MINISTRY OF HEALTH & WELLNESS

HUMAN RESOURCES FOR HEALTH: CLINICIANS WORKFORCE

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PART 1

SECONDARY CARE MODEL

Preface

This document is produced by the Ministry of Health and Wellness and represents the Ministry's vision for the expansion and upgrade of secondary care services to meet the changing needs of the population. The Strategic Goal 1 of the Ministry's 10 Year Strategic Plan is to "safeguard access to equitable, comprehensive and quality care". Strategic Outcome 1.2 outlines that "all hospitals, specialized care centres and support services are modernized to provide efficient and quality service in an aesthetically pleasing environment". Under this outcome, the actions include identifying, upgrading, and improving key infrastructure in hospitals to improve efficiency and to meet the demands of the population, establishing new facilities to increase capacity and to develop a transformation plan for hospitals in line with modern technology and management standards.

This secondary care plan presents the plans for upgrade of services, expansion of facilities and addition of new facilities. This is expected to be carried out in a phased implementation in tandem with building of new infrastructure, training of personnel and expansion of human resources. This will place the Jamaican Health System in a position to meet the health needs of not only Jamaica but the wider Caribbean sub-region. It is expected that with the implementation of this plan, we will be able to deliver quality, comprehensive services of the highest international standards and to produce world class health care providers who will serve globally.

It is expected that this document will serve as a guide for human resource and infrastructure planning. Several persons contributed to its development and participated in the consultations that led to the final presentation. Periodic review is required to update this document as there are still several ongoing discussions on improving the health system. The initial document was produced through consultations with Office of the Chief Medical Officer, Health Services Planning and Integration Branch, and various Senior Medical Officers, and Department Heads would have been consulted for details of their present organization and workload. Once the draft document was prepared, consultative meetings were held with primarily the different levels of hospitals where representatives including Regional Directors, Regional Technical Directors, Parish Managers, Chief Executive Officers, and Senior Medical Officers.

Jacquiline Bisasor-McKenzie CD
Chief Medical Officer
MOHW
March 9,2023

Abbreviations

SERHA = South East Regional Health Authority

SRHA = Southern Regional Health Authority

WRHA = Western Regional Health Authority

NERHA = North East Regional Health Authority

PMH = Princess Margaret Hospital

LPH = Linstead Hospital

STH = Spanish Town Hospital

KPH = Kingston Public Hospital

NCH = National Chest Hospital

BHC = Bustamante Hospital for Children

VJH = Victoria Jubilee Hospital

SJGRC = Sir John Golding Rehabilitation Centre

HI = Hope Institute

ABH = Annotto Bay Hospital

PtMH = Port Maria Hospital

PAH = Port Antonio Hospital

SABRH = St. Ann's Bay Regional Hospital

NHH = Noel Holmes Hospital

FPGH = Falmouth Public General Hospital

SPGH = Savanna-la-mar Public General Hospital

CRH = Cornwall Regional Hospital

PJH = Percy Junor Hospital

LTH = Lionel Town Hospital

BRH = Black River Hospital

MPH = May Pen Hospital

MRH = Mandeville Regional Hospital

UHWI = University Hospital of the West Indies

Bellevue = Bellevue Hospital

PGY = Post Graduate Year

NCD = Non-communicable Disease

Introduction

Jamaica's health profile is transitioning. Persons are now living longer. According to the World Bank data published in 2020[1], life expectancy in Jamaica is Male 70 years, female 74 years and total life expectancy is 72.0 years. At the bottom of the population pyramid, there is narrowing with the 0-14 age group declining from 41% in 1978 to 23 % in 2017[2]. In keeping with this there is a rise in the diseases associated with the older age groups. Non-communicable diseases (NCD) including Diabetes, Cardiovascular Diseases and Cancers are now the leading causes of mortality and morbidity. The increase in exposure to risk factors such as physical inactivity and unhealthy nutrition have led to increase in obesity in all age groups and increase risk for the NCDs.

Prevention and treatment services for non-communicable diseases and their complications are now the emerging priority of the health sector. Jamaica now must plan for dealing with a triple burden of disease: Non-communicable, Communicable and diseases brought about by climate change.

Jamaica's epidemiological profile is marked now by a declining burden of communicable diseases and a considerable increase in non-communicable diseases. Recent national surveys among adults 15-74 years of age show an upward trend in the prevalence of overweight and obesity, hypertension and diabetes. Currently, 1 in 2 Jamaicans are overweight or obese, 1 in 3 have hypertension and 1 in 8 have diabetes[3].

In 2016, NCDs accounted for 12,577 or 68.4 per cent of all deaths (18,373) five years and older in Jamaica. Between 2010 and 2016, the number of deaths due to NCDs increased by 21.6% (from 10,344 in 2010 to 12,577 in 2016)[4].

These changes have significant implications for the planning and utilization of health services. With these numbers, we are compelled to make changes to improve early detection and management of new and established disease, particularly since our youth – the future of our society – have not been spared. Obesity in students 13-15 years old, for example, increased by 68.3% from 6% in 2010 to 10.1% in 2017. The economic impact is significant, with direct treatment costs, productivity losses and social costs associated with NCDs and mental health conditions projected at J$137.1 billion over a 15 year period (2018-2033 and 2017-2032 for Mental Health and NCDs respectively)[5].

The Primary Health Care Reform takes into consideration the demand and utilization of existing services and the demand for additional services to cope with the changes in the population health profile.

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1 Data.worldbank.org

2 countryeconomy.com

3 Jamaica Health & Lifestyle Survey 111 (2016- 2017)

4 https://www.un.int

5 The Case for Investment in Prevention and Control of Noncommunicable Diseases in Jamaica: Evaluating the return on investment of selected tobacco, alcohol, diabetes, and cardiovascular disease interventions. Washington, D.C.: UNIATF, UNDP, and PAHO; 2018.
Care for Mental Health Conditions in Jamaica: The Case for Investment. Evaluating the Return on Investment of Scaling Up Treatment for Depression, Anxiety, and Psychosis. Washington D.C.: UNIATF, UNDP, and PAHO; 2019.

Introduction Cont'd

There is a focus on reduction of risk factors for chronic diseases, managing environmental factors that will mitigate the impact of disasters brought about by climate changes and addressing the social determinants of health. These changes are beyond clinical acute and chronic care and emphasizes the need for well-developed services in the areas of health promotion and prevention including health education, nutrition, environmental health, emergency disaster preparedness and management, social interventions and sexual and reproductive health. The monitoring of health status is also a key component of the reform. With the rising numbers of persons suffering from mental disorders and the sharp attention brought to this by the COVID-19 pandemic, the build out of the mental health programme is also included. Specific improvements to advance quality and comprehensive care of persons affected by the non-communicable diseases include the inclusion of specialist services at the primary care level, the expansion of the ophthalmology programme and the addition of rehabilitative and palliative care to the list of services accessible in primary care.

In the same way, there is an increasing demand at secondary care facilities based on existing and projected population needs. Trauma arising out of inter-personal violence and road traffic crashes have increased. Hospital emergency rooms across the island must be equipped with trained staff and resources to offer emergency care. Medical management has improved over the last four decades and early detection by trained staff, and early interventions will improve responses to medical and surgical emergencies including cardiovascular emergencies that are our main cause of mortality. At the same time improvements in obstetric and neonatal care require that trained personnel are in place to implement care thus saving lives.

In the present service delivery offerings, the largest number of hospitals are the type C hospitals, and these are not presently equipped to respond to the change in demand for services. This results in persons having to travel longer distances to get appropriate care, delay in care or not accessing care and increasing morbidity and mortality. The range of specialist services that are needed to deal with the disease burden of the country must be more accessible to the population and not only centered in the Type A referral facilities. Complications of Hypertension and Diabetes commonly affect the Cardiovascular, Renal, Neurological and Ophthalmological systems. Trauma frequently requires Orthopaedic management and the increase in mental disorders necessitates having appropriate Psychiatric care in place.

A rationalization of services must take place as it is not sustainable or practical or cost effective to have all services in all hospitals. However, the hospital system must deliver appropriate care to its clients and take care of most of the needs of the population close to their communities and refer for more advanced services to larger and more specialized hospitals. This requires an upgrade of our Type C Hospitals to offer the four general specialties of Internal Medicine, General Surgery, Obstetrics and Gynaecology and Paediatrics as well as the supporting specialties of Radiology, Anaesthetics and Emergency Medicine. This will ensure that appropriate management and referrals are made thus decreasing the burden on the patient and family as well as the larger

Introduction Cont'd

institutions. The larger facilities, the Type B and Regional Hospitals must be expanded to manage the disease burden arising out of complicated disease and the need for more specialized care. The specialist services have been placed strategically at the next level of hospital, the Type B and Regional Hospital to increase access. Other subspecialties that require a large layout of equipment and human resources are placed at Regional, Type A and Specialist hospitals. The Type A Hospitals are the final referral sites and offer tertiary and quaternary services. These facilities must be equipped for teaching purposes to ensure the provision of trained staff to meet the population needs.

With the build out of the medical specialties offered, provisions must also be made for the supporting paramedical and administrative services. While this document speaks about the medical specialties and sub-specialties to be offered, it serves as a guide for the inclusion of all the additional services that will support these areas and the general need for expansion of nursing, administrative and operational support for the expanded hospital.

In 2016, government facilities had under 5000 beds available for acute care. There has been little change in this capacity over the intervening years. In 2023, the acute bed to population ratio is approximately 1.7:1000. Implementation of this secondary care model will increase the number of beds available for acute care to approximately 6135, moving the ratio to 2.2:1000[6]. This increased bed capacity will allow for a 30% increase in admissions over 2016. This is facilitated not only by the increased number of beds but also by where the beds will be. A cursory review of number of clients waiting in emergency rooms for beds shows that an average of 300 - 500 patients[7] may be found waiting across the island for beds daily and this is mostly in the larger hospitals. The increase in bed capacity will allow for these admissions and will also allow for more elective surgeries to be done as well as admissions of patients for diagnostic evaluation and observation for high-risk presentations. Unavailability of ward beds would have significantly affected these important interventions.

The increased capacity of beds in Type C hospitals and Type B hospitals and the increased availability of specialist services in the Type C, B and regional facilities will diffuse the overcrowding in the tertiary facilities allowing them to undertake more complex interventions. The anticipated improvement in capacity is therefore facilitated not only by the increased numbers but also by the dispersion over different hospital types making services more available and accessible to the population.

6 Calculated using Jamaica Population from World bank data: 2,828,000 in 2021

7 From Office of the Chief Medical Officer April 2023

Classification of Hospitals

All Hospitals in Jamaica are over forty years old. The Primary Care perspective of 1978 refers to 27 public hospitals. Some have been downgraded to Health Centres and presently, in 2022, there are 24 public hospitals. The St. Joseph's Hospital that was acquired by the government in 2008 is not included. Strictly speaking, the UHWI is not a public hospital, but it is included in the total number of public hospitals outlined in Table 1 (refer to Abbreviation list).

Two down-graded facilities are now classified as Type 6 health Centres. These are the Alexandria

REGION/Management	TYPE C	TYPE B	TYPE A	REGIONAL	SPECIALIST
SERHA	PMH	STH	KPH		NCH
	LPH				BHC
					VJH
					SJGRC
					HI
NERHA	ABH			SABH	
	PtMH				
	PAH				
WRHA	NNH	SPGH	CRH		
	FPGH				
SRHA	PJH	MPH		MRH	
	LTH				
	BRH				
UHWI BOARD			UHWI		
BELLEVUE BOARD					BELLEVUE
Number of Hospitals	**10**	**3**	**3**	**2**	**6**

Table 1: Distribution of Public Hospitals per Regional Health Authority 2021

Community Hospital and the Chapelton Community Hospital. These facilities in the Primary Healthcare reform 2021-2030 will serve as primary care facilities and offer a full range of services as the Comprehensive Health Centre. In addition, they will provide maternity services for uncomplicated pregnancies and extended hours for ambulatory services. They will be classified as Comprehensive Health Centre/ Rural Maternity Centre.

Hospitals are considered secondary and tertiary care facilities. Secondary care refers to medical care that is provided by a specialist or facility upon referral by a primary care physician and that requires more specialized knowledge, skill, or equipment than the primary care physician can provide. Secondary care facilities also provide emergency care services that are not necessarily referred from the primary care setting.

Tertiary care facilities are hospitals that can form multidisciplinary teams that are equipped to manage complex cases. It refers to a level of health care obtained from specialists in a large hospital after

Classification of Hospitals Cont'd

referral from the providers of primary care and secondary care. Tertiary centres may be a major hospital that usually has a full complement of services including paediatrics, obstetrics, gynaecology, general medicine, general surgery, psychiatry and various branches of these specialist areas e.g. University Hospital of the West Indies, Kingston Public Hospital, Cornwall Regional Hospital, or, a specialty hospital dedicated to specific sub-specialty care (paediatric centres, oncology centres, psychiatric hospitals) e.g. Bustamante Hospital for Children, Victoria Jubilee Hospital. Patients will often be referred from smaller hospitals to a tertiary hospital for major operations, consultations with sub-specialists and when sophisticated intensive care facilities are required.

Hospitals in Jamaica are classified as Type A, B, and C facilities. In addition, there are Regional Hospitals and Specialist Hospitals. Very few hospitals were designed or built as a specific Type hospital as the classification came about after many of the facilities were established. Hospitals were set up under different conditions and varying management structures at various periods in the country's history. What is seen now, has evolved over time with some level of organizational structure being put in place for the purposes of governance.

The Type C hospital offers the most basic level of care. In the past, it was seen as a district or community hospital and catered to minor surgical and obstetric emergencies as well as general management of minor acute illnesses and acute exacerbations of chronic illnesses. The medical staff was minimal and usually included one specialist, preferably a general surgeon and a small number of undergraduate trained physicians.

