial Health Service Plans to set priorities for working towards equitable delivery of services and service improvement within provinces and nationally for the period 2017 – 2030, in line with the National Sustainable Development Plan (NSDP).

This would include strategies for achieving an incremental increase in staff resources and demonstrated equitable distribution of health professionals, and subsequent services delivered, throughout the country. Strategies may include use of contracts and potentially partnerships with other sectors (Including FBOs, NGOs and CSOs).

Principles set out in the HSS (see **section 2.1 Guiding Principles**) will guide planning and decision-making. For example, determining priorities for incremental increases in services by using data, such as: population densities<sup>4</sup> and information on health needs and service utilisation through the Ministry's Health Information System (HIS).

---

<sup>3</sup> *Service delivery packages for Solomon Islands primary care services, 2016*

<sup>4</sup> *World Bank's Community Health Services (CHS) 2016 Expenditure Analysis (Vanuatu)*

## 2.1 Guiding principles for the Role Delineation Policy

The HSS 2017 – 2020, envisages a health system based on the following principles:

- **Universal Health Coverage (UHC)** – ensuring that all citizens have equitable access to affordable health care, including emergency, curative and rehabilitative services, regardless of their age, gender, race, socio-economic status or where they live.
- **Primary Health care (PHC)** is the foundation of the health system and remains the core strategy for addressing most health issues.
- Responsibility for health **requires multi-sectoral action** – including partnerships with other government agencies, development partners, FBOs, NGOs, the private sector and other CSOs.
- Health services **should be ‘people-centred’** and inclusive, the needs of disadvantaged and vulnerable populations, those with disabilities and victims of violence, must be addressed.
- The health system should **provide a continuum of care**, through integration of public health and curative services. This means that a practical referral system should exist to make sure that people can access higher levels of care as needed and receive follow up.
- Health services **should be high quality**, and delivered in a cost-efficient way by staff with recognised skills and qualifications.
- Advocacy and **active community engagement** is important in encouraging communities and individuals to be responsible for their own health. This extends to collective participation through management of health facilities. The establishment of a functioning health committee, constituted of interested and informed community members, is an example of how this collective involvement can take shape.
- Health service planning, development and delivery **must be evidence-based**. In turn, we must monitor and evaluate the way we deliver health services, so we can keep building the knowledge base to guide future service development.

In addition to these principles outlined in the HSS, additional consideration for the following are to be made:

- promoting gender equality and empowering women,
- disability inclusion,
- child safeguarding, and
- climate change and disaster risk.

## 2.2 Models of Care in Vanuatu

This section describes the system of delivery at the community care level through to the tertiary level through health facilities in Vanuatu and is sometimes referred to as the ‘Model of Care.’ Again it focuses on the Ministry’s service delivery functions, recognizing there are many organizations outside government making a very significant contribution to improving the health of the population.

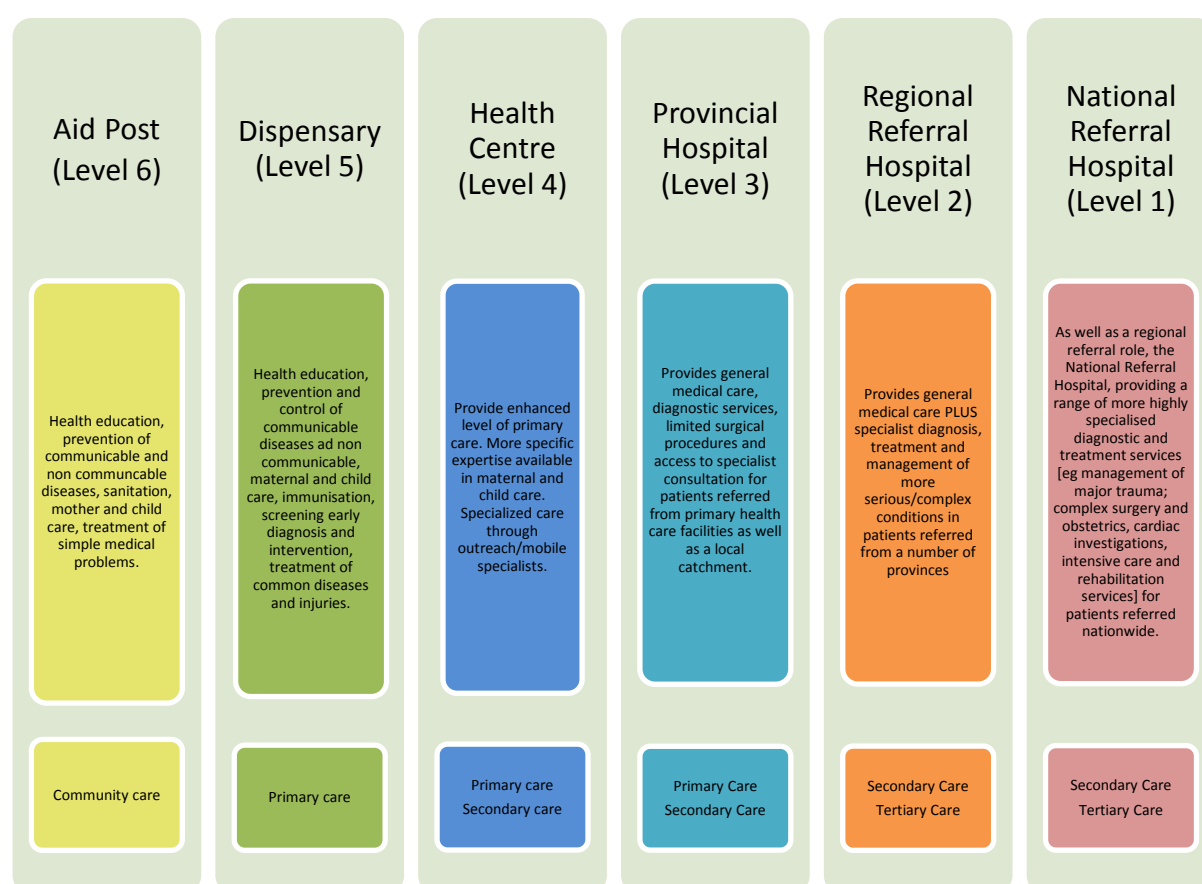
## 2.3 Levels of care delivered through health facilities

The levels of care provided through the facilities that are the subject of this RDP are illustrated below in **Figure 1**. Levels shown correspond to the policy definition which are further described in **Appendix A**.

Individual levels may include multiple sub-levels, such as for Dispensary (inclusive of Remote Dispensary level 5b) and Health Centre (inclusive of Enhanced Health Centre – Level 4b):



Figure 1: Levels of care provided by Aid Posts, Dispensaries, Health Centres and Hospitals



It is to be noted that due to the geography of Vanuatu and topography of islands within the Vanuatu Archipelago, additional definitions are used to describe primary care facilities in remote locations or with enhanced services, normally associated at Dispensary Level (I.e Remote Dispensary) or at Health Centre Level (I.e Enhanced Health Centre).

**Secondary care** services, including acute care of a serious injury or period of illness, usually relatively urgent are currently provided through provincial hospitals in six provinces (SHEFA, SANMA, TAFEA, PENAMA, MALAMPA and TORBA). While SANMA and SHEFA facilities have other titles, as Regional Referral and National Referral Hospitals respectively, they share their higher-level function with concurrent roles as provincial hospitals to their local provincial population.

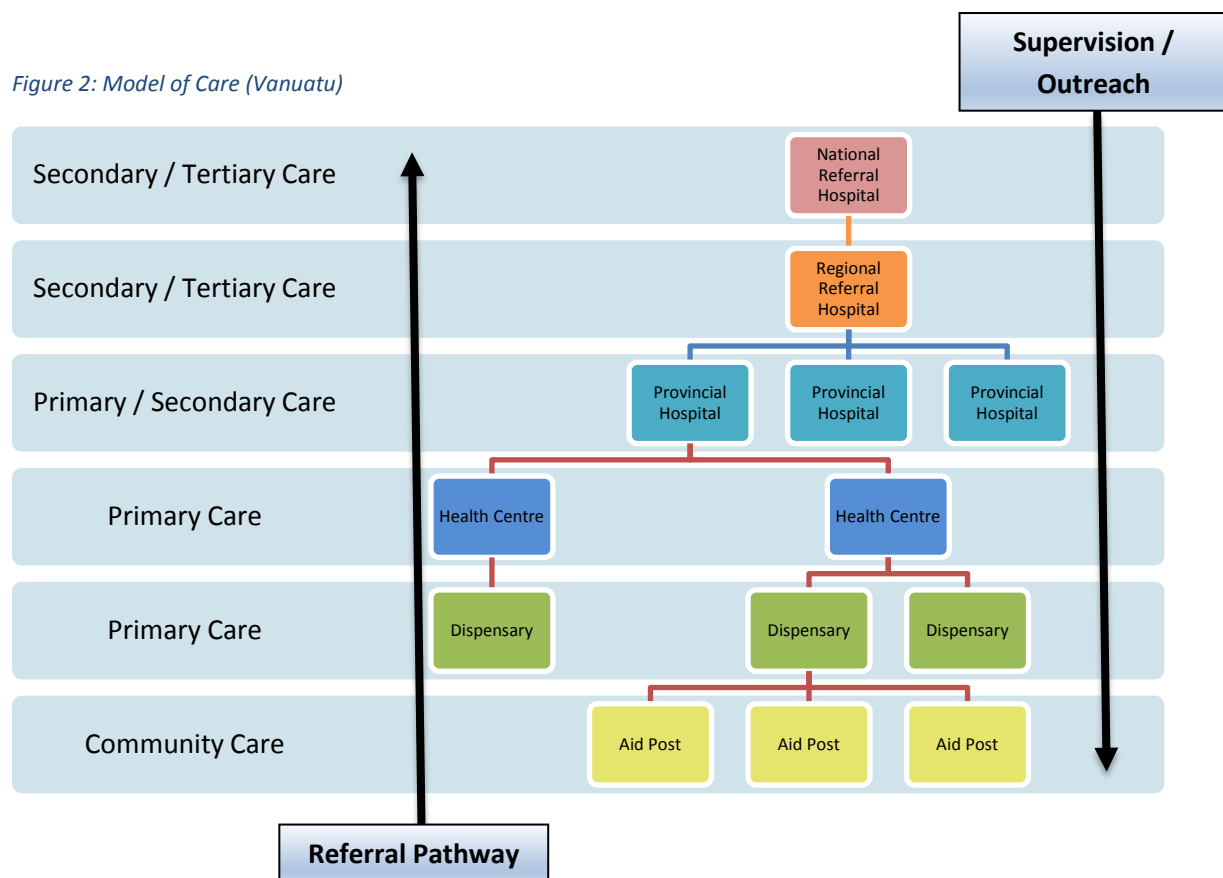
**Tertiary Care** is highly specialised health care, often for inpatients and on referral from a primary or secondary health services, and often includes particularly complex medical or surgical procedures. These services are provided solely through the Regional and the National Referral hospitals located in SHEFA and SANMA provinces. The Northern Provincial Hospital (NPH) located in SANMA is listed as a Regional Referral Hospital for Northern provinces and Vila Central Hospital (VCH) as the National Referral Hospital for the country.

The Model of Care in Vanuatu assumes that people can access higher levels of service as needed and receive follow up care through a referral pathway that connects Aid Posts, Dispensaries, Health Centres and Hospitals. These relationships are illustrated below in **Figure 2**.

Each level of service includes the services of the level below it but adds a higher level of complexity. Referral pathways need to remain flexible ensuring that adults and children with more serious needs can be referred to receive treatment in centres with the appropriate facilities and expertise in order to maximise their chances of survival. It should be noted that for referral pathways, there is no

additional designation to Dispensary or Health Centre level facilities (such as 'Remote' or 'Enhanced' titles).

Figure 2: Model of Care (Vanuatu)



**Note:** The illustration above is not reflective of the number of health facilities in Vanuatu nor any limitations on the number of sub-ordinate facilities that link to higher-level facilities.

The role of Provincial Management teams, inclusive of Provincial Administration, Public Health Management and Hospital & Curative Services Management groups, is to provide provincial health service delivery through conduct of integrated planning, provision of administrative support required to maintain fixed site services, provision of surge support to fixed sites and provision of outreach or other mobile services. Provincial Management teams are to plan and coordinate integrated service delivery within the province, inclusive of those services provided through implementing partners external to the government, in consultation with all stakeholders.

Oversight of primary care referral systems is to be provided by the Provincial Health Services Manager and, where required, administrative support is to be provided to rural health nurses and doctors for movement of patients to secondary and tertiary facilities.

Hospital Management teams, led by the Medical Superintendent, are responsible for supporting service delivery within the hospital and for provision of support to Public Health Managers in the delivery of integrated health services, planning of health service outreach and for support to rural nurses / doctors for the coordination of referral cases.

Within the Province, supportive supervision and Integrated Supervisory Visits (ISVs) are to be planned by Provincial Management teams and conducted by provincial staff down to all levels of Primary Care facilities. This may also include national Public Health, Hospitals & Curative or Corporate Service representation in the composition of any supervisory team.

## 2.4 Services and policy platforms for PHC delivery

The eight key elements of effective Primary Health Care<sup>5</sup> are used as a guiding framework to describe services to be delivered at each level of care and by each type of health facility. The policies and guidelines for the delivery of these services are developed by each of the Ministry's public health programs.

### Eight key elements of effective Primary Health Care:

1. Health Promotion and the Principles of and Primary Health Care; community mobilisation/participation
2. Maternal newborn and child health (aged 0-5). This includes reproductive health and vaccine preventable diseases)
3. Child and adolescent health (aged 5-17)
4. Food and nutrition
5. Environmental health and water, sanitation and hygiene (WASH)
6. Endemic communicable diseases (assessment, diagnosis, management and referral)
7. Non-communicable diseases (prevention, management and/or referral)
8. Provision of essential medicines

A Healthy Islands policy provides the platform for enabling action across and within settings to address health priorities using a primary health approach. In Vanuatu these settings are: Healthy Villages; Healthy Schools, Healthy Markets, and Healthy Clinics. A focus on settings enables comprehensive action in a particular location (school, market and village clinic) to improve health.

The MOH Healthy Islands policy, 2016, provides a strategic direction for the application of primary care as a tool for achieving the vision of healthy islands. This policy is in line with the Framework of Action for Revitalization of Healthy Islands in the Pacific, endorsed by Pacific Health Ministers in 2011.

## 2.5 Decentralisation

The model of care in Vanuatu is influenced by legislation, particularly the Decentralization Act (1994), which provided for the creation of the present six provinces and the devolution of health care service provision (preventive, curative and rehabilitation) to provincial health care administrations. The establishment of an appropriate network of supervision at all levels of health service provision is regarded as an important component of the decentralization of health services<sup>6</sup> which is provided through integrated supervisory visits, clinical supervision and performance management appraisal systems.

**Table 1** below shows the current distribution of facilities by province. Aid Posts are owned and managed by the local community. The Dispensaries and Health Centres listed in the table are government owned and managed facilities. The bracketed numbers refer to facilities that are open<sup>7</sup>.

Table 1: Health Facilities by Province (2016) (Source: VanVis2)

Province	National Referral Hospital	Regional Referral Hospital	Provincial Hospital	Health Centre	Dispensary	Aid Post
TORBA	-	-	1	3	5	24
SANMA	-	1	0 <sup>8</sup>	8 (8)	18 (16)	49
PENAMA	-	-	1	6 (6)	23 (22)	40

<sup>5</sup> Declaration of Alma –Ata, 1978, World Health Organization, (WHO)

<sup>6</sup> Ministry of Health Policies, 2004

<sup>7</sup> MOH, Planning Unit, Health Facilities data set (August 2017)

<sup>8</sup> Northern Provincial Hospital (NPH) designated as Regional Referral Hospital

MALAMPA	-	-	1	9 (9)	19 (18)	47
SHEFA	1	0 <sup>9</sup>	0 <sup>10</sup>	5 (5)	13 (12)	45
TAFEA	-	-	1	4 (3)	13 (11)	40
TOTAL	-	-	6	34 (33)	91 (84)	245

Hospital facilities located in SANMA and SHEFA Province, while maintaining a dual role as provincial hospitals, are shown in their higher designation as regional referral and national referral hospitals respectively.

Further detail on government health policy in regards to devolution of health services, resource allocation and user fees, are described in the *Ministry of Health Policies*, 2004. Reprinted in 2016, this document is still relevant today in describing the Model of Care. These policies indicate a commitment to devolve health service functions to all areas of Vanuatu in accordance with the principles of access, equity and health needs and to pursue preventative health practices as a priority in order to create a more effective health system, a commitment renewed in the recent HSS, 2017- 2020.

In line with this commitment to achieve UHC, the Ministry's policy statement on user fees (2004) states that *"fees, if applied, should not deter an individual's access to services and in particular should not obstruct the development of strong preventive health services"*.

While not to be defined in this policy, the presence of private health care facilities and those run by municipal councils are acknowledged for the support and burden they share within the Model of Care.

Further classification and regulation of services provided by other parties is to be completed by the MOH with relevant partners, so as to ensure that health service provision and standard of care are well regulated and compliant with expected levels of services with mutual support provisions clearly outlined.

### 3. Resources

The following is a list of resources that link to the RDP:

- National Sustainable Development Plan, 2016 - 2030
- *Health Sector Strategy*, 2017 – 2020
- Ministry of Health, Organization Structure, 2017
- Ministry of Health, Role Delineation Policy, 2004
- Ministry of Health, Medical Equipment Donor Policy, 2002
- Draft review of Ministry of Health's Role Delineation Policy undertaken in 2015.
- Village Health Worker (VHW) Scope of Practice, 2016
- *The Competencies Standards and Indicators for Registered Nurses in Vanuatu*, Vanuatu Nursing Council, 2011
- Decentralisation Act (1994)
- Health Committees Act (2003)
- World Health Organization (WHO) Health Resources Availability Monitoring System (HeRAMS) <http://www.who.int/hac/herams/en/>
- *Ministry of Health Policies*, 2004 (re printed 2016)
- Role delineation policies of Solomon Islands, Fiji and Papua New Guinea.
- Employment Act (Consolidated 2006)

<sup>9</sup> Vila Central Hospital (VCH) also acts as Regional Referral for SHEFA / TAFEA Provinces

<sup>10</sup> VCH is provincial Hospital for SHEFA Province

- Public Service Act (Consolidated 2006)
- Public Finance and Economic Management Act
- Financial Regulations (1999)
- Health Practitioners Act
- Mental Health Act
- Nurses Act
- Sale of Medicines Act
- Control of Medical Practice (Joint Regulation)
- Public Health Act

## 4. Definitions

<b>Code of Practice</b>	Level of service delivery expected to be carried out by any individual in accordance with their title as supported through their formal training and registration.
<b>Community Engagement</b>	The process of working collaboratively with groups of people who are affiliated by geographic proximity, special interests, or similar situations with respect to issues affecting their well-being. <sup>11</sup>
<b>Decentralisation</b>	The act of giving the means (through governance framework, structure and resources) for services to be planned and implemented at provincial level
<b>Fixed Site Visit</b>	Visit to a static (permanent) site by a patient for diagnosis or treatment. Fixed sites may result in being considered outpatient (no requirement to stay overnight) or requiring inpatient services.
<b>Functional Space</b>	The spatial requirements within a health facilities based on the services to be provided based on the designation of the facility. Includes the space required for staff to provide health services, and housing for all health equipment.
<b>Home Visit</b>	Home Visits by Medical Personnel are individually designed services to provide diagnosis, treatment and wellness monitoring in order to preserve the participant's functional capacity to remain in his/her own home
<b>Integrated Supervisory Visits</b>	Visits conducted by multiple managers, public health programs and other corporate functions, reviewing administration, public health outputs, essential medicines stocks, infrastructure and equipment states, normally resulting in plans to address administrative or operational support deficiencies or other training and development opportunities for staff.
<b>Model of Care</b>	Broadly defines the way health services are delivered. It outlines best practice care and services for a person, population group or patient cohort as they progress through the stages of a condition, injury or event.
<b>Outreach</b>	Outreach is an activity of providing services to any populations who might not otherwise have access to those services. A key component of outreach is that the groups providing it are not stationary, but mobile; in other words they are meeting those in need of outreach services in the patient's current location.
<b>Primary Health Care</b>	Health care provided in the community for people making an initial approach

<sup>11</sup> Community engagement, p.g. 9 [https://www.atsdr.cdc.gov/communityengagement/pce\\_what.html](https://www.atsdr.cdc.gov/communityengagement/pce_what.html)

	to a medical practitioner or medical facility for advice or treatment
<b>Supportive Supervision</b>	A process of guiding, helping, training and encouraging staff to improve their performance to provide high quality health services. <sup>12</sup>
<b>Supervisory Visits</b>	Visits conducted by managers, national / provincial program staff or appointed supervisors of subordinate officers and facilities, in order to provide supportive supervision, often resulting in provision of additional resources or individual training.
<b>Table of Equipment</b>	The confirmed minimum type and quantity of equipment, considered fixed assets and inventory items, dependent on the designation of the facility.
<b>Universal Health Coverage</b>	Ensuring that all people have access to needed health services (including prevention, promotion, treatment, rehabilitation and palliation) of sufficient quality to be effective while also ensuring that the use of these services does not expose the user the financial hardship.
<b>Village Health Worker Program</b>	The informal health system utilising the Community Care model of care with services provided through volunteer Village Health Workers (VHWs). Managed and implemented by the Ministry of Health at national and provincial levels through Health Promotion Units (HPUs).

## 5. The Policy

In the development and maintenance of Government health services across the full Model of Care, the Ministry is to consider accessibility, services requirements, resource availability; particularly staffing, financing and availability of physical infrastructure, as well as the development of support systems such as supervision, administration, monitoring and communication.<sup>13</sup>

It is not intended for this RDP to govern the provision of health services by private practices. However, any development and provision of health services by external providers, where there is intention to transfer responsibility to the Government of Vanuatu for continued provision of those services or draw on government resources to provide services to the general public, should be done with due consideration to the RDP content.

### 5.1 Accessibility and Classification Criteria

Population catchment figures and locational access criteria for Primary, Secondary and Tertiary Care facilities are detailed in **Appendix A**.

Community Care facilities (I.e Aid Posts) are not owned by the Government of Vanuatu or Ministry of Health however the MOH will provide advice on placement due to management and operations of the VHWP being a MOH responsibility. Considerations for AP site / facility establishment are:

- Land approved to be provided by the community for the purpose of delivery of community health care services under letter of agreement;
- Area big enough to accommodate functional space and outdoor educational areas;
- Meets population catchment and accessibility requirements as per Appendix A;
- Able to link with primary care network;

<sup>12</sup> Supervising Healthcare Services (Improving the Performance of People); JHPIEGO; 2004

<sup>13</sup> Service delivery packages for Solomon Islands primary care services, 2016

- Have a qualified VHW available to carry out services (or intention of the MOH to place a qualified VHW in the location); and
- Have access to reliable means of communications for referral and management services.

Evidence supports the need for a targeted approach to ensuring more equitable delivery of services across provinces. The World Bank's *Community Health Services (CHS) 2016 Expenditure Analysis, Vanuatu* can identify, for populations living in each Province and in Health Zones, the:

- Distribution of health care facilities; and
- Distribution of skilled health workers.

This information will be used by the MOH to identify where resources should be allocated to move to more equitable distribution of health services, informing implementation of the RDP in line with its guiding principles, and any future budget submissions to the Government for payroll, operations and Capital expenditure.

As a minimum, planning changes to services or location of new services, across Primary, Secondary and Tertiary settings, will need to take account of:

- The size of the population for the area to be serviced within a defined catchment area;
- The proximity of the population within the catchment areas and access time to the health facility;
- Clear identification of those areas within the catchment area that may be in need of outreach services;
- Ease of access to the next level of care taking into account remoteness and mode of transport available; and
- Infrastructure and equipment available to ensure exchange of information between facilities and support to timely referrals or outreach requirements.

Before any health facility is established or upgraded, the site/facility is to be checked against the following list of requirements:

- Land is State land OR has a valid lease agreement OR has an agreement to lease OR discussions have started to have a lease established;
- Size of land parcel available is sufficient to support the intended facility;
- Application of standards and considerations as outlined in Appendix A;
- Modes of transport available to access facility from within catchment area;
- Ability to link with higher health network through different modes of air, sea or land transport without major infrastructure development;
- Access to reliable water supply or ability to access water resources with minor works;
- Located in a manner so that the safety and security of staff, their families and possessions are not at risk;
- Access to suitable staff housing in the community or ability to construction staff housing within the health facility boundary without major modification;
- Access to reliable means of communication;
- Ability to link with existing power supply or have access to alternate power supply;

- Vulnerability to climate change risk or natural disaster;
- Ability to provide gender protection in the delivery of services through location or associated infrastructure; and
- Ability to accommodate inclusive design requirements.

For any new facility to be established or any existing facility to be upgraded (or downgraded), the MOH is to carefully consider the ensuing effect on health services, financial support requirements and HR planning, and to obtain an approval through an established health facilities management framework.

Health Zones are to be clearly defined and, where possible, align with Area Council delineations. In all cases, zoning is to utilise clearly identifiable features or existing boundaries, such as coastlines, water tributaries, or ridgelines in order to delineate zones.

Health zones, facilities and services provided at each are to be mapped geographically and up to date records held for access by MOH and external partners. Health facilities are to have unique identifiers, be reflected by classification name and level, and have correct information held relating to facility name, health zone, functional space available, equipment available and human resources posted.

## 5.2 Health Services

Each level of service includes the services of the level below it but adding a higher level of complexity of care. An effective referral and follow-up system between levels of care is needed to ensure that appropriate care is available wherever it is required, and linked, where necessary, to other levels of care. For example, it is important for maternal survival, since timely linkage to referral-level obstetric care is necessary to reduce maternal mortality.<sup>14</sup>

The service packages to be delivered by each facility are detailed in **Appendix B1 and B2** for primary care services and core requirements and **Appendix B3** for hospital facilities for hospital services and core requirements respectively.

These service packages are designed to encourage links between services, for example, communicable disease programs Vector Borne Diseases (VBD), Tuberculosis (TB), Sexually Transmitted Infection (STI), Neglected Tropical Diseases (NTD)) and Environmental Health (EH) activities; and links between reproductive health, maternal, newborn and child and adolescent care.

Mechanisms such as Integrated Supervisory Visits (ISVs) and programs such as the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) and the Integrated Management of Childhood Illnesses (IMCI) program are mechanisms for achieving service integration.

Within Hospital Services tiered capabilities are more evident within allied, medical and dental health services due to the reduced numbers of facilities across the country, which have an effect on skilled human resources, and both functional space and equipment requirements.

## 5.3 Staffing Standards

Staffing standards are determined on the basis of the:

- The types of services to be provided different levels of health facility;

---

<sup>14</sup> *Continuum of care for maternal, newborn, and child health: from slogan to service delivery*, Lancet 2007; 370: 1358–69, K J Kerber MPH, J E de Graft-Johnson MD, J E Lawn MRCP.



- Limitations of code of practice for each level of health professional; and
- Expectations for mobile outreach and supervision.

For Primary Care facilities, staff requirements are summarized in **Table 2** below. A detailed description of the staffing requirement for all facilities and relevant code of practice as it relates to health services is provided in **Appendix C1**.

*Table 2: Staffing Levels and Primary Care Facilities*

Facility	Required staffing
Aid Post	Village Health Worker <sup>15</sup>
Dispensary	Registered nurse Nurse Aide
Remote Dispensary	Midwife Nurse Aide
Health Centre	Nurse Practitioner Midwife Registered Nurse Nurse Aide Handy man and Driver
Enhanced Health Centre	<i>As for Health Centre, plus:</i> Rural Physician

Within Secondary and Tertiary facilities the planning is more complex and needs to consider patient loading, bed availability, occupancy rates and services provided at the facilities in question. As such, minimum staffing levels have not been defined for Hospitals, however planning information has been included at **Appendix C2** for future use in workforce planning.

Based on 2015 population and workforce data, Vanuatu has a ratio of 14.6 skilled health workers (doctors, registered nurses and mid-wives) to 10,000 population (Health Sector Strategy, Ministry of Health, 2017), which is well below the recommended World Health Organization (WHO) ratio of 24 skilled health workers to 10,000 population. Recently, WHO has revised this to 44.5 skilled health workers to 10,000 population, however caveats remain that these density figures need to be considered in the context of the country. It is estimated that a ratio of 38.16 skilled health workers to 10,000 population, based on population projections for 2030, would be required to meet the skilled health worker requirements of this Role Delineation which is aligned to the MoH's Organizational Structure for 2017 – 2030.

The Ministry aims to increase its skilled health workforce, including a target of 24 skilled health workers to 10,000 population by 2020 (HSS, 2017). The resources needed to achieve this increase indicate some extra 265 skilled health workers would be needed to achieve the target of 24 to 10,000 based on current workforce data and population figures<sup>16</sup>. It is vital then that resources are allocated where they are most needed to ensure more equitable access to health services within provinces and nationally for the period 2017 – 2025.

## 5.4 Functional Space

Functional space is determined on the basis of:

<sup>15</sup> A VHW is appointed by the local community to provide informal care. The Ministry provides training and some equipment and supplies.

<sup>16</sup> Estimates provided by World Bank, based on Ministry of Health workforce data (Source FMIS, 2017)

- Services to be delivered,
- Number of staff operating within facility,
- Equipment and utilities required to provide services, and
- Physical planning data, workflow and ergonomics.

All functional space designed for new construction, extension, renovation and repair of health facilities is to consider (at minimum):

- Efficient work flow practices, particularly minimizing time lag for patients to be seen by health professionals,
- Compliance with national standards, or regional standards where national standards do not exist,
- Inclusive design criteria for both health services provider and patients and be respective of patient privacy,
- Protection of patients in the care of health workers within the boundary of a health facility, particular those vulnerable groups which could be at threat from continued domestic violence, gender-based violence or other violent or sexual assault, and
- Safety provided to staff from hazards, disasters and other threats.

#### 5.4.1 Community Care Facilities

Aid Posts are not owned or managed by the Government however they do provide functional space for the VHWs to provide health services to the community. Where dedicated space is not provided, VHWs can utilise space available at schools, FBO facilities and within other community infrastructure. Minimum standards for function are:

1. Ability to consult individual or accompanies patients in secure environment.
2. Ability to provide minor treatment and advice in a private area.
3. Ability to store pharmaceuticals and equipment.

#### 5.4.2 Primary Care Facilities

Based on the health services to be provided at each level of community and primary care, a functional space list (**Appendix D1**) has been provided for consideration of special requirements for inclusion in future standardised designs.

Dispensaries, Remote Dispensaries, Health Centres and Enhanced Health Centres are expected to meet the following support infrastructure requirements in addition to minimum standards for functional space requirements –

- Water supply - tanks, standpipe or mains supply, with piped water and hand washing facilities in all clinical areas.
- Waste Management – ability to manage grey, brown and biomedical waste on site of have access for removal and back-loading to suitable disposal sites
- Power supply for fridge, lighting and staff housing – solar, standby generator and / or mains.
- Suitable sanitation arrangements to support the requirements of the facility, including a septic pit for disposal of placentas etc where relevant.
- Security fencing with a gate. Fence should be adequate to protect staff and buildings.

- Good ventilation and temperature control achieved by means of site selection and the orientation, design and construction of the facility.
- Insect screening to all areas.
- Good lighting (preferably solar) in all clinical areas.
- Staff housing – houses of standard design (including water tank, power and lighting), to reflect required staff numbers.

### 5.4.3 Secondary and Tertiary Care Facilities

Based on the health services to be provided at each level of secondary and tertiary care facilities, a functional space list (**Appendix D2**) has been provided for consideration of special requirements for inclusion in future designs.

The policy will not prescribe a standardised design, noting that review of the existing infrastructure and addressing gaps will need to be site specific. The guidelines provided at **Appendix E1 and E2** define minimum standard requirements for all facilities by type and are not to be taken as maximum functional space areas or restrictive for those facilities where additional space is required.

This is because capacity, and therefore the size of larger health facilities, needs to be determined on a more individual basis and will depend on the demand for services at each site across the country. This means assessing actual and likely levels of utilisation, which usually links directly to the size of the catchment population and the range of services available at the health facility.