The Type B hospital is the next level and offers four basic specialties of General Surgery, Internal Medicine, Obstetrics and Gynaecology and Paediatrics. The number of doctors in the past required cross coverage by specialists in some facilities but this no longer occurs at this level hospital. The overall staff complement was sparse with two or three specialists and a small number of basic trained physicians. In addition, anaesthetic services and radiology services are provided to support the specialist services. Emergency Medicine, that has been added in some hospitals, is a relatively new specialization and provides expert emergency management across all specialties in the emergency room.

The Type A hospital is the referral hospital and offered the four basic specialties, supporting specialties and medical and surgical sub-specializations. There are only three multidisciplinary Type A hospitals (UHWI, KPH, CRH) that catered to the sub specialist needs of the population. These are also tertiary hospitals offering more care for more complex cases. Psychiatric and Paediatric services were split from the KPH to form the Bellevue Hospital and the Bustamante Children's Hospital. These are now classified as Specialist Hospitals.

Classification of Hospitals Cont'd

Six specialist hospitals were established in response to specific needs of the population over time and have evolved to what they are now. These are: National Chest Hospital (NCH), Victoria Jubilee Hospital (VJH), Bustamante Children's Hospital (BHC), Sir John Golding Rehabilitation Centre (SJGRC), Hope Institute (HI) and Bellevue Hospital (BH). The BHC and VJH are specialist hospitals that offer tertiary level care for Paediatrics and Obstetrics & Gynaecology (OBGYN) respectively. The Bellevue hospital and NCH hospital have the potential to be developed to offer tertiary care for Psychiatry and Cardio-Pulmonary services respectively. SJGRC and HI are smaller facilities that have specialized services, but do not have multiple disciplines. The potential for expansion of services is to be explored.

With the establishment of Regional Health Authorities, a hospital in each region was designated the regional hospital. This hospital is the major referral hospital for the region. In the WRHA, the Cornwall Regional Hospital is the regional hospital. It is also the only Type A hospital outside of the Southeast Region and offers tertiary level service. Mandeville Regional and St. Ann's Bay Regional are upgraded Type B facilities and are the regional facilities for the Southern Region and the North-East Region respectively. The Kingston Public Hospital is the Regional Hospital for SERHA. However, Paediatric and OBGYN services are provided by the BHC and VJH. These three hospitals considered together, provide referral facilities for the region. Because of the concentration of specialist and subspecialist services in these facilities, they are also the referral facilities for the rest of the island.

Upgrades for Hospitals

Over the intervening forty years, there has been significant changes in the population size and age distribution as well as a change in the disease profile of the country and in particular the numbers of persons of all ages suffering from Non communicable diseases such as Diabetes, Hypertension, Cardiovascular Diseases and Cancers. There is a need for more access by the population to health care services that are relevant for their well-being closer to their homes and support mechanisms. For the most efficient use of resources, the stepwise approach to hospital care is still relevant. The Ministry of Health and Wellness linkages manual describes the referral process between facilities. While in the past specialist services were only available in the urban centres, it is critical that for better outcomes of illnesses, the community and district facilities must now offer some services and leave the most specialized services to regional and national referral centres that will be equipped to manage them.

An upgrade of the Type A, B, C and Regional hospitals is presented to meet the growing needs of the population. This includes an increase in specialist services and an increase in the number of medical staff to provide the services. The proposed range of services are shown in Table 2.

Upgrades for Hospitals Cont'd

TYPE C (7)	TYPE B (11)	REGIONAL (19)	TYPE A (35)
Internal Medicine	Internal Medicine	Internal Medicine	Internal Medicine
		Nephrology	Nephrology
	Cardiology	Cardiology	Cardiology*
			Neurology*
			Infectious Disease
			Pulmonology
			Rheumatology
		Haematology/Oncology	Haematology/Oncology
		Gastroenterology	Gastroenterology
			Endocrinology**
			Dermatology
General Surgery	General Surgery	General Surgery	General Surgery
	Orthopaedics	Orthopaedics	Orthopaedics
		Urology	Urology
		ENT	ENT
			Plastic Surgery
			Facio-maxillary**
			Neurosurgery
			Cardiothoracic
		Ophthalmology	Ophthalmology
			Radiation/Oncology
OBGYN	OBGYN	OBGYN	OBGYN
		Foetal-Maternal	Fetal-Maternal
			Gynae-Oncology
			Repro. Endocrinology
Paediatrics	Paediatrics	Paediatrics	Paediatrics
	Neonatology	Neonatology	Neonatology
			Paediatric Surgery
Anesthesiology	Anaesthesiology	Anaesthesiology	Anaesthesiology
			Critical Care
Emergency	Emergency Medicine	Emergency Medicine	Emergency Medicine
	Psychiatry	Psychiatry	Psychiatry
		Pathology	Pathology
Radiology	Radiology	Radiology	Radiology
			Dental

Table 2: Services to be offered at each hospital by hospital type (Number of hospitals in brackets)

Upgrades for Hospitals Cont'd

Specialist hospitals are not included in the table but are mentioned later in this document. The specialist hospitals will provide subspecialities of the specialty areas. There will also be an upgrade of some hospitals to the next level. The distribution of hospitals by hospital type for each region is as in Table 3. A new hospital is being proposed for St. Catherine and is captured in the table. In SERHA, the full complement of Type A services is obtained from KPH, BHC, VJH and NCH. In WRHA, the full complement of Type A services is obtained from CRH and WCAH.

REGION	TYPE C	TYPE B	TYPE A	REGIONAL	SPECIALIST
SERHA	PMH		KPH/St. Joseph	STH	NCH
	LPH				BHC
	St. Catherine new hospital				VJH
					SJGH
					HI
NERHA	PtMH	ABH		SABH	
	PAH				
WRHA	NNH	SPGH	CRH		WCAH
	FPGH				
SRHA	PJH	MPH		MRH	
	LTH				
		BRH			
UHWI BOARD			UHWI		
BELLEVUE BOARD					BELLEVUE
TOTAL	9	4	3	3	7

Table 3: Proposed Upgrade for Hospitals 2022

Upgrades for Hospitals Cont'd

REGION	TYPE C NOW	TYPE C	TYPE B NOW	TYPE B	TYPE A NOW	TYPE A	REGIONAL NOW	REGIONAL	SPECIALIST NOW	SPECIALIST
SERHA	PMH	PMH							NCH	NCH
	LPH	LPH							BHC	BHC
		St. Catherine new hospital							VJH	VJH
			STH					STH	SJGRC	SJGRC
					KPH	KPH/ST. Josephs			HI	HI
NERHA	PtMH	PtMH					SABRH	SABRH		
	PAH	PAH								
	ABH			ABH						
WRHA	NNH	NNH	SPGH	SPGH	CRH	CRH				WCAH
	FPGH	FPGH								
SRHA	PJH	PJH	MPH	MPH			MRH	MRH		
	LTH	LTH								
	BRH			BRH						
					UHWI	UHWI				
									BELLEVUE	BELLEVUE
TOTAL	10	9	3	4	3	3	2	3	6	7

Table 4: Existing and Proposed Classification of Hospitals

Table 4 shows the comparison of the existing and proposed classification of hospitals. In SERHA, a new Type C hospital is proposed. The Spanish Town Hospital will be upgraded to offer same services as a regional hospital. The Kingston Public Hospital campus will now include the St. Joseph Hospital. In NERHA, the Annotto Bay Hospital will become a Type B hospital. In SRHA, the Black River Hospital will be upgraded to a Type B hospital. In WRHA, the Type A complex will include the CRH and the WCAH hospital.

Type-C Hospitals

There are presently 10 Type C hospitals. This new model promotes Annotto Bay Hospital and Black River Hospital (previously Type C) to Type B hospitals. This results in eight Type C hospitals and of these, four hospitals are the only hospital in the parish. In addition, another hospital is being proposed for St. Catherine. Based on the proximity to major referral centres in Kingston and St. Andrew as well as the upgrades to Spanish Town Hospital, a new hospital would be best contemplated as a Type C hospital.

The Secondary Care Model will have nine Type C hospitals:

1. Lionel Town Hospital - CLARENDON
2. Linstead Public General Hospital – ST. CATHERINE
3. Princess Margaret Hospital – ST. THOMAS – only hospital in Parish
4. Port Antonio Hospital – PORTLAND - only hospital in Parish
5. Port Maria Hospital – ST. MARY
6. Noel Holmes Hospital – HANOVER - only hospital in Parish
7. Falmouth Public General Hospital – TRELAWNY - only hospital in Parish
8. Percy Junor Hospital – MANCHESTER
9. Type C Hospital (proposed for St. Catherine)

The Type C Hospitals are presently equipped to function as primary care facilities, with the emergency department receiving patients for ambulatory care for treatment, referring more complicated cases and stabilizing and transferring emergency cases. Surgical and minor obstetric emergencies are usually managed and referred as required. A general surgeon or sometimes an experienced physician was the only doctor (Senior Medical Officer) posted at this hospital. Over time additional doctors including specialists were assigned. In situations where no specialist is assigned to the hospital, uncomplicated surgical, obstetrics, medical and paediatric cases that require minimal interventions are sometimes admitted and managed under the guidance of specialists in other hospitals or by the Senior Medical Officer. The demand for more services at

Type C Hospitals Cont'd

these hospitals have increased significantly as the surrounding populations have grown and barriers to access to referral hospitals, such as long waiting times and investment of time and money, have increased. In the absence of specialists supervising care in the Type C facility, there is significant risk for delayed treatment, inappropriate treatment and high morbidity and mortality. Access to care is compromised as clients must travel farther to access basic care and this results in more complicated cases presenting later for care. This results in overcrowding and longer waiting times at the larger hospitals and a dissatisfaction with the health system by the population. The Regional Health Authorities have responded to this by increasing services in Type C hospitals without corresponding policy change.

In 2022, four Type C hospitals remain with one specialist, and these are Linstead Hospital and Lionel Town Hospital (Internal Medicine Physicians as Senior Medical Officers) and Noel Holmes Hospital and Port Maria Hospital (Obstetrician and Gynaecologists as Senior Medical Officers). These hospitals are therefore not able to respond to surgical emergencies and this can significantly affect outcomes as intervention during the "golden hour"[6] is missed.

Introduction of surgical services at the first level hospital is identified as an essential component in achieving universal access and universal health care. The 68th World Health Assembly urged Member States to identify and prioritize a core set of emergency and essential surgery and anaesthesia services at the primary health care and first-referral hospital level, and to develop methods and financing systems for making quality, safe, effective and affordable emergency and essential surgical care and anaesthesia services accessible to all who need them, including promoting timely referral and more effective use of the health care workforce through task-sharing, as appropriate, as part of an integrated surgical care network in order to achieve universal health coverage.

The other five Type C hospitals have increased services and have engaged other specialists but there are no posts and sustainability are affected by lack of job security and lack of investment in the service. The Jamaican health care system is plagued by the unattractiveness of positions in rural hospitals because of remoteness and access to social amenities. In addition, the posts in the Type C hospitals are not attractive because of the lack of clinical support. Without supporting services, the type of care offered is compromised and the specialists in these hospitals become frustrated. With improved road infrastructure and social and economic investments in rural areas, there is now an opportunity to attract staff.

Overall, the demand on the Type C hospital has changed significantly and patients with more complicated illnesses are presenting for treatment. The practice of medicine has evolved and as specialization has increased, management protocols have changed requiring more in-depth knowledge within each specialty area to manage patients. Also, there is a generally more focus in specialist training curricula on the specialized area than equipping doctors to practice generally.

Type C Hospitals Cont'd

The Regional Health Authorities have engaged specialists in some or all the four main specialists' areas of Internal Medicine, General Surgery, OBGN and Paediatrics in the Type C hospital. This has resulted in improvement in care offered but there is now considerable disparity in what is offered in each hospital and what is the standard of care. The cadre of staff and other resources for these hospitals does not cater for the increased workload or complexity of management. Recognizing the need for upgrade, the health system needs to reflect this change and standardize the services in the Type C Hospital.

The New Type-C Hospitals

This new hospital model upgrades the Type C Hospital with Specialists in the four main specialist areas and two supporting specialties. This model proposes that the increase in cadre of specialists in General Medicine, General Surgery, Obstetrics & Gynecology and Paediatrics will also provide service in the Comprehensive and District health centres and guidance to the doctors in the community health centres. The support services of Accident & Emergency and Anaesthesiology are to be appropriately staffed to allow for a continuum of expert care. A radiologist is also required in a Type C hospital that is the only hospital in the parish. In addition to duties at the hospital, the radiologist will provide service for the hospital's patients at the Type B or Type A hospital and support radiology in the primary care facilities. The need for trained specialists in these remote facilities is key to improvement in the service and to reduce mortality and morbidity and the increasing burden on the tertiary and specialist hospitals.

Type C Hospitals Cont'd

Key Facts (Clinical Services):

- The Type C Hospital will offer General Surgery, General Medicine, Paediatrics, Obstetrics & Gynaecology.
- Supporting specialist services will be Anaesthetics, Emergency Medicine, and Radiology.
- Specialists in the Type C Hospital will offer services in Primary Health Care.

The physician staff cadre will increase to meet this new service level. Specialists will be required in all the specialist areas. Support physician teams will be required to cover ward duties, out-patient clinics, emergency on call duties and the Accident & Emergency department.

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at each hospital at the MO5 level.
- 19 Specialist Physicians are required at each hospital.
- Support physician staff of 37 medical officers are required at each hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 8 medical interns can be placed at each hospital

The hospitals will require basic infrastructure to facilitate the expanded service. Many of the hospitals have the necessary infrastructure. Some facilities will require upgrades and/or new spaces.

Key Facts (Infrastructure):

- The Type C Hospital will accommodate 100-150 beds to facilitate admission of General Surgery patients, General Medicine patients, Paediatric patients, Neonates, Obstetrics & Gynaecology patients.
- The hospital will have Accident & Emergency Department, General Wards (and adjunctive areas) with capacity for Isolation, Labour and Delivery wards, Special Care Nursery, Operating theatres with Recovery Room, Radiology Department, Laboratory, Pharmacy, Outpatient Clinics.
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff.

Type-B Hospitals

There are presently three Type B hospitals: Spanish Town Hospital, May Pen Hospital and Savanna-la-mar Hospital. Spanish Town will be upgraded to the level of a Regional Hospital and Annotto Bay Hospital and Black River Hospital will be upgraded to Type B facilities.

The Secondary Care Model for 2023 proposes four Type B Hospitals:

1. Annotto Bay Hospital
2. May Pen Hospital
3. Savanna La Mar Public General Hospital
4. Black River Hospital

The epidemiological and demographic profile of the country has changed significantly over the last 40 years. Cardiovascular diseases are the leading cause of mortality and trauma places a large burden on hospitals. There is an increase in mental health problems affecting all age groups. There is therefore an increase in the need for specialist services in these areas. The proposed upgrade of the Type B Hospital is to offer eleven specialist areas. In addition to the major specialties offered in the Type C hospital, the Type B hospital will offer Orthopaedics, Cardiology, Psychiatry and Neonatology. The Type B Hospitals serve a larger population and provide referral services for these services and Radiology from the Type C Hospital. These additional specialist services are in high demand and the placement of these services in these facilities allow for easier access and quicker resolution of problems.

The staff complement for these hospitals are larger as a wider range of services are offered to a larger population. The establishment of High dependency Units in these hospitals also provide an

Type B Hospitals Cont'd

addition layer of protection to the population that would otherwise only be accessible at the Regional or Type A hospitals where there is a greater demand for critical care beds arising out of the management of complicated illnesses.

The four hospitals are already offering some Psychiatry and Neonatology services. Two of three hospitals are already offering Orthopaedics and one is offering Cardiology. There is however limited staff, and the resources are not in place for these services for which there is high demand. The upgrade will require additional posts and infrastructure.

Key Facts (Clinical Services):

- The new Type B Hospital will offer General Surgery, General Medicine, Paediatrics, Obstetrics & Gynaecology, Orthopaedics, Cardiology and Psychiatry.
- Supporting specialist services will be Anaesthetics, Emergency Medicine, and Radiology.

The physician staff cadre will increase to meet this new service level. Specialists will be required in all the specialist areas. Support physician teams will be required to cover ward duties, out- patient clinics, emergency on call duties and the Accident & Emergency department.

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at each hospital at the MO6 level.
- 7 MO5s positions will be assigned to the Heads of Departments of Surgery, Internal Medicine, Paediatrics, OBGYN, Accident & Emergency, Orthopaedics and Anaesthetics. The HODs will also lead a Firm.
- 22 consultants and 16 Senior Registrars are required at each hospital
- Support physician staff of 71 junior medical officers are required at each hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 30 medical interns can be placed at each hospital

The hospitals will require basic infrastructure to facilitate the expanded service. Many of the hospitals already have the necessary infrastructure. Some facilities will require upgrades and/ or new spaces.

Key Facts (Infrastructure):

- The Type B Hospital will accommodate 200 -250 beds to facilitate admission of General Surgery patients, General Medicine patients, Paediatric patients, Neonates, Obstetrics & Gynaecology patients, Orthopaedics, Cardiology and Psychiatric patients.
- The hospital will have Accident & Emergency Department, General Wards (and adjunctive areas) with capacity for Isolation, Labour and Delivery wards, Special Care Nursery, Operating theatres with Recovery Room, Radiology Department, Laboratory, Pharmacy, Outpatient Clinics, Physiotherapy Department, Cardiology procedure rooms, and a High Dependency Unit.
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff.

Regional Hospitals

The governance structure for health service delivery consists of four Regional Health Authorities (RHA). Each RHA has the responsibility to provide health services for the population in the geographic region it serves.

From a planning perspective, most health services needed, based on the epidemiology of the parishes served, should be provided within the Region. Each geographic region has a regional hospital that is the major referral centre for the region. The Regional Hospital should therefore provide the range of services required by most of its citizens therefore preventing movement away from the home environment and economic and psychosocial support. The epidemiological and demographical features of the different health regions are similar and therefore the services offered in each regional hospital is similar. Very specialized services are required by the population but in less demand. These are available in the Type A tertiary facilities and Specialist hospitals. Where these services are needed, in emergency situations, the sending hospitals are equipped to stabilize and care for patients during transport and for ambulatory specialist care, the inter hospital referral system is used.

The Regional Hospital is the point of referral for the hospitals within each region. Nineteen specialist areas are to be provided in these hospitals. These specialties represent the largest

Regional Hospitals Cont'd

medical needs of the population and the provision of these in the regional hospital will prevent long commutes and decrease waiting times to these vital services. This will result in early detection and treatment of complications of chronic illnesses and decrease in morbidity and mortality. The provision of expert emergency medical interventions will also play a role in decreasing complications and deaths and prevent the need for costly transfers. The provision of service within the region will also provide for better continuity of care and integration of primary and secondary interventions.

Cornwall Regional Hospital is the Regional Hospital for the WRHA. This hospital offers tertiary level care. Situated on the western side of the island, it not only serves the region, but is also a major referral hospital for central and western parishes. It is categorized as a Type A hospital and is to offer 35 specialties to the population. This hospital, although the regional facility, will be discussed under Type A hospital.

The Kingston Public Hospital, Victoria Jubilee Hospital and the Bustamante Hospital for Children are the main referral centres for the Southeast Regional Health Authority as well as for the country. These are tertiary level hospitals and are considered separately, KPH as a Type A facility and the others as specialist hospitals.

The Upgraded Regional Hospitals

Three hospitals will be considered under this section:

1. **St. Ann's Bay Regional Hospital**
2. **Mandeville Regional Hospital**
3. **Spanish Town Hospital**

The St. Ann's Bay Regional Hospital and the Mandeville Regional Hospital are the regional hospitals for NERHA and SRHA respectively. They will be upgraded to provide services that are in high demand in the regions.

The Spanish Town Hospital is the main referral hospital for St. Catherine. St. Catherine has a large population and there is a need for more specialist services in the parish because of the large demand. This hospital is being upgraded to provide services like the regional hospital.

Key Facts (Clinical Services):

- The Regional Hospital (MRH, SABRH) and the STH will offer 19 specialties and subspecialties.
- Complex cases are managed at these facilities and the required skillsets, equipment and infrastructure are needed.
- The large numbers of clients seen for emergency interventions, outpatient and in-patient services require larger numbers of physicians in each service.

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at each hospital at the MO6 level.
- 7 MO5s positions will be assigned to the Heads of Departments of Surgery, Internal Medicine, Paediatrics, OBGYN, Accident & Emergency, Orthopaedics and Anaesthetics.
- 43 consultants and 41 Senior Registrars are required at the MO4 and MO3 level respectively, at each hospital
- Support physician staff of 110 junior medical officers are required at each hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 33 medical interns can be placed at each hospital

These hospitals require complex infrastructure and equipment to provide the level of service.

Key Facts (Infrastructure):

- The Regional Hospital will accommodate 300 -450 beds.
- The hospital will have Accident & Emergency Department, General Wards (and adjunctive areas) with capacity for Isolation, Labour and Delivery wards, Special Care Nursery, Neonatal Intensive Care Unit, Operating theatres with Recovery Room, Intensive Care Unit, Radiology Department, Laboratory, Pharmacy, Outpatient Clinics, Physiotherapy Department, Specialist procedure rooms, Dialysis Unit, Chemotherapy Unit, Morgue
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff.

Type A Hospitals

There are three recognized Type A facilities in the country: University Hospital of the West Indies (UHWI), Kingston Public Hospital (KPH) and Cornwall Regional Hospital (CRH). The UHWI is a semiprivate facility and is governed by a Board of Management. The CRH is under the management of the Western Regional Health Authority (WRHA) and the KPH is under the management of the Southeastern Regional Health Authority (SERHA). These centres offer more specialized or advanced tertiary care and are the major referral centres for the island and are the main institutions of training in Medicine and related fields.

The Type A hospital provides the services provided by the Regional Hospital and in addition provides subspecialties that cater to a larger population outside of the region. These services are in sufficient demand to be provided in the country, but the resources needed does not allow them to be provided in all regions. The provision of these services requires some specialized skills and equipment that in some cases are not widely available and in other cases is not cost effective to procure and maintain at several points of care. The concentration of these services in the Type A centres allow for the maximal development of these services through a concentration of both human and infrastructural resources.

These services are strategically placed at the western and eastern ends of the island thus minimizing major movement of patients that is inconvenient and does not auger well for the healing process, as the family and community support plays a vital therapeutic role. A referral system is in place, but requires enhancement, to ensure timely appropriate access to the Type A facility. The allocation of services will be reviewed periodically to ensure that the planning of services match the demands of the population.

The UHWI and the CRH offer a full range of service covering the major specialties and their subspecialties. The KPH however does not provide Paediatric or OBGYN or Cardiothoracic services. These are offered at the BHC, VJH and the NCH respectively. These hospitals are considered specialist hospitals. The Type A hospitals cater to the needs of the surrounding communities, accept referrals from within the region and from across the island for more specialized interventions.

In the southeast region, the Kingston Public Hospital, National Chest Hospital, Victoria Jubilee Hospital and Bustamante Hospital for Children in combination provides all the

Type A Hospitals Cont'd

Type A services offered at the UHWI and CRH. In the Western Region, Type A services will now be split between the CRH and the WCAH.

In the planning for services to be offered at the KPH, VJH and NCH hospitals, the services are located at the present hospital sites. With future expansion, the services can be relocated to other facilities taking the physician staff with it as will take place at the CRH to staff the WCAH. Some services may remain shared between facilities. The KPH and VJH are physically located on the same compound. Anesthesiology is shared and the cadre is listed under KPH cadre of staff.

Kingston Public Hospital

The Kingston Public Hospital offers 26 specialties and is a main referral centre for the surgical and medical sub specialized areas and for cases that require a coordination of care between services. The expansion of services is limited by space. It is considered the trauma centre for the country because of the large number of trauma patients seen. However, the development of multidisciplinary trauma teams that is the main feature of trauma centres worldwide has not been advanced. The St. Joseph's Hospital has been placed under SERHA's management, effective April 2022.This will serve as a site for expansion of KPH services. This will allow for build out of the Oncology and Nephrology services at this facility and provide more space for expansion of other services at KPH. The National Chest Hospital also accommodates some of the services of the KPH and this hospital must also be looked at as providing an extension of the KPH services

Type A Hospitals Cont'd

Key Facts (Clinical Services):

- The KPH will offer 26 specialties and subspecialties including Dentistry.
- The KPH is a major referral facility for the country. It provides tertiary level care that provides opportunity for multidisciplinary management of complex problems.
- The KPH campus will expand to include the St. Joseph's Hospital facility.
- Complex cases are managed at these facilities and the required skillsets, equipment and infrastructure are needed.
- The large numbers of clients seen for emergency interventions, referrals, outpatient and in patient services require larger numbers of physicians in each service.

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at the MO6 level.
- 17 MO5 positions will be assigned to the head of some services.
- 79 consultants and 72 Senior Registrars at the MO4 and MO3 levels respectively, are required at this hospital
- Support physician staff of 156 junior medical officers are required at the hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 32 medical interns can be accommodated at this hospital

These hospitals require complex infrastructure and equipment to provide the level of service.

Key Facts (Infrastructure):

- The Type A Hospital will accommodate 400 - 500 beds.
- The hospital will have Accident & Emergency Department, General and Specialist wards (and adjunctive areas for specialist interventions) with capacity for Isolation, Adult High Dependency and Intensive Care Unit, Major, Minor and specialized Operating theatres with Recovery Room, Radiology Department, Radiotherapy Department, Laboratory, Pharmacy, Outpatient Clinics, Physiotherapy Department, Specialist procedure rooms, Dialysis Unit, Chemotherapy Unit, Morgue
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff, teaching facilities.

Cornwall Regional Hospital

The Cornwall Regional Hospital is a Type A Hospital and provides services to the Western region as a regional hospital. In addition, it will provide referral services for 15 additional sub-specialties and integrated management of complicated illnesses across specialties to the population particularly in the Western and North-Eastern Parishes but also to the Southern parishes. Paediatric services will be split from this hospital and move to the WCAH. Some shared services will remain.

The infrastructure development at the CRH will provide a new hospital facility and several upgrades are slated for the new Cornwall Regional Hospital building. New services will be introduced and existing services are to be expanded at the facility.

Key Facts (Clinical Services):

- The CRH will offer 30 specialties and subspecialties including Dentistry.
- The CRH is a major referral facility for the country. It provides tertiary level care that provides opportunity for multidisciplinary management of complex problems.
- The CRH and WCAH will share one campus and will have shared services across many specialties.
- Complex cases are managed at these facilities and the required skillsets, equipment and infrastructure are needed.
- The large numbers of clients seen for emergency interventions, referrals, outpatient, and in-patient services require larger numbers of physicians in each service.

Type A Hospitals Cont'd

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at the MO6 level.
- 14 MO5 positions will be assigned to the head of some services.
- 60 consultants and 67 Senior Registrars at the MO4 and MO3 levels respectively, are required at this hospital
- Support physician staff of 157 junior medical officers are required at the hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 40 medical interns can be accommodated at this hospital

These hospitals require complex infrastructure and equipment to provide the level of service.