Further work may be done by the MOH in order to develop standardised designs for all levels of health facilities and show progressive, modular modification to allow for upgrading of facilities as is required from time to time.

In addition to support infrastructure considerations listed above for primary care facilities, the following should be available:

- Water supply - Dedicated storage, treatment (where required) and reticulation to all essential services.
- Storage – dedicated storage for supply management and consumable support services.
- Waste Management – Contained treatment for medical waste (including laboratory reagents), separated septic or waste treatment system and biomedical hazardous waste disposal facilities.
- Power supply – dedicated power supply with standby available.
- Security fencing with a gate. Fence should be adequate to protect staff and buildings.
- Good ventilation and temperature control achieved by means of site selection and the orientation, design and construction of the facility.
- Insect screening to all areas.
- Adequate Cyclone protection for all essential services.
- Good lighting (preferably low power energy efficient) for provision in all clinical and administration areas.
- Staff housing – houses of standard design(s) (including water tank, power and lighting), to reflect required staff numbers.

## 5.5 Equipment

Equipment to be provided at each level of health facility has been determined based on:

- The health services to be provided at the facility level
- The requirement for outreach services from the health facility
- The number of health professional and trained state for the provision of services and utilization of equipment
- Functional space available for safe and proper storage of the equipment
- Sustainability of the equipment type through supply systems of the MOH
- Reduced lines of supply from external organisations
- Configuration management, cannibalization and interchangeability of parts and powering systems

Within Primary Care, Tables of Equipment (ToE) have been defined for each level of health facility in **Appendix F1** and are reflective of minimum standards of equipment required to deliver the health services at each level. The numbers of items required may need to be expanded in some cases for larger facilities with additional staff.

Additional specifications for equipment have been included to assist the MOH with future procurement requirements and, where warranted, preferred branding has been annotated.

For Primary Care facilities, additional non-medical equipment lists are included, such as the provision of transport, furniture, bedding, storage, computing systems, power systems and cleaning equipment. This list is not exhaustive however should also be referred to for a minimum holding at each Primary Care facility.

For Secondary / Tertiary Care facilities the listing of non-medical items is more complex, due to the fact that facilities are not standardised. While there are some items listed which provide additional utility to the provision of health services, the listing is not exhaustive and should be developed specific to each facility and the services that are provided.

As such, **Appendix F2** focuses on defining minimum medical equipment that should be available at different levels of hospitals without defining branding or developing additional specifications for future procurement. The minimum number has not been prescribed as this is dependent on service capacity required, staffing and functional space with support infrastructure which should be sit specific.

Any specifications of medical equipment should be confirmed prior to procurement as described by any relevant medical service strategies or Capital procurement plans.

Future work may be conducted by the MOH towards standardising the naming of all equipment (medical and non-medical) in line with regional or international naming standards so as to improve purchasing, inventory and asset management, and repair parts / maintenance systems.

## 5.6 Supervision and Monitoring

Supervision of health professionals, monitoring of health services provided in accordance with code of practice and communications to and from provinces are all important components of managing

quality health service delivery. While important at all levels, within hospital settings, supervision and monitoring is a requirement for maintaining and up-to-date Quality Management System (QMS).

Within the Primary Health Care space, supportive supervision objectives are:

- To improve the consistency and standard of PHC delivery at health facilities; and
- To improve accountability between levels of care and health service management;
- To improve community trust in PHC services, through increased communal engagement and utilization;
- To provide timely and actionable feedback to health workers on PHC delivery and areas for improvement; and
- To provide follow up support on actions and areas for improvement.

Irrespective of the programme or level of care, supervision should support the delivery of health services that are safe, effective, timely, efficient, equitable and people-centred<sup>17</sup> which are the principles of care (**Refer to Table 3**).

*Table 3: Principles of Care*

Requirement	Description
Safe	Delivering health care which minimises risks and harm to service users, including avoiding preventable injuries and reducing medical errors
Effective	Providing services based on scientific knowledge and evidence-based guidelines
Timely	Reducing delays in providing/receiving health care
Efficient	Delivering health care in a manner which maximises resource use and avoids wastage
Equitable	Delivering health care which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location or socioeconomic status
People-centered	Providing care which takes into account the preferences and aspirations of individual service users and the cultures of their communities

Principles to be followed in the conduct of regular supervision and monitoring are as follows:

- Managers at all levels are to conduct proactive management of subordinates for collective agreement of performance targets, professional development requirements, and performance assessment against targets.
- The chain of command within the unit / departmental or directorate structure is to be respected at all times throughout the conduct of supervision and / or monitoring activities.
- Regular supervisory contact is to be made between superior and subordinates, for understanding on health service gaps and recommended solutions.
- Professional development of individuals or groups, through range of learning and development opportunities, are to be encouraged and supported by the organisation.

<sup>17</sup> Tuncalp, O, Were, WM, MacLennan, C, Oladapo, OT, Gulmezoglu, AM, Bahl, R, Daelmans, B, Mathai, M, Say, L, Kristensen, F, Temmerman, M, Bustreoc, F, 2015. Quality of care for pregnant women and newborns—the WHO vision. BJOG 2015;122:1045–1049.

- Supervisors are to maintain a professional relationship with subordinates regardless of sex, religious beliefs, employment status or otherwise.
- Supervisory frameworks are to be established and supervision activities to be well planned, well integrated with multiple programmes (where possible) and reflective of contextual review requirements for systems strengthening.
- Supervisory visits to primary care facilities are to be conducted on a 6-monthly basis, wherever possible, gathering information on health services provided, routine management services and itemized deficiencies as mapped against the RDP, staff code of conduct and other legislative or regulatory requirement.
- At PHC level, the zonal health centre in-charge should be engaged in supportive supervision visits to PHC facilities within his/her catchment area.
- Supervisory visits and monitoring activities are to be recorded and submitted to the appropriate level for oversight, action and archiving.
- QMS within hospital facilities are to be up-to-date, maintained with designated officers responsible for reporting on health services on at least an annual basis.
- Where endorsed by the relevant Director, external agencies may provide additional supervision and monitoring of health services provided, with subsequent reporting for recommended action by the MOH for systems strengthening.

**APPENDIX A:**  
**ACCESSIBILITY AND CLASSIFICATION LEVELS**

## APPENDIX A: ACCESSIBILITY AND FACILITY CLASSIFICATION LEVELS

Level	Name of Facility	Abbreviation	Classification Description
6	Aid Post	AP	<p>An Aid Post is a facility established for the provision of Community Care within a health zone:</p> <p>Planning Baseline:</p> <ul style="list-style-type: none"> <li>• Catchment population = 100 – 300 people</li> <li>• 80% of people in the catchment area can access the facility within 30mins (by the most common mode of access eg walking, paddling, truck etc)</li> <li>• Access to Dispensary <b>may</b> require land or sea transport services (Transport assets not held at AP level)</li> <li>• Not responsible for supervision of any other health facilities or health workers</li> </ul>
5a	Dispensary	D	<p>A Dispensary is located within a health zone and has direct oversight of Aid Posts within its population catchment.</p> <p>Planning Baseline:</p> <ul style="list-style-type: none"> <li>• Local catchment population = 300 – 2,000</li> <li>• 80% of people in the catchment area can access the facility within one hour (By the most common mode of access eg walking, paddling, truck etc)</li> <li>• Access to next highest health facility within 1-4 hours (By the most common mode of access)</li> <li>• May be varied (ie for smaller population or less activity)</li> <li>• Responsible for oversight of Aid Post and Village Health Workers (VHWs)</li> </ul>



5b	Remote Dispensary	RD	<p>A Remote Dispensary is located within a health zone and has direct oversight of Aid Posts within its population catchment. It is remote in nature due to the time and method of travel required to access the next highest level of health care.</p> <p>Planning Baseline as for Dispensary level except:</p> <ul style="list-style-type: none"> <li>• Access to next highest health facility within 2-4 hours (By the most common mode of access)</li> </ul>
4a	Health Centre	HC	<p>A Health Centre is located within a health zone and has direct oversight of Dispensaries within its population catchment.</p> <p>Planning Baseline:</p> <ul style="list-style-type: none"> <li>• Catchment population = 2000-5000 population including referral catchment</li> <li>• 80% of people in the catchment area can access the facility within 4 hours (by the most common mode of access eg walking, paddling, truck etc)</li> <li>• People in the catchment area would need to travel four (4) hours or more (by the most common mode of access eg walking, paddling, truck etc) to visit an alternative HC or Hospital Facility.</li> <li>• Responsible for supervision of any Dispensaries within Health Zone OR provide oversight for Aid Post facilities where there is no established Dispensaries within the Health Zone.</li> <li>• May be varied (ie for smaller population or less activity) if travel time to nearest EHC or provincial hospital is more than four (4) hours or area is often isolated</li> </ul>
4b	Enhanced Health Centre	EHC	<p>As for a Health Centre for all details, except:</p> <ul style="list-style-type: none"> <li>• Catchment population may be larger</li> <li>• May have other Health Centres within the same Health Zone</li> <li>• May have extended time to travel to access the next higher level facility</li> </ul>

3	Provincial Hospital	PH	<p>Each province is to have a Provincial Hospital (PH) established within the Provincial boundaries.</p> <p>Planning Baseline:</p> <ul style="list-style-type: none"> <li>• Catchment Population = Provincial population</li> <li>• Responsible for referral from all Health Centres and Enhanced Health Centres within Province</li> <li>• All referral cases can access the facility from a Health Centre or Enhanced Health Centre, within 4 hours (by the most common mode of access eg walking, paddling, truck, boat etc) under non-emergency situation.</li> <li>• Priority (emergency) referral cases can reach the hospital within one (1) hour from Provincial Hospital utilising most expedient form of transport</li> <li>• Has access to airfield within 30 mins land transport from hospital location for fixed wing and rotary wing aircraft</li> </ul>
2	Regional Referral Hospital	RRH	<p>A Regional Referral Hospital (RRH) is located centrally to multiple provinces.</p> <p>Planning Baseline:</p> <ul style="list-style-type: none"> <li>• Catchment Population = Up to 4 Provincial population(s)</li> <li>• Responsible for referral from up to four (4) provincial hospitals</li> <li>• All referral cases can access the facility from Provincial Hospital, within 4 hours (by the most common mode of access eg walking, paddling, truck, boat etc) in non-emergency</li> <li>• Priority (emergency) referral cases can reach the hospital within one (1) hour from Provincial Hospital utilising most expedient form of transport</li> <li>• Has access to airfield within 30 mins land transport from hospital location for fixed wing and</li> </ul>

			rotary wing aircraft
1	National Referral Hospital	NRH	<p>National Referral Hospital is located close to the main transport hub of Vanuatu for domestic and international flights.</p> <p>Planning Baseline:</p> <ul style="list-style-type: none"> <li>• Catchment Population = Vanuatu population</li> <li>• Responsible for referral from all Regional Referral Hospitals within the country and for provision of other specialised allied health and clinical services</li> <li>• All referral cases can access the facility from a Regional Referral Hospital, within 4 hours (by the most common mode of access eg walking, paddling, truck, boat, air etc) under non-emergency situation.</li> <li>• Priority (emergency) referral cases can reach the hospital within one (1) hour from Regional Referral Hospital utilising most expedient form of transport.</li> <li>• Has access to airfield within 30 mins land transport from hospital location for fixed wing and rotary wing aircraft. Has ability for emergency rotary wing landing within Hospital grounds</li> </ul>

**APPENDIX B:**  
**HEALTH CARE SERVICES**

## PRIMARY CARE FACILITIES

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
<b>Basic care</b>	<ul style="list-style-type: none"> <li>- Conduct minor examinations of common diseases, referring clients with signs and symptoms indicative of more serious or complex conditions to a Dispensary or Health Centre (or a Hospital – in emergency situations only).</li> <li>- Clean and dress wounds.</li> <li>- Treat sores, and other common conditions.</li> <li>- Provide basic counselling to clients (as required and training allows).</li> <li>- Administer CPR</li> </ul>	<p>As for Aid Posts plus:</p> <ul style="list-style-type: none"> <li>- IV antibiotic treatment and fluid replacement</li> <li>- Outpatient clinical services to treat common illnesses and injuries</li> <li>- Observation, stabilization and referral of cases to a Health Centre or directly to a hospital</li> <li>- Minimal in-patient care for cases that need observation in first 24-48 hours of treatment before sending home or awaiting transfer to higher level of care</li> <li>- Minor operative procedures – including primary suturing, incision of abscess, removal of foreign bodies, splints.</li> </ul>	<p>As for Dispensaries plus:</p> <ul style="list-style-type: none"> <li>- Inpatient care for maternity care services</li> <li>- Stabilisation and quick referral of life-threatening cases such as emergency obstetric conditions</li> </ul>	<p>As for Dispensaries plus:</p> <ul style="list-style-type: none"> <li>- Inpatient care for medical, surgical, paediatric and maternity care services</li> <li>- Specialized care through outreach/mobile specialists – including eye specialists, Ear, Nose and Throat (ENT), dentists, and obstetric &amp; gynaecological care</li> <li>- Stabilisation and quick referral of life-threatening cases such as emergency obstetric conditions, trauma, fracture, head injuries, heart attack, bleeding, acute abdominal pain</li> <li>- Minor operative procedures, including primary suturing, incision of abscess, removal of foreign bodies, splints.</li> </ul>	<p>As for Health Centres plus:</p> <ul style="list-style-type: none"> <li>- Triage, assessment, diagnosis, basic treatment, referral and follow-up of patients presenting with medical conditions.</li> <li>- Transfer of patients requiring urgent care to Hospital ED or Emergency Medicine specialist.</li> <li>- Short term holding of patients requiring asthma treatment (nebuliser)</li> <li>- Reporting of communicable diseases and initiation of follow-up.</li> </ul>

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
<b>Health promotion</b>	<ul style="list-style-type: none"> <li>- Promotion of healthy behaviours through distribution of Information, Education and Communication (IEC) materials, school and village health talks and inspections and assisting implementation of healthy settings (schools, villages) through Healthy Islands policy.</li> <li>- Identification of community development needs for health through community mapping</li> <li>- Establishment of community health development plans to address needs, including 'development for health improvement' project ideas for further assessment by Area Nurse.</li> <li>- Monitor community health, trends and emerging diseases.</li> <li>- Provide risk communications for disaster response</li> </ul>	<p>As for Aid Posts</p> <ul style="list-style-type: none"> <li>- Work with and support Village Health Workers to provide health promotion/education services to community and to develop community health development plans.</li> </ul>	As for Dispensaries	<p>As for Remote Dispensaries plus:</p> <ul style="list-style-type: none"> <li>- Support Dispensaries in reinforcing healthy behaviors – school visits/ one to one health education</li> </ul>	As for Health Centres

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
<b>Communicable diseases</b>	<ul style="list-style-type: none"> <li>- Information, Education and Communication (IEC) on early identification and referral to a Dispensary or Health Centre for treatment of endemic diseases (e.g. malaria, diarrhoea, others)</li> <li>- Mobilise community members for routine nurse-administered health services such as vaccinations.</li> <li>- Support the work of visiting public health staff and teams, eg the Malaria team in routine distribution of malaria insecticide treated bed nets.</li> </ul>	<p>As for Aid Posts plus:</p> <ul style="list-style-type: none"> <li>- Diagnosis and treatment of malaria and TB, or referral to Health Centre.</li> </ul>	As for Dispensaries	<p>As for Dispensaries, plus:</p> <ul style="list-style-type: none"> <li>- Enhanced level of treatment of malaria and TB.</li> </ul>	<p>As for Health Centres</p> <ul style="list-style-type: none"> <li>- Enhanced level of diagnosis and treatment of all communicable diseases (within scope of practice)</li> <li>- Onwards referral of CD patients to hospital level</li> </ul>
<b>Environmental Health</b>	<ul style="list-style-type: none"> <li>- Education and support to community based activities which seek to break the faecal-oral transmission of disease, which cause acute diarrhoea, infestation of gut and other parasites and which contribute to stunting in children.</li> <li>- Health facility safe waste disposal and management.</li> <li>- Outreach environmental activities including</li> </ul>	<p>As for Aid Posts plus:</p> <ul style="list-style-type: none"> <li>- Education and support to community based activities which seek to break the faecal-oral transmission of disease, which cause acute diarrhea, infestation of gut and other parasites and which contribute to stunting in children.</li> <li>- Health facility safe waste disposal and management</li> </ul>	As for Dispensaries	As for Dispensaries	As for Health Centres

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
	organization of village clean ups and maintenance.	- Outreach environmental activities – support village clean ups and maintenance through Aid Posts.			
<b>STI/HIV</b>	<ul style="list-style-type: none"> <li>- Information, Education and Communication (IEC) on prevention of STI/HIV infections to promote behavioural change and to promote advocacy on STI/HIV by community leaders.</li> <li>- Access to free condoms</li> </ul>	As for Aid Posts plus: <ul style="list-style-type: none"> <li>- Treatment of STI's and detection of HIV</li> <li>- Post – exposure prophylaxis (PEP) for STI and HIV infections</li> </ul>	As for Dispensaries	As for Dispensaries	As for Health Centres
<b>Reproductive health (Including sexual Violence)</b>	<ul style="list-style-type: none"> <li>- Information, Education and Communication (IEC) on family planning.</li> <li>- Provision of condoms and referral to Dispensary for other contraceptives, for eg. IUD insertion, Jadelle insertion</li> </ul>	As for Aid Post plus: <ul style="list-style-type: none"> <li>- Provision of contraceptives, IUD insertion and Jadelle insertion</li> <li>- Emergency contraception</li> </ul>	As for Dispensaries	As for Dispensaries	As for Health Centres: <ul style="list-style-type: none"> <li>- Conduct of assessment using Sexual Assault Kits (SAK) and interaction with authorities for administration of positive confirmations.</li> </ul>
<b>Ante natal care</b>	<ul style="list-style-type: none"> <li>- Early identification of pregnancy in community.</li> <li>- Advice, early referral to Dispensary or Health Centre and follow-up, including nutritional</li> </ul>	As for Aid Post plus: <ul style="list-style-type: none"> <li>- Antenatal care: assess pregnancy, birth and emergency plan, respond to problems (observed and/or reported), advice on</li> </ul>	As for Dispensaries plus: <ul style="list-style-type: none"> <li>- Manage risk pregnancy</li> </ul>	As for Remote Dispensaries	As for Health Centres



Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
	information and support.	nutrition & breastfeeding, self-care and family planning, preventive treatment as appropriate. - Supplementation of iron folic acid			
<b>Intra-partum Care</b>	- N/A	As for Aid Post plus: - Skilled care during childbirth for clean and safe normal delivery - Some higher risk deliveries in remote areas where a mid-wife is assigned. - Basic emergency obstetric care (BEOC): parenteral antibiotics + oxytocic/anticonvulsant drugs + manual removal of placenta + removal of retained products with manual vacuum aspiration (MVA) + assisted vaginal delivery 24/24 & 7/7 - Management of post- partum hemorrhage, undiagnosed twins or breech delivery, and referral for post abortion care.	As for Dispensaries	As for Health Centre	As for Health Centres
<b>Post partum</b>	-Information and counselling on	As for Aid Post plus:	As for Dispensaries plus	As for Remote Dispensaries	As for Health Centres

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
	<p>self-care (nutrition and safe sex, good rest, less work), family planning, birth spacing, exclusive breastfeeding, recognition of danger signs including blues and depression, domestic sexual violence, use of malaria (ITN) nets</p> <p>To provide home visit to provide above services for both newborn and mothers</p>	<ul style="list-style-type: none"> <li>- Postpartum care: Home visit integrated with newborn, outreach and facility visit:</li> <li>- examination of mother and newborn (up to 6 weeks), respond to observed signs, referral of complications, support breast feeding, promote family planning</li> </ul>	<ul style="list-style-type: none"> <li>- Immediate and emergency care for newborn babies</li> </ul>		
<b>Newborn Care</b>	<p>Promotion and support for :</p> <p>Exclusive breastfeeding, thermal care, infection prevention by hand washing, general hygiene, safe disposal of baby's faeces.</p> <p>Recognition of Newborn danger signs and problems and timely care seeking</p> <p>Care for small babies, breastfeeding, skin to skin contact</p> <p>Prevention of indoor air pollution</p> <p>Birth registration</p>	<p>As for Aid Posts:</p> <ul style="list-style-type: none"> <li>- Home visit integrated with mothers,</li> <li>- Essential newborn care: basic newborn resuscitation + warmth (recommended method: Kangaroo Mother Care) + eye prophylaxis + clean cord care + early and exclusive breast feeding 24/24 &amp; 7/7</li> </ul>	As for Dispensaries	As for Remote Dispensaries	As for Health Centres

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
<b>Child health (0-5)</b>	<ul style="list-style-type: none"> <li>- Continue support with feeding, promoting exclusive breast feeding for at least 6 months.</li> <li>- Promotion of immunisations, including: community awareness of vaccine-preventable diseases (in accordance with national immunisation schedule); and community mapping for identification and mobilisation of eligible children ahead of immunisation visits.</li> <li>- Conduct minor examinations of common childhood illnesses including: respiratory infection (pneumonia), fever and infection, gastroenteritis including diarrhoea, malnutrition and anaemia referring those with signs and symptoms indicative of more serious or complex conditions to a Dispensary or Health Centre (or a Hospital – in emergency situations only).</li> <li>- Ongoing child growth monitoring and referral to higher levels as</li> </ul>	<p>As for Aid Posts, plus:</p> <ul style="list-style-type: none"> <li>- Infant and Young Child Feeding (IYCF) (breastfeeding &amp; complementary feeding) counselling including promotion of breast feeding for 6 months.</li> <li>- Routine immunization through the Enhanced Program of Immunization (EPI) against all national target diseases - functioning cold chain in place.</li> <li>- Integrated management of childhood illness (IMCI) to identify common childhood illnesses including: respiratory infection (pneumonia), fever and infection, gastroenteritis including diarrhea, malnutrition and anemia, integrated with distribution of insecticide-treated bednets</li> <li>- Management and referral for treatment of endemic childhood illnesses if medical complications.</li> </ul>	As for Dispensaries:	As for Remote Dispensaries	As for Health Centres

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
	<p>appropriate.</p> <ul style="list-style-type: none"> <li>- Screening for early detection of acute malnutrition - Middle upper arm circumference (MUAC) and oedema - referring those with moderate and severe acute malnutrition (SAM) with medical complications.</li> </ul>				
<b>Child and adolescent health (5 – 17)</b>	<ul style="list-style-type: none"> <li>- All of the above, with the exception of services relevant to children under 5, for example infant and young child feeding.</li> <li>- Promotion of healthy behaviours through Information, Education and Communication (IEC) to prevent injury; increase road safety; and increase sexual and reproductive health.</li> </ul>	As for Aid Posts	As for Dispensaries	As for Remote Dispensaries	As for Health Centres
<b>Food and nutrition</b>	<ul style="list-style-type: none"> <li>- Basic nutrition guidance to individuals, particularly those at risk of undernutrition, and community. At risk groups include: iron deficiency in</li> </ul>	As for Aid Posts	As for Dispensaries	As for Remote Dispensaries	As for Health Centres

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
	<p>pregnant and breastfeeding women; early and exclusive breastfeeding (up to 6 months); transition of breastfeeding to complimentary feeding.</p> <ul style="list-style-type: none"> <li>- Support community planning and activities which promote optimal nutrition, especially for pregnant women, infants and children.</li> </ul>				
<b>Non Communicable Disease</b>	<ul style="list-style-type: none"> <li>- Provide basic care and support, and promote self-care for people affected by NCD and chronic conditions.</li> <li>- Identify and refer severe cases for treatment, provide needed follow up to people with chronic health conditions and disabilities and discharged by facility based health services. (NCD may include, diabetes, cardiovascular disease, mental health, oral health, eye health, drugs and substance abuse, violence and road injuries).</li> </ul>	<p>As for Aid Posts plus:</p> <ul style="list-style-type: none"> <li>- Surveillance of risk factors and signs/symptoms, through basic NCD screening to include: blood pressure; height; weight; waist; BMI; and counselling.</li> <li>- Injury care and mass casualty management</li> <li>- Treat and manage NCD's, including diabetes and hypertension in accordance with Package Essential Interventions (PEN)</li> <li>- Provide basic care for mental health.</li> </ul>	As for Dispensaries	<p>As for Dispensaries plus:</p> <ul style="list-style-type: none"> <li>- Provide outpatient clinic for people with mental health illness.</li> </ul>	<p>As for Health Centres, plus:</p> <ul style="list-style-type: none"> <li>- Administration of anti-psychotics for at risk patients</li> </ul>

Health Domain	Aid Post (Level 6)	Dispensary (Level 5a)	Remote Dispensary (Level 5b)	Health Centre (Level 4a)	Enhanced Health Centre (Level 4b)
<b>Provision of essential medicines</b>	<ul style="list-style-type: none"> <li>- Working knowledge of approved essential medicines list for Aid Posts, and a working knowledge of how to administer each item (including a knowledge of "from where to source guidance").</li> <li>- Storage, stock take, drugs order</li> <li>- Aseptic technique for equipment and disposable medication, sharps and rubbish</li> </ul>	<p>As for Aid Posts, including:</p> <ul style="list-style-type: none"> <li>- Working knowledge of approved essential medicines for Dispensaries, and a working on knowledge of how to administer each item</li> </ul>	As for Dispensaries	As for Remote Dispensaries	As for Health Centres

## APPENDIX B2: PRIMARY CARE FACILITY CORE REQUIREMENTS

### *Aid Post*

Area	<i>Core requirements to support service delivery</i>
<b>Referral</b>	<p>Village Health Workers are trained to understand the limitations of their skills and experience and the boundaries of their scope of practice. They are required to assess clients, and recognize when their signs and symptoms are beyond their capacity of training?. Village Health Workers are required to refer clients with more complex conditions to a Dispensary or Health Centre (or a Hospital – in emergency situations only)</p> <p>Sometimes the Village Health Worker will be required to personally escort the client to the health care facility. However in most cases, the Village Health Worker will prepare a referral letter for the client or family member to take to the next health facility to present to the nurse. The nurse should always provide written feed back to the Village Health Worker on the true diagnosis and treatment, and if more follow up is required.</p>
<b>Facility management and administration</b>	<p>It is the responsibility of both the Aid Post Committee and the Village Health Worker to engage with the community for participative maintenance of the Aid Post building and surrounding grounds. In addition to this, the Village Health Worker has a responsibility to maintain the cleanliness and orderliness of the Aid Post on a day-to-day basis. A brief summary of the functions detailed in the VHW Scope of Practice is provided below.</p> <ul style="list-style-type: none"> <li>- Be familiar with the MOH Village Health Worker Scope of Practice and the Village Worker Health Worker Program Aid Post Manual.</li> <li>- Manage Information / data collection activities relating to Health Information Systems (HIS) activities.</li> <li>- Maintain a daily logbook of client / patient contacts.</li> <li>- Under the direction of the Aid Post Committee record and manage funds collected for patient treatment or through community fund raising in support of the Aid Post.</li> <li>- Manage drug orders</li> <li>- Provide secretarial support to the Aid Post Committee.</li> </ul>

## Dispensary

Area	Core requirements to support service delivery
<b>Referral</b>	<ul style="list-style-type: none"> <li>- Required to refer clients with more complex conditions to a Health Centre (or a Hospital – in emergency situations only).</li> <li>- In most cases, will prepare a referral letter for the client or family member to take to the next health facility to present to the nurse and will arrange an escort as needed.</li> </ul>
<b>Facility management and administration</b>	<ul style="list-style-type: none"> <li>- Be familiar with MOH policies, procedures and processes and public service staff guidelines.</li> <li>- Manage the resources of the facility, establishing and maintaining an inventory of all equipment, furniture and supplies.</li> <li>- Monitor use of medicines and other supplies and initiate re-ordering.</li> <li>- Maintain clinic standards for hygiene, water and sanitation.</li> <li>- Submit consolidated monthly reports of services provided and activities conducted; tally and analyse monthly data on health services provided, for example, review of consultations (“health information” includes the Monthly Malaria Line List report and the Enhanced Program for Immunisation statistics)<sup>18</sup>,</li> <li>- Supervise the nurse aid to keep records, monitor and report on the use of clinic fees to Health Committee.</li> <li>- Conduct regular meetings with Health Committee to discuss community support for dispensary.</li> <li>- Submit quarterly reports to Supervisor (zone nurse or provincial health manager), and ask for feedback and discussion on reports.</li> <li>- Ensure community is informed of Dispensaries operating hours and services.</li> </ul>
<b>Supervision</b>	<ul style="list-style-type: none"> <li>- Supervises Nurse Aid</li> <li>- Visits Aid Post Village Health Worker at least every 6 months to provide supervision and provides on call support.</li> <li>- Should receive at least two supervisory visits from provincial health manager per year.</li> </ul>

---

- <sup>18</sup> Currently, quite a few public health programs collect their data separately including Neglected Tropical Diseases, and TB. These health data collection activities will be potentially be integrated in 2018.