Key Facts (Infrastructure):

- The Type A Hospital will accommodate 400 - 500 beds.
- The hospital will have Accident & Emergency Department, General and Specialist Wards (and adjunctive areas for specialist interventions) with capacity for Isolation, Labour and Delivery wards, Special Care Nursery, Adult High Dependency and Intensive Care Unit, Major, Minor and specialized Operating theatres with Recovery Room, Radiology Department, Radiotherapy, Laboratory, Pharmacy, Outpatient Clinics, Physiotherapy Department, Cardiology procedure rooms, Dialysis Unit, Chemotherapy suite, Morgue
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff and teaching facilities.

Specialist Hospitals

Bustamante Hospital For Children (Tertiary Facility For Pediatrics)

The Bustamante Hospital for Children (BHC) has the distinction of being the only specialist paediatric hospital in the English-Speaking Caribbean at this time. With a bed capacity of 279, this institution caters to patients from birth to 12 years, providing a comprehensive range of diagnostic, preventive, curative, rehabilitative and ambulatory services in paediatric medical and surgical specialties and sub-specialties. The proposed upgrade of the hospital will see the development of new subspecialties.

The hospital caters to not only patients from across Jamaica, but other neighbouring Caribbean countries. The facility was formally a British Military Hospital but was given to the Jamaican Government as a 'good will' gesture on the achievement of Jamaica's Independence on November 6, 1962. The paediatric ward from the KPH was then moved to the site.

The Bustamante Hospital for Children offers a wide range of paediatric specialty services and serves the entire island for specialist paediatric care. With the development of the Western Child and Adolescent Hospital in the western region, it is expected that the St. James facility will offer some subspecialty services in paediatrics thus making these services more accessible.

Specialist Hospitals Cont'd

Key Facts (Clinical Services):

- The BHC will offer 26 specialties and subspecialties including Dentistry.
- The BHC is a major paediatric referral facility for the country. It provides tertiary level care that provides opportunity for multidisciplinary management of complex problems.
- Complex cases are managed at this facility and the required skillsets, equipment and infrastructure are needed.
- The large numbers of clients seen for emergency interventions, referrals, outpatient and in-patient services require larger numbers of physicians in each service.

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at the MO6 level.
- 8 MO5 positions will be assigned to the head of some services.
- 47 consultants and 39 Senior Registrars at the MO4 and MO3 levels respectively, are required at this hospital
- Support physician staff of 121 junior medical officers are required at the hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 24 medical interns can be accommodated at this hospital

These hospitals require complex infrastructure and equipment in order to provide the level of service.

Key Facts (Infrastructure):

- The hospital will accommodate 400 - 500 beds.
- The hospital will have Accident & Emergency Department, General and Specialist Wards (and adjunctive areas for specialist interventions) with capacity for Isolation, Paediatric High Dependency and Intensive Care Unit, Special Care Nursery, Major, Minor and specialized Operating theatres with Recovery Room, Radiology Department, Laboratory, Pharmacy, Outpatient Clinics, Physiotherapy Department, Cardiology procedure rooms, Morgue
- The hospital has a Cardiac Unit that comprises Operating Theatres, recovery room, Intervention suite and Isolation rooms.
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff.

Western Child And Adolescent Hospital

This hospital is expected to provide service in 2024. The paediatric and adolescent services, presently offered at the CRH, will be expanded and enhanced on completion of the Western Children and Adolescent Hospital. All the services are not distinctly separated at this time at the CRH; the adolescent population is served by both paediatric and adult services. Over time, a wider range of services will be introduced at the WCAH to complement the range of paediatric services provided at the Bustamante Hospital for Children in the South-East Region.

Key Facts (Clinical Services):

- The WCAH will offer Paediatric and Adolescent Medicine, Paediatric and Adolescent Surgery and Child and Adolescent Psychiatry.
- The WCAH will be major referral facility for the country. It will provide tertiary level care that provides opportunity for multidisciplinary management of complex problems.
- The CRH and WCAH will share one campus and will have shared services across many specialties.
- The WCAH paediatric medicine and paediatric surgery services will also provide services in Paediatric Oncology, Paediatric Nephrology, Paediatric Cardiology and Paediatric Urology, Neonatal surgery.
- The WCAH will also build out over time Adolescent services including Adolescent Mental Health services.

Specialist Hospitals Cont'd

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at the MO6 level.
- 5 MO5 positions will be assigned to the head of some services.
- 21 consultants and 16 Senior Registrars at the MO4 and MO3 levels respectively, are required at this hospital
- Support physician staff of 58 junior medical officers are required at the hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 9 medical interns can be accommodated at this hospital

These hospitals require complex infrastructure and equipment in order to provide the level of service.

Key Facts (Infrastructure):

- The children's hospital will accommodate 220 beds.
- The hospital will have Accident & Emergency Department (Paediatric), General Wards (and adjunctive areas for specialist interventions) with capacity for Isolation, Paediatric High Dependency and Intensive Care Unit, Major, Minor and specialized Operating theatres with Recovery Room, Radiology Department, Laboratory, Pharmacy, Outpatient Clinics
- The hospital will have Administrative Offices.

Victoria Jubilee Hospital

Victoria Jubilee Hospital is the only specialist Obstetrics and Gynaecologist (O&G) hospital in the island. The development of the subspecialties of O&G is envisioned for this hospital which will set it apart from the other hospitals offering O&G services. The infrastructure work needs to accompany the build out of the required staff.

Key Facts (Clinical Services):

- The VJH is a specialist Obstetrics & Gynaecology Hospital that also has Neonatology services.
- The hospital will offer general Obstetrics and Gynaecology services and 3 main subspecialties of Foetal-Maternal medicine, Gynae-Oncology and Reproductive Endocrinology.
- Services will include Antenatal, Postnatal, Labour and Delivery, Gynaecology, Family Planning Services.
- The VJH is a major referral facility for the country. It provides tertiary level care that provides opportunity for multidisciplinary management of complex problems.
- Complex cases are managed at these facilities and the required skillsets, equipment and infrastructure are needed.
- The large numbers of clients seen for emergency interventions, referrals, out-patient and in-patient services require larger numbers of physicians in each service

Specialist Hospitals Cont'd

Key Facts (Physician Staff):

- A Senior Medical Officer will be posted at the MO6 level.
- 2 MO5s are assigned. They will also provide leadership to a Firm.
- 13 consultants and 12 Senior Registrars at the MO4 and MO3 levels respectively, are required at this hospital.
- Support physician staff of 33 junior medical officers are required at the hospital.
- The hospitals will be able to support undergraduate and post graduate training in medicine. 12 medical interns can be accommodated at this hospital

These hospitals require complex infrastructure and equipment to provide the level of service.

Key Facts (Infrastructure):

- The hospital will have General and Specialist Wards (and adjunctive areas for specialist interventions) with capacity for Isolation, Adult High Dependency and Intensive Care Unit, Special Care Nursery and Neonatal Intensive Care Unit, Major, Minor and specialized Operating theatres with Recovery Room, Out Patient Clinics, Family Planning Unit.
- Radiology Department, Radiotherapy, Laboratory, Pharmacy, Physiotherapy Department, Cardiology procedure rooms, Morgue are shared with the KPH.
- The hospital will have Administrative Offices, Clinical Offices, Medical Records Department, Laundry, Central Sterilization and Sorting Department, Dietary Services, General Stores, Waste Management, Maintenance department, Cafeteria, Accommodation and rest areas for staff.

Specialist Hospitals Cont'd

National Chest Hospital

National Chest Hospital is the home presently for Cardiothoracic and Pulmonology Services. It is a major referral centre for the management of Tuberculosis and other pulmonary disorders. Services such as Dermatology and Plastic Surgery as well as Cardiology that are based at the KPH utilize the space at the hospital because of limited space at the North Street facility. The operating theatres at this hospital are also utilized by the Sir John Golding Rehabilitation Centre. The hospital is ideal for future development for management of Infectious diseases, Interventional Cardiology and Adolescent Cardiology services. This will require an expansion of the existing infrastructure, support services and bed capacity.

Bellevue Hospital

The Bellevue Hospital will be upgraded to a Specialist Neuro -Psychiatric Hospital. It will serve the parishes of Kingston & St. Andrew as a General Psychiatric Hospital managing acutely ill and sub acutely ill clients as well as patients who require specialized care. It will also receive referrals from other hospitals for sub-acute and specialist care.

The services at the Bellevue Hospital are to be expanded in keeping with a Mental Health Reform which will see the deinstitutionalization of the Bellevue Hospital and its conversion into a tertiary level Psychiatric Hospital. It is proposed that the new hospital will provide General and Specialist Psychiatric care including Psychiatric Intensive care, Neuropsychiatry, Addiction Psychiatry and Forensic Psychiatry. The plans are currently being developed.

Specialist Hospitals Cont'd

Hope Institute

The Hope Institute Hospital is a 40-bed specialist oncology and palliative care unit. The services offered include in-patient and out-patient care in Oncology (Chemotherapy (curative and palliative) clinics four days per week) and Palliative Care. Patients are admitted for symptom control, respite care and terminal care. Ward referrals are seen at National Chest Hospital and Kingston Public Hospital, and consultations are also given by phone to other hospitals if patients are unable to come to clinic.

The Hope Institute team also provides outpatient oncology and palliative care services at Kingston Public Hospital and Victoria Jubilee Hospital and the National Chest Hospital.

Sir John Golding Rehabilitation Centre

Formerly known as the Mona Rehabilitation Centre, the SJGRC is the second rehabilitation centre in the English-speaking Caribbean. Clients are not only from Jamaica but from other Caribbean territories.

The hospital was formerly a 120-bed facility but now has been downsized and caters mainly to patients with spinal cord injuries.

The adult ward, the Henriques Wing holds approximately 28 patients, and the paediatric ward can hold 42 patients There is also a private hostel called the Athlone Wing, which houses children with disabilities giving them the opportunity to stay and attend schools in the area.

Specialist Hospitals Cont'd

The hospital is to be upgraded to provide:

- The hospital is to be upgraded to provide:
- Neuro rehabilitation for spinal cord injuries, Cerebrovascular accidents (Strokes), and other motor disorders e.g. Cerebral Palsy
- Lower limb prosthetics assessment and management
- Special shoes for clubfoot assessment
- Wound care for patients admitted with bedsores
- Occupational therapy
- Speech therapy
- Disability sports (Paralympics) evaluation of athletes

The hospital utilizes the operating theatre and adjunctive services at the National Chest Hospital.

PART 2

PRIMARY AND SECONDARY CARE PHYSICIAN WORKFORCE

ALLOCATION OF MEDICAL OFFICERS TO REGIONAL OFFICES, HEALTH DEPARTMENTS HEALTH CENTRES & HOSPITALS

Preface

This document is produced by the Ministry of Health and Wellness and represents another step in the Ministry's vision for the expansion and upgrade of primary and secondary care services to meet the changing needs of the population. The Strategic Goal 1 of the Ministry's 10 Year Strategic Plan is to "safeguard access to equitable, comprehensive and quality care". Strategic outcome 1.1 focuses on strengthening primary health care. The strategic actions include transforming structures and functions of health centres and health departments. Strategic Outcome 1.2 outlines that "all hospitals, specialized care centres and support services are modernized to provide efficient and quality service in an aesthetically pleasing environment". Under this outcome, the actions include identifying, upgrading, and improving key infrastructure in hospitals to improve efficiency and to meet the demands of the population, establishing new facilities to increase capacity and to develop a transformation plan for hospitals in line with modern technology and management standards.

These actions require that a suitable workforce is put in place to achieve the vision. The 4th Strategic Goal of the Ten Year Strategic Plan is about ensuring human resources for health in sufficient number and competencies. This document is the proposed physician workforce. It is expected that with the implementation of this plan, we will be able to deliver quality, comprehensive services of the highest international standards and to produce world class health care providers who will serve globally. This will place the Jamaican Health System in a position to meet the health needs of not only Jamaica but the wider Caribbean sub-region.

It is expected that this document will serve as a guide for human resource and infrastructure planning. Several persons contributed to its development and participated in the consultations that led to the final presentation. Periodic review is required to update this document as there are still several ongoing discussions on improving the health system. The initial document was produced through consultations with Office of the Chief Medical Officer, Health Services Planning and Integration Branch, and various Senior Medical Officers, and Department Heads would have been consulted for details of their present organization and workload. Once the draft document was prepared, consultative meetings were held with representatives of the workforce including Regional Directors, Regional Technical Directors, Parish Managers, Chief Executive Officers, and Medical Officers.

It is essential that the physician workforce be upgraded to meet the demands on the public health system. Physicians are only one group and the planning that is now taking place in reviewing primary health care services will also result in an in-depth analysis of other members of the health team for Primary Health care. The same is to be done for secondary care services. A comprehensive review of the workforce has not been done for several years. The Ministry is advancing with several projects that will result in an increased demand for health care workers in new and expanded health facilities. It is therefore timely that this document is created to meet the completion of these projects.

This document takes into consideration the upgrades that are to be done in the new secondary care model and in the primary healthcare reform. It includes the projections for physician staffing in Secondary Care and Primary Care. The Primary health workforce include the Regional Offices, Health Departments and Health Centres.

The Ministry of Health & Wellness Head Office staff is not included in this document. Interns and Senior House Officers are not included in the numbers presented.

The document is presented in 3 Sections:
Secondary Care Physician Workforce
Primary Care Physician Workforce
Gap Analysis

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Chief Medical Officer
March 9,2023

Background

Jamaica's health profile is transitioning. Persons are now living longer. According to the World Bank data published in 2020[1], life expectancy in Jamaica is Male 70 years. female 74 years and total life expectancy is 72.0 years. At the bottom of the population pyramid, there is narrowing with the 0-14 age group declining from 41% in 1978 to 23 % in 2017[2]. In keeping with this there is a rise in the diseases associated with the older age groups. Non-communicable diseases (NCD) including Diabetes, Cardiovascular Diseases and Cancers are now the leading causes of mortality and morbidity. The increase in exposure to risk factors such as physical inactivity and unhealthy nutrition have led to increase in obesity in all age groups and increase risk for the NCDs.