### ***Remote Dispensary***

<b>Area</b>	<b><i>Core requirements to support service delivery</i></b>
<b>Referral</b>	<ul style="list-style-type: none"> <li>- Required to refer clients with more complex conditions to a Health Centre (or a Hospital – in emergency situations only).</li> <li>- In most cases, will prepare a referral letter for the client or family member to take to the next health facility to present to the nurse and will arrange an escort as needed.</li> </ul>
<b>Facility management and administration</b>	<ul style="list-style-type: none"> <li>- Be familiar with MOH policies, procedures and processes and public service staff guidelines.</li> <li>- Manage the resources of the facility, establishing and maintaining an inventory of all equipment, furniture and supplies.</li> <li>- Monitor use of medicines and other supplies and initiate re-ordering.</li> <li>- Maintain clinic standards for hygiene, water and sanitation.</li> <li>- Submit consolidated monthly reports of services provided and activities conducted; tally and analyse monthly data on health services provided, for example, review of consultations (“health information” includes the Monthly Malaria Line List report and the Enhanced Program for Immunisation statistics)<sup>19</sup>,</li> <li>- Supervise the nurse aid to keep records, monitor and report on the use of clinic fees to Health Committee.</li> <li>- Conduct regular meetings with Health Committee to discuss community support for dispensary.</li> <li>- Submit quarterly reports to Supervisor (zone nurse or provincial health manger), and ask for feedback and discussion on reports.</li> <li>- Ensure community is informed of Dispensaries operating hours and services.</li> </ul>
<b>Supervision</b>	<ul style="list-style-type: none"> <li>- Supervises Nurse Aid</li> <li>- Visits Aid Post Village Health Worker at least every 6 months to provide supervision and provides on call support.</li> <li>- Should receive at least two supervisory visits from provincial health manager per year.</li> </ul>

## Health Centre

Area	<i>Core requirements to support service delivery</i>
<b>Referral</b>	<ul style="list-style-type: none"> <li>- Required to refer clients with more complex conditions to a Hospital – in emergency situations only.</li> <li>- Clinical staff are expected to provide written feed back to the Registered Nurse or Midwife at the Dispensary / Remote Dispensary on the true diagnosis and treatment, and advise if more follow up is required.</li> </ul>
<b>Facility management and administration</b>	<ul style="list-style-type: none"> <li>- Be familiar with MOH policies, procedures and processes and public service staff guidelines.</li> <li>- Manage the resources of the facility, establishing and maintaining an inventory of all equipment, furniture and supplies.</li> <li>- Monitor use of medicines and other supplies and initiate re-ordering.</li> <li>- Ensure clinic standards for hygiene, water and sanitation are maintained.</li> <li>- Conduct regular meetings with staff to discuss HC operations, review HC data and consultations.</li> <li>- Submit consolidated monthly reports of services provided and activities conducted; tally and analyse monthly data on health services provided, for example, number of consultations.</li> <li>- Compile an annual report of the HC and submit to provincial health manager.</li> <li>- Attend meetings representing staff of HC and provide feedback upon return.</li> <li>- Liaise with Provincial Health Manager on staffing, finances, supplies and other matters.</li> <li>- Manage and supervise staff, including all human resource functions, such as monitoring leave and other absences and conducting annual staff performance appraisals.</li> </ul>
<b>Supervision</b>	<ul style="list-style-type: none"> <li>- Supervises HC nursing staff</li> <li>- Supervises dispensary staff within the HC zone, which are responsible to the HC OR VHWs where there are no dispensaries within the health zone.</li> <li>- Should receive at least two supervisory visits from the Provincial Health Manager per year</li> </ul>

### ***Enhanced Health Centre***

<b>Area</b>	<b><i>Core requirements to support service delivery</i></b>
<b>Referral</b>	<ul style="list-style-type: none"> <li>- Required to refer clients with more complex conditions to a Hospital – in emergency situations only.</li> <li>- Clinical staff are expected to provide written feed back to the Registered Nurse or Midwife at the Dispensary / Remote Dispensary on the true diagnosis and treatment, and advise if more follow up is required.</li> </ul>
<b>Facility management and administration</b>	<ul style="list-style-type: none"> <li>- Be familiar with MOH policies, procedures and processes and public service staff guidelines.</li> <li>- Manage the resources of the facility, establishing and maintaining an inventory of all equipment, furniture and supplies.</li> <li>- Monitor use of medicines and other supplies and initiate re-ordering.</li> <li>- Ensure clinic standards for hygiene, water and sanitation are maintained.</li> <li>- Conduct regular meetings with staff to discuss HC operations, review HC data and consultations.</li> <li>- Submit consolidated monthly reports of services provided and activities conducted; tally and analyse monthly data on health services provided, for example, number of consultations.</li> <li>- Compile an annual report of the HC and submit to provincial health manager.</li> <li>- Attend meetings representing staff of HC and provide feedback upon return.</li> <li>- Liaise with Provincial Health Manager on staffing, finances, supplies and other matters.</li> <li>- Manage and supervise staff, including all human resource functions, such as monitoring leave and other absences and conducting annual staff performance appraisals.</li> </ul>
<b>Supervision</b>	<ul style="list-style-type: none"> <li>- Supervises HC nursing staff</li> <li>- Provides education and training opportunities where possible</li> <li>- Supervises dispensary staff within the HC zone, which are responsible to the HC OR VHWs where there are no dispensaries within the health zone.</li> <li>- Should receive at least two supervisory visits from the Provincial Health Manager / Visiting Clinical Teams per year</li> </ul>

### APPENDIX B3: SECONDARY / TERTIARY HEALTH CARE SERVICES

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
<b>EMERGENCY &amp; CRITICAL CARE</b>			
<b>Emergency medicine &amp; trauma care</b>	<ul style="list-style-type: none"> <li>Resuscitation &amp; stabilisation of patients with life threatening conditions prior to transfer to higher level care.</li> <li>ED trained Medical officer available 24/7 (on call after hours)</li> <li>Triaging, assessment, diagnosis, basic treatment and referral of patients presenting with injury/trauma or acute illness.</li> <li>Short-term admission of patients with acute conditions requiring observation/treatment or awaiting transfer</li> <li>Access to mobile X-ray</li> <li>Dispensing of emergency medications after hours</li> </ul>	<ul style="list-style-type: none"> <li>Resuscitation &amp; stabilisation of patients with life threatening conditions, including defibrillation, intubation and short-term ventilation. Transfer to NRH if required.</li> <li>Triaging, assessment, diagnosis and treatment of patients presenting with injury/trauma or acute medical conditions or referred from other health facilities.</li> <li>Paediatric emergency service supported by paediatric team on call.</li> <li>24/7 cover by medical officer and specialist ED nurses. Emergency Medicine consultant on call after hours on site or within 60 minutes.</li> <li>Mobile X-ray and ABG analysis available</li> <li>Short-term admission of seriously ill patients requiring monitoring/observation/treatment or awaiting transfer.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Able to manage full range of emergencies including major trauma and cardiac emergencies.</li> <li>Provide cardiac monitoring and short-term ventilation of critically ill patients awaiting transfer to intensive care (ICU, PICU, NICU).</li> <li>Separate adult and paediatric emergency treatment areas</li> <li>Some laboratory tests available within department.</li> <li>24/7 cover by Emergency Medicine consultant and registrars plus specialist emergency nurse, with on call access to consultant/SMO in other specialties.</li> <li>Provides consultant advice to other hospital emergency departments.</li> </ul>
<b>Retrieval &amp; emergency transfers</b>	<ul style="list-style-type: none"> <li>Organisation of ambulance transfers to referral hospital from lower level facilities.</li> <li>Ambulance service staffed by drivers with paramedical training.</li> <li>Provision of nurse escort if required.</li> <li>Access to air ambulance service.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Coordination of emergency retrievals and transfers of critically ill patients from other hospitals.</li> <li>Coordination of emergency ambulance/air transfers to NRH.</li> <li>Provision of medical/nursing escort if</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provision of medical retrieval team to transfer critical patients from accident sites and other health facilities.</li> <li>Coordination of emergency transfers to overseas hospitals</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
		required.	
<b>Disaster response</b>	<ul style="list-style-type: none"> <li>Local disaster plan in place.</li> <li>Designated disaster response officer with training in coordinated disaster response.</li> <li>Coordination of disaster response at provincial health facilities.</li> <li>Provision of self-sufficient, off-grid Emergency Operations Centre (EOC) in times of disaster.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Coordination of disaster response at regional health facilities.</li> <li>Standby power &amp; water available and regularly tested</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Coordination of national health disaster response and mobilisation of Emergency Medical Teams (EMT).</li> <li>Supervised by National Disaster Coordinator</li> <li>Able to establish mobile hospital/clinic during disaster.</li> </ul>
<b>High dependency/Intensive care</b>	<ul style="list-style-type: none"> <li>General ward includes 1-2 beds equipped for close observation/monitoring of acutely ill or post-operative patients. Ideally, these beds are in a separate room for better infection control.</li> <li>ICU specialist from NRH available on call 24/7 for consultations.</li> <li>Strictest infection control system applies.</li> </ul>	<ul style="list-style-type: none"> <li>Separate high dependency unit (HDU) providing close observation, monitoring, oxygen and short term [&lt;24 hours] ventilation, with patients requiring higher level care or prolonged ventilation transferred to NRH.</li> <li>Specialist high dependency nurses (1:4 bed) plus medical supervision by consultant physicians, surgeons and anaesthetists, with consultancy support from ICU specialists at the NRH.</li> <li>Medical, surgical, maternity and paediatric wards include two HDU/step down beds equipped for close observation/monitoring of acutely ill or post-operative patients.</li> <li>Strictest infection control system applies.</li> </ul>	<ul style="list-style-type: none"> <li>Intensive care unit (ICU) capable of providing complex life support including medium term mechanical ventilation, provides specialist referral service for critically ill patients from all provinces.</li> <li>Medical supervision by designated SMO anaesthetist/intensivist, on call 24/7. Designated ICU MO available on site 24/7.</li> <li>Nursing staff have specialist intensive care training.</li> <li>Unit incorporates intensive care and HDU/stepdown beds, with bedside and central monitoring available.</li> <li>Paediatric patients managed in PICU</li> <li>Standard protocols and procedures in place.</li> <li>Strictest infection control system applies.</li> <li>24/7 availability of diagnostic, pharmacy and operating theatre services. ABG on site.</li> <li>Has formal links (training, consultation, clinical standards) with an intensive care service in a tertiary referral hospital overseas.</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
			<ul style="list-style-type: none"> <li>Provides daily consultant supervision to RRH.</li> </ul>
<b>MEDICAL</b>			
<b>General outpatient clinic services</b>	<ul style="list-style-type: none"> <li>Triaging, assessment, diagnosis, basic treatment, referral and follow-up of patients presenting with medical conditions, provided by general medical officers/nurse practitioners and RNs.</li> <li>Referral of patients to NCD and other specialist clinics.</li> <li>Transfer of patients requiring urgent care to ED or Emergency Medicine specialist.</li> <li>Provision of wound care, dressings and injections</li> <li>Short term holding of patients requiring observation, rehydration, IV antibiotics or asthma treatment (nebuliser)</li> <li>Referral of patients requiring admission to inpatient services to responsible MO.</li> <li>Reporting of communicable diseases and initiation of follow up.</li> <li>Health education for individuals and groups.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Triaging, assessment, diagnosis, basic treatment and referral of patients referred from other health facilities.</li> <li>After hours emergency service provided via ED.</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Medical consultation and specialist referral provided to patients referred from other health facilities or private practitioners.</li> </ul>
<b>Specialist outpatient services</b>	<ul style="list-style-type: none"> <li>Assessment, diagnosis, treatment, ongoing management and referral of patients referred from GOPD or other health facilities.</li> <li>Specialist clinics [e.g Medical, STI/HIV, TB] provided by general medical officers, and/or specialist and allied health staff.</li> <li>NCD hub providing multi-disciplinary care for patients referred from GOPD and other</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Specialist Internal Medicine clinics provided by consultant physicians, medical officers and specialist nurses.</li> </ul>	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<p>health facilities, staffed by medical officers, specialist nurses, dietitians, eye nurses and foot care nurses.</p> <ul style="list-style-type: none"> <li>Provision of reports to referring health workers for patient follow-up.</li> </ul>		
<b>Sub-specialist clinics</b>	<ul style="list-style-type: none"> <li>May have visiting services provided by outreach teams</li> </ul>	<ul style="list-style-type: none"> <li>Some more specialised outpatient services (eg cardiac, oncology, renal) may be provided by outreach teams from NRH or visiting overseas teams.</li> </ul>	<ul style="list-style-type: none"> <li>Outpatient clinic services provided by visiting or local consultant physicians with specialist qualifications in areas such as Cardiology, Endocrinology, Oncology, Respiratory Medicine Neurology and Infectious Diseases.</li> </ul>
<b>Inpatient care</b>	<ul style="list-style-type: none"> <li>Admission of patients with medical conditions referred from outpatient clinics or other health facilities.</li> <li>Medical inpatient care provided in separate male and female wards, staffed by nurses, nurse aides and supervised by a medical officer.</li> <li>Isolation of patients with infectious diseases.</li> <li>Discharge of patients for follow up/continuing care by referring health facility/practitioner.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Admission of patients with more complex medical conditions referred from outpatient clinics or other health facilities.</li> <li>Provision of higher dependency care, including cardiac monitoring, for more seriously ill patients.</li> <li>Short term admission of patients for procedures such as blood transfusion, pleural taps and IV antibiotics.</li> <li>Inpatient care provided in medical ward, staffed by specialist clinical nurses, RNs, nurse aides and supervised by a consultant physician.</li> <li>Isolation of patients with infectious disease: separate area for TB patients.</li> <li>Stable psychiatric patients may be admitted.</li> <li>Physiotherapy support available for respiratory and stroke patients.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provides nation-wide referral service for patients with complex or rare medical conditions that cannot be managed in other facilities. Has access to international clinical consultation and may transfer selected patients for treatment overseas.</li> <li>Provision for coronary care patients in a designated area with cardiac monitoring.</li> <li>Chemotherapy provided mainly on a short stay or day only admission basis.</li> <li>Has designated area with protective isolation for oncology and immuno-compromised patients.</li> <li>Some nurses have specialised training in areas including cardiology/coronary care, oncology, diabetes and renal medicine.</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
<b>Cancer Services</b>	<ul style="list-style-type: none"> <li>▪ Cancer prevention programs (e.g smoking cessation, healthy lifestyle, Hepatitis immunisation) conducted in conjunction with public health services.</li> <li>▪ Reporting new cancer cases and deaths to National Cancer Registry</li> <li>▪ Promotion of breast self-examination</li> <li>▪ Screening and early diagnosis of common cancers</li> <li>▪ Treatment of cervical cancer with VIA, cryotherapy, LETZ/LEEP.</li> <li>▪ Palliative care for terminal cases [<i>Refer below</i>].</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Diagnostic procedures eg biopsy</li> <li>▪ Surgical removal of selected tumours</li> <li>▪ Pain management service provided by internal medicine, pharmacy and anaesthetic staff.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Administration of chemotherapy to adult and paediatric patients by specialist trained chemotherapy nurses, supervised by Oncology SMO</li> <li>▪ Strict infection control/protective isolation for immuno-compromised patients</li> <li>▪ Oncology pharmacy available on site</li> <li>▪ Formal professional and referral links with major cancer centre overseas to support staff training and cancer service delivery/development.</li> <li>▪ Maintenance of National Cancer Registry: monitoring of cancer incidence/prevalence.</li> </ul>
<b>SURGICAL</b>			
<b>Surgical clinics</b>	<ul style="list-style-type: none"> <li>▪ Outpatient consultation, assessment, diagnosis and referral of patients referred from GOPD and other health facilities.</li> <li>▪ Clinics conducted by visiting surgical team from referral hospital</li> </ul>	<ul style="list-style-type: none"> <li>▪ General Surgical Clinics conducted by consultant surgeons and registrars, with specialist surgical nurses providing consultation, assessment, diagnosis and management of patients referred from GOPD and provincial hospitals.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Specialist wound management service provided in clinics and on a consultancy basis to staff in other health facilities.</li> </ul>
<b>Specialist surgical clinics</b>	<ul style="list-style-type: none"> <li>▪ Access to specialist surgical services at referral hospitals.</li> </ul>	<ul style="list-style-type: none"> <li>▪ More specialised outpatient clinic services may be provided by visiting surgical teams eg orthopaedics, plastics, urology, ENT, paediatric.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Outpatient clinic services provided by local specialist surgeons and visiting specialist surgical teams with sub-specialist training.</li> <li>▪ Specialties include orthopaedics/fracture, urology, ENT, ophthalmology, plastics and paediatric surgery.</li> </ul>
<b>Surgical procedures</b>	<ul style="list-style-type: none"> <li>▪ Minor surgical procedures on low risk patients, plus a limited range of emergency</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Elective and emergency surgical procedures</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Elective and emergency surgical procedures</li> </ul>



SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<p>procedures, performed by resident doctors with surgical skills, mostly on a 'day only'/outpatient basis.</p> <ul style="list-style-type: none"> <li>Debriding of septic wounds [may be done in theatre or 'dirty' procedure room].</li> <li>More complex/specialised surgery performed by visiting surgical teams.</li> </ul>	<p>(major and minor) on low-moderate risk patients (ASA 1-3) performed by consultant surgeons and registrars.</p>	<p>(major and minor) on patients in high risk (ASA category 4) performed by consultant surgeons and registrars.</p> <ul style="list-style-type: none"> <li>More specialised surgery performed by local and visiting surgeons with sub-specialist training include orthopaedics/fracture, urology, ENT, ophthalmology, plastics and paediatric surgery.</li> </ul>
<b>Inpatient care</b>	<ul style="list-style-type: none"> <li>Admission of patients with surgical conditions referred from outpatient clinics or other health facilities.</li> <li>Inpatient and post-operative care for surgical patients provided in separate male and female wards, staffed by nurses, nurse aides and supervised by a MO.</li> <li>Discharge of patients for follow up/continuing care by referring health facility/practitioner</li> <li>Referral to RRH/NRH if required for more complex cases and for specialist care.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Admission of surgical patients referred from provincial hospitals.</li> <li>Inpatient care for patients provided in surgical wards, staffed by surgically trained nurses, nurse aides and supervised by the surgical team.</li> </ul> <p>Provision for higher dependency care, including monitoring, for more seriously ill patients.</p>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Admission of patients referred with surgical conditions requiring sub-specialist management or higher dependency care, including monitoring.</li> <li>Inpatient areas providing for separation of patients with sepsis/infections from other post-operative patients and separate area for burns patients.</li> <li>Access to rehabilitation service and prosthetics consultation on site.</li> <li>Some nurses have specialised training in areas such as urology, ENT, orthopaedics, burns and amputee care.</li> </ul>
<b>Eye/Ophthalmology services</b>	<ul style="list-style-type: none"> <li>Eye clinic conducted by specialist Eye Nurse.</li> <li>Identification and treatment of simple eye infections and injuries; removal of foreign bodies; referral as appropriate.</li> <li>Visual acuity and general eye health testing; prescription and supply of glasses</li> <li>Diabetic retinopathy screening and referral for laser treatment</li> <li>School screening provided on outreach basis</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Specialist Ophthalmology clinic conducted by specialist Eye Nurse and Ophthalmologist.</li> <li>Identification and treatment of more serious eye infections and injuries; refer as appropriate.</li> <li>Diabetic retinopathy screening &amp; laser treatment</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Service provided by specialist Eye Nurses and specialist Ophthalmologist</li> <li>Coordination and clinical supervision of clinical ophthalmology services nationally.</li> <li>Manages complex eye surgery, major eye trauma and ophthalmic emergencies in patients referred from all provinces.</li> <li>Provision of mobile outreach team to other</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<ul style="list-style-type: none"> <li>Referral to Ophthalmologist for treatment of cataracts and other conditions requiring specialist management.</li> <li>Primary eye care education/promotion</li> </ul>	<ul style="list-style-type: none"> <li>Eye surgery including cataract removal and other procedures, mostly performed on a day only basis. Referral to NRH for more complex procedures like retinal surgery.</li> <li>Consultant on call for major eye trauma and ophthalmic emergencies</li> <li>Ongoing management of complex/chronic ophthalmic conditions.</li> </ul>	<p>health facilities</p> <ul style="list-style-type: none"> <li>Coordination of visiting overseas eye teams</li> <li>Has links with Pacific Eye Institute for training, clinical standards and service development.</li> </ul>
<b>ENT services</b>	<ul style="list-style-type: none"> <li>Outpatient clinic conducted by specialist ENT Nurse</li> <li>Identification and treatment of simple infections of ear, nose or throat; manage foreign bodies; referral as appropriate.</li> <li>Basic audiology and speech testing; referral for hearing aids assessment.</li> <li>School screening provided on outreach basis</li> <li>May have visiting hearing aid service</li> <li>Referral to ENT Surgeon for patients requiring further assessment/ specialist management.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Outpatient clinics conducted by visiting ENT surgeon or ENT registrar.</li> <li>Identification and treatment of more serious infections of ear, nose or throat; referral if necessary.</li> <li>Audiology, speech and tympanometry testing; assessment for hearing aids by audiologist or nurse audiometrist.</li> <li>Referral to NRH for patients requiring surgery and specialist management</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Outpatient clinic conducted by specialist ENT consultant surgeon/registrar.</li> <li>Audiologist and speech pathologist available on site.</li> <li>Coordination of National Hearing Care service.</li> <li>ENT surgery for both elective and emergency cases by ENT surgeon with trained ENT theatre nurse.</li> <li>Training of specialist ENT nurses.</li> </ul>
<b>Oral Health/Dental</b>	<ul style="list-style-type: none"> <li>General dental service including oral health promotion, pain relief, fillings, extractions, management of simple trauma by local or visiting dentist/dental therapist.</li> <li>Outreach to communities and health facilities with public health teams</li> <li>Referral to RRH and NRH for maxillo-facial surgery</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Complex restorative dentistry; dental prosthetics.</li> <li>Oral/maxillo-facial surgery - management of dental trauma, fixation of facial fractures and low-moderate risk elective procedures.</li> <li>Some specialist dental services including periodontics, endodontics and prosthodontics, provided by visiting specialist dentists.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provides oral/maxillo-facial surgery service for patients with major trauma and complex dental conditions referred from other hospitals</li> <li>Provides specialist dental services including periodontics, endodontics, paediatric dentistry and specialised prosthodontics.</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
		<ul style="list-style-type: none"> <li>Oral surgeon on call for emergency cases.</li> </ul>	
<b>Burns</b>	<ul style="list-style-type: none"> <li>Cleaning and treatment of minor burns.</li> <li>Initial resuscitation, stabilisation and prompt transfer of serious burns to NRH.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Cleaning and treatment of minor-moderate burns.</li> <li>Initial resuscitation, stabilisation and prompt transfer of serious/extensive burns to national referral hospital.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Surgical management of patients with severe/extensive burns, including resuscitation, debriding, acute care, rehabilitation and management of contractures.</li> <li>Separate inpatient burns unit with protective isolation and nursing staff trained in burns care.</li> </ul>
<b>MATERNAL AND REPRODUCTIVE HEALTH</b>			
<b>Outpatient services</b>	<ul style="list-style-type: none"> <li>Antenatal clinics conducted by midwives and MO, providing <ul style="list-style-type: none"> <li>Early assessment and continuing management of pregnancy, in line with <i>MoH Standard Guidelines for Obstetrics, Gynaecology and Newborn Care</i>.</li> <li>Identification &amp; referral of patients with high risk pregnancies to high risk clinics, with transfer to referral hospital at 32-34 weeks.</li> </ul> </li> <li>Postnatal clinics (7 days &amp; 6 weeks post-partum)</li> <li>Family planning/women's health clinics, providing contraceptive advice and supplies, pap smears, VIA, PMCT testing and counselling and general gynaecological health checks. Insertion of loops and Jadelle implants by trained midwife or MO.</li> <li>Referral to specialist service of patients</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>High risk antenatal clinics conducted by obstetricians &amp; midwives for pregnant women referred from provincial hospitals and outpatient clinics.</li> <li>Gynaecology clinics, providing specialist consultation for patients referred with gynaecological issues.</li> <li>Colposcopy and cryotherapy services</li> <li>Antenatal screening/diagnosis with chorionic villus sampling (CVS) or amniocentesis.</li> </ul>	<p><i>As for Regional Referral Hospital</i></p> <ul style="list-style-type: none"> <li>Antenatal care and management of women with high risk pregnancies referred at 32-34 weeks from other provinces.</li> <li>Antenatal day assessment of women with high risk pregnancies requiring close monitoring.</li> <li>Infertility clinic</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<p>requiring gynaecological surgery or more complex treatment.</p> <ul style="list-style-type: none"> <li>Specialist clinics provided by visiting O&amp;G teams.</li> </ul>		
<b>Delivery and intrapartum care</b>	<ul style="list-style-type: none"> <li>Management of normal vaginal deliveries, early essential newborn care and provision of emergency obstetric care in line with <i>National Obstetric and Gynaecology Guidelines</i>.</li> <li>Vacuum extractions and manual removal of placenta by midwives or MOs.</li> <li>Neonatal resuscitation if required performed by specially trained midwives or medical officers.</li> <li>Provision of IV antibiotics if required for puerperal sepsis and PID.</li> <li>Timely antenatal transfer of women with high risk pregnancies/requiring caesarean section to referral hospital.</li> <li>Emergency caesarean section (+/- TL) may be performed by resident medical officer with obstetric training or mobile emergency obstetric team from referral hospital.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Comprehensive obstetric emergency care as per <i>Standard Guidelines for Obstetrics, Gynaecology and Newborn Care</i></li> <li>Elective and emergency caesarean sections, performed by obstetricians or obstetric registrars, attended by paediatricians or midwives trained in neonatal resuscitation, on patients referred from other hospitals or health centres.</li> <li>Immediate transfer to special care nursery (SCN) of premature, very small or sick babies.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Obstetric management/delivery of women with serious medical conditions or whose babies are expected to require neonatal intensive care.</li> <li>Mobile Obstetric team ('Flying Squad') provided for emergency deliveries where patient cannot be transferred safely to NRH.</li> <li>Maternity Intensive Care (MICU) service linked with birthing area.</li> <li>Has 24/7 on site access to medical laboratory, blood bank, medical imaging, pharmacy, ICU and NICU.</li> <li>Formal review of all Maternal and Perinatal deaths in Vanuatu hospitals</li> </ul>
<b>Inpatient care</b>	<ul style="list-style-type: none"> <li>Admission of patients for antenatal assessment/care, postnatal care and breastfeeding support.</li> <li>Inpatient care provided in maternity ward, staffed by midwives, nurses, nurse aides with medical officer support.</li> <li>Discharge of patients for early post-natal care by home visiting team and continuing care by</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Antenatal admission of patients with high risk pregnancy/medical conditions referred from outpatient clinics or other health facilities.</li> <li>Maternity HDU for sick pregnant or postnatal women, including immediate post-caesarean cases.</li> <li>Admission of gynaecological surgery patients</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>MICU for postnatal care of sick women, including immediate post-caesarean cases.</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	local midwife/health facility.	for post-operative care in women's surgical ward.	
<b>Gynaecological surgery</b>	<ul style="list-style-type: none"> <li>Minor gynaecological procedures (D&amp;C, tubal ligation, vasectomy, LETZ/LEEP etc) performed by resident medical officer with procedural skills.</li> <li>Other gynaecological surgery performed by visiting O&amp;G team.</li> </ul>	<ul style="list-style-type: none"> <li>Minor and major gynaecological procedures performed by O&amp;G consultants or registrars.</li> <li>Access to oncology services at NRH for patients with gynaecological cancers.</li> </ul>	<ul style="list-style-type: none"> <li>Full range of gynaecological procedures, including on high risk (ASA 4) patients and gynaecological cancers, performed by O&amp;G consultants or visiting teams.</li> <li>Laparoscopic procedures</li> <li>Access to oncology and palliative care services for gynaecological cancer patients.</li> </ul>
<b>Sexual Health</b>	<ul style="list-style-type: none"> <li>Comprehensive management of STI and HIV.</li> <li>Identification, counselling, support and referral of victims of gender-based violence, rape &amp; sexual assault.</li> <li>Provision of emergency contraception and post – exposure prophylaxis for STI and HIV infections for sexual violence victims.</li> <li>On call service to ED available 24/7</li> </ul>	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>
<b>NEWBORN, CHILD &amp; ADOLESCENT SERVICES</b>			
<b>Newborn care</b>	<ul style="list-style-type: none"> <li>Provide Early Essential Newborn Care (EENC) for all neonates:</li> <li>Provide Kangaroo mother care and refer for special care if sick or premature.</li> <li>Neonatal resuscitation performed if required by specially trained midwives or medical officers.</li> <li>Promotion of early breastfeeding.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Delivery and care of very premature or low birth weight babies, referred antenatally from other health facilities.</li> <li>Neonatal resuscitation performed if required by paediatricians or specially trained midwives.</li> </ul>	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
<b>Special care nursery/NICU</b>	<ul style="list-style-type: none"> <li>Provision of Kangaroo mother care and higher dependency care for late preterm and sick neonates in separate special care nursery area: transfer to national referral hospital if longer term care, surgery or assisted ventilation is required.</li> <li>Phototherapy for babies with uncomplicated jaundice.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provision of high dependency care, including apnoea monitoring, nasogastric feeding, short term IV therapy and short-term respiratory support (CPAP) for small, late preterm and sick neonates in a separate special care nursery (SCN).</li> <li>Transfer to national referral hospital if longer term assisted ventilation, higher level care or surgery is required.</li> <li>Phototherapy available for babies with jaundice.</li> <li>Arterial blood gas (ABG) analysis available on site</li> <li>SCN staffed by nurses with specialist neonatal and/or paediatric training, supervised by paediatricians.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provision of intensive and high dependency care, including medium term respiratory support (CPAP and mechanical ventilation) for small, extremely preterm and sick neonates, inborn or referred from other hospitals.</li> <li>Separate Neonatal Intensive Care Unit (NICU) with intensive care (respiratory support) and high dependency/step down cots.</li> <li>Access to paediatric surgery, blood gas monitoring, diagnostic services.</li> <li>NICU staffed by specialist neonatal nurses with consultant paediatrician available 24/7.</li> </ul>
<b>Child Health/Paediatric clinics</b>	<ul style="list-style-type: none"> <li>IMCI clinics provided by trained paediatric nurse and MO for assessment, diagnosis, treatment and referral of sick children.</li> <li>Specialist referral clinics provided by visiting paediatric team.</li> <li>Immunisation/MCH clinics provided in conjunction with Public Health.</li> <li>Nurses trained in child protection.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Specialist referral clinics provided by paediatric team and visiting paediatric specialist teams.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Sub-specialist paediatric referral clinics provided by visiting teams including cardiology, endocrinology and haematology/oncology.</li> <li>Service linkages with overseas paediatric referral hospital.</li> </ul>
<b>Paediatric inpatient care</b>	<ul style="list-style-type: none"> <li>Paediatric inpatient care for children admitted with medical conditions requiring more intensive observation, treatment or management.</li> <li>Separation of infectious patients from those vulnerable to infection.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Paediatric inpatient care for children admitted following surgery or with more complex medical conditions.</li> <li>Provision for high dependency care, including</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provision for paediatric intensive/high dependency care, including invasive monitoring and respiratory support, for seriously ill children referred from ED, OPD</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<ul style="list-style-type: none"> <li>Opportunistic immunisation</li> </ul>	<ul style="list-style-type: none"> <li>oxygen and monitoring, for seriously ill patients.</li> <li>Separate isolation space for infectious patients.</li> </ul>	<ul style="list-style-type: none"> <li>and other hospitals/ health facilities.</li> <li>Haematology/Oncology service including provision of chemotherapy for children with cancer.</li> <li>Consultant paediatrician or registrar available 24/7 on site.</li> </ul>
<b>Paediatric HDU/ICU</b>	<ul style="list-style-type: none"> <li>Paediatric ward includes 1-2 beds equipped for close observation/monitoring of acutely ill children. Ideally, these beds are isolated for better in infection control.</li> <li>Paediatric intensive care unit (PICU) SMO from NRH available on call 24/7 for consultation.</li> <li>Strictest infection control system applies.</li> </ul>	<ul style="list-style-type: none"> <li>Paediatric HDU providing close observation, monitoring, oxygen and short-term (&lt;24 hrs) respiratory support to acutely ill children.</li> <li>Patients requiring higher level care or prolonged ventilation transferred to NRH.</li> <li>Specialist high dependency nurses plus medical supervision by consultant paediatricians, with support from PICU specialists at NRH.</li> <li>Strictest infection control system applies.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provision of complex life support including medium term mechanical ventilation, for critically ill children from all provinces.</li> <li>Medical supervision by designated SMO paediatrician/intensivist, on call 24/7.</li> <li>Nursing staff have specialist PICU training.</li> <li>Unit incorporates intensive care and HDU/stepdown beds, with bedside and central monitoring available.</li> <li>Standard protocols and procedures in place.</li> <li>Strictest infection control system applies.</li> <li>24/7 availability of diagnostic, pharmacy and operating theatre services. ABG on site.</li> <li>Has formal links (training, consultation, clinical standards) with an intensive care service in a tertiary referral hospital overseas.</li> <li>Provides consultant supervision to RRH and provincial hospitals.</li> </ul>
<b>Adolescent health</b>	<ul style="list-style-type: none"> <li>'Youth friendly' health services including health education, reproductive health, mind care, STI/HIV testing and diagnosis, counselling and referral to specialist services, provided in conjunction with Public Health</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Specialist medical consultation, treatment and referral provided in adolescent clinics by outreach paediatric team.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Specialist medical consultation, treatment and ongoing management of adolescent patients with chronic/complex conditions.</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	services and NGOs.	<ul style="list-style-type: none"> <li>Consultation and referral to NRH for patients with chronic/complex medical conditions</li> </ul>	<ul style="list-style-type: none"> <li>Coordination of transitional care for patients transferring to adult medical care</li> </ul>
<b>MENTAL HEALTH</b>			
<b>Mental Health/Psychiatry</b>	<ul style="list-style-type: none"> <li>Outpatient clinics, counselling, outreach and emergency on call service provided by specialist Mental Health nurse.</li> <li>Visiting psychiatrist available for consultation and specialist outpatient clinics.</li> <li>Secure room available for stabilisation of disturbed/aggressive patients.</li> <li>Limited inpatient care for stable patients provided in general ward, supported by Mental Health nurse.</li> <li>Discharge of patients for follow up/continuing care by referring health facility/practitioner</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Specialist outpatient clinics and emergency consultation provided by Psychiatrist.</li> <li>Day therapy program including occupational or diversional therapy support.</li> <li>Short term inpatient care and early rehabilitation for stable patients provided in mental health unit.</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Coordination of national mental health consultation-liaison and emergency response service.</li> <li>Accepts nation-wide referrals of patients with more serious/complex conditions and/or requiring longer-term admission.</li> <li>Specialist procedures including ECT and psychotherapy services.</li> <li>Separate mental health facility including inpatient and outpatient services.</li> </ul>
<b>ALLIED HEALTH/CLINICAL SUPPORT SERVICES</b>			
<b>Pharmacy and Central Medical Stores</b>	<ul style="list-style-type: none"> <li>Dispensing of medications as per Essential Drug List (EDL) including patient drug information and counselling.</li> <li>Management of drug supply to hospital and other health facilities, including receiving supplies from Central Medical Stores (CMS); inventory management, monitoring drug use and maintaining secondary store.</li> <li>Dispensing of restricted medications (as per EDL).</li> <li>Maintenance of ward imprest system for</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Extended clinical pharmacy role: participation in ward rounds and committees eg NCD, HIV, Infection Control.</li> <li>Arranging continuing supply/management of restricted medications for patients at provincial hospitals and health centres.</li> <li>Monitoring of patterns of drug use, investigate apparent over or under-prescribing.</li> <li>Clinical supervision of pharmacy interns and</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Specialised and extensive clinical pharmacy support across all departments, including participation in clinical trials</li> <li>Specialist pharmacy services including oncology pharmacy and manufacturing of paediatric medications.</li> <li>Designated pharmacist responsible for national drug information/medicine safety service.</li> <li>Technical support of electronic inventory</li> </ul>



SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<p>inpatient medications.</p> <ul style="list-style-type: none"> <li>Provision of clinical pharmacy support and drug education to management, clinical staff and other health facilities.</li> <li>Monitoring and investigation of adverse drug reactions</li> <li>Service provided by pharmacist, pharmacy technicians and supply officers.</li> <li>After hours on call service available on site or within 60 minutes</li> </ul>	<p>dispensers as well as pharmacy staff at Provincial Hospitals.</p> <ul style="list-style-type: none"> <li>24/7 emergency service with after hours on call available on site or within 30 minutes.</li> <li>Advise CMS Sub-Store and assists with distribution of medicines and medical supplies to other provincial facilities.</li> <li>Teaching of nursing and medical students; regular participation in CME/CPD programs.</li> </ul>	<p>management system at all health facilities</p> <ul style="list-style-type: none"> <li>Safe storage and disposal of cytotoxic drugs and expired medications.</li> <li>Referral of adverse drug reactions to TGA and suppliers.</li> <li>Liaises with CMS in relation to procurement, purchasing and distribution of medicines and medical supplies.</li> </ul>
<b>Medical laboratory services</b>	<ul style="list-style-type: none"> <li>A range of essential diagnostic tests including <ul style="list-style-type: none"> <li>Haematology: routine tests incl. FBC, electrolytes, malaria, parasites,</li> <li>Biochemistry: routine automated tests.</li> <li>Microbiology: basic tests. Eg urinalysis, stool &amp; blood cultures, TB AFB microscopy</li> <li>Serology (RDT): Hepatitis, HIV, STI, TB</li> </ul> </li> <li>Specimen collection and preparation: transport to referral hospital laboratories as required.</li> <li>Blood collection and banking, cross matching.</li> <li>Access to pathologist consultation and autopsy service via RRH or NRH.</li> <li>Laboratory surveillance and reporting of communicable diseases.</li> <li>Annual audit using WHO Guidelines to monitor service quality.</li> <li>After hours on call service available on site or within 60 minutes.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Basic histopathology (FNAB TB cytology, serology, PAP smear testing) and referral of tissues to national pathology service.</li> <li>Semi-automated blood culture</li> <li>GeneXpert analyses</li> <li>Urgent blood gas analysis</li> <li>Laboratory Information System (LIS) provides results electronically to clinical areas and referring hospitals</li> <li>Service provided by laboratory scientists and technicians with access to pathologist consultation and autopsy service via NRH.</li> <li>Local access to autopsy facilities</li> <li>24/7 service with after hours on call available on site or within 30 minutes.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Consultant pathologist and registrar and some specialised scientists and technicians on site.</li> <li>Histology/cytology laboratory providing a range of services including frozen sections, biopsies, pleural effusions, bone marrow aspirates.</li> <li>Immuno-assays</li> <li>Molecular/DNA testing &amp; genetic counselling</li> <li>Media preparation (plates, broth)</li> <li>National blood service including blood collection &amp; supply of whole blood, plasma, platelets, packed cells, fresh frozen plasma &amp; blood irradiation.</li> <li>Autopsies performed by Pathologist with Laboratory Scientist support. External support from Forensic Pathologist if required.</li> <li>Participates in annual external audits to</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
			monitor and benchmark service quality. <ul style="list-style-type: none"> <li>Conducts internal audit of provincial laboratories.</li> <li>Production of national laboratory handbook, clinical guidelines and SOPs.</li> <li>National research laboratory</li> <li>Laboratory service available on site 24/7.</li> </ul>
<b>Medical imaging</b>	<ul style="list-style-type: none"> <li>X-ray (fixed, digital) and ultrasound services</li> <li>May have mobile X-ray and portable ultrasound</li> <li>Medical Imaging service provided by medical imaging technicians or radiographers.</li> <li>Access to radiology consultation from referral hospital.</li> <li>After hours on call service available on site or within 60 minutes.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Digital X-ray with monitors in radiology, ED, OPD and wards.</li> <li>PACS linking with provincial hospitals</li> <li>Mobile X-ray in ED</li> <li>Full ultrasound service (colour doppler) plus portable ultrasound machines in antenatal clinic and maternity ward.</li> <li>Image intensifier in theatre</li> <li>Orthopantomography (OPG)</li> <li>Fluoroscopy (IVU and contrast studies)</li> <li>Service provided by medical imaging technicians or radiographers with access to consultant radiologist at NRH</li> <li>24/7 service with after hours on call available on site or within 30 minutes.</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Has consultant Radiologist and registrar. Radiography staff include sonographers with specialist training. Specialist radiologist reporting of X-rays and scans</li> <li>CT scanning available for selected patients in line with referral criteria.</li> <li>Basic interventional radiology service (ultrasound guided procedures)</li> <li>Linked with referring hospitals and provides electronic images and reports via PACS (picture archiving &amp; communication system).</li> <li>Radiology nurse available</li> <li>Service available on site 24/7</li> </ul>
<b>Clinical investigations</b>	<ul style="list-style-type: none"> <li>ECG available in Emergency department and medical/surgical ward</li> <li>Basic endoscopy service may be provided by visiting specialists</li> </ul>	<ul style="list-style-type: none"> <li>A limited range of investigations may be provided, including:               <ul style="list-style-type: none"> <li>ECG</li> <li>Echocardiography</li> <li>Endoscopy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>ECG</li> <li>Exercise stress tests</li> <li>EEG</li> <li>Echocardiography</li> <li>Endoscopy, colonoscopy, bronchoscopy</li> <li>Spirometry</li> </ul>
<b>Operating theatres +</b>	<ul style="list-style-type: none"> <li>Single operating theatre, staffed by trained</li> </ul>	<ul style="list-style-type: none"> <li>Operating theatre suite comprising at least</li> </ul>	<i>As for Regional Referral Hospital PLUS</i>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
<b>endoscopy</b>	<p>theatre nurses, provides for minor/moderate surgical and diagnostic procedures to be performed by local and visiting surgical staff.</p> <ul style="list-style-type: none"> <li>Provides 24/7 cover for emergency caesarean sections.</li> <li>Theatre has separate preparation, recovery and sterile store areas.</li> <li>Strict infection control measures in place if clean and dirty procedures performed in same room.</li> </ul>	<p>two theatres suitable for performing both major and minor procedures, with separate anaesthetic and recovery areas.</p> <ul style="list-style-type: none"> <li>Provision for day only procedures to be performed with separate admission area and recovery lounge.</li> <li>Operating theatres staffed by trained theatre nurses.</li> <li>24/7 service with after hours on call available on site or within 30 minutes.</li> </ul>	<ul style="list-style-type: none"> <li>Service includes at least three main operating theatres, plus minor theatre, procedure room and endoscopy room, with separate anaesthetic induction areas and recovery area with 2 beds per theatre.</li> <li>Theatres staffed by trained operating theatre nurses and anaesthetic nurses/technicians</li> <li>Theatres have ready access to ICU and easy access from delivery suite.</li> <li>Service available on site 24/7</li> </ul>
<b>Anaesthetics</b>	<ul style="list-style-type: none"> <li>Local, spinal and general anaesthetics on low risk patients, by MO with anaesthetic training or anaesthetic nurse.</li> <li>Provides 24/7 cover for emergency caesarean sections.</li> <li>Anaesthetist consultation available from referral hospital.</li> </ul>	<ul style="list-style-type: none"> <li>Anaesthetic service provided by anaesthetists, anaesthetic registrars and anaesthetic nurses, capable of providing general, regional, epidural and local anaesthetics, and sedation to low-moderate risk patients (ASA 1-3).</li> <li>Pre-admission or pre-surgery screening/assessment provided in preadmission clinic or ward.</li> <li>Provides support to ED, HDU and wards with emergency resuscitation; intubation, ventilation, insertion of central lines and acute post-surgical pain management.</li> <li>24/7 service with after hours on call available on site or within 30 minutes.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Provision of anaesthetics/sedation for all categories of patients including high risk (ASA4) and children aged &lt;5, undergoing surgery or diagnostic procedures in operating suite, endoscopy room or Radiology department.</li> <li>Pre-admission review of patients with identified comorbidity or other risks.</li> <li>Management of ventilatory support for patients in ICU and ED.</li> <li>Service available on site 24/7.</li> <li>Acute &amp; chronic pain management service</li> <li>Coordinates formal audit process including review of deaths under anaesthetic</li> </ul>
<b>Sterilising and Infection Control</b>	<ul style="list-style-type: none"> <li>Provides and operates a steam sterilisation system for all instruments, delivery packs and sterile linen packs.</li> <li>Additional sterilising units in ED and dental areas.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Formally appointed Infection Control Officer responsible for maintenance of cleaning and sterilising standards; monitoring and</li> </ul>	<p><i>As for Regional Referral Hospital</i></p>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<ul style="list-style-type: none"> <li>▪ Cleaning team on site to maintain environmental hygiene</li> <li>▪ Prevents and controls infection risk by practicing universal precautions.</li> <li>▪ Isolation of infectious patients</li> <li>▪ Infection control committee and designated IC nurse in place.</li> </ul>	<p>reporting of hospital acquired infections; disease surveillance and investigation of outbreaks.</p>	
<b>Biomedical engineering</b>	<ul style="list-style-type: none"> <li>▪ Biomedical technician service providing routine maintenance and repair of biomedical equipment for hospital and provincial health facilities.</li> <li>▪ Maintains equipment inventory and coordinates equipment maintenance, repair and replacement program for all sites.</li> <li>▪ Maintenance of workshop: storage and supply of spare parts and consumables.</li> <li>▪ Training of clinical staff in safe use, maintenance and cleaning of biomedical equipment.</li> <li>▪ Biomedical staff training, support and quarterly visits provided by biomedical team from referral hospital.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Provides routine maintenance/repair of all biomedical equipment in common use in hospital and provincial health facilities.</li> <li>▪ Advises on procurement of equipment and spare parts and on acceptability of donated equipment.</li> <li>▪ Service operates from separate, well equipped workshop.</li> <li>▪ Regional service provided by biomedical engineer, biomedical technicians and trainees.</li> <li>▪ Supervision/support of biomedical technicians and trainees, plus biomedical staff in provincial hospitals.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Provides/arranges repair, maintenance and replacement of specialist biomedical equipment within the National Referral Hospital or referred from other hospitals. Coordinates new orders across all facilities.</li> <li>▪ Coordinates National Biomedical Support Service, including basic training of technical staff; business planning; development of policy guidelines and operating policies/procedures; budget management/</li> <li>▪ Manages annual training and CPD programs for biomedical staff.</li> <li>▪ Monitors turnaround times for repair/replacement: investigates delays and acts to prevent these.</li> </ul>
<b>Physiotherapy/Rehabilitation</b>	<ul style="list-style-type: none"> <li>▪ Basic physiotherapy and exercise programs delivered by physiotherapist or trained therapy aide, supervised by local/visiting physiotherapist.</li> <li>▪ Visiting rehabilitation service provides physiotherapy service and assessment/referral for mobility aids/equipment for patients referred by</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rehabilitation service provided in designated area by physiotherapists and therapy aides. May have occupational therapist.</li> <li>▪ Provides general physiotherapy services to inpatients and outpatients, as well as specialist rehabilitation programs eg amputee, stroke recovery, cardiac rehab.</li> <li>▪ Maintains equipment pool and provides</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>▪ Multidisciplinary rehabilitation service including physiotherapy, occupational therapy, speech therapy and prosthetics &amp; orthotics, provided on both inpatient and outpatient basis.</li> <li>▪ Inpatient care in designated Rehabilitation</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<p>other health services.</p> <ul style="list-style-type: none"> <li>Supply of wheelchairs and mobility devices</li> <li>Access to prosthetics services.</li> <li>Coordination of provincial Community Based Rehabilitation (CBR) program; maintenance of register of people with disabilities; liaison with disability NGOs.</li> </ul>	<p>assessment and access to wheelchairs and mobility aids.</p> <ul style="list-style-type: none"> <li>Provide supervision to interns and outreach/visiting services, training and advice to staff at provincial hospitals.</li> <li>Works with community-based rehabilitation services to provide ongoing support to patients after discharge.</li> </ul>	<p>unit, with access to therapy areas and gym shared with outpatient programs.</p> <ul style="list-style-type: none"> <li>Coordinates nation-wide rehabilitation service through outreach visits; training and professional supervision of staff in provinces and management of CBR program.</li> </ul>
Prosthetics/Orthotics	<ul style="list-style-type: none"> <li>Has access to prosthetics services at RRH.</li> </ul>	<ul style="list-style-type: none"> <li>Service provided by trained prosthetist/orthotist who assesses patients requiring prostheses and manufactures or orders appropriate prostheses or orthoses. P&amp;O manufacturing workshop located on hospital site.</li> <li>Maintains close links with rehabilitation services and NGOs.</li> </ul>	<i>As for Regional Referral Hospital</i>
Nutrition/dietetics	<ul style="list-style-type: none"> <li>Visiting nutrition/dietetics service provided by Referral Hospital</li> <li>Basic nutrition advice to individual patients particularly those with lifestyle-related NCD.</li> <li>Maternal Infant and Young Child Feeding (MIYCF) counselling including promotion of breast feeding for 6 months</li> <li>Special feeding programs for children with malnutrition.</li> <li>Food service and clinical staff have access to nutrition training via National Public Health Nutrition program.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Service provided by dietitian based at hospital.</li> <li>Advises food services on preparation of nutritious meals, special diets based on clinical conditions, food handling and safety.</li> <li>Supervision of enteral feeding programs</li> <li>Participation in multi-disciplinary NCD clinics and malnutrition programs within hospital.</li> <li>Provision of nutrition education programs and food preparation demonstrations for patients and families.</li> <li>Working with public health staff on consumer education programs promoting healthy diets</li> <li>Provision of outreach support to provincial</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Coordination of integrated nutrition program with Public Health, providing nation-wide access to nutrition education, dietary advice and clinical management of nutrition/diet related illness, including NCD, malnutrition, anaemia.</li> <li>Development and support of national nutrition guidelines for Food Services and dietary management of hospital patients.</li> </ul>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
		hospitals.	
<b>Counselling/social work/pastoral care</b>	<ul style="list-style-type: none"> <li>Limited counselling service provided by Mental Health nurse</li> <li>Coordination of counselling services provided through partnerships with churches, community groups and NGOs.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Trained counsellor or social worker on site</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Coordination of National Counselling program, providing training and support to counsellors and social workers working across the hospital system.</li> </ul>
<b>Palliative care</b>	<ul style="list-style-type: none"> <li>Care, advice on pain management and support to people living with terminal illness and their families, provided by medical officers and nursing staff with palliative care training, in conjunction with Public Health staff.</li> <li>Designated palliative care bed adjacent to general ward, with care provided mainly by family members?</li> <li>Pain management service may be provided in consultation with anaesthetic and clinical pharmacy staff at regional referral hospital.</li> <li>Other services may be provided through partnerships with churches, community groups and NGOs.</li> </ul>	<ul style="list-style-type: none"> <li>Staff trained in palliative care provide care and support, including pain management, to patients with terminal conditions.</li> <li>Designated palliative care team may include medical, nursing, pharmacy, volunteers and other staff.</li> <li>Inpatient care provided in designated palliative care area, adjacent to general ward.</li> <li>Service linkages with churches and community groups: training provided to volunteers to provide community support.</li> </ul>	<i>As for Regional Referral Hospital</i>
<b>Health promotion</b>	<ul style="list-style-type: none"> <li>Hospital provides health promoting environment: clean facilities, smoke-free, healthy food, promoting hand washing, physical activity etc ...</li> <li>Individual health education provided to patients and their families by medical officers, nurses, pharmacist, dietician</li> <li>Health promotion included in job descriptions of all clinical staff.</li> <li>Group education/activity programs</li> </ul>	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	conducted in both hospital and community outreach settings.		
<b>Health Information/Medical Records</b>	<ul style="list-style-type: none"> <li>Production, maintenance, filing and secure storage [hard copies and electronic] and archiving of medical records for all patients.</li> <li>Collection of statistical data, coding and entry into Health Information System (HIS).</li> <li>Production of monthly and annual HIS reports for use by managers in monitoring hospital utilisation and planning services.</li> <li>Training and support of health workers in completion of forms and use of HIS data in decision-making.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Provision of training and supervision of interns, filing clerks and provincial staff.</li> <li>Research and preparation of <i>ad hoc</i> reports requested by managers and senior clinicians?</li> <li>Provision of limited service on weekends and public holidays.</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Maintenance of national archive.</li> </ul>
<b>MANAGEMENT/ADMINISTRATION</b>			
<b>Management &amp; Administration</b>	<ul style="list-style-type: none"> <li>Functions include: <ul style="list-style-type: none"> <li>Provincial administration</li> <li>Medical administration</li> <li>Nursing services management</li> <li>Management of Finance, HR, IT and General Services</li> <li>Administrative/clerical support.</li> </ul> </li> <li>Ensure effective use of available resources to deliver the health services required to meet provincial needs.</li> <li>Maintain financial, HR, asset and other records and submit regular reports to MoH.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Allied health services management</li> <li>Policy and planning support to region</li> <li>Supervision of provincial IT services and provision of specialist support</li> </ul>	<i>As for Regional Referral Hospital</i>
<b>EDUCATION, TRAINING, SUPERVISION</b>			

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
<b>Teaching, training, professional development</b>	<ul style="list-style-type: none"> <li>Identification of general and specialised training needed for staff to achieve standards required to provide key services.</li> <li>Provision of an annual program to ensure staff have access to regular in-service training, updates and refresher courses, in conjunction with MoH Human Resource Development (HRD) officers.</li> <li>Planning and coordination of CPD provided during specialist outreach/supervision visits.</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Arranges weekly CPD sessions for all clinical staff</li> <li>Coordinates medical student electives and volunteer placements.</li> <li>Coordinates training, mentoring and clinical placement activities provided by visiting teams</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Manages medical training program including placement, rotation and assessment of interns and registrars within the hospital.</li> </ul>
<b>Clinical support and Supervision</b>	<ul style="list-style-type: none"> <li>Clinical supervision of medical and allied health staff provided via quarterly outreach visits from referral hospitals.</li> <li>Clinical supervision of nursing staff by nurses in charge</li> </ul>	<ul style="list-style-type: none"> <li>Clinical supervision of registrars and interns by consultants.</li> <li>Provision of consultant advice, quarterly outreach/supportive supervision visits to provincial hospital clinical staff.</li> <li>Clinical supervision of nurse interns by nursing supervisors/nurses in charge</li> <li>Allied health interns supervised by senior staff, with specialist updates provided by visiting NRH staff</li> <li>Coordination of clinical research activities.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Functions as teaching hospital for final year undergraduates and post-graduate trainees studying overseas.</li> <li>Planning and coordination of national clinical research programs.</li> </ul>
<b>Clinical practice improvement unit</b>	<ul style="list-style-type: none"> <li>Service to be provided by a single dedicated trained senior nurse.</li> </ul>	<ul style="list-style-type: none"> <li>Service to be provided by up to 3 trained staff responsible for risk management, infection control &amp; customer service.</li> </ul>	<p><i>As for Regional Referral Hospital</i></p>
<b>GENERAL SUPPORT SERVICES</b>			
<b>Kitchen/food service</b>	<ul style="list-style-type: none"> <li>Manages ordering, supply, safe storage and timely use of fresh and frozen foods and dry goods.</li> <li>Provides nutritious meals and special diets</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Dietitian prescribes special diets and provides nutrition education to food services staff.</li> </ul>	<p><i>As for Regional Referral Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Dietitian based in kitchen</li> </ul>



SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<p>for patients, with dietitian advice if available.</p> <ul style="list-style-type: none"> <li>Ensures standards of food safety and kitchen hygiene are met and staff are fully trained to do this.</li> </ul>		
<b>Housekeeping: Laundry/linen and cleaning.</b>	<ul style="list-style-type: none"> <li>Collects soiled linen and scrubs/lab coats; wash, dry and supply clean linen etc to wards and outpatient areas.</li> <li>Ensures standards of hygiene and infection control are met and staff are fully trained to do this.</li> <li>Maintains standards of environmental cleanliness and hygiene by cleaning all surfaces throughout the hospital.</li> <li>Provides additional cleaning/disinfecting in areas of cross infection risk.</li> </ul>	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>
<b>Transport - patient and general</b>	<ul style="list-style-type: none"> <li>Provides ambulance plus vehicles for staff transport and general courier/on call duties.</li> <li>Provides basic CPR and paramedical training for ambulance drivers.</li> <li>Mechanical maintenance and regular servicing of all vehicles.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Provides ambulance fleet - 3 vehicles driven by drivers trained as paramedics including 4WD vehicles.</li> </ul>	<i>As for Regional Referral Hospital PLUS</i> <ul style="list-style-type: none"> <li>Intensive care ambulance</li> <li>Patient transport vehicle for airport and local transfers</li> </ul>
<b>Porters/wardsmen</b>	<ul style="list-style-type: none"> <li>Transfer of patients, equipment/supplies and communications between areas of the hospital.</li> <li>Transfer of bagged waste from clinical areas to collection points.</li> </ul>	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>
<b>Security</b>	<ul style="list-style-type: none"> <li>Protection of hospital, staff, equipment, patients 24/7; reporting of all incidents.</li> </ul>	<i>As for Provincial Hospital PLUS</i> <ul style="list-style-type: none"> <li>Closed circuit TV/video surveillance provided</li> </ul>	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
		in vulnerable areas	
<b>Communications/switchboard</b>	<ul style="list-style-type: none"> <li>Emergency phone number available 24/7.</li> <li>Separate number for routine calls: extensions in all wards and departments.</li> <li>Teleconferencing facility available</li> </ul>	<p><i>As for Provincial Hospital PLUS</i></p> <ul style="list-style-type: none"> <li>Emergency number staffed 24/7 by trained telephonist/clerical officer.</li> <li>Consultants, nurses in charge and on call clinical staff all contactable by mobile phone or pager, with numbers listed at main switchboard.</li> <li>Switchboards with automated answering voice for quick response eg when telephonist busy</li> </ul>	<i>As for Regional Referral Hospital</i>
<b>Mortuary</b>	<ul style="list-style-type: none"> <li>Refrigerated storage available for 4-6 bodies, with table for body preparation and viewing area for relatives and.</li> <li>Access to autopsy service at referral hospital.</li> </ul>	<ul style="list-style-type: none"> <li>Refrigerated storage available for at least 6 bodies, with table for body preparation and viewing, plus gathering area for relatives.</li> <li>Access to autopsy facilities, and autopsy service by pathologist from NRH.</li> </ul>	<ul style="list-style-type: none"> <li>Refrigerated storage for 8-10 bodies plus a freezer with capacity for storage of 2 bodies.</li> <li>Mortuary staffed by mortuary technicians ('morgue men') responsible for preparation, viewing and transfer of bodies to funeral homes, and assist with autopsy.</li> <li>Beyond the short term, viewing and for relatives to gather may be outsourced.</li> <li>Autopsies performed by consultant pathologist.</li> </ul>
<b>Waste Management</b>	<ul style="list-style-type: none"> <li>Management of waste from hospital and selected waste from other health facilities.</li> <li>Sorting/segregation of all waste, recycling/reusing where possible.</li> <li>Disposal of infectious waste material and other medical waste via high temperature incinerator.</li> <li>Safe disposal of sharps, chemicals, corrosives, dangerous and radioactive waste.</li> </ul>	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital - Services to be provided	Regional Referral Hospital (RRH) -Services to be provided	National Referral Hospital (NRH)- Services to be provided
	<ul style="list-style-type: none"> <li>Management of basic water supply and adequate sanitation/sewerage arrangements.</li> </ul>		
<b>Maintenance and grounds</b>	<ul style="list-style-type: none"> <li>Provision of general maintenance of buildings and equipment including carpentry, plumbing and electrical trades.</li> <li>Monitoring physical condition of infrastructure, plan and supervise maintenance/repair work.</li> <li>Maintenance and tidying of external lawn and garden areas; cleaning of paved areas.</li> </ul>	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>
<b>Hostel/waiting house</b>	<ul style="list-style-type: none"> <li>May have access to simple, self-contained accommodation for patients and families referred from outlying areas.</li> </ul>	<ul style="list-style-type: none"> <li>Simple self-contained accommodation on or near hospital for women with high risk pregnancies transferred antenatally from other provinces and parents of babies in NICU or paediatric ward without local accommodation.</li> </ul>	<i>As for Regional Referral Hospital</i>

***APPENDIX C:***  
***FACILITY STAFFING REQUIREMENTS***

## APPENDIX C1: PRIMARY CARE STAFFING REQUIREMENTS

### Aid Post

Title	Basic Qualification / Work Requirements
<b>Village Health Worker</b>	<p>A Village Health Worker is an informal health worker trained to achieve specific, necessary skills and practices and to understand the limitations of their skills and experience and the boundaries of their scope of practice. Prior to commencing health practice the VHW should:</p> <ul style="list-style-type: none"> <li>- Have completed a Village Health Worker (VHW) Pre-Service Training (PST)</li> </ul> <p>During service, the VHW should conduct:</p> <ul style="list-style-type: none"> <li>- Approved In-Service Training (IST)</li> <li>- Other refresher coursing or skills enhancement support of the code of conduct</li> <li>- Enhanced skills training in case of emergency response requirements (I.e Based on disaster response requirements)</li> </ul> <p>In addition to service provision requirements, specific roles include:</p> <ul style="list-style-type: none"> <li>- Facilitate operation and maintenance of the Aid Post</li> <li>- Provide health updates to Aid Post Committee</li> <li>- Provide health information reports to next higher level of facility</li> <li>- Collect and record AP user fee for outpatient consultations</li> </ul>

## Dispensary

Title	Basic Qualification / Work Requirements
Registered nurse	<p>In order for the health facility to be able to deliver health services as listed, conduct public health interventions and to manage a dispensary, the basic skills needed are found in a registered nurse who has undergone a set of training, orientation and capacity building as follows:</p> <ul style="list-style-type: none"> <li>- Successfully completed a Diploma of Nursing at Vanuatu College of Nursing Education, VCNE, or another recognised training institution as a minimum qualification.</li> <li>- At least 1 year of supervised internship as a recognised accreditation facility.</li> <li>- At least 2 years assignment to a health centre, supervised by a senior midwife or a nurse practitioner.</li> <li>- Orientation and Induction before deployment – every registered nurse should undergo an orientation by appropriate personnel to outline and clarify roles and responsibilities, administrative and management processes, financial processes and accountability and reporting mechanisms. For new assignments, the nurse should be taken to her new work station by her Supervisor who goes over the three sets of functions listed above. If possible a handover is facilitated with the nurse who had previously worked in this dispensary.</li> </ul>
Nurse Aide	<p>The nurse aide's role is to assist the registered nurse in specific areas. A nurse aide should have completed the approved / accredited training for nurse aides, and possess good knowledge of community engagement. The specific roles include:</p> <ul style="list-style-type: none"> <li>- Provide wound cleaning and dressings</li> <li>- Cleaning of dispensary including laundry and general hygiene practices</li> <li>- Sterilisation of equipment</li> <li>- Assist the nurse to take vital signs – take BP, temperature, pulse, breathing rate</li> <li>- Collect and record clinic user fee.</li> <li>- Assist in community engagement activity</li> </ul>

## Remote Dispensary

Title	Basic Qualification / Work Requirements
Midwife	<p>In a number of dispensaries due to their remoteness and difficulty in being able to quickly organize life-threatening medical evacuations to a referral hospital (eg, maternity conditions such as excessive bleeding during delivery, retained placenta, breech delivery).</p> <p>The midwife's critical role is to provide maternity services for women including antenatal care, labour &amp; delivery, postnatal care and newborn care. She is also responsible for family planning including IUD insertion, Jadelle insertion and appropriate maternity care referrals. She supports and supervises the MCH team including vaccination, IMCI and infant feeding and deputizes for the nurse practitioner where and when appropriate.</p> <p>The midwife should have:</p> <ul style="list-style-type: none"> <li>- successfully completed a Diploma of Midwifery training course at VCNE or other recognised training institution,</li> <li>- have a minimum of two years' experience working in hospital maternity ward settings, and</li> <li>- Have a minimum of two years' experience working in a health centre setting under a nurse practitioner.</li> </ul> <p>Every midwife should undergo an orientation by appropriate personnel to outline and clarify roles and responsibilities, administrative and management processes, financial processes and accountability and reporting mechanisms. For new assignments, the nurse should be taken to her new work station by her Supervisor who goes over the three sets of functions listed above. If possible a handover is facilitated with the nurse who had previously worked in this dispensary.</p>
Nurse Aide	<p>The nurse aide's role is to assist the registered nurse in specific areas. A nurse aide should have completed an approved / accredited training course for nurse aides, and possess good knowledge of community engagement. The specific roles include:</p> <ul style="list-style-type: none"> <li>- Provide wound cleaning and dressings</li> <li>- Cleaning of dispensary including laundry and general hygiene practices</li> <li>- Sterilisation of equipment</li> <li>- Assist the nurse to take vital signs – take BP, temperature, pulse, breathing rate</li> <li>- Collect and record clinic user fee.</li> <li>- Assist in community engagement activity</li> </ul>

## Health Centre

Title	Basic Qualification / Work Requirements
Nurse practitioner	<p>The nurse practitioner assumes the role of health facility manager while maintaining his/her clinical skills, contributing to delivery of health services. The nurse practitioner should have accomplished the following:</p> <ul style="list-style-type: none"> <li>- Registered Nurse with post graduate nurse practitioners qualification.</li> <li>- Public health and management experience.</li> <li>- Orientation and Induction before deployment – the nurse practitioner should undergo an orientation by appropriate personnel to outline and clarify roles and responsibilities, administrative and management processes, financial processes and accountability and reporting mechanisms. For new assignments, the nurse practitioner should be taken to his/her new work station by the provincial health manager who is the supervisor and who will go over the three sets of functions listed above. If possible a handover is facilitated with the nurse practitioner who had previously worked at the health centre.</li> </ul>
Midwife	<p>The midwife's critical role is to provide maternity services for women including antenatal care, labour &amp; delivery, postnatal care and newborn care. She is also responsible for family planning including IUD insertion, Jadelle insertion and appropriate maternity care referrals. She supports and supervises the MCH team including vaccination, IMCI and infant feeding and deputizes for the nurse practitioner where and when appropriate.</p> <p>The midwife should have successfully completed the Diploma of Midwifery course and gained experience working in maternity ward settings.</p> <p>Like all other health facility staff, there must be Orientation and Induction before deployment, similar to that of the nurse practitioner outlined above.</p>
Registered nurse	<p>The basic skills and experience required by a registered nurse who has undergone a set of training, orientation and capacity building are as follows:</p> <ul style="list-style-type: none"> <li>- Successfully completed a Diploma of Nursing at Vanuatu College of Nursing Education, VCNE, or another recognised training institution as a minimum qualification.</li> <li>- At least 1 year of supervised internship as a recognised accreditation facility.</li> </ul>



Title	Basic Qualification / Work Requirements
	<ul style="list-style-type: none"> <li>- Like all other health facility staff, there must be Orientation and Induction before deployment, similar to that of the nurse practitioner outlined above.</li> </ul>
Nurse Aid	<p>The nurse aid's role is to assist the registered nurse in specific areas. A nurse aid should have completed an approved / accredited training course for nurse aids, and possess good knowledge of community engagement. The specific roles include:</p> <ul style="list-style-type: none"> <li>- Provide wound cleaning and dressings.</li> <li>- Cleaning of dispensary including laundry and general hygiene practices.</li> <li>- Sterilisation of equipment.</li> <li>- Assist the nurse to take vital signs – take BP, temperature, pulse, breathing rate.</li> <li>- Collect and record clinic user fee.</li> <li>- Assist in community engagement activity</li> </ul>
Driver and Handyman	<p>The driver/handyman drives for the HC and undertakes the tasks of a grounds man in maintenance work that might be required for the HC and staff housing. He also carries out minor repairs when needed for nearby dispensaries that fall within the zone in which the HC is located and provides supervisory support. The driving tasks include – pick up of medicines and supplies from Central Medical Store or pharmacy, transport of medical evacuation to referral centre, and take outreach teams to communities on scheduled dates.</p>

**Note:** Staff requirements for Health Centres include a driver/handyman who is expected to undertake minor repairs when needed for nearby Dispensaries or Remote Dispensaries that fall within the zone in which the Health Centre is located and to which the Health Centre provides supervisory support.