Prevention and treatment services for non-communicable diseases and their complications are now the emerging priority of the health sector. Jamaica now must plan for dealing with a triple burden of disease: Non-communicable, Communicable and diseases brought about by climate change.

Jamaica's epidemiological profile is marked now by a declining burden of communicable diseases and a considerable increase in non-communicable diseases. Recent national surveys among adults 15-74 years of age show an upward trend in the prevalence of overweight and obesity, hypertension, and diabetes. Currently, 1 in 2 Jamaicans are overweight or obese, 1 in 3 have hypertension and 1 in 8 have diabetes[3].

In 2016, NCDs accounted for 12,577 or 68.4 per cent of all deaths (18,373) five years and older in Jamaica. Between 2010 and 2016, the number of deaths due to NCDs increased by 21.6% (from 10,344 in 2010 to 12,577 in 2016)[4].

These changes have significant implications for the planning and utilization of health services. With these numbers, we are compelled to make changes to improve early detection and management of new and established disease, particularly since our youth – the future of our society – have not been spared. Obesity in students 13-15 years old, for example, increased by 68.3% from 6% in 2010 to 10.1% in 2017[4].

The economic impact is significant, with direct treatment costs, productivity losses and social costs associated with NCDs, and mental health conditions projected at J$137.1 billion over a 15 year period (2018-2033 and 2017-2032 for Mental Health and NCDs respectively[5].

1 Data.worldbank.org
2 countryeconomy.com
3 Jamaica Health & Lifestyle Survey 111 (2016- 2017)
4 https://www.un.int
5 The Case for Investment in Prevention and Control of Noncommunicable Diseases in Jamaica: Evaluating the return on investment of selected tobacco, alcohol, diabetes, and cardiovascular disease interventions. Washing ton, D.C.: UNIATF, UNDP, and PAHO; 2018.

Care for Mental Health Conditions in Jamaica: The Case for Investment. Evaluating the Return on Investment of Scaling Up Treatment for Depression, Anxiety, and Psychosis. Washington D.C.: UNIATF, UNDP, and PAHO; 2019.

Background Cont'd

The Primary Health Care Reform takes into consideration the demand and utilization of existing services and the demand for additional services to cope with the changes in the population health profile. There is a focus on reduction of risk factors for chronic diseases, managing environmental factors that will mitigate the impact of disasters brought about by climate changes and addressing the social determinants of health. These changes are beyond clinical acute and chronic care and emphasizes the need for well-developed services in the areas of health promotion and prevention including health education, nutrition, environmental health, emergency disaster preparedness and management, social interventions, and sexual and reproductive health. The monitoring of health status is also a key component of the reform. With the rising numbers of persons suffering from mental disorders and the sharp attention brought to this by the pandemic, the build out of the mental health programme is also included. Specific improvements to advance quality and comprehensive care of persons affected by the non-communicable diseases include the inclusion of specialist services at the primary care level, the expansion of the ophthalmology programme and the addition of rehabilitative and palliative care to the list of services accessible in primary care.

In the same way, there is an increasing demand at secondary care facilities based on existing and projected population needs. Trauma arising out of inter-personal violence and road traffic crashes have increased. Hospital emergency rooms across the island must be equipped with trained staff and resources to offer emergency care. Medical management has improved over the last four decades and early detection by trained staff, and early interventions will improve responses to medical and surgical emergencies including cardiovascular emergencies that are our main cause of mortality. At the same time improvements in obstetric and neonatal care require that trained personnel are in place to implement care thus saving lives.

In the present service delivery offerings, the largest number of hospitals are the type C hospitals and are not equipped to respond to the change in demand for services. This results in persons having to travel longer distances to get appropriate care, delay in care or not accessing care and increasing morbidity and mortality. The range of specialist services that are needed to deal with the disease burden of the country must be more accessible to the population and not only centred in the Type A referral facilities. Complications of Hypertension and Diabetes commonly affect the Cardiovascular, Renal, Neurological and Ophthalmological systems. Trauma frequently requires Orthopaedic management and the increase in mental disorders necessitates having appropriate Psychiatric care in place.

A rationalization of services must take place as it is not sustainable or practical or cost effective to have all services in all hospitals. However, the hospital system must deliver appropriate care to its clients and take care of most of the needs of the population close to their communities and refer for more advanced services to larger and more specialized hospitals. This requires an upgrade of our Type C Hospitals to offer the four general specialties of Internal Medicine, General Surgery, Obstetrics and Gynaecology and Paediatrics as well as the supporting specialties of Radiology, Anaesthetics and Emergency Medicine. This will ensure that appropriate management

Background Cont'd

and referrals are made thus decreasing the burden on the patient and family as well as the larger institutions. The larger facilities, the Type B and Regional Hospitals must be expanded to manage the disease burden arising out of complicated disease and the need for more specialized care. The specialist services have been placed strategically at the next level of hospital, the Type B and Regional Hospital to increase access. Other subspecialties that require a large layout of equipment and human resources are placed at Regional, Type A and Specialist hospitals. The Type A Hospitals are the final referral sites and offer tertiary and quaternary services. These facilities must be equipped for teaching purposes to ensure the provision of trained staff to meet the population needs.

The World Health Organization published in 2016 "Health workforce requirements for Universal Health Coverage and the Sustainable Development Goals". In this document a SDG composite index threshold was identified that consisted of the estimated number of skilled workers (physicians, nurses, midwives) needed to reach the minimum proportion of high coverage (defined as 80% or more) for 12 selected health indicators linked to the health SDG. These 12 indicators are family planning, antenatal care coverage, skilled birth attendance, DTP3 immunization, tobacco smoking, potable water, sanitation, antiretroviral therapy, tuberculosis treatment, cataract surgery, and diabetes and hypertension treatment. The value of the SDG index composite threshold was determined to be 4.45 doctors, nurses, and midwives per 1000 population.

Jamaica is moving towards this with this planned increase in the physician workforce. The expansion of services in primary health care as well as in secondary care allows for more attention to the selected health indicators. 3635 physicians are required to provide services in an expanded primary and secondary care models. 2675 are required at the secondary care level, 710 at the primary care level and 250 are required to be in training to ensure sustainability of the health system. The present physician workforce is estimated at 70 per 100,000 or 0.7/1000 population. With the full implementation of this plan by 2030, the public sector physician workforce will move to approximately 1.5/1000 population. Along with the Nursing workforce plan that is being developed, this is expected to move Jamaica from 2.71 skilled workers per 1000 population to closer to 4 per1000 population.

SECTION 1

SECONDARY CARE PHYSICIAN WORKFORCE

Introduction

The demand for hospital services by type of service and quantity of service is determined by the population (demography) and the disease burden (epidemiology) and morbidity and mortality rates in the country. Over the last forty years, Jamaica has been going through a demographic and epidemiological transition that now requires a review of the hospital services in country. A review of secondary and tertiary hospital services in the public sector has been done and outlined in the Ministry of Health & Wellness's Secondary Care Model 2023. This requires an expansion of human resources and infrastructure to provide this expanded service.

The new public hospital network comprises 25 public hospitals that are classified as Type A, B, C, Regional and Specialist Hospitals. The services have been upgraded at each hospital type to ensure timely access to hospital services by the population. The figure below outlines the specialist services to be offered at each hospital type.

TYPE C	TYPE B	REGIONAL	TYPE A
Internal Medicine	Internal Medicine	Internal Medicine	Internal Medicine
		Nephrology	Nephrology
	Cardiology	Cardiology	Cardiology*
			Neurology*
			Infectious Disease
			Pulmonology
			Rheumatology
		Haematology/Oncology	Haematology/Oncology
		Gastroenterology	Gastroenterology
			Endocrinology**
			Dermatology
General Surgery	General Surgery	General Surgery	General Surgery
	Orthopaedics	Orthopaedics	Orthopaedics
		Urology	Urology
		ENT	ENT
			Plastic Surgery
			Facio-maxillary**
			Neurosurgery
			Cardiothoracic
		Ophthalmology	Ophthalmology
			Radiation/Oncology
OBGYN	OBGYN	OBGYN	OBGYN
		Foetal-Maternal	Fetal-Maternal
			Gynae-Oncology
			Repro. Endocrinology
Paediatrics	Paediatrics	Paediatrics	Paediatrics
	Neonatology	Neonatology	Neonatology
			Paediatric Surgery
Anesthesiology	Anaesthesiology	Anaesthesiology	Anaesthesiology
			Critical Care
Emergency	Emergency Medicine	Emergency Medicine	Emergency Medicine
	Psychiatry	Psychiatry	Psychiatry
		Pathology	Pathology
Radiology	Radiology	Radiology	Radiology
			Dental

Table 1: Specialist services at each hospital type

Section 1- Introduction Cont'd

To provide this expanded service, 2675 medical officers are required to staff these hospitals. The numbers of each level of medical officer at each hospital is captured in the table below.

HOSPITALS	MO6	MO5	MO4	MO3	MO2	MO1	TOTAL
KPH	1	17	79	72	69	87	325
VJH	1	2	13	12	6	27	61
NCH	0	1	11	7	13	8	40
CRH	1	14	60	67	62	95	299
WCAH	1	4	20	15	19	35	94
C (9 hospitals)	0	9	85	81	103	225	503
B (4 hospitals)	4	28	88	64	100	184	468
Regional (3 hospitals)	3	21	129	123	138	192	606
BHC	1	8	46	41	62	59	217
Bellevue	1	0	9	4	13	12	39
HI	0	1	2	2	2	2	9
SJG	0	1	3	4	4	2	14
	13	106	545	492	591	928	2675

Table 2: Overall Physician (MO1-6) Requirement for Public Hospitals

In addition to ensure sustainability of services and a high quality of clinical staff, provisions are made for ongoing training of physicians.

- The upgraded hospital system will have the capacity to place 410 medical interns in General Medicine, General Surgery, Paediatrics & Obstetrics & Gynaecology, when all services are in place. The placement of interns is dependent on the availability of supervisory staff and budgetary allocation.
- After internship, registered doctors are required to complete 1 year as Senior House Officer to qualify for a post in the government service and for entry into post graduate programmes. The public health system should accommodate a minimum of 150 SHO positions to ensure replacement of staff.
- 250 training posts are to be implemented. 100 at the MO1 level and 140 at the MO2 level. Five posts at each of the MO3 and MO4 level should be reserved for sub-specialist training. This is to allow for an intake of 50 doctors each year in PGY1, PGY2, PGY3, PGY4 and remainder in PGY5-7 in the DM training programme. These positions should be operated from the central Ministry to prevent interference with service delivery at hospitals.

Physician Requirements & Duties

Physicians are called Medical Officers in the public system and are currently engaged using a pay scale that has 8 levels: HPC/MO1-8. Interns and Senior House Officers are not on this pay scale. This document outlines the physician needs in hospitals. There are no HPC/MO7-8 in hospitals. An indication of the number of interns that can be placed is also given.

There are 8 levels of physicians in public secondary and tertiary care services in Jamaica.

Registration

All physicians are required to register with the Medical Council of Jamaica to practice Medicine in Jamaica.
The University of the West Indies is the main source of training for doctors in the country. On completion of final examinations, doctors are required to carry out a one-year internship period before obtaining full registration. Provisional licensing from the Medical Council is required for Internship. All doctors who graduate from a medical school that is recognized by the Medical Council can apply for provisional registration. The Medical Council grants provisional registration if there is proof of employment. Employment is based on available spaces. Doctors who graduate from schools where the training programme is not recognized by the Medical Council are required to pass the Caribbean Association of Medical Council's qualifying examinations before they can be granted full registration.

After the period of Internship, doctors can apply for full registration.

Fully registered doctors are required to complete an additional year of training before they can be employed as Medical Officers in public facilities. This additional year of training is termed Senior House Officer training.

The training and responsibilities of doctors are as follows:

Interns

Interns have completed 5 years of Medical School (MBBS) including 3 years of clinical rotations. The internship period consists of three-month rotations in General Surgery, General Medicine, Paediatrics and Obstetrics and Gynaecology. The intern works as part of a team that is headed by a consultant. The intern's duties include admission of patients and to carry out the routine management of patients under supervision of a consultant. They participate in in-patient management, emergency management, out-patient clinics, inpatient & out- patient procedures, surgical management (pre, intra, post op).

Registration Cont'd

During the clinical rotations in medical school, interns would have been exposed to basic procedures (medical and para-medical) in routine and emergency care and with the understanding of the principles of medicine gained through the course of their study, they are now proficient to apply this knowledge to the assessment and care of patients and to provide guidance to other members of the medical team. They will supervise students and provide, in collaboration with seniors, instructions for patient care for other categories of staff.

Senior House Officers

Senior House Officers have completed the one-year internship period. The SHO works as part of a team that is headed by a consultant. Their duties include admission of patients and to carry out the routine management of patients under supervision of a consultant. These doctors are fully registered with the Medical Council. They participate in in-patient management, emergency management, out-patient clinics, inpatient & out- patient procedures, surgical management (pre, intra, post op). They will supervise interns and student and provide, in collaboration with seniors, instructions for patient care for other categories of staff.

They will perform minor procedures in which they have achieved proficiency and make decisions on management of patients in conjunction with seniors.

Medical Officer 1

The Medical Officer 1 has completed at minimum, one year internship and one year as Senior House Officer. They are responsible for admitting patients and routine management of patients under supervision of consultant. They participate in in-patient management, emergency management, out-patient clinics, inpatient & out- patient procedures, surgical management (pre, intra, post op). They will supervise SHOs, interns and students and provide, in collaboration with seniors, instructions for patient care for other categories of staff.

They will perform procedures and make decisions on management of patients based on their experience and knowledge and in conjunction with seniors.

Medical Officer 2

The Medical Officer 2 is a more senior and experienced doctor. They have completed internship, one year as Senior House Officer and have at minimum five years' experience as a MO1 or have completed a post graduate training in area of work but not to a specialist level. They are responsible for admitting patients, and routine and emergency management of patients under supervision of consultant.

Registration Cont'd

They participate in in-patient management, emergency management, out-patient clinics, inpatient & out- patient procedures, surgical management (pre, intra, post op). They will supervise other junior medical officers, SHOs, interns and students. This officer can work with less supervision than the Medical Officer 1 and provides, instructions for patient care for other categories of staff.

They will perform procedures based on experience and knowledge and make decisions on management of patients based on experience and expertise and in conjunction with seniors. The officer is often given responsibility for aspects of general management of the service.During the clinical rotations in medical school, interns would have been exposed to basic procedures (medical and para-medical) in routine and emergency care and with the understanding of the principles of medicine gained through the course of their study, they are now proficient to apply this knowledge to the assessment and care of patients and to provide supervision to other members of the medical team. They will supervise students and provide, in collaboration with seniors, instructions for patient care for other categories of staff.

Medical Officer 3

The Medical Officer, Level 3, in the public hospital is a specialist who has completed the required period of training for specialization in their clinical discipline. The officer can function independently as a specialist making clinical decisions on patient management and carrying out complex tasks for which they have been trained. The officer functions as part of a team and receives mentorship and supervision from the clinical head of the service, the consultant, who is a more experienced officer. The officer is often given responsibility for aspects of general management of the service.

Medical Officer 4

The consultant is a Medical Officer, Level 4. This officer is a specialist in their field who is the leader or manager of the clinical team. They are responsible, in conjunction with the Head of Department and with the Senior Medical Officer for strategic planning of the service, quality assurance through mentoring and direct supervision of junior staff and continuing medical education of the clinical team. Administrative responsibilities such as scheduling, performance appraisal and human resource management for their clinical team are carried out under their supervision and in collaboration with other departments in the hospital.

Registration Cont'd

Medical Officer 5

The Medical Officer Level 5 post is being proposed for the Senior Medical Officers in the Type C hospitals and the Heads of Departments in Type B, Type A & Regional Hospitals in some specialties.The Senior Medical Officer is in charge of the Clinical services in the hospital and is a part of the senior management of the hospital. They provide supervision for the medical department heads and other clinical services such as laboratory, radiology, pharmacy, physiotherapy, nutrition and dietetics, medical social work and medical records. They ensure coordination of clinical activities within the hospital and is responsible to ensure that the hospital provides quality and comprehensive care at the hospital level. They provide strategic planning input for the clinical services in the hospital and is responsible for the monitoring of the services. Internal Medicine, General Surgery, Paediatrics, O&G, Anaesthesiology, Emergency Medicine and Orthopaedics are large services in the Type A and Regional Hospitals. The Head of these departments ensure coordination within the multiple services offered under their portfolio. All clinical services require coordination within the service and with other clinical and administrative services in the hospital. Because of the size of these departments, the large number of staff and the large populations served, the responsibility is greater and akin to the supervision provided by the SMOs in the C Hospitals.

Medical Officer 6

The Senior Medical Officers of larger hospitals are at the HPC/MO6 level. These are the Type B, Type A Hospital and Regional Hospitals. These doctors manage a large physician workforce. The Senior Medical Officer oversees the Clinical services in the hospital and is a part of the senior management of the hospital. They provide supervision for the medical department heads and other clinical services such as laboratory, radiology, pharmacy, physiotherapy, nutrition and dietetics, medical social work and medical records. They ensure coordination of clinical activities within the hospital and is responsible to ensure that the hospital provides quality and comprehensive care at the hospital level. They provide strategic planning input for the clinical services in the hospital and is responsible for the monitoring of the services.

Work Force Planning

The physician workforce for each hospital type is outlined in this document.

Type C Hospital

The Type C Hospitals in the Secondary Care Model for 2023 are Princess Margaret Hospital, Linstead Hospital, Lionel Town Hospital, Percy Junor Hospital, Noel Holmes Hospital, Falmouth Hospital, Port Maria Hospital, Port Antonio Hospital and a new hospital in St. Catherine. The Type C hospital will be upgraded to offer General Surgery, General Medicine, Paediatrics and Obstetrics and Gynaecology and the supporting specialties of Emergency Medicine, Radiology and Anaesthesiology as outlined in the Secondary Care Model for 2023. This will be a phased implementation. Accordingly, the physician staff complement will increase. The new model will require the 503 posts in nine hospitals for Medical Specialists and supporting medical staff in the Type C Hospital as outlined in the table below.

TYPE C	MO5	MO4	MO3	MO2	MO1	TOTAL MOs	Interns
Senior Medical Officer	1					1	
General Surgery		1	2	1	3	7	2
General Medicine		1	2	1	3	7	2
Pediatrics		1	2	1	3	7	2
Obstetrics & Gynecology		1	2	1	3	7	2
Anesthesiology		2	1	1	3	7	0
Emergency Medicine 4,4,2		3	0	6	10	19	0
Radiology* only in Parish Hospitals		1	0	1	0	2	0
Total Per Hospital with Radiology	1	10	9	12	25	57	8
Total Per Hospital without Radiology	1	9	9	11	25	55	8
4 facilities with Radiologist	4	40	36	48	100	228	32
5 facilities without Radiologist	5	45	45	55	125	275	40
TOTAL	9	85	81	103	225	503	72

Table 3 : Physician requirements for upgraded Type C Hospital

Some Type C Hospitals are remote, and some are the only hospital in the parish. The engagement of specialist doctors that will serve both primary and secondary care is proposed and will be a new type of engagement for specialists. The terms of engagement will be reviewed to capture this.

The Specialist will conduct 1 clinic session per week in Primary care. This will consist of alternatively clinic duties and conducting tele-mentoring sessions for continuing medical education for primary health care providers or teleconsulting sessions where clients are scheduled for consults using digital technology.

Type C Hospital Cont'd

For the parishes that have a Type C hospital, the specialists in the Type C hospital will provide services for specialists' clinics in the Comprehensive and District health centres in the parish. Specialists in Noel Holmes and Port Maria Hospitals will cover Westmoreland and St. Ann respectively, in addition to Hanover and Port Maria.

TYPE C HOSPITALS	MO5	MO4	MO3	MO2	MO1	TOTAL
Required for 9 hospitals	9	85	81	103	225	503
Total hired	0	19	15	34	77	145
GAP	9	66	66	69	148	358

Table 4: Physician Gap Type C Hospitals

Five hundred and three (503) doctors are required to staff the 9 upgraded Type C Hospital and Specialist services in the Primary Care.

One Hundred and forty-five doctors are presently engaged. The gap of 358 doctors represents 9 at the MO5 level, 66 at the MO4 level, 66 at the MO3 level, 69 at the MO2 level and 148 at the MO1 level. There are 15 post graduate trained doctors who are presently engaged at the MO3 level who can be promoted to MO4 level.

In addition, these facilities would at this level of services be able to accommodate Medical Interns. There would be space for 72 interns in the nine facilities.

All hospitals would not immediately be at the point where they can accommodate these additional services. The creation of the services would be done in a phased approach, that is timed with the improvement in the facilities and the implementation of the Primary Care Reform.

Type B Hospital

The Type B Hospitals in the Secondary Care Model for 2023 are May Pen Hospital, Savanna-la-mar Hospital, Annotto Bay Hospital and Black River Hospital. The Type B hospitals will be upgraded to offer 11 specialties and subspecialties as outlined in the Secondary Care Model for 2023. This will be a phased implementation. The new model will require the 468 posts in four hospitals for Specialists and supporting staff in the Type B Hospital as follows:

TYPE B	Firm	MO6			MO3	MO2	MO1	TOTAL MOs	INTERN
SENIOR MEDICAL OFFICER		1						1	
General Surgery	3		1	2	3	3	6	15	6
General Medicine	3		1	2	3	3	6	15	6
Pediatrics	3		1	2	3	3	6	15	12
Obstetrics & Gynecology	3		1	5	3	3	6	18	6
Orthopedics	3		1	2	3	3	3	12	
Cardiology	0			1	1	1	0	3	
Psychiatry	1			1	0	0	1	2	
Radiology	1			2	0	0	1	3	
Anesthesiology	1		1	3	0	3	0	7	
Emergency Medicine 6, 5, 4	0		1	2	0	6	17	26	
TOTAL PER HOSPITAL		1	7	22	16	25	46	117	30
For 4 hospitals		4	28	88	64	100	184	468	120

Table 5: Proposed Physician Requirement for Type B Hospitals

Four hundred and sixty-eight doctors are required to staff the four upgraded Type B Hospitals.

TYPE B HOSPITALS	MO6		MO4	MO3	MO2	MO1	TOTAL
Required	4	7	88	64	100	184	468
Total Hired	0	2	26	21	28	94	171
GAP	4	5	62	43	72	90	297

Table 6: Physician Gap for proposed Type B Hospitals

One hundred and seventy-one doctors are presently engaged. The gap of 297 doctors represents 4 at the MO6 level, 5 at the MO5 level, 62 at the MO4 level, 43 at the MO3 level, 72 at the MO2 level and 90 at the MO1 level.

In addition, these facilities would at this level of services, continue to accommodate Medical Interns. There would be space for 120 interns in the four facilities.

Regional Hospitals

The Regional Hospitals in the Secondary Care Model for 2023 are Mandeville Regional Hospital, St. Ann's Bay Regional Hospital, and Spanish Town Hospital will be upgraded to the same service level as the regional hospital. Cornwall Regional Hospital and Kingston Public Hospital are regional facilities and Type A Hospitals. They are discussed under Type A hospitals. The Regional hospitals will be upgraded to offer 19 specialties and subspecialties as outlined in the Secondary Care Model for 2023. This will be a phased implementation. The required services and medical staff for the Regional Hospital is shown in table below.

REGIONAL	Firm	MO6	MO5	MO4	MO3	MO2	MO1	TOTAL MOs	INTERNS
Senior Medical Officer		1						1	
General Surgery	3		1	6	3	6	6	22	6
General Medicine*	3		1	6	3	9	6	25	9
Cardiology*	1			1	2	1	1	5	
Nephrology*	1			1	2	1	1	5	
Gastroenterology*	1			1	2	1	1	5	
Pediatrics	3		1	3	3	6	6	19	12
Obstetrics & Gynecology	3		1	6	3	6	6	22	6
Feto Maternal Medicine	0			1	0	0	0	1	
Orthopedics	3		1	3	3	3	3	13	
Psychiatry	1			1	1	1	1	4	
Haem/Oncology	1			1	2	1	2	6	
Urology	1			1	2	1	2	6	
ENT	1			1	2	1	1	5	
Ophthalmology	1			1	2	1	1	5	
Neonatology	1			1	2	0	0	3	
Pathology	1			1	1	0	2	4	
Radiology	1			1	1	0	2	4	
Anesthesiology	1		1	4	4	0	4	13	
Emergency Medicine 8, 8, 4 + 2	0		1	3	3	8	19	34	
TOTAL		**1**	**7**	**43**	**41**	**46**	**64**	**202**	**33**
3 Hospitals		**3**	**21**	**129**	**123**	**138**	**192**	**606**	**99**

Table 7: Physician Requirement for Regional Hospitals

Regional Hospitals Cont'd

	MO6	MO5	MO4	MO3	MO2	MO1	TOTAL
Required	3	21	129	123	138	192	606
Existing	3	0	58	39	45	198	343
Gap	0	21	71	84	93	-6	263

Table 8: Gap in Physician Requirement for Regional Hospitals

Six hundred and six doctors are required to staff the upgraded Regional Hospitals. Three hundred and forty-three doctors are presently engaged. The gap of 263 doctors represents 21 at the MO5 level, 71 at the MO4 level, 84 at the MO3 level, 93 at the MO2 level. Six doctors are in excess at the MO1 level who are to be promoted to the MO2 level.

In addition, these facilities would at this level of services, continue to accommodate Medical Interns. There would be space for 99 interns in the three facilities.

Type-A Hospitals

The Type A hospitals in the public sector are Kingston Public Hospital and Cornwall Regional Hospital. National Chest Hospital, Victoria Jubilee Hospital and Bustamante Hospital for Children are specialist referral hospitals that offer tertiary care services and together with KPH in the South-east Region would offer all the Type A services. KPH, VJH and NCH presently have shared services and are considered together although VJH and NCH are classified as specialist hospitals.

The CRH and the WCAH will offer the Type A services in the Western Region. Both hospitals are situated on the same compound and will share some services. Although WCAH will be classified as a specialist hospital, it is considered with the CRH in this section.

Kingston Public Hospital

Twenty-six specialist and sub-specialist services will be offered at the KPH. The services to be offered and the required staff are outlined in the table below. St. Joseph's Hospital is to be renovated and expanded to become an extension of the KPH. Some services will move to this campus allowing for expansion of the remaining services at the North Street location. These services will move with the assigned staff.