## Enhanced Health Centre

Title	Basic Qualification / Work Requirements
Rural Physician	<p>The Rural Physician assumes the role of health facility manager while maintaining his/her clinical skills, contributing to delivery of health services. The Rural Physician should have accomplished the following:</p> <ul style="list-style-type: none"> <li>- Completed a Bachelor of Public Health qualifications provided by an accredited organisation</li> <li>- Completed an internship at a recognised accredited facility and be registered as a health practitioner</li> <li>- Completed a minimum of 2 years in a hospital setting prior to movement into a rural setting</li> </ul> <p>Orientation and Induction before deployment – the Rural Physician should undergo an orientation by appropriate personnel to outline and clarify roles and responsibilities, administrative and management processes, financial processes and accountability and reporting mechanisms. For new assignments, the Rural Physician should be taken to his/her new work station by the Provincial Health Manager who is the supervisor and who will go over the three sets of functions listed above. If possible a handover is facilitated with the Rural Physician or other health staff who have previously worked at the health centre.</p> <p>Is responsible for:</p> <ul style="list-style-type: none"> <li>- Provision of clinical and public health services based on scope of practice and trained level.</li> <li>- Contributing to the planning and implementation of health services within the zonal and provincial boundaries across Public Health and Hospitals &amp; Curatives Service components.</li> <li>- Administration of the Enhanced Health Centre, inclusive of planning, finance, human resource management and other administrative services.</li> <li>- Maintenance of quality management systems for health service provision.</li> <li>- Supportive Supervision of subordinate facilities and health personnel.</li> <li>- Capacity development of health professionals within the Enhanced Health Centre (EHC) and health zone.</li> <li>- Health Information Systems (HIS) Reporting on a regular basis or immediate (if notifiable)</li> </ul>
Nurse practitioner	<p>The nurse practitioner assumes the role as second in charge of health facility under the Rural Physician while maintaining his/her clinical skills, contributing to delivery of health services.</p>

Title	Basic Qualification / Work Requirements
	Remainder as per Health Centre requirements.
Midwife	As for Health Centre
Registered nurse	As for Health Centre
Nurse Aid	As for Health Centre
Driver and Handyman	As for Health Centre

## APPENDIX C2: HOSPITAL STAFFING REQUIREMENTS

### PROVINCIAL HOSPITALS

See table at Attachment 1.

### REGIONAL REFERRAL HOSPITAL

Medical staffing: increase in **resident medical specialist** cover in the areas of

- Emergency medicine
- Internal medicine
- Surgery
- Anaesthetics/HDU
- O&G
- Paediatrics/Neonatal

Minimum staffing in these areas = 2 x consultant/senior registrar; 1 x junior registrar/MO plus 1 intern per specialty. Medical staff to be responsible for covering inpatient, outpatient and emergency on call services plus consultancy support/supervision of staff in provincial hospitals and health facilities.

Specialist consultant cover to be provided from NRH in

- Surgical subspecialties
- Psychiatry
- Pathology
- Radiology

These services to be supervised at RRH level by a registrar or MO with specialist focus.

**Specialist trained nurses** – required for

- Emergency department
- Critical care/HDU (adult and paediatric)

- NCD clinic: diabetes, footcare, eye, nutrition
- Medical ward
- Surgical ward
- Women's health clinics
- Paediatrics
- Special care nursery
- Mental health outpatient clinic (also support inpatient)
- Operating theatres
- Anaesthetics
- Palliative care
- Infection control

**Midwives & Senior Midwives** required for

- Antenatal/postnatal clinics (including high risk)
- Labour and delivery
- Maternity ward

**Nurse staffing levels**

Beyond minimum cover, to be determined on a patient caseload and dependency basis.

**Outpatient staffing levels – medical, nursing and other cadres**

- Refer proposed outpatient staffing standards at Attachment 2.

**Allied Health/Clinical Support**

- Refer proposed minimum staffing standards at Attachment 3.

**NATIONAL REFERRAL HOSPITAL**

Medical staffing: increase in **resident medical specialist** cover in the areas of

- Emergency medicine
- Internal medicine
- Surgery
- Anaesthetics/HDU
- O&G
- Paediatrics/Neonatal

Minimum staffing in these areas = 3 x consultant/senior registrar; 1 x junior registrar/MO plus 1 intern per specialty. Model is generalist with specialist focus. This will allow for some sub-specialisation within core staffing.

Specialist consultant/SMO staffing to be upgraded in:

- Psychiatry (2 x SMO)
- Pathology (1 x SMO, 1 x trainee)
- Radiology (1 x SMO, 1 x trainee)

Medical staff to be responsible for covering inpatient, outpatient and emergency on call services plus provision of specialist support and supervision to staff at RRH and some provincial hospitals.

**Specialist trained nurses** – required in:

- Emergency department (adult and paediatric)
- ICU/HDU (adult and paediatric)
- NCD clinic: diabetes, footcare, eye, nutrition
- Medical ward
- Surgical ward
- Oncology/chemotherapy
- Women's health
- Paediatrics
- NICU
- Mental health
- Operating theatres

- Anaesthetics
- Palliative care
- Infection control

Clinical nurse consultant positions as an alternative career pathway for clinical specialist nursing.

**Midwives & Senior Midwives** – as for RRH

**Outpatient staffing levels – medical, nursing and other cadres**

- Refer proposed outpatient staffing standards at Attachment 2.

**Allied Health/Clinical Support**

- Refer proposed minimum staffing standards at Attachment 3.

**APPENDIX C2: ATTACHMENT 1 - MINIMUM STAFFING STANDARDS (PROVINCIAL HOSPITALS)**

Category	Minimum Number	Notes
Medical Superintendent	1	
Nursing Services Manager	1	
Manager General Services	1	
Medical Officer - general	2	
Nurse Aide		Nurse staffing numbers depend on size of hospital and level of activity. <i>At least one midwife is required per shift.</i>
Registered Nurse		
Midwife		
Nurse Practitioner		
Eye nurse	1	Structure = 4 (incl. 1 NP) + 1 nurse aide
ENT nurse	1	Structure provides for 3 + 1 nurse aide
Mental health nurse	1	
ASO/Nurse Anaesthetist	2	Structure = 1 ASO, 2 Nurse Anaesthetist
Dental Officer/dentist	1	
Dental therapist	1	
Dental assistant	1	
Laboratory technician	2	
Assistant Laboratory technician	1	Structure provides + 2 microscopists
Medical imaging technician	2	Ideally should include 1 sonographer
Pharmacist	1	Structure provides for 3
Pharmacy Dispenser	1	Structure provides for 3
Pharmacy technician	1	Structure provides for 2
Supply officer (pharmacy)	1	Structure provides for 3
Therapy Aide	1	Structure provides for 1 Physiotherapist
Biomedical technician	1	Not in structure
HIS officer	1	
Medical records officer	1	Includes coding role
Medical records clerk	2	
Secretary/receptionist	2	Structure provides for 3



Category	Minimum Number	Notes
Finance officer	1	
Clerical	1	Structure provides for 2
Housekeeping supervisor	1	
Cooks	2	
Laundry, tailor	2	Structure provides for 5
Cleaners	4	Structure provides for 5
Porter	2	Structure provides for 3
Maintenance supervisor	1	
Maintenance staff	2	Handyman, groundsman
Driver	2	
Security	1	

## APPENDIX C2: ATTACHMENT 2 - STAFFING STANDARDS (OUTPATIENT SERVICES)

Assumes average clinical productivity of 43 weeks per year (accounts for annual & sick leave, public holidays, training days etc) and average 10% administrative time (ie 9 sessions per week for full time outpatient staff). Numbers of sessions depend on demand for individual services ... may be varied.

**Note:** FTE = Full-time equivalent

A nurse who works 3 days per week (6 sessions) = 6/10 or 0.6 FTE

*Note that contact duration (minutes per contact); sessions per week and assumed weeks per year are all subject to variation.*

Outpatient caseload analysis	Minutes/contact (Average)	Contacts per hr	Sessions per wk	Hrs per wk* (4 hrs/session)	Contacts per week	Contacts p.a (43 wks p.a.)
Consultant	20	3	2	8	24	1032
Medical Officer	15	4	8	32	128	5504
Dentist	30	2	9	36	72	3096
Dental Therapist/hygienist	20	3	9	36	108	4644
Nurse Practitioner	15	4	9	36	144	6192
Midwife	15	4	5	20	80	3440
RN	15	4	9	36	144	6192
Nurse Aide	12	5	9	36	180	7740
Physiotherapist	30	2	8	32	64	2752

Radiographer	15	6	9	36	144	6192
Sonographer	20	3	9	36	108	4644
CT Scanning technician	45	1.3	9	36	46	2012
Clinical pharmacist	TBD	TBD	TBD	TBD	TBD	TBD
Pharmacy dispenser	TBD	TBD	TBD	TBD	TBD	TBD
Lab technicians	TBD	TBD	TBD	TBD	TBD	TBD

**FTE staffing** = projected demand (contacts) divided by average caseload. For seven day coverage, multiply FTE by 1.4.

**APPENDIX C2: ATTACHMENT 3 - MINIMUM STAFFING (RRH & NRH) – ALLIED HEALTH/CLINICAL SUPPORT**

SERVICE CATEGORY	REGIONAL REFERRAL HOSPITAL	NATIONAL REFERRAL HOSPITAL
Pharmacy	Pharmacy Manager Senior pharmacist x 2 Pharmacy dispenser x 4* Pharmacy assistant x 2 Pharmacy intern x 1 Supply Officer x 2	Pharmacy Manager Senior pharmacist x 4 Pharmacist x 2 Pharmacy dispenser x 6* Pharmacy assistant x 2 Pharmacy intern x 1 Supply Officer x 4
Medical laboratory services & Blood Bank	Laboratory OIC Senior Lab Tech x 3 Lab. Technician x 3 Lab assistant x 3 Phlebotomist x 2 Blood donor recruitment officer x 1 Lab Tech Intern x 1	Principal Laboratory Officer Section OIC x 6 Senior Lab Tech x 6 Lab. Technician x 6 Lab assistant x 3 Blood donor recruitment officer x 1 Phlebotomist x 2 Lab Tech Intern x 1
Medical imaging	Medical Imaging OIC Senior MI Technician x 2 MI Technician x 2 MI Intern x 1	Principal Medical Imaging Officer Senior MI Technician x 3 MI Technician x 4 MI Intern x 1
Operating theatres + endoscopy	Theatre Manager/Nurse in charge RNs (spec)	Theatre Manager/Nurse in charge RNs (spec)
Anaesthetics	SMO x 2 MO x 1 Intern x 1 Nurse Anaesthetist x 3 Anaesthetic Technician x 1	SMO x 3 MO x 2 Intern x 1 Nurse Anaesthetist x 3 Anaesthetic Technician x 1
Sterilising & Infection control	Nurse in charge NA x 3	Nurse in charge NA x 5
Biomedical engineering	Technician in Charge Technician x 2	Manager, National Biomedical Service Senior Biomedical Technician x 2

SERVICE CATEGORY	REGIONAL REFERRAL HOSPITAL	NATIONAL REFERRAL HOSPITAL
		Biomedical Technician x 2 Biomedical Technician Intern x 1
Physiotherapy/Rehabilitation	Physiotherapist in charge Physiotherapist x 1 Occupational Therapist x 1 Therapy aide x 2	Manager, Physiotherapy & Rehabilitation Physiotherapist x 2 Occupational Therapist x 1 Speech Pathologist x 1 Physio intern x 1 Therapy aide x 2
Prosthetics/Orthotics	Prosthetist/Orthotist x 1 Technician x 1	Prosthetist/Orthotist x 1 Technician x 1
Nutrition/dietetics	Senior Dietitian x 1 Dietitian x 1 Dietary assistant x 2	Manager, Nutrition & Dietetics Senior dietitian x 2 Dietary assistant x 2
Counselling/social work/pastoral care	Counsellor x 1	OIC Counselling service Counsellor
Palliative care	RN (spec) x 1	RN (spec) x 2
Health promotion	Health Promotion Liaison Officer x 1	Health Promotion Liaison Officer x 1
Health information/medical records	Senior HIS Officer HIS Officer x 2 Medical Records Officer/Coder x 2 Medical Records Clerk x 4	Manager Health Information Senior HIS Officer HIS Officer x 2 Medical Records Officer/Coder x 3 Medical Records Clerk x 8

**APPENDIX D:**  
**FUNCTIONAL SPACE AND UTILITIES**

# ATTACHMENT D1: PRIMARY CARE FUNCTIONAL SPACE AND UTILITIES

## Key:

Aid Post (AP), Dispensary (D), Remote Dispensary (RD), Health Centre (HC), Enhanced Health Centre (EHC)

## PRIMARY CARE FACILITIES - FUNCTIONAL SPACE

Serial	Functional Area	Room Requirement					Area Description	Spatial Requirement (m2)					Supporting Utilities
		AP	D	RD	HC	EHC		AP	D	RD	HC	EHC	
1	Consultation Room	1	1	1	2	2	Room suitable for private consultation with patient and carer (if applicable). Ability to house nurses station, examination bed, basic diagnostic equipment, communications equipment, reference material, and patient files. Access to outpatient waiting area and clinical treatment room.	12	10	10	10	10	Ability to communicate through voice and / or data mediums. Supported by power supply. Access to infection control fittings.
2	Treatment / Procedure Room	1	1	1	1	1	Room suitable for treatment of single patient with carer support (if required). Ability to house nurses station, treatment bed, first aid and other medical equipment. Access to consultation and pharmaceutical storage areas.	0	13	13	13	13	Supported by power supply for provision of examination and general lighting. Access to infection control facilities with running water.
3	Inpatient (Male) Ward	0	1	1	1	1	Room suitable for housing two (2) inpatients at one time with ability to store personal effects, allow for visitors, and support inpatient meals in situ. Provision of privacy for further assessment and observation through non-intrusive means. Access to ablution areas.	0	12	12	12	12	Supported by general lighting systems.

Serial	Functional Area	Room Requirement					Area Description	Spatial Requirement (m2)					Supporting Utilities
		AP	D	RD	HC	EHC		AP	D	RD	HC	EHC	
4	Inpatient (Female) Ward	0	1	1	1	1	Room suitable for housing two (2) inpatients at one time with ability to store personal effects, allow for visitors, and support inpatient meals in situ. Provision of privacy for further assessment and observation through non-intrusive means. Access to ablution areas.	0	12	12	12	12	Supported by general lighting systems.
5	Inpatient Maternity Ward	0	0	1	1	1	Room suitable for housing 2-3 inpatients at one time and 2-3 cribs with ability to store personal effects, allow for visitors, and support inpatient meals in situ. Provision of privacy for further assessment and observation through non-intrusive means. Access to ablution areas.	0	0	14	14	14	Supported by general lighting systems and additional power supply for night lighting (low light).
6	Delivery Room	0	0	1	1	1	Room for housing delivery bed, ability to accommodate three (3) staff at one time. Close to inpatient Maternity and pharmaceutical storage and provide access to ablutions.	0	0	10.5	10.5	10.5	Access to running water and sluice area. Supported by General and examination lighting and ability to operating low power equipment as required. Access to medical gas supply.
7	Pharmaceutical Storage	1	1	1	1	1	Room for housing pharmaceutical storage, cold chain, sterilisation equipment, sorting table and nurses station. Ability to support laboratory / diagnostics area. Adjacent to treatment room and Delivery room, close to inpatient wards.	12	10.5	10.5	10.5	10.5	Access to running water and reagent disposal. Supported by general lighting and provision of power for low power applications. Access to gas lines for sterilisation of equipment (non-electric)



Serial	Functional Area	Room Requirement					Area Description	Spatial Requirement (m2)					Supporting Utilities
		AP	D	RD	HC	EHC		AP	D	RD	HC	EHC	
8	Waiting Area	0	1	1	1	1	Room for seating for outpatient consultation, covered from inclement weather. Ability to change the waiting area to training area with notice board / black board option for presentations. Inclusive design with ramp and stair access. Adjacent to consultation room. Ability to be closed to remainder of the facility. Access to external ablution areas and water supply.	3	15	15	15	15	Access to running water and external ablutions as well as handwashing facilities. Supported by general lighting. Additional infection control dispensing measure to be in place
9	Ablutions (WC) - Internal	0	2	3	3	3	Separate Male and Female ablutions for staff and inpatients only. Ability to access via wheelchair or place additional aids. Adjacent to inpatient wards and delivery room.	0	6	6	6	6	Access to water for flush system and handwashing. Toilet discharge to brown water waste, hand basin to grey water waste.
10	Ablutions (Shower) - Internal	0	2	3	3	3	Separate Male and Female ablutions for staff and inpatients only. Ability to access via wheelchair or place additional aids. Adjacent to inpatient wards and delivery room.	0	10	10	10	10	Access to water for gravity fed showering system. Discharge to grey water waste.
11	Laundry	0	1	1	1	1	External facilities suitable for handwashing soiled linen and other cleaning items. Complete with stainless steel tubs and faucets, angle grill for non-abrasive washing and drainage linked to grey water waste areas. If external, can be part of undercover drying area for laundry items.	0	2	2	2	2	Access to running water. External general lighting to be provided for working by night.
12	Sluice	0	1	1	1	1	Internal or external facilities for disposal of bodily fluid waste (not excrement) and birthing waste. Linked to septic tank system. Accessible from in-patient wards and delivery room.	0	0.5	0.5	0.5	0.5	Access to brown water waste system and running water for flush. Access to hand washing facilities.

Serial	Functional Area	Room Requirement					Area Description	Spatial Requirement (m2)					Supporting Utilities
		AP	D	RD	HC	EHC		AP	D	RD	HC	EHC	
13	Sterilisation	0	1	1	1	1	Internal area for sterilisation through use of power, or fuel system. Can utilise existing space.	0	1	1	1	1	Adjacent to Pharmaceutical Storage units
<b>External Water and Sanitation Health</b>													
13	Ablutions (WC) - External		2	2	2	2	Double Ventilated Improved Pit (VIP) Toilet external to health facility with lined pit. Separated male / female individual toilets. Access to hand washing facilities and other hand sanitation consumables.	0	3	3	3	3	Water storage for handwashing only.
14	Ablutions (Shower) - External		2	2	2	2	Basic shower facilities separated for male and female. Access to external ablutions and other hand sanitation facilities. Grey water waste disposal separated from VIP.	0	5	5	5	5	Water storage with gravity feed system.
15	Grey Water Waste		1	1	1	1	Waste pit discharge area with appropriate soak away construction	0	N/A	N/A	N/A	N/A	Lines from all grey waste areas
16	Brown Water Waste		1	1	1	1	Multi-chambered septic tank capable of holding effluent based on facility size, catchment population and expected usage rates. Treated water discharge to appropriate soakaway.	0	N/A	N/A	N/A	N/A	Lines from all brown waste areas
17	Roof Water Catchment System		1	1	1	1	Water capture system from roof catchment into existing water tanks or underground tanks systems.	0	N/A	N/A	N/A	N/A	Piped to health facility with appropriate yield
18	Well / Local Water Supply		1	1	1	1	Water capture from local supply or within health facility via piping or pumping system to health facility for storage in above ground or below ground tanks.	0	N/A	N/A	N/A	N/A	Piped to health facility with appropriate yield

Serial	Functional Area	Room Requirement					Area Description	Spatial Requirement (m2)					Supporting Utilities
		AP	D	RD	HC	EHC		AP	D	RD	HC	EHC	
19	Generator Shed		1	1	1	1	Covered facility for housing of generator or battery bank for solar systems. Ventilated, protected from weather conditions. Ability to exhaust fumes.	0	2	2	2	2	Access to MDB in staff housing / medical facilities
20	Drying Shed / Area	0	1	1	1	1	Provision of space for drying of clothes bedding and other linen. Open are facility, with ability to be used for roof water catchment to feed into water tanks.	0	0	0	0	0	Adjacent to water storage areas
21	Waste Management and Storage	0	1	1	1	1	Incineration system for medical and general waste. Certified to dispose of glass and needles plus any combustible biohazard waste.	0	3	4	4	4	Distance from medical facility, long chimney flume.
22	Garage	0	0	0	1	1	External shelter able to provide cover for 1 x vehicle. Able to be used for water catchment system feed to water tanks	0	0	0	15	15	Adjacent to water storage areas, can be the roof catchment area.
23	Workshop	0	0	0	1	1	Standalone workshop for driver / cleaner for storage of tools, minor repair works. Can be part of vehicle shelter.	0	0	0	6	6	Adjacent to garage
24	Waiting Home	0	0	1	1	1	Provision of living quarters for up to 3 families to be provided for short to long term stay in preparation for child birth. Separated family rooms with security screens and locks. Access to ablutions inclusive external toilets, showers. All ablutions to be separated male / female.	0	0	TBD	TBD	TBD	TBC – Policy to be amended once standardised designs are finalised

Serial	Functional Area	Room Requirement					Area Description	Spatial Requirement (m2)					Supporting Utilities
		AP	D	RD	HC	EHC		AP	D	RD	HC	EHC	
25	Kitchen	0	1	1	1	1	Kitchen facility for preparation of patient meals and for use by families utilising maternity waiting homes.	0	12	12	12	12	Distance from medical facility, downwind.
<b>STAFF HOUSING</b>													
26	3 Bedroom Staff House	0	0	0	2	3	2 bedroom house consisting of verandah, master bedroom, 2 x other bedrooms, kitchen, ablutions, laundry, septic tank, water storage, and boundary fence	0	0	0	148	222	TBC
<b>TOTAL SPATIAL REQUIREMENTS</b>								<b>0</b>	<b>74</b>	<b>74</b>	<b>148</b>	<b>222</b>	
27	2 Bedroom Staff House	0	2	2	2	2	2 bedroom house consisting of verandah, master bedroom, 1 x other bedrooms, kitchen, ablutions, laundry, septic tank, water storage, and boundary fence	0	130	130	130	130	TBC
<b>TOTAL SPATIAL REQUIREMENTS</b>								<b>0</b>	<b>130</b>	<b>130</b>	<b>130</b>	<b>130</b>	

## PRIMARY CARE FACILITIES - ADDITIONAL UTILITIES

Serial	Utilities	Example Description	AP	D	RD	HC	EHC
1	Water Supply	Establishment of standing water tanks on hardstanding or compacted coral areas with tie down for cyclone protection. Water catchment via roof water capture system, well draw and delivery system or other gravity fed natural flow or banked tank systems. Distribution via gravity system for utilisation within health facilities, particularly for handwashing facilities.	- Able to access water from local source and store up to 5,000L within proximity of Aid Post for exclusive use.	- 10,000 Litre system. Delivery to Consultation and Treatment areas, and any ablutions	- 15,000 Litre system. Delivery to consultation, treatment and delivery areas, and any ablutions	- 30,000 Litre system. Delivery to consultation, treatment and delivery areas, and any ablutions	As for Health Centre
2	Power Supply	Provision of solar power supply through roof mounted or pole mounted solar array, with battery bank, control panels and load limiters. Provision of generator support services linked to established electrical lines. Connection to mains power (GRID) through establishment of meter box on site and connection to wired infrastructure.	- Provision of 50W Solar lighting package with 2-3 light fittings, solar panel, and ability to charge cellphone	- Provision of 300W solar power system with establishment of lighting in each room. External lighting for waiting / Health Promotion area. Back up 5kVa generator with ability to link to established electrical systems. Separate solar or generator lighting systems for staff housing.	As for Dispensary, plus - Lighting to delivery and Maternity inpatient ward.	- Provision of 1000W solar power system with establishment of lighting in each room including delivery and maternity inpatient ward. External lighting for waiting / Health Promotion area. Back up 5kVa generator with ability to link to established electrical systems. Separate solar or generator lighting systems for staff housing.	As for Health Centre

Serial	Utilities	Example Description	AP	D	RD	HC	EHC
3	Communications	Ability to access voice, SMS and Data through connection to private ICT provider, through satellite communications or Government Broadband Network (GBN).	<ul style="list-style-type: none"> <li>- Cellphone and access to voice and SMS only. Ability to access credit provided by MOH for services.</li> </ul>	<ul style="list-style-type: none"> <li>- Cellphone or Desktop phone (sim capable) for access to voice and SMS only.</li> <li>- Access to calling circle within provincial area.</li> </ul>	<p>As for Dispensary, plus:</p> <ul style="list-style-type: none"> <li>- Low Power laptop and printer to utilise Data capability.</li> </ul>	<p>As for Remote Dispensary plus:</p> <ul style="list-style-type: none"> <li>- Provision of tablet for mobile pharmaceutical supply ordering system, supervisory visits and surveillance.</li> </ul>	As for Health Centre
4	Sanitation Services	Provision of improved toilets, hand washing facilities inside and outside facilities and waste disposal facilities for grey and brown waste. Ability to dispose of solid biomedical waste through approved practices.	<ul style="list-style-type: none"> <li>- Access to community latrines or Ventilated Improved Pit Toilets.</li> <li>- Access to hand washing facilities (such as tippy-tap)</li> </ul>	<p>As for Aid Post plus:</p> <ul style="list-style-type: none"> <li>- Separated liquid waste to established grey and brown water waste facilities.</li> <li>- Backload of biomedical waste to Health Centre for Disposal or establishment of "kiln" type incineration system</li> <li>- Hand washing units inside consultation, treatment and sluice areas</li> <li>- Handwashing facilities inside ablutions</li> </ul>	<p>As for Dispensary, plus:</p> <ul style="list-style-type: none"> <li>- Ability to dispose of maternal waste (e.g placenta)</li> <li>- Handwashing facilities inside delivery units</li> <li>- Establishment of fuel powered incineration system</li> </ul>	As for Remote Dispensary	As for Health Centre

Serial	Utilities	Example Description	AP	D	RD	HC	EHC
5	Security	Establishment of external active or passive security measure for the facility or incorporation of additional security measures for the facility, such as boundary fences, secure storage facilities, or separation of services	<ul style="list-style-type: none"> <li>- Ability to secure pharmaceuticals in ventilated storage area within main consultation room.</li> </ul>	<ul style="list-style-type: none"> <li>- Establishment of security fencing around the Dispensary Facility, and staff housing.</li> <li>- Lockable health facility and pharmaceutical storage area.</li> <li>- Ability to secure generator and other fixed assets outside the facility</li> </ul>	As for Dispensary plus: <ul style="list-style-type: none"> <li>- Security for maternity inpatients facility.</li> </ul>	As for Remote Dispensary	As for Health Centre
6	Transport Services	Access to transport services available within local area. Provision of transport services such as motorbike? quad, boat, or vehicle for provision of MOH owned transport services. Access to local port, landing zone or airfield infrastructure for referral system.	<ul style="list-style-type: none"> <li>- Access to local transport</li> </ul>	As for Aid Post: <ul style="list-style-type: none"> <li>- Support provided by Health Centre. Provision of Quad bike for local support services.</li> </ul>	As for Dispensary plus. <ul style="list-style-type: none"> <li>- Provision of boat and / or vehicle for link to Health Centre and provision of outreach services.</li> </ul>	As for Remote Dispensary plus <ul style="list-style-type: none"> <li>- Access to wharf, landing zone or airfield utilising common modes of transport.</li> </ul>	As for Health Centre

## APPENDIX D2: HOSPITAL FUNCTIONAL SPACE AND UTILITIES

### PROVINCIAL HOSPITALS

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>OUTPATIENT SERVICES</b>			
<b>Emergency Department (ED)</b>	Waiting area (internal)	15	Small area adjacent to GOPD waiting
	Reception/registration and triage point	9	Shared with GOPD
	Resuscitation bay	25	2 beds. Direct external access desirable
	Acute treatment bay/cubicle	4	Includes nebuliser station(s). Number of bays depends on activity level – <i>refer standards</i>
	Consultation/examination room	12	May be shared with GOPD
	Dressing/plaster/procedure room	14	
	Observation/holding bed(s)	8-12	1-2 beds depending on demand
	Psychiatric emergency room – secure, padded	9	
	Mobile equipment bay	4	Shared with GOPD
	Staff station	8	Shared with GOPD
	Store room/clean utility/ file storage	8	May be shared with GOPD?
	Dirty utility/sluice	8	Shared with GOPD
	Staff tea/meeting room	16	Shared with GOPD
	Disaster kit storage	4	Secure store room, with locked external access
	Toilets – patient (male & female)	2 x 3	With handwashing. Shared with GOPD
	Toilet – staff	4	With handwashing. Shared with GOPD
<b>General Outpatients Department (GOPD)</b>	Waiting area (internal and external) with health promotion area.	15 -30	Internal area may be shared with ED. Covered external area, with seating for up to 40 people, depending on demand.
	Reception and triage point		Shared with ED
	Consultation/examination rooms	12	Number depends on activity – <i>refer standards</i> . May be shared with ED.
	Eye/ear room	16	Soundproof room; able to be darkened, with space for equipment storage plus write-up area for Eye & ENT nurses.



Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Treatment room	16	Includes areas for dressings, injections, nebuliser treatment.
	Observation bed(s)		Shared with ED
	Store room/clean utility/file storage	10	May be shared with ED
	Dirty utility		Shared with ED
	Toilets – patient (male & female)		Shared with ED
	Toilet – staff		Shared with ED
<b>Specialist outpatient clinics</b>	Waiting area	16	May be shared with GOPD
	Consultation/examination rooms	12	Number depends on activity level – <i>refer standards</i>
<b>Paediatric/child health clinics</b>	Waiting area with reception desk and triage station	20-30	Space depends on activity. Has health promotion area with TV
	Consultation/examination room	12	
	Treatment room	16	Includes resuscitation bay with trolley.
	Observation area – 1-2 beds	8 per bed	Size depends on activity level
	Store room/clean utility/file storage	10	May be shared with other clinic services
	Dirty utility		May be shared with other clinic services
	Toilets – patient		May be shared with other clinic services
	Toilet – staff		May be shared with other clinic services
<b>NCD Hub</b>	Waiting area with reception desk		Space depends on patient numbers: allow 0.5 m <sup>2</sup> per person
	Consultation cubicles x 2: NCD nurse; dietitian/nutrition nurse	6 per cubicle	
	Consult room: doctor/NP	10	With handwashing
	Eye assessment room	8	Able to be darkened
	Footcare room	12	With handwashing
	Handwashing bay	2	
	Staff toilets & lockers	8	May be shared with SOPD
	Toilets – patient (male & female)	2 x 3	With handwashing.
	Store	6	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
Antenatal clinic	Waiting area with nurse station, scales	20-40	Seating for 15-40 women. Area size depends on demand. Has access to patient toilet and handwashing. External overflow waiting area may be provided to accommodate families.
	Screened examination bay(s)	3 per bay	1-2 bays depending on demand
	Consultation/examination room with CTG	12	Space for desk, couch, CTG machine, handwashing.
Women's health clinic	Waiting area with nurse station	16	May be shared with SOPD
	Screened examination bay	3	
	Consultation/examination/procedure room	14	
Dental services	Reception and waiting area with oral health promotion area	10	Space for up to 10 people with access to toilet and handwashing
	Dental surgery with space for at least 1 chair, with lights, drill and suction units.	12	Requires suitable plumbing & drainage
	Sterilising bay with bench, sink and autoclave plus storage for sterile supplies.	6	
	Office area for dental officer	9	
	Storage area for dental equipment and records,	8	
	Store for compressor (external)	4	Compressor to be housed close by but outside dental surgery.
Health promotion programs	Room/space for staff conducting health promotion activities/programs in hospital	30	Ideally located within or adjacent to GOPD waiting area.
INPATIENT SERVICES			
General/Medical/Surgical wards	Male and female ward, each including a 2-bed acute care area, adjacent to staff station.	1 bed room – 12	<i>Bed numbers</i> are to be determined separately at each site, based on utilisation.  Beds are arranged in 4 bed bays, plus a number of single rooms with ensuite shower and toilet, suitable for private use or infection control.  All wards to include (size m <sup>2</sup> in brackets) <ul style="list-style-type: none"> <li>Staff station (9)</li> <li>Office for In charge (9)</li> <li>Hand washing bay (1): one per 6 beds</li> </ul>
Isolation Ward	2 bed ward adjacent to general ward. Each must have separate toilet and shower. Hand washing bay just outside the door. Air-conditioning should be negative pressure	2 bed room – 20 4 bed room - 32	
TB Ward	Separate self-contained building. <i>NB fewer beds required as treatment shifts to community.</i>		
Antenatal and	Located adjacent to each other to allow flexible		

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>Postnatal ward</b>	use. Includes baby care room for bathing, feeding, examinations etc plus area for post-operative patients close to staff station.		<ul style="list-style-type: none"> <li>▪ Ready access to resuscitation trolley</li> <li>▪ Access to shower and toilet facilities</li> <li>▪ Interview/consultation room (9)</li> <li>▪ Ward pharmacy cupboard (1)</li> <li>▪ Linen bay (1)</li> <li>▪ Clean utility/storage (10)</li> <li>▪ Dirty utility with sluice (8)</li> <li>▪ Access to staff tea room, toilets and changing room</li> <li>▪ Access to meeting room</li> <li>▪ Access to visitor waiting area</li> </ul> <p>Some of these facilities may be shared among two or more wards, depending on the size and proximity of those wards.</p> <p>All inpatient areas require good ventilation &amp; insect screens.</p>
<b>Nursery</b>	Accommodates humidicribs(s), cots, plus space for breastfeeding and storage.	7 per cot	
	Examination/bathing area	6	
	Phototherapy bay	2	
	Hand hygiene bay – wash basin and alcohol rub	1	
<b>Paediatric ward</b>	Paediatric ward, including area suitable for isolation of infectious cases.		
	Acute care bay (1-2 beds)	10 - 16	
	Children's play area	16	
	Bathroom with bath	10	
<b>Birthing</b>	Screened cubicle/room for assessment/prep/CTG	8	Located near entrance to labour ward.
	Labour/first stage ward (2-4 beds) with ambulation area	10 per bed	2 labour ward beds per delivery bed. Bed numbers need to be determined separately at each site.
	Delivery room (1-2 beds)	16 per bed	High dependency bed located adjacent to delivery room.
	High dependency area (1 bed)	10	
	Sterile stock room	6	
	Pharmacy imprest bay/cupboard	2	
	Staff change room, toilet and handwashing	8	
	Waiting area for families	16	
<b>ALLIED HEALTH/CLINICAL SUPPORT SERVICES</b>			
<b>Pharmacy</b>	Waiting area	12-20	May be shared with outpatients
	Work area with benches/tables for assembly/preparation/checking of medications.	12	Pharmacy area must be secure, temperature controlled, with space for bulk fluids and vaccine fridge. Direct access to delivery dock is desirable.
	Pharmacy store with shelving, refrigerated storage and receiving area for deliveries.	10	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Dangerous drugs cupboard	2	Directly accessible from waiting area.
	Dispensing/drug information area window.	2	
	Pharmacist office	9	
	Secondary/bulk store	14	Space for storage & distribution of bulk fluids and supplies to provincial health facilities.
<b>Medical laboratory</b>	Reception and waiting area	10	Space for up to 10 people, depending on size of hospital
	Collection room with adjacent toilet	6 + 3	Phlebotomy chair/couch
	Specimen reception and storage area	2	
	Haematology & biochemistry area	16	'Clean' and 'dirty' laboratory functions require separate work areas, each with benches and sinks.
	Microbiology area	12	
	Media preparation bay with sink, workbench and storage	6	
	Wash bay with steriliser	4	
	Technician's office	9	
	Interview/counselling room	9	
	Storage for equipment, reagents etc	16	Must be dry, cool
	Tea room	16	Shared with other allied health services
<b>Blood bank</b>	Collection room with donation couch and blood storage fridge.	10	Waiting area shared with laboratory. Blood storage fridge within laboratory storage area.
	Donor refreshment area	10	
<b>Medical Imaging</b>	Reception and waiting area	10	Space for 6-10 people, depending on size of hospital
	Patient change area (2 cubicles)	8	Needs easy access to patient toilet
	General X-ray room	20	Requires shielding
	Ultrasound scanning room	8	
	Processing room and chemical store	8	Only required if plain film system in use
	Reporting area with technician's office space	12	
	File storage area	4	Only required if plain film system in use

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
Operating Theatre	Anteroom/receiving area	8	Theatres located together with direct access from A&E and Labour Ward.
	Scrub area	6	
	Operating room	30	
	Procedure room	16	
	Recovery area (2 bays)	16	
	Change room, toilet and shower	12	
	Sterile stock room with packing area	20	
	Store: non-sterile supplies	10	
Anaesthetics	Office space for anaesthetist, theatre manager	12	Adjacent to theatres
	Storage for anaesthetic machines & equipment.	8	
Sterilising (CSSD) & Infection Control	Receiving bay	6	Trolley access necessary. Sterilising unit should allow a one-way progression of instruments from 'dirty' to 'clean'.
	Instrument rinsing/disinfecting area	12	
	Instrument sorting, packing area	14	
	Autoclave area	12	May be shared with theatres
	Despatch area	4	
	Storage for sterile equipment & linen	10	
	General store (chemicals etc)	4	
	Trolley stripping, wash bay	8	
	Change room with toilet and shower	12	
Biomedical	Workshop area with work benches and secure storage for equipment and tools		Allow for storage of bulky equipment
	Storage area for equipment awaiting repair.		
	Technician's office with computer		
Physiotherapy/Rehab	Gym area with space for 1-2 treatment cubicles and large open area for exercise programs.	50	Must be wheelchair accessible. Located to be accessible from both inpatient and outpatient areas
	Assessment/consult/treatment room	10	
	Office for OIC, with file storage area.	10	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Small ADL kitchen	12	May be shared with wards
	Bulky equipment store.	20	
	Shower – accessible	6	
	Accessible/assisted toilet and handwashing.	4	
Medical records/health information	Receiving area with window	8	Located near outpatient reception desk. Includes desk for filing clerk.
	Record assembly/sorting and work table	10	May be compactus if space is limited and structure permits
	File storage shelving (active)	20	
	Office/computer station for HIS officer	9	
	Trolley holding bay	6	
	Archive storage	20	
MANAGEMENT/ADMINISTRATION/EDUCATION			
Administrative offices	Offices for Medical Superintendent Manager Nursing Manager General Services Administrative staff Doctors (shared)		Needs to be specified at each site
Small meeting room	To seat up to 8 people	16	
Large meeting room	To seat 20 people	24	
Library	Shelving for publications, reading area and computer station with internet access	16	
Conference/training room	To seat up to 40 people	36	Shared with Public Health: capacity to be specified at each site
Staff amenities	Common/dining room with tea making facilities. Male and female staff change areas with shower, toilets and lockers.		
On call accommodation	On call rooms for medical, nursing, medical imaging and laboratory staff		

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>GENERAL SUPPORT SERVICES</b>			
<b>Kitchen/food service</b>	Office for head cook	9	Include space for dietitian?
	Food preparation area	16	
	Cooking area	20	
	Store for cooking equipment and crockery	4	
	Cooked food storage area	6	
	Food storage (dry, fresh and refrigerated goods)	24	
	Dishwashing area	10	
	Trolley holding bay	10	
	Bin area for hygienic disposal of kitchen waste.	4	Located outside but adjacent to kitchen.
<b>Housekeeping supervisor</b>	Office for housekeeping supervisor	9	Located close to laundry and cleaning store.
<b>Laundry</b>	Receiving area for soiled linen	3	
	Area for washing machines and dryers	12	
	Linen folding and sewing area	9	
	Clean linen storage.	3	
	Outside area for line drying	30	May be partially covered.
<b>Cleaning</b>	Storeroom for cleaning equipment and supplies	6	Located adjacent to supervisor's office
<b>Transport and parking</b>	Covered parking space to store 3 vehicles.		
	Workshop with pit for maintenance of vehicles.		
	General storage area for fuel etc.		
<b>Mortuary</b>	Body preparation and viewing area	10	Room should be temperature controlled and have direct access from outside for ambulance and funeral vehicles.
	Refrigerated storage drawers for 2-6 bodies.	4	
	Relatives waiting/gathering area	25	External, covered area adjacent to viewing area.
<b>Maintenance</b>	Office – maintenance supervisor	9	
	Workshop - general	40	
	Store – general	30	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Groundsman's store	20	
<b>Bulky equipment storage</b>	Protected area suitable for storage of spare beds, trolleys, wheelchairs, etc.	40	
	Oxygen store	20	
<b>Waste management</b>	Rubbish collection point and bin storage.	20	
	Secure holding for surgical waste, sharps containers and expired medications.	6	
	Incinerator	40	High temperature incineration system for medical and general waste, including glass, sharps & combustible biohazard material.
	Sewage treatment plant	TBD	Dependant on capacity requirement
<b>Hostels / Accommodation</b>	Staff Accommodation – 3 Bedroom	74	Doctors, Senior Nurses, Allied Health workers and Senior Administration with families
	Staff Accommodation – 2 Bedroom	65	Managers, Nurses, allied health workers with families
	Staff Accommodation - Dormitory	12	Per dormitory bedroom with access to shared ablutions
	Maternity waiting or referral waiting accommodation	45	Per unit with ablution access

*Where provincial health administration is based at the hospital, additional office space will be required for Provincial Administrator; Public Health program coordinators and possibly others. Actual office space requirements are to be determined on a site by site basis*



## REGIONAL REFERRAL HOSPITALS

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>OUTPATIENT SERVICES</b>			
<b>Emergency Department (ED)</b>	Waiting area	20	Adjacent to GOPD waiting. Space for up to 20 people.
	Reception and triage area	12	May be shared with GOPD
	Resuscitation area (2 bays)	36	2 beds. Direct external access desirable
	Acute treatment bay/cubicle	8 per bay	Includes nebuliser station(s). Mix of beds and chairs. Number of bays depends on activity level – <i>refer to standards</i>
	Consultation/examination room	12	May be shared with GOPD
	Dressing/plaster/procedure room	14	
	Observation/holding bed(s)	16-32	2-4 beds depending on demand – <i>refer to standards</i>
	Psychiatric emergency room – secure, padded	9	
	Mobile equipment bay	4	May be shared with GOPD
	Linen bay	1	
	General store	8	
	Staff station	10	
	Clean utility	12	
	Dirty utility/sluice	10	May be shared with GOPD
	Handwashing bay	1	
	Staff tea/meeting room	16	Shared with GOPD
	Disaster kit storage	6	Secure store room, with locked external access
	Toilets – patient (male & female)	2 x 3	With handwashing. Shared with GOPD
	Staff toilet & lockers	8	With handwashing. Shared with GOPD
	Ambulance bay (external)		Covered area for patients to be transferred from ambulance to ED.
<b>General Outpatients Department (GOPD)</b>	Waiting area (covered) with health promotion area.	40	Area may be shared with ED. Covered external area, with seating for up to 60 people, depending on demand.

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Reception and triage point	12	May be shared with ED
	Consultation/examination rooms	12	Number of rooms depends on activity – <i>refer standards</i> .
	Treatment room	16	Includes areas for dressings, injections, nebuliser treatment.
	Observation bed(s)	16-32	Shared with ED
	Store room/clean utility	12	May be shared with ED
	Dirty utility	10	Shared with ED
	Toilets – patient (male & female)	2 x 3	Shared with ED
	Staff toilet & lockers	8	Shared with ED
Specialist outpatient clinics	Waiting area	16	
	Consultation/examination rooms	12	Number depends on activity level – <i>refer to standards</i>
	Treatment/procedure room	14	
	Eye room	12	Soundproof room; able to be darkened, with space for equipment storage plus write-up area for Eye nurses.
	ENT room	12	Space for equipment storage plus write-up area for ENT nurses.
	Staff toilets & lockers	8	May be shared with Women's Health
	Toilets – patient (male & female)	2 x 3	With handwashing.
Paediatric clinic	Waiting area with reception desk	30	Space depends on activity. Has health promotion area with TV
	Triage station	6	Space for triage nurse, seating for up to 3 people
	Consultation/examination rooms	12	Number depends on activity – <i>refer standards</i> .
	Treatment room	16	Includes resuscitation bay with trolley.
	Observation area – 1-2 beds	8 per bed	Size depends on activity level
	Store room/clean utility/file storage	10	May be shared with other clinic services
	Dirty utility	8	May be shared with other clinic services
	Office - shared	12	
	Toilets – patient	6	May be shared with other clinic services
	Staff toilets & lockers	8	May be shared with other clinic services
NCD Hub	Waiting area with reception desk		Space depends on patient numbers: allow 0.5 m <sup>2</sup> per person

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Consultation cubicles x 2: NCD nurse; dietitian	6 per cubicle	
	Consult room: doctor/NP	10	With handwashing
	Eye assessment room	8	Able to be darkened
	Footcare room	12	With handwashing
	Handwashing bay	2	
	Staff toilets & lockers	8	May be shared with SOPD
	Toilets – patient (male & female)	2 x 3	With handwashing.
	Store	6	
<b>Antenatal clinic</b>	Waiting area with nurse station, scales	50	Seating for up to 60 women. Area size depends on demand. Has access to patient toilet and handwashing. External overflow waiting area may be provided to accommodate families.
	Screened examination bay(s)	3 per bay	2-4 bays depending on demand
	Toilets – patient (2 cubicles)	6	With handwashing.
	Staff toilets & lockers	8	May be shared with Women's Health
	Consultation/examination room with CTG	12	Space for desk, couch, CTG machine, handwashing.
<b>Women's health clinic</b>	Waiting/reception area	16	
	Consultation/examination room	12	Number depends on activity level – <i>refer standards</i>
	Nursing station with file storage	9-12	
	Clean utility	8	Includes storage for equipment, medical supplies & drugs.
	Staff toilets & lockers	8	May be shared with Antenatal or SOPD
	Toilets – patient	2 x 3	May be shared with SOPD
<b>Mental health outpatients</b>	Waiting area	12	
	Consultation room	10	
	Day therapy area	40	Open area for individual and group activities with kitchenette, access to external courtyard and patient toilets.
	Store (equipment)	6	
	Drug cabinet (secure)	1	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Office (shared)	12	
Dental services	Reception and waiting area with oral health promotion area	20	Space for up to 20 people with access to toilet and handwashing. Capacity depends on activity level – <i>refer standards</i>
	Storage area for dental equipment and records	8	Located near reception area
	Dental surgery with space for at least 1 chair, with lights, drill and suction units.	14 per chair	Area depends on activity level – <i>refer standards</i> . Requires suitable plumbing & drainage
	X-ray room	8	Shielded
	Dark room for X-ray processing	4	Not required if digital system in place.
	Sterilising bay with bench, sink and autoclave plus storage for sterile supplies.	10	
	Dental laboratory	12	
	Laboratory store	6	
	Office for HOD	9	
	Office area for dental staff	9	
	Staff tea room/meeting room	16	
	Toilets – patient	2 x 3	May be shared with SOPD
	Staff toilet and lockers	8	
	Store for compressor (external)	4	Compressor to be housed close by but outside dental surgery.
Health promotion programs	Room/space for staff conducting health promotion activities/programs in hospital	30	Ideally located within or adjacent to GOPD waiting area.
INPATIENT SERVICES			
General / Medical / Surgical wards	Male and female ward, each including a 2-bed acute care area, adjacent to staff station.	1 bed room – 14	<i>Bed numbers</i> are to be determined separately at each site, based on utilisation.  Beds are arranged in 4 bed bays, plus 2 single rooms with ensuite shower and toilet, suitable for private use or infection control.  All wards to include (size m <sup>2</sup> in brackets) <ul style="list-style-type: none"> <li>Staff station &amp; write up area (12 m<sup>2</sup>)</li> </ul>
Isolation Ward	2 bed ward adjacent to medical ward. Each has ensuite toilet and shower. Hand washing bay just outside the door. Air-conditioning should be negative pressure	2 bed room – 22 4 bed room - 40	
TB Ward	Separate self-contained building. <i>NB fewer beds</i>		

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	<i>required as treatment shifts to community.</i>		
<b>Antenatal and Postnatal ward</b>	Located adjacent to each other to allow flexible use. Includes baby care room for bathing, feeding, examinations etc plus area for post-operative patients close to staff station.		<ul style="list-style-type: none"> <li>Office HOD (9 m<sup>2</sup>)</li> <li>Office, Nurse in Charge (9 m<sup>2</sup>)</li> <li>Treatment/consultation room (14 m<sup>2</sup>)</li> <li>Access to interview/counselling room (9 m<sup>2</sup>)</li> <li>Hand washing bay (1 per 6 beds: 1 m<sup>2</sup>).</li> <li>Ready access to resuscitation trolley</li> </ul>
<b>Nursery</b>	Accommodates humidicribs and cots, plus space for breastfeeding and storage. Ideally located between maternity and paediatric wards.	7 per cot	<ul style="list-style-type: none"> <li>Access to patient shower and toilet facilities (1 toilet &amp; shower per 4 beds: toilet 3 m<sup>2</sup>, shower 4m<sup>2</sup>)</li> <li>Accessible toilet (4 m<sup>2</sup>)</li> <li>Ward pharmacy cupboard (1 m<sup>2</sup>)</li> <li>Linen bay (1 m<sup>2</sup>)</li> <li>Clean utility/storage (10 m<sup>2</sup>)</li> <li>Dirty utility with sluice (8 m<sup>2</sup>)</li> <li>General store (6 m<sup>2</sup>)</li> <li>Equipment store (12 m<sup>2</sup>)</li> <li>Staff tea room (16m<sup>2</sup>)</li> <li>Access to visitor waiting area</li> </ul>
	Examination/bathing area	6	
	Phototherapy bay	2	
	Staff change and property bay	4	
<b>Paediatric ward</b>	Paediatric ward, including area suitable for isolation of infectious cases.		
	High dependency area – 2 beds	16	
	Children's play area	16	
	Bathroom with bath	12	
<b>Psychiatric admission unit</b>	4 bed ward with one seclusion room for acutely unwell patients. Located adjacent to but separate from medical ward.		Some of these facilities may be shared among two or more wards, depending on the size and proximity of those wards. All inpatient areas require good ventilation & insect screens.
<b>Birthing</b>	Assessment/prep/CTG room	14	Located near entrance to labour ward.
	Labour ward/first stage room (8 places) with ambulation area	10 per bed	2 labour ward places per delivery bed. Bed numbers need to be determined separately at each site. Labour ward includes a mix of beds and chairs.
	Delivery room (4 beds)	16 per bed	
	High dependency area (1 bed)	14	High dependency bed located adjacent to labour ward. Handwashing units inside
	Sterile stock room	8	
	Equipment store	12	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Pharmacy imprest bay/cupboard	2	
	Resuscitation trolley bay	1	
	Linen trolley bay	1	
	Staff station	12	
	Office – Charge Midwife	9	
	Clean utility	10	
	Dirty utility/sluite	8	
	Staff change room, toilet and handwashing	8	
	Waiting area for families	20	
<b>ALLIED HEALTH/CLINICAL SUPPORT SERVICES</b>			
<b>Pharmacy</b>	Waiting area	30	Covered area, with seating and good ventilation. May be shared with outpatients.
	Work area for assembly/preparation/checking of inpatient medications.	12	Pharmacy area must be secure, temperature controlled, with space for bulk fluids and vaccine fridge. Direct access to delivery dock is desirable.  Work areas include work benches/tables plus shelving.
	Work area for assembly/preparation/checking of outpatient medications	16	
	Pharmacy store with shelving, refrigerated storage and receiving area for deliveries.	10	
	Dangerous drugs store	3	
	Dispensing/drug information area window.	2	Directly accessible from waiting area.
	Drug education/counselling room	8	
	Pharmacist office	9	
	Goods receiving area	4	
	Staff toilet & lockers	8	May be shared with other Allied Health services
	Secondary/bulk store	40	May be located off site. Space for storage & distribution of bulk fluids and supplies to provincial health facilities
<b>Medical laboratory</b>	Reception and waiting area	16	Space for up to 20 people, depending on size of hospital

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Collection room with adjacent toilet	8 + 3	Phlebotomy chair/couch
	Counselling room	9	
	Specimen reception and storage area	2	
	Haematology & biochemistry area	16	'Clean' and 'dirty' laboratory functions require separate work areas, each with benches and sinks.
	Microbiology/TB area	16	
	Media preparation bay with sink and workbench	6	
	Wash bay with steriliser	4	
	Technician's office	9	
	Storage for equipment, reagents etc	8	Must be cool, dry space
	Staff tea/meeting room	16	
	Staff toilet & lockers	8	May be shared with other Allied Health services
<b>Blood bank</b>	Collection room with donation couch and blood storage fridge.	12	Waiting area shared with laboratory. Blood storage fridge within laboratory storage area.
	Donor refreshment room	12	
<b>Medical Imaging</b>	Reception and waiting area	20	Space for up to 20 people
	Office – Chief Radiographer	8	
	General X-ray room	32	Requires shielding
	Ultrasound scanning room	14	
	OPG room	8	Requires shielding
	Fluoroscopy room with ensuite toilet	32	Requires shielding
	Reporting area/office space	12	
	Mobile equipment bay	6	
	Patient change area (2 cubicles)	4	Needs easy access to patient toilet
	Toilets – patient (male & female)	2 x 3	
	General store	6	
	PACS unit /File storage area	4	
	Staff tea/meeting room	16	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
High Dependency Unit (HDU)	Staff toilets & lockers	8	
	Bed space (open)	32	
	Isolation bay	12	
	Staff station	10	
	Mobile equipment bay	8	
	Resuscitation trolley bay	2	
	Clean utility	10	May be shared with ED or ward
	Dirty utility	8	May be shared with ED or ward
	Storeroom	10	
	Office	9	
	Patient shower & toilet	8	
	Staff tea room/meeting room	16	
	Staff change, toilet and property bay	6	May be shared
Operating Theatres & endoscopy	Waiting area	20	
	Holding/anaesthetic bay	8	
	Scrub/gowning area	6	
	Operating room(s)	40 per room	Theatres located together with direct access from A&E and Labour Ward. Number of operating rooms dependent on level of demand – <i>refer to standards</i>
	Procedure/endoscopy room	28	
	Recovery/transfer area (4 bays)	32	
	Clean-up/flash sterilising area	10	
	Sterile stock room with packing area	20	
	Clean utility	12	
	Dirty utility	10	
	Change room, toilet and shower	12	
	Mobile equipment store	12	
	Store: non-sterile supplies	10	
	Office: In Charge	9	



Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Doctors' room	12	With desk and computer
	Staff tea room/meeting room	16	
	Change room and staff toilet - male	10	
	Change room and staff toilet - female	10	
<b>Anaesthetics</b>	Storage for anaesthetic machines & equipment.	15	Adjacent to theatres
	Anaesthetics office	9	
<b>Sterilising (CSSD) &amp; Infection Control</b>	Receiving bay	8	Trolley access necessary. Sterilising unit should allow a one-way progression of instruments from 'dirty' to 'clean'.
	Instrument rinsing/disinfecting area	24	
	Instrument sorting, packing area	30	
	Autoclave area	24	
	Despatch area	4	
	Storage for sterile equipment & linen	20	May be shared with theatres
	General store (chemicals etc)	12	
	Trolley stripping, wash bay	8	
	Change room with toilet and shower	12	
<b>Biomedical</b>	General workshop area with work benches	30	
	General store	30	secure storage for equipment and tools
	Storage area for biomedical equipment	15	Allow for storage of bulky equipment
	Chemical store?	12	
	Medical gases	25	
	Technician's office with computer	10	
<b>Physiotherapy / Rehab</b>	Reception/clerical/ file storage area	10	
	Gym area with space for 1-2 treatment cubicles and large open area for exercise programs.	50	Must be wheelchair accessible. Located to be accessible from both inpatient and outpatient areas
	Assessment/consult/treatment room	12	
	Office for OIC	9	
	Office for therapy staff	14	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	ADL kitchen	10	
	Meeting/education room	25	
	General store	12	
	Bulky equipment store.	20	
	Accessible/assisted toilet and handwashing	4	
	Shower rooms – accessible, male & female	2 x 5	
	Beverage pantry	4	Staff tea room
	Staff toilet and property bay.	4	May be shared with wards?
<b>Medical records/health information</b>	Receiving area with window	8	Located near outpatient reception desk. Includes desk for filing clerk.
	Record assembly/sorting and work table	10	
	Coding/clerical work space	6	
	File storage shelving (active)	40*	Medical records storage. May be compactus if space is limited and structure permits * Less space required if systems are fully digitised.
	Office/computer station for HIS officer	9	
	Trolley holding bay	6	
	Archive storage	20	
<b>MANAGEMENT/ADMINISTRATION/EDUCATION</b>			
<b>Administrative offices</b>	Offices for Medical Superintendent Manager Nursing Manager General Services IT support Administrative staff Doctors (shared)		Needs to be specified at each site Office – Manager (15 m <sup>2</sup> ) Office – other (9 m <sup>2</sup> ) Office – admin/clerical, shared (30 m <sup>2</sup> ) Office – medical officers, shared (30 m <sup>2</sup> )
<b>Small meeting room</b>	To seat up to 8 people	12	
<b>Large meeting/tutorial room</b>		25	
<b>Library</b>	Shelving for publications, reading area and	TBD	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
Conference/training room	computer station with internet access		
	To seat up to 50 people	40	
Staff amenities	Common/dining room with tea making facilities.	TBD	
	Male and female staff change areas with shower, toilets and lockers.	TBD	
On call accommodation	On call rooms for medical, nursing, medical imaging and laboratory staff	12	Individual units with access to shared staff facility. Dormitory style.
<b>GENERAL SUPPORT SERVICES</b>			
Housekeeping Supervisor	Office for housekeeping supervisor	9	Located near Laundry & cleaning store
Kitchen/food service	Office for head cook and dietitian	10	
	Food preparation area	16	
	Cooking area	20	
	Tray assembly area	15	
	Store for cooking equipment and crockery	4	
	Cooked food storage area	6	
	Food storage (dry, fresh and refrigerated goods)	30	
	Dishwashing area	10	
	Trolley holding bay	10	
	Bin area for hygienic disposal of kitchen waste.	4	Located outside but adjacent to kitchen.
Laundry	Receiving area for soiled linen	15	
	Area for washing machines and dryers	20	
	Linen folding and sewing area	12	
	Clean linen storage.	30	
	Outside area for line drying	30	May be partially covered.
Cleaning	Storeroom for cleaning equipment and supplies	6	Located adjacent to kitchen area and supervisor's office
Transport and	Covered parking space to store 3 vehicles.		

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>parking</b>	Workshop with pit for maintenance of vehicles.		
	General storage area for fuel etc.		
<b>Mortuary</b>	Entry lobby/clerical	6	Room should be temperature controlled and have direct access from outside for ambulance and funeral vehicles.
	Body preparation area	6	
	Body viewing area	8	
	Refrigerated storage drawers for 6-8 bodies.	12	Freezer provision?
	Relatives waiting/gathering area	25	External, covered area adjacent to viewing area.
<b>Maintenance</b>	Office – maintenance supervisor	10	
	Workshop – general	40	
	Store – general	50	
	Groundsman's store	20	
<b>Bulky equipment storage</b>	Protected area suitable for storage of spare beds, trolleys, wheelchairs, etc.	40	
	Oxygen store	20	
<b>Staff Amenities</b>	Staff dining room/cafeteria	TBD	
	Staff showers and change rooms	TBD	
<b>Waste management</b>	Rubbish collection point and bin storage.	20	
	Secure holding for surgical waste, sharps containers and expired medications.	6	
	Incinerator	40	High temperature incineration system for medical and general waste, including glass, sharps & combustible biohazard material.
	Sewage treatment plant	TBD	Dependent on capacity waste flows
<b>Hostels / accommodation</b>	Staff Accommodation – 3 Bedroom	74	Doctors, Senior Nurses, Allied Health workers and Senior Administration with families
	Staff Accommodation – 2 Bedroom	65	Managers, Nurses, allied health workers with families
	Staff Accommodation - Dormitory	12	Per dormitory bedroom with access to shared ablutions
	Maternity waiting or referral waiting accommodation	45	Per unit with ablution access



## NATIONAL REFERRAL HOSPITAL

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>OUTPATIENT SERVICES</b>			
<b>Emergency Department (ED)</b>	Waiting area	30	Adjacent to GOPD waiting. Space for up to 30 people.
	Reception and triage area	12	
	Resuscitation area (2 bays)	36	2 beds. Direct external access desirable
	Acute treatment bay/cubicle	8 per bay	Includes nebuliser station(s). Mix of beds and chairs. Number of bays depends on activity level – <i>refer to standards</i>
	Consultation/examination room	12	
	Dressing/plaster/procedure room	14	
	Observation/holding bed(s)	16-32	2-4 beds depending on demand – <i>refer to standards</i>
	Psychiatric emergency room – secure, padded	9	
	Mobile equipment bay	4	
	Linen bay	1	
	General store	8	
	Staff station	10	
	Clean utility	12	
	Dirty utility/slucice	10	
	Handwashing bay	1	
	Meeting room	16	
	Staff tea room	12	
	Disaster kit storage	6	Secure store room, with locked external access
	Toilets – patient (male & female)	2 x 3	With handwashing.