TYPE A/ Referral	Firm	MO6	MO5	MO4	MO3	MO2	MO1	TOTAL	INTERNS
SENIOR MEDICAL OFFICER		1						1	
General Surgery	4		1	8	8	8	8	33	16
General Medicine	4		1	8	8	8	12	37	16
Orthopaedics	4		1	8	4	4	4	21	
Cardiology	3		1	2	3	3	3	12	
Intervention Cardiology	0			2	1	0	0	3	
Psychiatry	3		1	2	3	3	3	12	
Nephrology	3		1	2	3	3	3	12	
Haematology/Oncology	3		1	2	3	3	3	12	
Gastroenterology*	0			1	1	0	1	3	
Neurology*	0			1	1	0	1	3	
Infectious Disease	3		1	2	3	3	3	12	
Rheumatology*	0			1	1	0	0	2	
Endocrinology*	0			1	1	0	0	2	
Urology	4		1	3	4	4	4	16	
ENT	3		1	2	3	3	4	13	
Facio-Maxillary	0			1	1	0	0	2	
Neurosurgery	3		1	2	3	3	3	12	
Ophthalmology	1		1	6	0	1	2	10	
Plastic Surgery	3		1	2	3	3	3	12	
Pathology	1		1	2	0	3	0	6	
Radiology	1		1	2	3	0	3	9	
Anaesthesiology	1		1	10	8	0	8	27	
Critical Care	0			2	1	2	1	6	
Emergency Medicine 8, 8, 4	0		1	4	3	12	15	35	
Radiation Oncology	3			3	3	3	3	12	
Dental									
TOTAL		1	17	79	72	69	87	325	32

Table 9: Physician Requirement for KPH

Type A Hospitals Cont'd

- For Internal Medicine, some subspecialties are large enough to operate as stand-alone services with their own firms and on call coverage. Specialty areas of Neurology, Gastroenterology, Rheumatology and Endocrinology will be attached to a General Medicine Firm.

Three hundred and twenty-five doctors are required to staff the upgraded Kingston Public Hospital. 32 interns can be accommodated.

Victoria Jubiliee Hospital (Specialist-Shared Services With Kph)

This hospital is the only Specialist OBGYN hospital in the country. It is expected that the sub specialist areas of Feto-Maternal Medicine, Gynae-Oncology and Reproductive Endocrinology will be developed at this facility. The hospital takes referrals from all hospitals in the country. The services to be offered at the VJH and the required staff are outlined in the table below.

VJH	Firm	MO6	MO5	MO4	MO3	MO2	MO1	
Obstetrics & Gynecology	3		1	5	6	6	6	
Feto Maternal Medicine	1			2	1	0	3	
Gyne-Oncology	1			2	1	0	3	
Reproductive Endocrinology	1			2	1	0	3	
Neonatology	1		1	2	3	0	12	
TOTAL		1	2	13	12	6	27	61

Table 10: Physician Requirement for VJH

Sixty-one doctors are required to staff the upgraded Victoria Jubilee Hospital.

National Chest Hospital (Specialist- Shared Servcies With Kph)

The National Chest Hospital is a specialist hospital for Pulmonology and Cardiothoracic Surgery. The hospital also houses some services from the KPH. The services to be offered at the NCH and the required staff are outlined in the table that follows.

Type A Hospitals Cont'd

NCH	Firm	MO6	MO5	MO4	MO3	MO2	MO1	
SENIOR MEDICAL OFFICER			1					
Pulmonology	2			2	2	2	2	
Dermatology	1			2	0	0	2	
Cardiothoracic	2			2	2	2	2	
Anaesthetics	1			2	2	2	0	
Urgent Care	0			0	0	4	2	
Radiology	0			1	0	1	0	
Critical care	1			2	1	2	0	
TOTAL		0	1	11	7	13	8	40

Table 11: Physician Requirement for NCH

Forty doctors are required to staff the upgraded National Chest Hospital.

Physician Gap At KPH, VJH, NCH

	MO6	MO5	MO4	MO3	MO2	MO1	Total
TOTAL RQD	2	20	103	91	88	122	426
TOTAL EXISTING	2	2	75	54	102	205	440
TOTAL GAP	0	18	28	37	-14	-83	-14

Table 12: Physician Gap for KPH, VJH and NCH Hospitals

426 doctors are required to staff the upgraded three hospitals: KPH, VJH, NCH.
Four hundred and forty doctors are presently engaged. The excess of 14 doctors represents a need for 18 at the MO5 level, 28 at the MO4 level, 37 at the MO3 level and an oversupply of 97 MO1 and MO2 doctors. Many of the doctors at MO1 level are in training posts and though employed against posts at the MOHW and in other Regional Health Authorities, have been counted in the numbers reported.
In these hospitals, because of a lack of MO2 and MO3 posts, there are doctors hired at the MO1and MO2 level who can be promoted. Excess MO 1 level doctors are to be promoted to MO2 positions and there are some MO2 level doctors who are to be promoted to MO 3 level. It is important that these physicians be hired at this time to optimize the services that are already existing at these hospitals. In addition, these facilities would continue to accommodate medical interns and Senior House Officers. The three facilities can accommodate 44 interns.

Cornwall Regional Hospital

The services at this Type A facility are to be expanded. Twenty-eight specialty and subspecialities will be offered. The services to be offered at the CRH and the required staff are outlined in the table below.

CRH	Firm	MO6	MO5	MO4	MO3	MO2	MO1
SENIOR MEDICAL OFFICER		1					
General Surgery	3		1	6	6	6	6
General Medicine*	3		1	3	6	6	9
Orthopaedics	3		1	3	3	3	3
Cardiology	3		1	2	3	3	3
Psychiatry	3		1	2	3	3	3
Nephrology	3		1	2	3	3	3
Haem/Oncology	3		1	2	3	3	3
Gastroenterology	1			1	2	0	3
Neurology*	0			1	0	0	0
Infectious Disease*	0			1	0	0	0
Rheumatology*	0			1	0	0	0
Urology	3		1	2	3	3	3
ENT	3		1	2	3	3	4
Facio-maxillary**	0			1	0	0	0
Neurosurgery	3		1	2	3	3	3
Ophthalmology	1			1	2	4	4
Plastic Surgery	1			1	2	2	1
Pathology	1			1	1	3	0
Radiology	1		1	2	3	0	3
Anaesthesiology	1		1	8	4	0	4
Critical Care -adult	0			1	1	0	2
Obstetrics & Gynaecology	3		1	6	3	4	8
Feto Maternal Medicine	0			1	2	1	1
Gynae Oncology	0			1	2	1	1
Pulmonology	1			1	1		3
Dermatology	1			1	1	1	1
Cardiothoracic	1			1	2	0	3
Emergency Medicine Adult 8,8,4	1		1	3	3	8	19
Radiation Oncology	1			1	2	2	2
Dental							
TOTAL		**1**	**14**	**60**	**67**	**62**	**95**

Table 13: Physician requirement for CRH

Type A Hospitals Cont'd

For Internal Medicine, some subspecialties are large enough to operate as stand-alone services with their own firms and on call coverage. These are Cardiology, Nephrology, Haematology/Oncology and Gastroenterology. Specialty areas of Neurology, Infectious Disease, Rheumatology will be attached to a General Medicine Firm. The consultants will also have general medicine duties and cover the general medicine duties for the firm.

Western Child And Adolescent Hospital (Specialist-Shared Services With CRH)

The WCAH is a new facility that is expected to come on stream in 2024. Paediatric services at the CRH will migrate to this hospital. In addition, some subspecialties in Paediatric Medicine and surgery are to be added over time as well as adolescent services. Several services will be shared between the two hospitals. The services to be offered at the WCAH and the required staff are outlined in the table below.

WCAH	Firm	MO6	MO5	MO4	MO3	MO2	MO1	
SENIOR MEDICAL OFFICER		1						
Neonatology	3		1	2	3	3	3	
Paediatrics	3		1	3	3	3	6	
Paediatric Cardiology				1				
Paediatric Nephrology				1				
Haematology/Oncology				1				
Paediatric Surgery	3		1	4	3	3	3	
Urology				1				
Neonatal Surgery				1				
Critical Care- Paediatrics	0			1	1	0	2	
Emergency Medicine Paediatric 5,4,3	1			2	0	6	17	
Adolescent Medicine	3		1	2	3	3	3	
Child and Adolescent Psychiatry	1			1	2	1	1	
TOTAL		1	4	20	15	19	35	94

Table 14: Services and Required Physician Staff for WCAH

Type A Hospitals Cont'd

- For Paediatric Medicine, there will be three firms with two consultants each. One consultant on each general medicine firm will be a subspecialist in the areas of Paediatric Cardiology, Paediatric Nephrology and Paediatric Haematology/Oncology.
- For Paediatric Surgery, there will be three firms with two consultants each. The firms will cover general paediatric surgery, paediatric urology/oncology, and paediatric neonatology surgery. All the Surgeons will cover general paediatric surgery subject to the assessment on workload by the HOD, and SMOs.

493 doctors are required to staff the upgraded TYPE A CRH and WCAH. One hundred and sixty-two doctors are presently engaged. There is a gap of 231 doctors to offer the expanded service. The gap of doctors represents 12 at the MO5 level, 33 at the MO4 level, 68 at the MO3 level, 58 at the MO2 level and 55 at the MO1 level.

CRH/WCAH	MO6	MO5	MO4	MO3	MO2	MO1	TOTAL
TOTAL REQUIRED	2	18	80	82	81	130	393
EXISTING	2	0	48	14	23	75	162
GAP	0	18	32	68	58	55	231

Table 15: Physician Gap TYPE A group of CRH & WCAH Hospital

In addition, these facilities would at this level of services, continue to accommodate Medical Interns and Senior House Officers. There would be capacity for 49 interns in these facilities

Specialist Hospitals

There are 7 hospitals that are specialist hospitals. Four will be considered in this section: Bustamante Hospital for Children, Bellevue Hospital, Hope Institute and Sir John Golding Rehabilitation Centre. The National Chest Hospital and the Victoria Jubilee Hospital and the Western Child and Adolescent Hospital were discussed with the TYPE A Hospitals as they have several shared services.

Bustamante Hospital For Children

The BHC will offer 24 specialties and subspecialties for the paediatric population. The range of services and physician requirements are seen in the table below.

BHC	Firm	MO6	MO5	MO4	MO3	MO2	MO1	
SENIOR MEDICAL OFFICER		1						
Paediatric Medicine	4		1	4	4	8	8	
Paediatric Nephrology	1			1	1	1	1	
Paediatric Neurology	0			1	0	0	1	
Infectious Disease	0			1	0	0	1	
Paediatric Pulmonology	1			1	1	1	1	
Paediatric Rheumatology	0			1	0	0	1	
Paediatric Gastroenterology	0			1	0	0	1	
Paediatric Endocrinology	0			1	0	0	1	
Haem/Oncology	3		1	2	3	3	3	
Paediatric Cardiology	3		1	2	3	3	3	
Dermatology	0			1	0	1	1	
Paediatric Surgery	3		1	3	3	6	3	
Orthopaedics	3		1	3	3	6	3	
Paediatric Urology	1			2	1	1	1	
Radiation Oncology-SHARED	0			0	0	0	0	
ENT	1			2	1	2	1	
Facio Maxillary -SHARED	0			0	0	0	0	
Plastic Surgery	1			1	2	2	2	
Neuro Surgery	1			1	2	2	2	
Ophthalmology	1			2	2	2	2	
Neonatology	3		1	3	3	4	4	
Anaesthesiology	1		1	6	5	5	5	
Emergency Medicine	1		1	3	3	12	12	
Child Psychiatry	1			1	2	1	1	
Radiology	1			3	2	2	1	
Dental								
TOTAL		1	8	46	41	62	59	217

Table 16: Physician requirements for proposed services at BHC

Specialist Hospitals Cont'd

4 paediatric medicine firms; each firm with one general paediatric consultant and one additional sub specialty service; Neurology, Gastroenterology, Endocrinology, Rheumatology, Infectious Disease. Infectious Disease cuts across all wards and there is an Infectious Disease ward, this service may require eventually more staff. Cardiology, Oncology, Pulmonology and Nephrology are to be stand-alone services.

3 Paediatric Surgery firms; Will cover laparoscopic surgery, transplant surgery and general paediatric surgery. Paediatric urology, ENT, Plastic, Neuro surgery, Ophthalmology, Cardiothoracic will be stand-alone service.

The hospital will offer 24 specialties. In addition, Radiation Oncology and Faciomaxillary services will be accessed from KPH and NCH. Oral Health Services are not included in this staff assessment. 24 Paediatric Medicine Interns will be accommodated at this hospital.

PHYSICIANS	MO6	MO5	MO4	MO3	MO2	MO1	TOTAL
Required	1	8	46	41	62	59	217
Existing	1	0	29	17	29	94	170
GAP	0	8	17	24	33	-35	47

Table 17:Physician Gap BHC Hospital

217 doctors are required to staff the upgraded Bustamante Hospital for Children.
One hundred and seventy doctors are presently engaged. The gap of 47 doctors represents a need for 8 doctors at the MO5 level, 17 at the MO4 level, 24 at the MO3 level, 33 at the MO2 level and a oversupply of 35 MO1 doctors. Ninety-four doctors are hired at the MO1 level compared to a requirement of fifty-two. In this hospital, because of a lack of MO2 and MO3 posts, there is an excess of doctors hired at the MO1 level. Some will be promoted to MO2 level and some at the MO2 level will be promoted to the MO 3 level.

In addition, these facilities would at this level of services, continue to accommodate Medical Interns and Senior House Officers. There would be space for 24 interns.

Specialist Hospitals Cont'd

Bellevue Hospital

The services at the Bellevue Hospital are to be expanded in keeping with a Mental Health Reform which will see the deinstitutionalization of the Bellevue Hospital and its conversion into a tertiary level Neuro-Psychiatric Hospital. The new hospital will provide acute and sub-acute general psychiatric care including Psychiatric Intensive care; and care in the areas of sub specializations of Neuropsychiatry, Addiction Psychiatry and Forensic Psychiatry.
The required staff are as follows:

TYPE S Bellevue Hospital	MO6	MO4	MO3	MO2	MO1
Psychiatry		4	4	8	8
Neuro Psychiatry		1	0	2	1
Addiction		1	0	0	0
Forensic		1	0	0	0
Psychiatric Emergency		1	0	3	3
Internal Medicine		1	0	0	0
	1				
TOTAL	1	9	4	12	12

Table 18: Bellevue Hospital Physician Requirement

The proposed staff is to allow for the carrying out of present services and the addition of new services. The buildout of these services over time will require revision of this staff complement.