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Staff toilet & lockers	8	With handwashing. May be shared with GOPD
	Ambulance bay (external)		Covered area for patients to be transferred from ambulance to ED.
<b>General Outpatients Department (GOPD)</b>	Waiting area (covered) with health promotion area.	40	Covered area, with seating for up to 80 people, depending on demand.
	Staff station	10	
	Reception and triage point	12	
	Consultation/examination rooms	12	Number of rooms depends on activity – <i>refer standards</i> .
	Treatment room	16	Includes areas for dressings, injections, nebuliser treatment.
	Observation bed(s)	16-32	
	Store room/clean utility	12	
	Dirty utility	10	
	Toilets – patient (male & female)	2 x 3	
	Staff toilet & lockers	8	
<b>Specialist outpatient clinics</b>	Waiting area	16	
	Staff station	10	
	Consultation/examination rooms	12	Number depends on activity level – <i>refer to standards</i>
	Treatment/procedure room	14	
	Store room/clean utility	12	
	Dirty utility	10	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Staff toilets & lockers	8	
	Toilets – patient (male & female)	2 x 3	With handwashing.
Eye Clinic	Waiting area	16	
	Consultation room	12	Number depends on activity level – <i>refer to standards</i>
	Treatment/procedure room	16	
	Office – Eye nurses (shared)	12	
	Office - Ophthalmologist	9	
	Store room/clean utility	12	
	Dirty utility	10	
	Meeting/tutorial room	16	May be shared with ENT & Dental
	Beverage pantry/kitchenette	4	May be shared with ENT & Dental
	Staff toilets & lockers	8	May be shared with ENT & Dental
	Toilets – patient (male & female)	2 x 3	Shared with ENT & Dental
ENT Clinic	Waiting area	20	
	Consultation room	12	Number depends on activity level – <i>refer to standards</i>
	Audiometry room	12	Sound proof
	Laboratory	10	For ear impressions and mould manufacture
	Office – ENT nurses (shared)	12	
	Office – ENT specialist	9	
	Store room/clean utility	12	
	Dirty utility	10	
	Meeting/tutorial room	16	May be shared with Eye & Dental
	Beverage pantry/kitchenette	4	May be shared with Eye & Dental



Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
Paediatric clinic	Staff toilets & lockers	8	May be shared with Eye & Dental
	Waiting area with reception desk	30	Space depends on activity. Has health promotion area with TV
	Triage station	6	Space for triage nurse, seating for up to 3 people
	Consultation/examination rooms	12	Number depends on activity – <i>refer standards</i> .
	Treatment room	16	Includes resuscitation bay with trolley.
	Observation area – 2-4 beds	8 per bed	Size depends on activity level
	Store room/clean utility/file storage	10	
	Dirty utility	8	
	Office – paediatrician	9	
	Office – paediatric nurses	12	
	Meeting/tutorial room	16	May be shared with other clinic services
	Toilets – patient	6	May be shared with other clinic services
NCD Hub	Staff toilets & lockers	8	May be shared with other clinic services
	Waiting area with reception desk and health promotion area		Space depends on patient numbers: allow 0.5 m <sup>2</sup> per person
	Consultation cubicles x 2: NCD nurse; dietitian	6 per cubicle	
	Consult room: doctor/NP	10	With handwashing
	Eye assessment room	8	Able to be darkened
	Footcare room	12	With handwashing
	Handwashing bay	2	
	Meeting/tutorial room	16	May be shared with SOPD
	Beverage pantry/kitchenette	4	
	Staff toilets & lockers	8	May be shared with SOPD

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Toilets – patient (male & female)	2 x 3	With handwashing.
	Store	6	
<b>Antenatal clinic</b>	Waiting area with nurse station, scales	50	Seating for up to 60 women. Area size depends on demand. Has access to patient toilet and handwashing. External overflow waiting area may be provided to accommodate families.
	Screened examination bay(s)	3 per bay	4-6 bays depending on demand
	Toilets – patient (2 cubicles)	6	With handwashing.
	Staff toilets & lockers	8	May be shared with Women's Health
	Consultation/examination room with CTG	12	Space for desk, couch, CTG machine, handwashing.
<b>Women's health clinic</b>	Waiting/reception area	16	
	Consultation/examination room	12	Number depends on activity level – <i>refer standards</i>
	Nursing station with file storage	9-12	
	Clean utility	8	Includes storage for equipment, medical supplies & drugs.
	Staff toilets & lockers	8	May be shared with Antenatal or SOPD
	Toilets – patient	2 x 3	May be shared with SOPD
<b>Mental health outpatients</b>	Waiting area	12	
	Consultation room	10	
	Day therapy area	40	Open area for individual and group activities with kitchenette, access to external courtyard and patient toilets.
	Store (equipment)	6	
	Drug cabinet (secure)	1	
	Office – Psychiatrist	9	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Office – nursing (shared)	12	
Dental services	Reception and waiting area with oral health promotion area		Space for up to 40 people with access to toilet and handwashing. Capacity depends on activity level – <i>refer standards</i>
	Storage area for dental equipment and records	8	Located near reception area
	Dental surgery with space for at least 4 chairs, with lights, drill and suction units.	14 per chair	Area depends on activity level – <i>refer standards</i> . Requires suitable plumbing & drainage
	X-ray room	8	Shielded
	Dark room for X-ray processing	4	Not required if digital system in place.
	Sterilising bay with bench, sink and autoclave plus storage for sterile supplies.	10	
	Dental laboratory	12	
	Laboratory store	6	
	General store	8	
	Office for HOD	9	
	Office area for dental staff	9	
	Staff tea room/meeting room	16	
	Toilets – patient	2 x 3	May be shared with SOPD
	Staff toilet, change and lockers	10	
	Store for compressor (external)	4	Compressor to be housed close by but outside dental surgery.
Health promotion programs	Room/space for staff conducting health promotion activities/programs in hospital	30	Ideally located within or adjacent to GOPD waiting area.
INPATIENT SERVICES			
General / Medical /	Male and female ward, each including a 2-bed	1 bed room –	<i>Bed numbers</i> are to be determined separately at each site, based on

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>Surgical wards</b>	acute care area, adjacent to staff station.	14	utilisation.
<b>Isolation Ward</b>	2 bed ward adjacent to medical ward. Each has ensuite toilet and shower. Hand washing bay just outside the door. Air-conditioning should be negative pressure	2 bed room – 22 4 bed room - 40	<p>Beds are arranged in 4 bed bays, plus 2 single rooms with ensuite shower and toilet, suitable for private use or infection control.</p> <p>All wards to include (size m<sup>2</sup> in brackets)</p> <ul style="list-style-type: none"> <li>▪ Staff station &amp; write up area (12 m<sup>2</sup>)</li> <li>▪ Office HOD (9 m<sup>2</sup>)</li> <li>▪ Office, Nurse in Charge (9 m<sup>2</sup>)</li> <li>▪ Treatment/consultation room (14 m<sup>2</sup>)</li> <li>▪ Access to interview/counselling room (9 m<sup>2</sup>)</li> <li>▪ Hand washing bay (1 per 6 beds: 1 m<sup>2</sup>).</li> <li>▪ Ready access to resuscitation trolley</li> <li>▪ Access to patient shower and toilet facilities (1 toilet &amp; shower per 4 beds: toilet 3 m<sup>2</sup>, shower 4m<sup>2</sup>)</li> <li>▪ Accessible toilet (4 m<sup>2</sup>)</li> <li>▪ Ward pharmacy cupboard (1 m<sup>2</sup>)</li> <li>▪ Linen bay (1 m<sup>2</sup>)</li> <li>▪ Clean utility/storage (10 m<sup>2</sup>)</li> <li>▪ Dirty utility with sluice (8 m<sup>2</sup>)</li> <li>▪ General store (6 m<sup>2</sup>)</li> <li>▪ Equipment store (12 m<sup>2</sup>)</li> <li>▪ Staff tea room (16m<sup>2</sup>)</li> <li>▪ Access to visitor waiting area</li> </ul>
<b>TB Ward</b>	Separate self-contained building. <i>NB fewer beds required as treatment shifts to community.</i>		
<b>Antenatal and Postnatal ward</b>	Located adjacent to each other to allow flexible use. Includes baby care room for bathing, feeding, examinations etc plus area for post-operative patients close to staff station.		
<b>Antenatal day assessment unit</b>	Located adjacent to antenatal ward. Separate area with 2 beds with CTG and ultrasound access.		
<b>Nursery</b>	Accommodates humidicribs and cots, plus space for breastfeeding and storage. Ideally located between maternity and paediatric wards.	7 per cot	
	Examination/bathing area	6	
	Phototherapy bay	2	
	Staff change and property bay	4	
<b>Paediatric ward</b>	Paediatric ward, including area suitable for isolation of infectious cases.		<p>Some of these facilities may be shared among two or more wards, depending on the size and proximity of those wards.</p> <p>All wards require access to meeting/tutorial rooms: generally shared between 2-3 wards, depending on unit size and staff numbers.</p> <p>All inpatient areas require good ventilation &amp; insect screens.</p>
	High dependency area – 2 beds	16	
	Children's play area	16	
	Bathroom with bath	12	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
<b>Psychiatric admission unit</b>	Freestanding ward with up to 12 beds, including one seclusion room for acutely unwell patients. Located with psychiatric outpatients/day therapy area in close proximity to medical ward.		
<b>Rehabilitation unit</b>	Freestanding unit of 12 beds with additional space to allow for mobility aids and wheelchair accessible. Ideally located with rehabilitation outpatients with access to therapy areas.		
<b>Birthing</b>	Assessment/prep/CTG room	14	Located near entrance to labour ward.
	Labour ward/first stage room (8 places) with ambulation area	10 per bed	2 labour ward places per delivery bed. Bed numbers need to be determined separately at each site. Labour ward includes a mix of beds and chairs.
	Delivery room (4 beds)	16 per bed	
	High dependency area (MICU - 1 bed)	14	High dependency bed located adjacent to labour ward.
	Sterile stock room	8	
	Equipment store	12	
	Handwashing bay	6 x 1	In labour ward, all delivery rooms and MICU area
	Pharmacy imprest bay/cupboard	2	
	Resuscitation trolley bay	1	
	Linen trolley bay	1	
	Staff station	12	
	Office – medical officer	9	
	Office – Charge Midwife	9	
	Clean utility	10	
	Staff tea room	10	
	Dirty utility/sluice	8	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Staff change room, toilet and handwashing	8	
	Waiting area for families	20	
<b>ALLIED HEALTH/CLINICAL SUPPORT SERVICES</b>			
<b>Pharmacy</b>	Waiting area	30	Covered area, with seating and good ventilation. May be shared with outpatients.
	Work area for assembly/preparation/checking of inpatient medications.	12	Pharmacy area must be secure, temperature controlled, with space for bulk fluids and vaccine fridge. Direct access to delivery dock is desirable.  Work areas include work benches/tables plus shelving.
	Work area for assembly/preparation/checking of outpatient medications	16	
	Sterile preparation/handling area (includes cytotoxics), with airlock + anteroom for scrubbing & gowning.	15	
	Pharmacy store with shelving, refrigerated storage and receiving area for deliveries.	16	
	Dangerous drugs store	3	
	Dispensing/drug information area window.	2	Directly accessible from waiting area.
	Drug education/counselling room	8	
	Chief Pharmacist office	9	
	Pharmacist work station	5.5	
	Meeting/tutorial room	16	
	Staff tea room	10	
	Goods receiving area	4	
	Staff toilet & lockers	8	May be shared with other Allied Health services
	Secondary/bulk store	40	May be located off site. Space for storage & distribution of bulk fluids

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
			and supplies to provincial health facilities
<b>Medical laboratory</b>	Reception and waiting area	16	Space for up to 20 people, depending on size of hospital
	Collection room with adjacent toilet	8 + 3	Phlebotomy chair/couch
	Counselling room	9	
	Specimen reception and storage area	2	
	Haematology area	16	Includes areas for high volume analysis, manual tests and lab work stations (microscopy).
	Haematology store	8	
	Biochemistry area	16	Includes areas for high volume analysis and lab work stations (chemistry) plus equipment storage bay.
	Microbiology/Serology area	16	Separate enclosed area with negative pressure air conditioning
	Anatomical pathology area:	20	includes Cytology lab; Histology lab; lab workstations, tissue processing and storage (samples, slides, specimens)
	Media preparation bay with sink and workbench	6	
	Wash bay with steriliser	4	
	Technician's office	9	
	Storage for equipment, reagents etc	8	Must be cool, dry space
	Staff tea room	10	
	Meeting/tutorial room	16	May be shared with other Allied Health services
	Staff toilets & lockers	8	
<b>Blood bank</b>	Collection room with donation couch	12	Waiting area shared with laboratory. Blood storage fridge within laboratory storage area.
	Blood storage fridge & freezer.	6	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	After hours blood store?	2	
	Donor refreshment room	12	
Medical Imaging	Reception and waiting area	20	Space for up to 30 people
	Office – Chief Radiographer	9	
	General X-ray room x 2	32	Requires shielding. Number of rooms depends on activity levels
	Ultrasound scanning room x 2	14	Number of rooms depends on activity levels
	CT scanning room	42	
	CT scanning control room	12	
	CT computer equipment room	6	
	Patient holding bay	8	
	Resuscitation trolley bay	1.5	
	OPG room	7	Requires shielding
	Fluoroscopy room with ensuite toilet	32	Requires shielding
	Reporting area/work stations	12	
	Mobile equipment bay	6	
	Patient change area (2 cubicles)	4	Needs easy access to patient toilet
	Toilets – patient (male & female)	2 x 3	
	General store	6	



Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	PACS unit /File storage area	4	
	Staff tea room	10	
	Linen bay	2	
	Meeting/tutorial room	16	May be shared with other clinical support services
	Patient change cubicles	4 x 1.5	
	Staff toilets & lockers	8	
<b>Intensive Care Unit (ICU)</b>	Waiting area	15	
	Anteroom/gowning area	2	
	Interview/counselling room	12	
	Bed space (open)	16 per bed	Bed numbers based on demand: possibly 4 – 6?
	Isolation bay	20	Enclosed, with air lock, ensuite bathroom and negative pressure air conditioning for infectious patients
	High dependency bed spaces	12 per bed	Bed numbers equivalent to intensive care
	Bathrooms – patient	2 x 6	Size for 'full assistance', i.e. 2 staff plus equipment
	Staff station	10	Centrally located with a view of all beds
	Mobile equipment bay	8	
	Resuscitation trolley bay	2	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Hand washing bay	3 x 1	At entry to the Unit, outside isolation room and in corridors
	Clean utility	10	
	Dirty utility	8	May be shared with ED or ward
	Storeroom	10	
	Office – Charge nurse	9	
	Office – Medical Officer	9	
	Staff tea room/meeting room	16	
	Staff change, toilet and property bay	2 x 6	
<b>Operating Theatres &amp; endoscopy</b>	Waiting area	20	
	Reception/clerical area	8	
	Patient holding bay	10	
	Scrub/gowning area	8	
	Anaesthetic induction area: per theatre	12	May be shared space or individual rooms
	Operating room	40	Theatres located together with direct access from A&E and Labour Ward. Number of operating rooms dependent on level of demand – <i>refer to standards</i>
	Procedure/endoscopy room	28	
	Recovery/transfer area	9 per bay	2 bays per theatre
	Clean-up/flash sterilising area	10	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Sterile stock room with packing area	20	
	Emergency resuscitation trolley bay	2	
	Handwashing bay	1	
	Mobile equipment store	12	
	Store: non-sterile supplies	10	
	Clean utility	12	
	Dirty utility	10	
	Office: In Charge	9	
	Doctors' room	12	With desk and computer
	Meeting/tutorial room	16	
	Staff tea room	10	
	Change room and staff toilet - male	10	
	Change room and staff toilet - female	10	
	Staff toilet	3	With handwashing: separate to change room facilities
<b>Anaesthetics</b>	Anaesthetics office	12	Anaesthetics area located adjacent to theatres
	Storage for anaesthetic machines & equipment	15	
	Anaesthetics work room	10	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
Sterilising (CSSD) & Infection Control	Reception	8	Trolley access necessary. Sterilising unit should allow a one-way progression of instruments from 'dirty' to 'clean'.
	Trolley stripping, wash bay	8	
	Receiving area – used instruments	12	
	Goods receiving – non-sterile stock	8	
	Cleaning/decontamination	20	
	Instrument sorting, packing area	30	
	Autoclave area	30	Includes airlock at entry.
	Cooling area	12	
	Office – In charge + Infection Control	12	
	Despatch area	6	
	Storage for sterile equipment & linen	20	May be shared with theatres
	General store (chemicals etc)	12	
	Staff tea/meeting room	12	
	Change room with toilet and shower	12	
Biomedical	General workshop area with work benches	40	
	General store	40	Secure storage for equipment and tools
	Storage area for biomedical equipment	30	Allow for storage of bulky equipment

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Chemical store	12	
	Medical gases	25	
	Manager's office with computer	10	
	Technicians' electronic work area	12	
Physiotherapy / Rehab	Reception/clerical/ file storage area	10	
	Waiting area	20	
	Wheelchair park	3	
	Interview/counselling room	9	
	Gym area with space for up to 4 treatment cubicles and large open area for exercise programs.	60	Must be wheelchair accessible. Located to be accessible from both inpatient and outpatient areas
	Physio equipment store	20	
	Occupational therapy room	16	
	ADL kitchen	10	
	ADL bathroom	10	
	OT store	10	
	Assessment/consult room – speech pathology	12	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Mobility devices workshop	12	
	Prosthetics/orthotics clinic room	10	
	Prosthetics/orthotics workshop	14	Located externally but close to rehabilitation unit
	Office for OIC	9	
	Office/work stations for therapy staff - shared	14	
	Meeting/tutorial room	16	
	General store	12	
	Clean utility	10	
	Dirty utility	8	
	Accessible/assisted toilet -	2 x 4	
	Shower rooms – accessible, male & female	2 x 5	
	Beverage pantry/kitchenette	4	Staff tea room
	Staff toilet and property bay.	4	May be shared with wards?
<b>Medical records/health information</b>	Receiving area with window	8	Located near outpatient reception desk. Includes desk for filing clerk.
	Record assembly/sorting and work table	14	
	Coding/clerical work space	12	
	File storage shelving (active)	40*	Medical records storage. May be compactus if space is limited and

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
			structure permits * Less space required if systems are fully digitised.
	Office – Officer in Charge	9	
	Office/computer station for HIS officers	14	
	Trolley holding bay	6	
	Archive storage	40	
<b>MANAGEMENT/ADMINISTRATION/EDUCATION</b>			
<b>Administrative offices</b>	Offices for Medical Superintendent Manager Nursing Manager General Services IT support Administrative staff Doctors (shared)		Needs to be specified at each site  Office – Manager (15 m <sup>2</sup> )  Office – other (9 m <sup>2</sup> )  Office – admin/clerical, shared (30 m <sup>2</sup> )  Office – medical officers, shared (30 m <sup>2</sup> )
<b>Small meeting room</b>	To seat up to 8 people	12	
<b>Large meeting/tutorial room</b>		25	
<b>Library</b>	Shelving for publications, reading area and computer station with internet access	30	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
Conference/training room	To seat up to 50 people	40	
Staff amenities	Common/dining room with tea making facilities.	80	
	Male and female staff change areas with shower, toilets and lockers.		
On call accommodation	On call rooms for medical, nursing, medical imaging and laboratory staff		Motel style units with bedroom, ensuite bathroom and kitchenette.
<b>GENERAL SUPPORT SERVICES</b>			
Housekeeping Supervisor	Office for housekeeping supervisor	9	Located near Laundry & cleaning store
Kitchen/food service	Office for head cook and dietitian	10	
	Food preparation area	16	
	Cooking area	20	
	Tray assembly area	15	
	Store for cooking equipment and crockery	4	
	Cooked food storage area	6	
	Food storage (dry, fresh and refrigerated goods)	30	
	Dishwashing area	10	



Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Trolley holding bay	10	Located outside but adjacent to kitchen.
	Bin area for hygienic disposal of kitchen waste.	4	
<b>Laundry</b>	Receiving area for soiled linen	15	
	Area for washing machines and dryers	20	
	Linen folding and sewing area	12	
	Clean linen storage.	30	
	Outside area for line drying	30	May be partially covered.
<b>Cleaning</b>	Storeroom for cleaning equipment and supplies	6	Located adjacent to kitchen area and supervisor's office
<b>Transport and parking</b>	Covered parking space to store 3 vehicles.		
	Workshop with pit for maintenance of vehicles.		
	General storage area for fuel etc.		
<b>Mortuary</b>	Entry lobby/clerical	6	Room should be temperature controlled and have direct access from outside for ambulance and funeral vehicles.
	Body preparation area	6	
	Body viewing area	8	
	Refrigerated storage drawers for 6-8 bodies.	12	Freezer provision?
	Relatives waiting/gathering area	25	External, covered area adjacent to viewing area.
<b>Maintenance</b>	Office – maintenance supervisor	10	
	Workshop – general	40	

Service/Function	Functional requirements	Area (m <sup>2</sup> )	Notes
	Store – general	50	
	Groundsman's store	20	
<b>Bulky equipment storage</b>	Protected area suitable for storage of spare beds, trolleys, wheelchairs, etc.	40	
	Oxygen store	20	
<b>Staff Amenities</b>	Staff dining room/cafeteria	TBD	
	Staff showers and change rooms	TBD	
<b>Waste management</b>	Rubbish collection point and bin storage.	20	
	Secure holding for surgical waste, sharps containers and expired medications.	6	
	Incinerator	40	High temperature incineration system for medical and general waste, including glass, sharps & combustible biohazard material.
	Sewage treatment plant	TBD	Dependent on capacity requirements
<b>Hostels / Accommodation</b>	Staff Accommodation – 3 Bedroom	74	Doctors, Senior Nurses, Allied Health workers and Senior Administration with families
	Staff Accommodation – 2 Bedroom	65	Managers, Nurses, allied health workers with families
	Staff Accommodation - Dormitory	12	Per dormitory bedroom with access to shared ablutions
	Maternity waiting or referral waiting accommodation	45	Per unit with ablution access

## HOSPITAL FACILITY PLANNING STANDARDS

- **Inpatient beds** – population-based planning: WHO standard 3.3 per 1000 population.

Vanuatu 2014 – 1.7 beds per 1000 population

PNG standard – 2.7 beds per 1000 population

- **Inpatient Beds** – requirement to be based on patient days and target occupancy rate. **Proposed occupancy rates**
  - 75% for referral hospitals
  - 70% for maternity ward
  - 65% for paediatric ward & HDU/ICU
  - 65% for provincial hospitals

Lower rates may be justified in some situations eg small, isolated hospitals.

Future demand may be based on population growth and expected hospital utilisation rates (average patient days per 1000 population). Generally, utilisation rates might be expected to increase as services are upgraded.

- **Outpatient Clinics**
  - GOPD - one consultation room/treatment place\* per 6,000 attendances per year (about 24 patients per day, 50 weeks per year)
  - Assumes efficient use of consultation rooms.
- **Emergency Department**
  - One treatment place\* per 3,000 attendances per year (about 8.5 pts/day)
  - Excludes resuscitation bay
- **Birthing**
  - Labour ward: 1 bed per 250 births p.a.
  - Delivery ward: 1 bed per 500 births p.a. (minimum = 1 bed)
  - Combined birthing unit: 1 bed per 300 births p.a.
- **Operating theatres**
  - One theatre per 1,200 operations p.a.
  - Day surgery/minor procedures: one per 2,200 procedures

Treatment place = consult room, bay with bed/trolley, cubicle or specific treatment (eg nebuliser) station

**APPENDIX E**  
**MINIMUM ESSENTIAL EQUIPMENT**

## APPENDIX E1: MINIMUM ESSENTIAL EQUIPMENT

### PRIMARY HEALTH CARE FACILITIES - EQUIPMENT LIST (MINIMUM STANDARD)

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
1	Bag, Artificial Manual Breathing Unit (AMBU), Adult	1	1	1	1	1	Withstand autoclave to 134deg C temp, Bag volume 1700ml total, expiry resistance of 2.2cms of water, inspiratory resistance of 3.3cms of water, controlled flow rates, port for connection of oxygen	Carry Case	
2	Bag, Artificial Manual Breathing Unit (AMBU), Child	1	1	1	1	1	Withstand autoclave to 134deg C temp, Bag volume 500ml total, expiry resistance of 2.2cms of water, inspiratory resistance of 3.3cms of water, controlled flow rates, port for connection of oxygen	Carry Case	
3	Bag, Artificial Manual Breathing Unit (AMBU), Infant (Newborn)	1	1	1	1	1	Withstand autoclave to 134deg C temp, Bag volume 300ml total, expiry resistance of 2.2cms of water, inspiratory resistance of 3.3cms of water, controlled flow rates, port for connection of oxygen	Carry Case	
4	Bed, Cot, Infant, Singlet	0	1	2	3	3	Surface lying area: 900mm x 2000mm, height adjustment range: 350mm - 850mm, Safe capacity: 170kg (27 stone) including client, mattress and accessories, Side rail height: 750mm, External dimensions: 1000mm x 2170m	Mattress, pillow, linen	
5	Bed, Examination, Adjustable Head	1	1	1	2	2	L = 2.0m, W = 0.75m, H = 0.46 - 0.90m, Working Load 180kg, Adjustable Head	Roll for disposable surface (for infection control)	Medicraft, Hill-Rom
6	Bed, In-Patient, Single, Manual	0	4	6	6	6	Lying surface dimensions: 2000mmL x 1100mmW, Height adjustable: min 270mm - max 750mm, Safe capacity: 300kg including client, mattress and accessories	Mattress, Pillow, Linen	Medicraft, Hill-Rom
7	Bed, Mechanical, Birthing	0	1	1	1	1	Lying surface dimensions: 2000mmL x 1100mmW, Height adjustable: min 270mm - max 750mm, Safe capacity: 300kg including client, mattress and accessories, calf support options, two (2) IV pole inserts, castors for movement	Mattress, Pillow, Linen	Hill-Rom

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
8	Bed, Stretcher, Portable	1	2	2	2	2	L = 2.0m, W = 0.75m, Aluminium Frame, PVC Coated, Polyester bed with antibacterial, stain, chemical and crack resistant. Rubber Handles. Working Load 180kg	Carry Case	
9	Bedpan	0	2	2	2	2	Aluminium for durability and infection control, Length: 380mm, Width: 270mm, Depth: 65mm	N/A	
10	Bottle, Humidifier, Oxygen Concentrator	0	3	3	4	4	360 degree moulded, low resistance, transparent Standard fitting for attachment to flowmeters and concentrator outlets	N/A	
11	Bowl, 4 Litre	2	2	2	2	2	Plastic or aluminium, Width 350mm minimum Depth: 65mm minimum	N/A	
12	Cabinet, Bedside, Lockable	0	4	6	6	6	2 x drawer, 1 x lockable, open shelf or cupboard under. Preferably waterstain resistant coating		
13	Cannister, Gauze	1	2	2	3	3	Stainless Steel, 0.4L, Push lid		
14	Cannister, Cotton Wool	1	2	2	3	3	Stainless Steel, 0.4L, Push lid		
15	Clock, Analogue	1	1	2	2	2	Round Face, Approx 350mm face, black on white, AA battery	N/A	
16	Compressor, Nebuliser	0	1	2	2	2	Free Air Flow: ≥8lpm, AC/DC power	Nebuliser Kits, tubing, Filter, Adult and Paeds Mask	
17	Crutches, Adult	2	4	6	6	6	Max. user weight: 127kg (20 stone), Top to floor: 1340mm - 1540mm, (Client height 5'10" - 6'6".) 22mm tip.	N/A	
18	Crutches, Youth	2	2	3	3	3	22mm tip, Max. user weight: 127kg (20 stone), Top to floor: 940mm - 1140mm, (Client height 4'6" - 5'2".)	N/A	
19	Cutter, Stitch, Sterile	0	2	2	2	2	Stitch Cutter Blade that does not require handle for use.	N/A	Swann Morton Disposable Stitch Cutter Blades
20	Cylinder, Oxygen, G size	0	2	2	3	3	Type 10 'Bullnose' fitting as per current cylinders in use through MoH.	N/A	BOC
21	Dish, Kidney, 0.75 Litre	1	10	10	10	10	Stainless Steel, L = 250mm, H = 55mm, V = 750ml	N/A	

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
22	Dispenser, Sanitiser, Wall Mounted	1	4	4	6	6	Wall mounted, Takes 1000ml refills, size 29 x 16 x 11cm or similar	500ml - 1000ml refills	
23	Forceps, Artery	0	20	20	20	20	12cm	12cm	Mayo-Hegar
24	Forceps, Dissecting	0	20	20	20	20	12cm	12cm	Mayo-Hegar
25	Forceps, General	2	20	20	20	20	12cm	12cm	Mayo-Hegar
26	Forceps, Sponge	2	20	20	20	20	12cm	12cm	Mayo-Hegar
27	Holder, Needle	0	20	20	20	20	12cm	N/A	Mayo-Hegar
28	Holder, Scalpel, Metal		1	2	2	2	To fit scalpel sizes: 11/12/15/20/21/22	N/A	
29	Holder, Suture	0	20	20	20	20	12cm	N/A	Mayo-Hegar
30	Jug, Graduated, 1 litre	1	2	3	3	3	Plastic, 50ml graduations	N/A	
31	Light, Examination, LED, Portable	0	1	1	2	2	Stand light, Flexible head, adjustable intensity preferable, stable platform, castors, 5-10W LED power. Battery backup an advantage but not essential.	N/A	Welch Allyn GS300 (expensive) - cheaper but just as effective options available
32	Mattress, Bed, Single	0	4	6	6	6	To fit Bed, inpatient, single	Pillows, Pillowcase, linen sheets	
33	Medicine Cup, Graduated, 250ml	2	4	4	6	6	Plastic, Up to 250ml		
34	Meter, Blood Glucose	0	2	2	3	3	Test time - 5 seconds, Power supply - AA Battery or Lithium CR2032 Memory capacity -500 blood glucose results Additional features: Auto power on when test strip inserted; Auto power off after 60 seconds	Carry Case, test strips	Roche Accu-Chek Performa (superseded by Performa II)

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
35	Meter, Flowmeter, Oxygen, 0-15LPM	0	4	6	6	6	400kPa pressure capacity, Highly accurate, easy to read, Durable chrome-plated brass body, Shatter resistant polycarbonate Thorpe tube, 1 LPM graduations full scale	Nozzles for tubing attachment	
36	Meter, Hemoglobin	0	1	1	1	1	Precise factory calibration against the ICSH reference method, uses microcuvette technology, date and time storage for up to 600 results Blood-based liquid controls	Microcuvettes (consumable)	Radiometer Hemocue 201+
37	Meter, Pulse Oximeter, Fingertip	0	2	2	3	3	Patient Range: Adult and Paediatric, SpO2 Measurement Range: 70%-99%, Resolution: +/- 1%, Measurement Accuracy: 80%-99%: +/- 2%, 70%-80%: +/-3%, Pulse Rate Measurement Range: 30-235 bpm, Resolution: +/- 1bpm, Measurement Accuracy: 33-99 bpm: +/- 2 bpm, 100-235 bpm: +/- 2 bpm	Carry Case	Conmed
38	Meter, Sphygmomanometer, Aneroid	1	2	2	3	3	Certified accuracy to +/- 3mmHg, Latex free for safety, Durable one-piece Adult cuff - 25 - 34cm, Durable one-piece Child cuff - 15 - 21cm, Polyester zip case	Carry Case	Welch Allyn, Reister, Baumanometer
39	Meter, Thermometer, Ear, Infrared	0	1	1	1	1	Auto shut off, memorises readings, Use with Ear covers, reading in under 2 seconds, AA or AAA batteries	Carry Case, infrared ear thermometer probe covers	N/A - suggest Braun 6021, Covidien Genius 2
40	Meter, Thermometer, Standard, Digital	1	2	2	4	4	Digital display, Celsius calibration, self timing, mercury free, hard tip, audible warnings, utilises standard coin cell battery, eg LR44	covers for tip (eg for oral use)	
41	Monitor, Blood Pressure, Digital	1	1	1	1	1	120 Memories Recall, One-touch operation, Fully auto measurements, WHO pressure level indicator, Low battery detection, Auto power off function, AC-DC option, standard batteries - AA or AAA.	Adult and Paediatric Cuffs	N/A - suggest Omron HEM-907 or similar
42	Monitor, Doppler	0	1	1	1	1	Fixed probe 2-3MHz (2 general, 3 early gestation), standard alkaline batteries - AA, AAA or 9V	Carry Case, water-based coupling gel	Contec, Huntleigh, Edan



Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
43	Net, Mosquito, Cot	0	1	2	3	3	LLIN treated, to fit cot dimensions 900mm x 2000mm +100mm and 1000mm drop	Ceiling Hooks	
44	Pole, IV, Mobile	0	4	6	6	6	Height: 1220mm - 2100mm, Aluminium (or SS for durability), Castors, Dual Head (for two IV Bags)	Spare Castors	
45	Pump, Suction, Manual, Foot	0	1	1	1	1	Hand or foot operation, 600ml fluid capacity, maximum free air flow 70 litres / min, autoclavable	Suction tips	
46	Refrigerator, Chill, Vaccine, 20 Litre, Solar	0	1	1	0	0	TCW15SDD Solar Refrigerator, R600a refrigerant, 20 Litre minimum capacity	N/A	Dometic, Vestfrost, B Medical System
47	Refrigerator, Chill, Vaccine, 36 Litre, Solar	0	0	0	1	1	TCW40SDD Solar Refrigerator, R600a refrigerant, 36 Litre minimum capacity	N/A	Dometic, Vestfrost, B Medical System
48	Refrigerator, Blood	0	1	1	1	1	+4degC, multiple alarms (temp deviation, power disruption etc), temperature logging function, battery back-up (or UPS), capacity ≥20 x 450mL blood bags		
49	Rod, Height, Wall Mounted	1	1	1	1	1	Wall Mounted, Stadiometer, level scale indication, scale and head piece in moulded plastic, measures in inches and centimetres	N/A	
50	Scale, Weighing, Adult	1	1	2	2	2	180kg load capacity, 10 x 15 inch platform, manual slide scale or clock face with calibration setting	N/A	Seca
51	Scale, Weighing, Child	1	1	2	2	2	25kg load capacity, 15 x 22 inch platform, manual slide scale	N/A	Seca
52	Scale, Weighting, Newborn	0	0	1	1	1	10kg load capacity, hanging scale	N/A	
53	Scissors, Bandage, 14cm	1	2	2	2	2	As per item description, angled blades	N/A	
54	Scissors, Clothing Cutters, Large, 17.5cm	1	1	2	2	2	As per item description, angled blades	N/A	
55	Scissors, Clothing Cutters, Small, 15cm	1	1	2	2	2	As per item description, angled blades	N/A	
56	Scissors, Dressing, Blunt / Sharp, 13cm	1	1	2	2	2	As per item description	N/A	

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
57	Scissors, Dressing, Blunt, 13cm	1	1	2	2	2	As per item description	N/A	
58	Scissors, Dressing, First Aid, 8.9cm	1	1	2	2	2	As per item description	N/A	
59	Scissors, Suture, 30cm	0	2	4	4	4	As per item description	N/A	
60	Scope, Fetoscope	0	1	1	2	2	Metal for durability and cleaning, 8 inch or more	N/A	
61	Scope, Ophthalmoscope, Handheld	0	1	1	1	1	Should be rechargeable battery with Charger / mains operated, LED light source, red-free filters, small and large spot sizes, fixation targets, slit aperture, hemi-spot and cobalt blue filter, wheel control with lens powers ranging from +20D to -35D in single dioptre steps up to 10D and 5D steps above that, illuminated lens dial, rubber brow rest, dust free optics and a spherical optical system.	Carry Case	Welch Allyn, Reister, Heine
62	Scope, Otoloscope, Fibre Optic	0	1	1	1	1	Interchangeable head with ophthalmoscope above. Handle contains rechargeable battery. Should be LED illumination	Carry Case	Welch Allyn, Reister, Heine
63	Scope, Stethoscope, Double Head, Adult	0	1	1	2	2	Adult Head	Carry Case	
64	Scope, Stethoscope, Single Head, Paeds	1	2	2	4	4	Paediatric	Carry Case	
65	Screen, Privacy, Portable	1	4	6	6	6	Single panel width: 300mm, 4 x panels, Base dimensions: 590mm L x 400mm W, Weight: 22kg, Panel height: 1650mm, Accordion system, rubber stop mounted	N/A	
66	Sheets, Bed, Single	0	8	12	12	12	To fit Bed, inpatient, single	N/A	
67	Speculum, Stainless Steel, Set	0	1	2	2	2	1 set consists of 1 x Small, 1 x Medium and 1 x Large	N/A	SIMS
68	Steriliser, Autoclave, Powered	0	1	1	1	1	Class B, 18-22L minimum. Minimum 5-tray capacity. Must be provided with water distiller (for de-calcification) or some other source.	Distilled water, chemical indicators to test for effective sterilization	Ritter and Tuttner or Rexmed
69	Steriliser, Autoclave, Steam	1	1	1	1	1	Capacity as above, pressure and temperature indication, stainless steel construction, gas cooktop OR wood fired heat	Gas bottle and line (If gas fed)	

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
70	Stool, Foot	01	1	1	1	1	Single step. Tubular pipe framework. CRC sheet top (fitted with non-skid rubber sheet) or an SS top. Rubber/PVC stumps. Approx Dimensions (LxWxH): 460x230x230mm. Pre-treated & Epoxy powder coated finish.	N/A	
71	Tape, Measuring, Handheld	1	2	2	3	3	Plastic coated, metal tips, 2.0m length	N/A	
72	Tape, MUAC, Adult	1	2	2	3	3	Non-tear, non-stretch	N/A	
73	Tape, MUAC, Child	1	2	2	3	3	Non-tear, non-stretch	N/A	
74	Tray, Dressing	2	2	2	4	4	Stainless Steel, 20cm x 15cm	N/A	
75	Tray, Instrument, Square	1	2	2	3	3	Stainless Steel, 30cm x 30cm	N/A	
76	Tray, Over bed, Portable	0	4	6	6	6	Adjustable, on castors, lockable height dial	N/A	
77	Tray, Pelvic	0	2	2	4	4	Stainless Steel, 20cm x 15cm	N/A	
78	Tray, Suture	0	2	2	4	4	Stainless Steel, 20cm x 15cm	N/A	
79	Tray, Urine, Male	1	2	2	4	4	Plastic moulded, 1 litre capacity, with lid	N/A	
80	Tray, Urine, Female	1	2	2	4	4	Plastic moulded, 1 litre capacity, without lid	N/A	
81	Trolley, Instrument / Dressing, 2-Drawer	0	1	1	2	2	Castors, Two drawer, Plastic tray top, 1000mmW x 500mmD x 900mmH	Spare Castors	
82	Trolley, Medication, 2-Drawer	0	1	1	2	2	Castors, Two drawer, Plastic tray top, 1000mmW x 500mmD x 900mmH	Spare Castors	
83	Tweezers, Angle Tip, 11cm	1	2	4	4	4	As per item description	N/A	
84	Tweezers, Pointed Tip, 11cm	1	2	4	4	4	As per item description	N/A	
85	Vaccine Carrier, small, 0.9 Litre	0	1	1	2	2	Insulated container, minimum cold life of 24 hours	Ice Packs 0.3,0.4 and 0.6 litres	
86	Vaccine Carrier, small, 1.5 Litre	0	1	1	2	2	Insulated container, minimum cold life of 24 hours	Ice Packs 0.3,0.4 and 0.6 litres	
87	Vaccine Carrier, small, 2 Litre	0	1	1	2	2	Insulated container, minimum cold life of 24 hours	Ice Packs 0.3,0.4 and 0.6 litres	
88	Vaccine Cold Box, large, long range 20ltr	0	1	1	2	2	Products between 15 - 25 litres, minimum cold life of 96 hours	Ice Packs 0.3,0.4 and 0.6 litres	
89	Vaccine Cold Box, large, short range 15ltr	0	1	1	2	2	Products between 15 - 25 litres, minimum cold life of 48 hours	Ice Packs 0.3,0.4 and 0.6 litres	

Medical Assets and Inventory		Quantity					Additional Information		
Serial	Item Description	AP	D	RD	HC	EHC	Specifications	Accessories	MOH Brand
90	Vaccine Cold Box, small, long range 10ltr	0	1	1	2	2	Products between 5- 15 litres, minimum cold life of 96 hours	Ice Packs 0.3,0.4 and 0.6 litres	
91	Vaccine Cold Box, small, short range 5ltr	0	1	1	2	2	Products between 5- 15 litres, minimum cold life of 96 hours	Ice Packs 0.3,0.4 and 0.6 litres	
92	Vacuum, Aspiration, Manual	0	1	2	2	2	≥70l/min flow, ≥600mmHg vacuum, ≥1000mL capacity, foot-operated, easy clean	Tubing, canisters, one-way valves	Ambu Twin
93	Vacuum, Extractor, Delivery, Manual	0		1	2	2	Low-profile cup, ease-of-use	Cups (disposable)	Kiwi vacuum Delivery System - Omni-cup or Omni-MT
94	Wheelchair, Adult	1	1	1	2	2	Back height: 450mm, Floor to seat height: 510mm, Overall width: 760mm, Overall length: 1120mm, chair weight: 24kg, Max. user weight: 204kg, Seat width: 560mm	N/A	

**PRIMARY HEALTH CARE FACILITIES – NON-MEDICAL FIXED ASSETS AND INVENTORY**

Assets and Inventory (Non-Medical)							
Serial	Item Description	Functional Area	AP	D	RD	HC	EHC
1	Vehicle, Utility, 4WD, Double Cabin	Garage	-	-	1	1	1
2	All-Terrain Vehicle (ATV), Quad, 4WD	Garage	-	1	1	1	1
3	Boat, Fibreglass, 7m	Other Storage	-	-	1	1	1
4	Boat, Aluminium, 4.5m	Other Storage	-	-	1	1	1
5	Motor, Outboard, 40HP	Other Storage	-	1	1	2	2
6	Motor, Outboard, 10HP	Other Storage	-	1	1	2	2
7	Power System, Generator, 5kVa	Generator Shed	-	1	1	1	1
8	Power System, Generator, 10kVa	Generator Shed	-	-	1	1	1
9	Power System, Solar Unit, 1000W	Generator Shed	-	-	-	1	1
10	Power System, Solar Unit, 300W	Generator Shed	-	1	1	-	-
11	Power System, Solar Unit, 100W	Generator Shed	1	-	-	-	-
12	Computer, Laptop, Government Specification	Consultation Room	-	-	1	1	1
14	Hard Drive, 1TB, Mobile	Consultation Room	-	-	1	1	1
15	Cabinet, Filing, Vertical, 3-Tier	Consultation Room	-	1	1	1	1
16	Cabinet, Filing, 3-Tier, Pedestal	Consultation Room	-	1	1	1	1
17	Cabinet, Bookshelf, 4 Tier	Consultation Room	-	1	1	1	1
18	Cabinet, Bookshelf, 1-Tier, Wall Mounted	Consultation Room	-	1	1	1	1
19	Cabinet, Storage, Pharmaceutical	Pharmaceutical Storage	1	1	1	1	1
20	Cabinet, Kitchen, Storage	Delivery Room	-	1	1	1	1
21	Extinguisher, Fire, Wood, 1L		-	2	3	3	3
22	Sink, Stainless, 35L	Various	-	3	3	3	3
23	Sink, Porcelain, Handbasin	Ablutions (WC) - Internal	-	2	2	2	2
24	Table, desk, 1.8m	Consultation & Treatment Room	1	2	2	2	2
25	Table, sorting, 1.8m	Pharmaceutical Storage	-	1	1	1	1
26	Chair, Manager	Consultation Room	1	1	1	1	1

Assets and Inventory (Non-Medical)							
Serial	Item Description	Functional Area	AP	D	RD	HC	EHC
27	Chair, Consultation	Consultation Room	1	2	2	2	2
28	Chair, Visitor	Inpatient Wards	1	4	6	6	6
	Chair, Bench Seating, 2.4m	Outpatient Waiting Area	2	5	5	7	7
29	Bin, Rubbish, 10L	Consultation & Treatment Room	1	1	2	2	2
30	Clock, Wall Mounted	Consultation & Treatment Room	1	2	2	2	2
31	Bucket, 20L	Other Storage	1	2	2	2	2
32	Mop, 1.5m	Other Storage	-	2	3	3	3
33	Tank, Water, 5,000L	Water Storage	1	-	1	-	-
34	Tank, Water, 10,000L	Water Storage	-	1	1	3	3
35	Ablutions, Toilet, Flush System	Ablutions (WC) - Internal	-	2	2	2	2
36	Ablutions, Toilet, VIP, Double	Ablutions (WC) - External	-	1	1	2	2
37	Bedding, Pillow	Various	-	4	6	6	6
38	Bedding, Pillowcase	Various	-	8	12	12	12
39	Bedding, Linen, Single	Various	-	16	24	24	24
40	Bedding, Linen, Cot	Various	-	2	4	6	6

**Note:**

1. Vehicles and Boat allocation is dependent on location. Facilities may hold vehicles but not boats and vice versa. Where there is justification to hold both (with access to sea and road routes) this is permitted.
2. Boats are inclusive all safety equipment, such as lifejackets, oars, EPIRB, nautical maps, flares (and gun), navigation lights and marine compass.
3. Outboard motors are dependent on final boat allocation.
4. Solar system numbers are indicative of individual health facilities. Additional systems will be required for staff housing (300W systems)
5. All furniture is to be suitable for tropical climate (i.e Anti-corrosion etc)

## APPENDIX E2: HOSPITAL FACILITIES MEDICAL EQUIPMENT

### HOSPITAL FACILITIES – EQUIPMENT LISTS

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
<b>EMERGENCY AND CRITICAL CARE</b>			
<b>Emergency Department</b>	Emergency resuscitation trolley – adult & paediatric  Defibrillator, external automated  ECG machine (12 lead)  Stethoscopes - mechanical  Sphygmomanometers (adult, child cuffs)  Thermometers (digital)  Glucometer  Pulse oximeter - additional  Spirometer/peak flow meter  Diagnostic set (otoscope, ophthalmoscope)  O&G emergency trolley and sets  Laryngoscope, adult/child set  Airways tubes, endotracheal tubes & masks (adult & child)  Suction machine (manual)	<i>As for Provincial Hospital PLUS:</i>  Ventilator (adult, paediatric portable)  Oxygen cylinders and regulator  Flow meter (oxygen therapy)  Multi-channel infusion pump  Multiple channel syringe pumps  Wall-mounted oxygen and suction systems  Laryngoscope, adult/child, set  Mobile X-ray machine  Endotracheal suction equipment  Paediatric warmer	<i>As for Regional Referral Hospital PLUS:</i>  Cardiac monitor  Central monitor (that links with all bedside monitors)  Portable echocardiography/Ultrasound machine  Laboratory unit – emergency diagnosis - point-of-care test devices for lab tests e.g.  - iSTAT device for Hb, blood gas analysis and UEC - Glucometer with ketometer - Urinalysis meter

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Nebuliser Infusion pump and drip stand Syringe pump x 2 (for IV medication) Examination light (portable) Humidifier & regulator Oxygen concentrator Oxygen cylinder - portable Urinary catheterisation equipment Nasogastric drain tubes and collection bag Emergency drug kit Scales Plaster saw IBlood/V fluid warmer Patient transport trolley & slide Emergency light with rechargeable battery <i>Communication:</i> Satellite phone or radio communication Whiteboard or similar PC Workstation linked to referral hospital and PACS and on-line education tools etc		



SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
Retrieval & emergency transfers	Stethoscope Sphygmomanometer glucometer Portable defibrillator Portable resuscitator with adult and child masks Cardiac monitor AMBU bag Guedal airways tubes Thomas stretcher	<i>As for Provincial Hospital PLUS:</i> Portable resuscitator with adult and child masks	<i>As for Regional Referral Hospital PLUS</i> IV set Portable suction unit
HDU/ICU	<i>NB: HDU is part of general medical-surgical ward so equipment is shared. Essential for HDU are:</i> Emergency/Resuscitation trolley ( <i>may be shared with ED</i> ) Scale, patient, bed Light, examination, mobile Oxygen set Suction unit (manual) Infusion pump, multichannel IV drip stand Sphygmomanometer, aneroid	<i>Separate unit. Equipment as for Provincial Hospital PLUS</i> Emergency resuscitation trolley, fully equipped including adult and paediatric laryngoscope sets. Portable patient monitor [ blood pressure, non-invasive, ECG, Oximetry, temperature]. Suction system, general purpose, electric Portable ventilator, adult/paediatric (short term use) Flow meter, oxygen therapy Ophthalmoscope & otoscope	<i>Free standing unit. Equipment as for Regional Referral Hospital PLUS</i> Wall mounted oxygen and suction (2 per bed) Portable monitor: NIBP, oximeter, ECG, capnometer, temperature, pressure channels (1 per bed) Ventilator, mechanical, adult/paediatric Central telemetry (cardiac) monitoring Patient monitor, blood pressure, invasive. Patient monitor, electrocardiographic/respiratory Glucometer with ketometer Urinalysis meter

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Stethoscope, mechanical Pulse oximeter ECG machine ( <i>may be shared with ED/OPD</i> ) Glucometer Thermometer, electronic Nebuliser (electric) Dressings trolley Wheelchair Patient transport trolley		Point-of-care test devices for lab tests [e.g. iSTAT device for Hb, blood gas analysis and UEC] Gasometer Access to mobile X-ray
<b>MEDICAL</b>			
<b>General outpatient clinic services</b>	Scales – adult Height scale Stethoscopes Sphygmomanometers – aneroid with adult and child cuffs ECG machine (12 lead) Portable cardiac monitor Glucometer Thermometers – digital	<i>As for Provincial Hospital PLUS:</i>	<i>As for Regional Referral Hospital PLUS:</i>

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Pulse oximeter Diagnostic set (otoscope, ophthalmoscope) Examination lamp Nebuliser (electric) Infusion pump and drip stand Dressings trolley Lockable drugs trolley/cabinet RDT kits X-ray viewing box or monitor/screen for digital images Vaccine fridge ( <i>may be shared with paediatric outpatients</i> ) Patient transport trolley		
<b>Specialist outpatient clinic services</b>	As above		

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
Inpatient care	<p><i>Medical-Surgical ward</i></p> <p>Scales – adult</p> <p>Height scale</p> <p>Stethoscopes</p> <p>Sphygmomanometers – aneroid</p> <p>ECG machine (12 lead)</p> <p>Glucometer</p> <p>Thermometers – digital</p> <p>Pulse oximeter</p> <p>Diagnostic set (otoscope, ophthalmoscope)</p> <p>Examination lamp</p> <p>Nebuliser (electric)</p> <p>Infusion pump</p> <p>IV drip stands</p> <p>Dressings trolley</p> <p>Lockable drugs trolley/cabinet</p> <p>X-ray viewing box or monitor</p> <p>Fridge – vaccines &amp; drugs</p> <p>Wheelchair, mobility aids</p>	<p><i>Medical ward: equipment as for Provincial Hospital PLUS:</i></p> <p>Emergency resuscitation trolley</p> <p>Defibrillator</p> <p>Cardiac Monitor</p> <p>Neurology set</p> <p>Oxygen cylinder - portable</p> <p>Oxygen concentrator</p> <p>Oxygen and suction – wall mounted</p> <p>Computer monitor for imaging, lab results</p> <p>Portable suction unit</p> <p>Syringe pump</p> <p>Bone marrow biopsy set</p> <p>Spirometer</p>	<p><i>Medical ward(s): equipment as for Regional Referral hospital PLUS:</i></p> <p>Physiologic monitors for high dependency beds.</p> <p>Echocardiography unit – portable</p> <p>Ultrasound machine - portable</p>

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Emergency Resuscitation trolley (shared with ED/OPD)		
<b>SURGICAL</b>			
<b>Surgical clinics</b>	<i>As for general outpatient clinic plus:</i> Proctoscope	<i>As for provincial hospital PLUS:</i> Flexible sigmoidoscope	
<b>Specialist clinics</b>	<i>As above plus:</i> Plaster saw (Orthopaedics/fracture)	<i>As for Provincial hospital plus:</i> Cystoscope, flexible (Urology)  Urodynamics system (Urology)	<i>As for Regional Referral hospital</i>
<b>Surgical procedures</b>	<i>See operating theatres</i>	<i>See operating theatres</i>	<i>See operating theatres</i>
<b>Inpatient care – surgical wards</b>	<i>As for medical inpatients plus:</i> Plaster saw/cutters	<i>As for Provincial hospital plus:</i> Emergency resuscitation trolley  Defibrillator	<i>As for Regional Referral hospital PLUS</i> Ultrasound machine - portable

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
		Cardiac Monitor Oxygen and suction – wall mounted Computer monitor for imaging, lab results Syringe pump Procedure trolley Dressing trolley POP trolley and accessories Traction frame bed(s) Ripple mattress Patient transport trolley	
<b>Eye/Ophthalmology services</b>	Amsler's eye chart Ishihara colour testing chart Head lamp Slit lamp? Examination lamp Eye retractor Ophthalmoscope/retinoscope set Magnifying loop Trial lens set	<i>As for provincial hospital PLUS:</i> Slit lamp with 90D lens Indirect ophthalmoscope Corneal pachymeter/ Keratometer Visual field analyser Glucometer?	<i>As for regional referral hospital PLUS:</i> Fundus camera Laser (details?) Argon?

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Dressing trolley		
ENT services	Otoscope Examination lamp Suction unit Audiometer Tympanometer	As for provincial hospital PLUS: Head lamp with light source Nasofibroscope (flexible & rigid) Audiometry testing booth Operating microscope (in operating theatres)	As for regional referral hospital PLUS Operating sets – ENT (in operating theatre)
Oral Health/Dental	Dental chair with light, drill and suction unit Dental handpieces Benchtop steriliser/autoclave Compressor unit (if required) Blood pressure monitor Glucometer Portable dental unit for outreach service Portable autoclave	As for provincial hospital PLUS: Wall mounted X-ray machine with monitor Biosonic cleaner Suction unit – dental, portable Intra-oral X-ray processor Dental laboratory and prosthodontics workshop equipment	As for regional referral hospital
Burns	N/A	N/A	Burns bath
<b>MATERNAL AND REPRODUCTIVE HEALTH</b>			
Antenatal & postnatal clinics	Scales, adult and baby Measuring tape	As for Provincial Hospital PLUS: Cardiotocograph (CTG) machine	As for Regional Referral hospital

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Sphygmomanometer/blood pressure monitor Examination light Foetal stethoscope/heartbeat monitor Stethoscope Thermometer, clinical Pregnancy wheel/gestation calculator Examination table with stirrups Dressing trolley RDT kits Access to ultrasound scanner (mobile)	Ultrasound scanner	
<b>Antenatal high-risk clinic</b>	<i>As for antenatal</i> May have CTG?	<i>As for Provincial Hospital PLUS:</i> Cardiotocograph (CTG) machine Ultrasound scanner	<i>As for Regional Referral hospital</i>
<b>Gynaecology, family planning/women's health clinics</b>	<i>As for antenatal PLUS</i> Colposcope Pap smear kit	<i>As for Provincial Hospital PLUS:</i> Cryotherapy unit	<i>As for Regional Referral hospital</i>
<b>Delivery and intrapartum care</b>	Examination bed/couch Examination light Wall clock Labour/Delivery beds with accessories	<i>As for Provincial Hospital PLUS:</i> CTG machine Ultrasound scanning unit Suction unit, electric	<i>As for Regional Referral hospital</i>



SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Drip stands Infusion pumps Sphygmomanometer, aneroid Stethoscope (adult) Foetoscope Partograph Ultrasound scanner, mobile Foetal heart monitor (mobile) Bakri balloon (control severe PPH) Steriliser for instruments Vacuum extraction set, manual Scale, infant, beam type Emergency resuscitation trolley, equipped for adult and newborn resuscitation. Pulse oximeter Oxygen cylinder or concentrator, with accessories Pump, suction, foot operated or electrical Suction bulb (Laederl 'Penguin' suction device) Pump, suction, newborn resuscitation	Syringe pump Nebuliser pump Emergency resuscitation trolley	

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Newborn warmer/resuscitation trolley Patient transport trolley		
<b>Inpatient care</b>	Scale, adult Scale, infant, beam type Examination light, portable Sphygmomanometer, aneroid Stethoscope (adult) Thermometer, clinical Speculum Infusion pump Drip stands Nebulizer with accessories Pulse oximeter Syringe pump with accessories Computer for RMNCAH data entry? Wheelchair	<i>As for Provincial Hospital PLUS:</i> ECG machine (12 lead) Monitor for high dependency bed Oxygen Suction Glucometer Ultrasound machine – portable	<i>As for regional referral hospital</i>
<b>Gynaecological surgery &amp; Caesarean sections</b>	<i>As for Operating Theatres</i>	<i>As for Provincial Hospital PLUS:</i>	
<b>Sexual violence</b>	<i>As for Women's health clinics</i>		

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
<b>NEWBORN, CHILD &amp; ADOLESCENT SERVICES</b>			
<b>Newborn care</b>	Scale, infant, digital  Newborn resuscitation table with accessories  Suction  Resuscitator, hand operated, newborn set  Oxygen concentrator, flow splitter, for newborn.	<i>As for Provincial Hospital PLUS</i>	<i>As for Regional Referral Hospital PLUS:</i>
<b>Special care nursery/NICU</b>	Humidicrib/incubator (neonatal)  Warmer, heating pad, newborn  Scale (digital)  Phototherapy trolley/light  Infusion pump  Pulse oximeter	<i>As for Provincial Hospital PLUS</i>  Neonatal Continuous Positive Airway Pressure (CPAP) system  Warmer, radiant heat, free standing, neonatal  Infusion pump with accessories x 2  Bilirubinometer  Apnoea monitor  Auditory function screening device, newborn  X-ray viewer/monitor  Syringe pump	<i>As for Regional Referral Hospital PLUS:</i>  Intensive care cots with mechanical ventilator (neonatal)  Cardiac or multi-system monitors  Syringe pumps  Infusion pumps  Sphygmomanometer – 1 per cot  Thermometer – 1 per cot
<b>Child Health/Paediatric clinics</b>	Scales: infant and child  Height scale  Mid Upper Arm Circumference (MUAC) measuring tapes: infant/child	<i>As for Provincial Hospital PLUS</i>  ECG machine  Pulse oximeter  Diagnostic set	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Thermometer, clinical Examination light Audiometer, pure tone Otoscope Podoscope Stethoscope Sphygmomanometer, aneroid with paediatric cuff Paediatric examination table X-ray viewer or monitor Vaccine fridge	Oxygen cylinder – portable Oxygen concentrator Fridge - medications	
<b>Paediatric inpatient care</b>	Scales: infant and child Height scale Mid Upper Arm Circumference (MUAC) measuring tapes: infant/child Examination light Thermometer, clinical Timer, respiration for ARI Infusion pump Drip stand, double hook	<i>As for Provincial Hospital PLUS</i> Oxygen set (mobile) ECG machine Defibrillator Blanket warmer	<i>As for Regional Referral Hospital PLUS:</i> Cardiac monitor

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Nebulizer with accessories Pulse oximeter, portable with accessories Access to X-ray viewer or monitor		
<b>MENTAL HEALTH</b>			
Psychiatric ward	<i>Refer to medical ward</i>	<i>Refer to medical ward</i>	Scales – adult Stethoscope Sphygmomanometer – aneroid ECT machine with EEG monitor Thermometer – digital Examination lamp IV drip stand Dressings trolley Lockable drugs trolley/cabinet Fridge – medications Wheelchair
<b>ALLIED HEALTH/CLINICAL SUPPORT SERVICES</b>			
Pharmacy	Pill counters Drug fridge Medicine trolley	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital PLUS:</i> Cytotoxic cabinet for oncology pharmacy

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	Lockable storage cabinet for dangerous drugs Computer terminal for M-supply		
<b>Pathology/Medical laboratory services</b>	<i>Haematology</i> Haematology analyser (100)  Coagulation unit  Microscope  Blood gas analyser  <i>Biochemistry</i> General analyser – semi-automated, dry chemistry  GeneXpert – PCR  <i>Microbiology</i> Incubator  Autoclave  <i>Serology</i> Rotator and mixture	<i>Haematology</i> Haematology analyser (550)  Coagulation unit  Automated slide stainer  Microscope  Centrifuge  Blood gas analyser  <i>Biochemistry - as for Provincial Hospital</i> <i>Microbiology - as for Provincial Hospital PLUS</i> Blood culture machine <i>Serology - as for Provincial Hospital PLUS</i> ELISA  HPV  Safety cabinet	<i>As for Regional Referral Hospital PLUS:</i> Haematology analyser (1000)  Automated coagulation unit  Blood culture machine  <i>Biochemistry - as for Regional Referral Hospital PLUS</i> Analyser – automated, wet chemistry [Cobas C311]  Immuno-Assays <i>Molecular Biology</i> PCR machine  <i>Microbiology - as for Regional Referral Hospital</i> <i>Serology - as for Regional Referral Hospital</i> <i>Histology/Cytology</i> Tissue processor  Embedding centre  Microtome- semi-automated  Water bath  Incubator  Automated stainer

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
			Safety cabinet
<b>Blood Bank</b>	Automated scale/pulse/bleeding machine Haemocue Blood separator Blood donation couch Small blood fridge	<i>As for Provincial Hospital PLUS:</i> Mobile blood donation vehicle Automated ESR Blood rotator Scales (blood) Sealer (blood bank) Warmer	<i>As for Regional Referral Hospital</i> Blood irradiator Apheresis machine
<b>Medical imaging</b>	Fixed X-ray (digital, with PACS capability) X-ray table Developing Processor Ultrasound scanner (basic)	<i>As for Provincial Hospital PLUS:</i> Digital X-ray with monitors in ED, OPD and wards and PACS capability. Mobile x-ray Ultrasound - colour doppler Image intensifier (in theatre) Fluoroscopy (IVU and contrast studies)	<i>As for Regional Referral Hospital PLUS:</i> OPG CT scanner Emergency resuscitation trolley
<b>Clinical investigations</b>	ECG machine ( <i>located in ED</i> )	<i>As for Provincial Hospital PLUS:</i> Echocardiograph with accessories	<i>As for Regional Referral Hospital PLUS:</i> Exercise stress test
<b>Operating theatres + Endoscopy</b>	Operating table, with accessories Electrosurgical unit, with accessories Light, operating theatre, ceiling, with accessories	<i>As for Provincial Hospital PLUS:</i> Mobile X-ray, with viewer and accessories. Image intensifier Diathermy	<i>As for Regional Referral Hospital PLUS</i> Surgical/operating sets for: <ul style="list-style-type: none"> <li>- Head and neck surgery</li> <li>- Spinal surgery</li> <li>- Thoracic surgery</li> <li>- Hand surgery</li> </ul>

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
	<p>Light, operating theatre, mobile, with accessories</p> <p>Electrical vacuum aspiration (EVA) full set</p> <p>Manual vacuum aspiration (MVA) complete set</p> <p>Pump, suction, electrical, 1 bottle with accessories</p> <p>Pump, suction, electrical, 2 bottles with accessories</p> <p>Sphygmomanometer, aneroid</p> <p>Stethoscope (adult)</p> <p>Tourniquet, rubber, approx. 50cm</p>	<p>Surgical/operating sets for:</p> <ul style="list-style-type: none"> <li>- Abdominal surgery</li> <li>- Orthopaedics</li> <li>- Plastic surgery</li> <li>- ENT surgery</li> <li>- Ophthalmic surgery</li> <li>- Facio-maxillary surgery</li> <li>- Paediatric surgery</li> </ul> <p>Endoscopic sets (gastroscope, colonoscope, cystoscope, bronchoscope)</p> <p>Endoscope rinsing/disinfecting bath</p>	
Anaesthetics	<p>Anaesthetic machine.</p> <p>Defibrillator, basic with accessories</p> <p>Laryngoscope, adult/child set</p> <p>Oxygen concentrator, with accessories</p> <p>Pulse oximeter</p> <p>Infusion pump</p> <p>Pump, suction, foot operated</p> <p>Resuscitator, hand operated, adult set.</p>	<p><i>As for Provincial Hospital PLUS:</i></p> <p>Anaesthetic machine with ventilator and accessories.</p> <p>Anaesthetic cardiac monitor (CO<sub>2</sub> monitor probe)</p> <p>ECG monitor probe</p> <p>BP monitor probe</p> <p>Defibrillator, external automated</p> <p>Automated non-invasive BP monitoring (adult and paediatric)</p> <p>Fluid/blood warmer</p> <p>O<sub>2</sub> monitor</p> <p>ETCO<sub>2</sub> monitor</p>	<i>As for Regional Referral Hospital</i>



SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
		Temperature monitor Nerve stimulator Rapid IV infusion sets ECG machine (12 lead) Blanket warmer	
<b>Sterilising and Infection Control</b>	Bench top autoclave	Surgical instrument washer Ultrasonic washer Steam steriliser Endoscope disinfection/sterilising unit Package sealer Trolleys, trays and racks	<i>As for Regional Referral Hospital</i>
<b>Biomedical engineering</b>	TBA	TBA	TBA
<b>Physio/Rehabilitation</b>	Parallel bars Standing frame Exercise steps & stairs Treatment couch	<i>As for Provincial Hospital PLUS:</i> Gym equipment Skeletal model Plinth bed with overhead rails Ultrasound machine (treatment) TENS machine	<i>As for Regional Referral Hospital</i>

SERVICE CATEGORY	Provincial Hospital	Regional Referral Hospital	National referral Hospital
		Treadmill Patient transfer lift Peak flow meter	
Prosthetics/Orthotics	TBA	TBA	TBA
Nutrition/dietetics	Health education materials	TBA	TBA
Health promotion	IEC materials Therapeutic Guidelines for smartphones (eg IMCI)	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>
Health Information/Medical Records	Computer with internet connection Filing shelves or cabinets Printers	<i>As for Provincial Hospital</i>	<i>As for Regional Referral Hospital</i>
Mortuary	Morgue refrigerator, 4-6 drawers Mortuary trolley	Morgue refrigerator, 6 drawers Mortuary trolley Autopsy carrier with roller Autopsy table, with drainage gutters Hanging autopsy scale Raised dissecting boards platform Examination light (surgical, fixed)	Morgue refrigerator, 8 drawers Mortuary trolley <i>Autopsy equipment as for Regional Referral Hospital</i>
EDUCATION, TRAINING, SUPERVISION			
Telemedicine, clinical consultancy advice.	Videoconferencing system	Videoconferencing system	Videoconferencing system





MINISTRY OF HEALTH