Hope Institute

The Hope Institute Hospital is a 40-bed specialist oncology and palliative care unit. The services provided are outlined in the Secondary Care Model. This hospital will be reviewed and there may be revision of the staff required. For optimization of present services, the required staff is as follows:

TYPE S Hope Institute	MO5	MO4	MO3	MO2	MO1
Senior Medical Officer	1				
Haematology/ Oncology		1	1	2	2
Clinical Oncology		1	1		
TOTAL	1	2	2	2	2

Table 19: Hope Institute Physician requirement

Sir John Golding Rehabilitation Hospital

The Sir John Golding Rehabilitation Centre is a 68-bed facility. The services provided are outlined in the Secondary Care Model. This hospital will be reviewed and there may be revision of the staff required. For optimization of present services, the required staff is as follows:

TYPE S Sir John Golding Rehabilitation Centre	MO5	MO4	MO3	MO2	MO1
Senior Medical Officer	1				
Orthopaedics		2	4	4	2
Physiatrist		1			
TOTAL	1	3	4	4	2

Table 20: SJGRC Physician Requirement

A total of sixty-one doctors are required to provide the service at the 3 hospitals. Twenty-five (25) are presently engaged. 36 doctors are required.

Summary

The number of medical officers required to staff the upgraded hospitals is 2675. This does not include interns and Senior House Officers. This full workforce will be implemented in phases when the resources are in place to offer the services in all the hospitals. A training plan is to be put in place that will synchronize with the infrastructure upgrades that are needed. The immediate human resource gaps for the existing services are required now.

SECTION 2

PRIMARY HEALTH CARE PHYSICIAN WORKFORCE

Introduction

The primary health care workforce comprises of physicians in clinical care at health centres and physicians in public health practice and management. The latter physicians are engaged in monitoring and supervisory roles at health departments and regional offices.

The team at the Regional Office is headed by the Regional Technical Director (RTD). This officer provides administrative and technical oversight of the health services within the region delivering on the service level agreements with the health ministry and carrying out the programmes and policies of the ministry. A support team for priority areas and large programmes is required to enhance the implementing, coordinating, and monitoring function and to be able to provide expert advice to the Regional Director and the Boards of the Regional Health Authorities. This document formalizes the key physician roles that report to the RTD, and that have already been implemented in some of the RHAs. These are the Regional Epidemiologist, Regional Clinical Care Coordinator, Regional Priority Communicable Diseases Coordinator, Regional Psychiatrist and Regional Priority Non-Communicable Diseases/Family Health Coordinator, Regional Quality Assurance Officer. The Regional Dental Surgeon also reports to the RTD but is not included in this document on Physician workforce.

The team at the public health department is headed by the Medical Officer of Health (MO(H)) and this officer has responsibilities for implementing and supervision of service delivery and for monitoring the health status of the parish. This document recognizes the areas of responsibility of the Medical Officer of Health and provides dedicated technical support for the officer. A cadre of physicians will be assigned to the health department to improve management of the population public health programmes. Many programmes are managed by other groups of health professionals that come under the MO(H)'s supervision. The detailed micro-plans [1] for each programme will determine staff in each area.

With primary healthcare reform, clinical services are to be upgraded and expanded to deliver quality and comprehensive care. With this intervention 125 health centres are to be upgraded to be able to provide individual care services reliably at the comprehensive, district, and community level. The physician staff, documented here, is calculated based on the services to be offered at these health centres and these doctors will provide satellite services to the other existing facilities. This workforce document introduces supervisory levels of staff for clinical care in the primary care setting and these supervisory roles reside at the service delivery site, at the health department and the Regional Office.

Physician Workforce Primary Health Care

The role of the Physicians engaged in Primary Health Care is as depicted in the following table:

	Public Health Management	Clinical Care
Senior House Officers	The Senior House Officer Programme allows for rotation in priority areas. This officer has completed training and the required internship period and is fully registered to work independently in public and private settings. In the public sector, the officer works under the supervision of the Medical Officer.	This officer has completed training and the required internship period and is fully registered to work independently in public and private settings. In the public sector, the officer works under the supervision of the Medical Officer. The officer is responsible for all aspects of general patient care and has the required skill to use the knowledge gained in history taking and examination to make diagnosis and decide on patient management.
MO1	This officer has completed training and the required internship period and the SHO year and is fully registered to work independently in public and private settings. In the public sector, the officer works under the supervision of the Medical Officer of Health. The officer is responsible for duties assigned by the Medical Officer of health that may include programme management or public health activities. The officer, although assigned to the health department may from time to time be assigned to clinical duties at the health centre based on exigencies of the service. In this role, the officer is responsible for all aspects of general patient care and has the required skill to use the knowledge gained in history taking and examination to make diagnosis and decide on patient management. The officer will supervise interns and other members of the health team in carrying out patient management activities or public health activities.	This officer has completed training and the required internship period and a Senior House Officer year and is fully registered to work independently in public and private settings. In the public sector, the officer works under the supervision of the Specialist Medical Officer or a senior medical officer with similar training but more years of experience. The officer is responsible for all aspects of general patient care and has the required skill to use the knowledge gained in history taking and examination to make diagnosis and decide on patient management. Although assigned to the health centre, the officer may from time to time be requested to carry out public health activities or programme management. The officer will supervise SHOs, interns and other members of the health team in carrying out patient management or public health activities.
MO2	This officer has completed post graduate training in Public Health or five years of engagement as a MO1. In the public sector, the officer works under the supervision of the Medical Officer of Health. The officer is responsible for duties assigned by the Medical Officer of health that may include programme management or public health activities. The officer, although assigned to the health department may from time to time be assigned to clinical duties at the health centre based on exigencies of the service. In this role, the officer is responsible for all aspects of general patient care and has the required skill to use the knowledge gained in history taking and examination to make diagnosis and decide on patient management. The officer will supervise interns and other members of the health team in carrying out patient management activities or public health activities.	This officer has completed post graduate training but not a specialist degree in a relevant specialty or has five years of engagement as a MO1. In the public sector, the officer works under the supervision of the clinical supervisor. In this role, the officer is responsible for all aspects of general patient care and has the required skill to use the knowledge gained in history taking and examination to make diagnosis and decide on patient management. Although assigned to the health centre, the officer may from time to time be requested to carry out public health activities or programme management. The officer will supervise interns, SHOs, Medical Officers and other members of the health team in carrying out patient management activities or public health activities.
MO3	This officer has completed post graduate training in Public Health and has three years of experience in public health practice. In the public sector, the officer works under the supervision of the Medical Officer of Health. The officer is responsible for duties assigned by the Medical Officer of health that may include programme management or public health activities. The officer will supervise Medical Officers, SHOs and other members of the health team in carrying out public health management, programme management or other public health activities.	This officer has completed post graduate specialist training in a relevant clinical specialty. In the health centre, the officer is responsible for all aspects of patient care in their specialized area and assigned clinical programmes. The officer will supervise interns, SHOs, Medical officers and other members of the health team in carrying out patient management activities or public health activities. Coordination and administration of services will be at the parish health department level and the Regional Office.

MO4	This officer has completed post graduate training in Public Health and has four years of experience in public health practice rotating through all the programme areas OR MO4 officers, in charge of clinical programmes will have the required specialist training. PARISH: In the public sector, the officer can be promoted to the Medical Officer of Health position. In some parishes, there is a Senior Medical Officer of Health, to whom the officer reports. As the Medical Officer of Health, the officer has responsibility for the public health programmes in their jurisdiction and for safeguarding the public against public health events. The officer will supervise programme managers and the support staff for all technical programmes. As a Medical Officer of Health or Specialist Medical Officer reporting to a Senior Medical Officer of Health, the officer may be responsible for specified districts or zones within a parish or specified programme areas. REGIONAL OFFICE: At the Regional Office, MO4 officer reports to the Regional Technical Director and is responsible for specified technical areas.	This officer has completed post graduate training in a clinical specialty. In the primary care system this may be Family Medicine, Psychiatry, or other priority area. The officer is responsible for clinical care as well as supervision of the other team members assigned to the programme. They will also form part of the management team of the health department and will participate in strategic planning and implementation and monitoring of new programmes.
MO5	This officer has completed post graduate training in Public Health and has six years of experience in public health practice rotating through all the programme areas OR for officers in charge of clinical programmes, will have the required specialist training and health management experience. PARISH: In the public sector, the officer holds the Medical Officer of Health (MO(H)) position. In some parishes, this officer is the most senior medical officer and reports to the Parish Manager. As Medical Officer of Health for the Parish, the officer has overall responsibility for the public health programmes in the parish and for safeguarding the public against public health events. The officer will mentor and supervise programme managers and the support staff for all technical programmes in the parish. REGIONAL OFFICE: At the Regional Office, the MO5 officer reports to the Regional Technical Director and is responsible for specified technical area(s).	
MO6	This officer has completed post graduate training in relevant specialty (Public Health or Clinical Specialty) and has ten years of experience in health management. SENIOR MEDICAL OFFICER OF HEALTH: This position is obtained in the KSAHD. The Senior Medical Officer of Health supervises 6 health zones and the range of public health services in this complex and diverse metropolitan area. CLINICAL CARE COORDINATOR This Officer coordinates and monitors the clinical service in both primary and secondary care. The officer is to have experience and expertise in managing clinical teams and reports to the RTD. The coordination of services in hospitals requires that this officer has experience in hospital service management.[1]	
MO7	REGIONAL TECHNICAL DIRECTOR: This officer provides oversight of the health services within the region ensuring delivery on the service level agreements with the health ministry	

1 This is a new position, although existing on a temporary arrangement in the WRHA as at March 2023. The position is put at the MO6 level to attract persons who have served as Heads of Departments or Senior Medical Officers in clinical services.

Rationale

The National Health Services Act in 1997 established the Regional Health Authorities and administrative positions in the Regions and Health Departments. Over the years, with expansion of technical services and programmes offered, the Regions and parishes have responded differently. The result is that there has been an increase in technical staff at the regions but with no policy direction, there is no standard and there is an array of positions and job descriptions that have been created.

At the parish level, medical officers are assigned to the parish and are deployed to the health centres to carry out clinical care. For oversight of public health programmes, the increase in staff at the regions is not copied at the parish level, and in most parishes, there is still only one medical officer who is the Medical Officer of Health who carries out this responsibility. While the programme managers in some instances come from different professional groups, additional support is required for the Medical Officer of Health. The MO(H) will rotate doctors assigned to the health centres to assist with various public health functions.

At the health centres, the medical doctors that are assigned move between the different health centres. There is no post for doctors trained in Family Medicine or clinical specialties to provide oversight of clinical care.

There is need for policy directive to guide the deployment of human resources. The Primary Health Care reform includes the assessment of each programme area offered in primary health care and will determine the numbers and placement of staff. This document provides guidance for the deployment of medical officers and hinges on the implementation of the new classification of health centres (comprehensive, district, community) and the necessary infrastructure to be put in place.

In this new dispensation, medical officer posts at the Regional Office, Health department and health centre is outlined.

Regional Health Authority

There are four regional health authorities (RHA). The RHAs are responsible to ensure that the Region delivers on the MOHW's Service Level Agreements. They are responsible to provide oversight for all the Ministry's technical policies and programmes in the region, through collection and analysis of programme data and to ensure efficiency, respond to areas of deficiency and participate in strategic planning to ensure responsive, quality and comprehensive services to the population.

To carry out these functions the technical team at the region must be appropriately resourced. The team is led by the Regional Technical Director who advises the Regional Director and the Board on the technical programmes of the region.

The following positions are to be implemented in each region under the Primary Health Care Reform:

1. HPC/MO7 Regional Technical Director
2. HPC/MO6 Regional Clinical Coordinator
3. HPC/MO5 Regional Epidemiologist
4. HPC/MO4 Regional Quality Control Officer
5. HPC/MO4 Regional Priority Communicable Diseases Coordinator
6. HPC/MO5 (SERHA, WRHA) HPC/MO4 (NERHA, SRHA) Regional Priority Non-Communicable Diseases Coordinator/ Family Health
7. HPC/MO5 Regional Psychiatrist
8. HPC/MO1 Training position for rotation of Medical Officers of Health in Training

32 medical officers are required to staff the Regional Health Authority.

RHA	MO1	MO4- Quality Assurance, CD/HIV, NCD/FH	MO5 Psychiatrist, Epidemiologist, NCD/FH	MO6 Clinical Coordinator	MO7 RTD	TOTAL
SERHA	1	2	3	1	1	8
NERHA	1	3	2	1	1	8
SRHA	1	3	2	1	1	8
WRHA	1	2	3	1	1	8
TOTAL	4	10	10	4	4	32

Table 21:Medical Officers per Region posted at Regional Office

Health Department

There are 13 health departments for the 14 parishes. Kinston and St. Andrew are combined to form one health department. The health department is responsible to implement and manage the public health programmes of the MOHW. The Medical Officer of Health for the parish is the technical officer who is responsible for this oversight. To carry out the required tasks the health departments must have dedicated medical officers. In addition to provide exposure, to supplement monitoring capacity and to boost response activities, the Medical Officer of Health may recruit from time to time or routinely, medical officers assigned to the health centre providing that the ability of the staff at the health centre to deliver timely quality and comprehensive clinical service is not compromised.

Because of population size and the types of programmes offered, some parishes will have a larger workforce.

The following positions are to be implemented under the Primary Health Care Reform:

1. HPC/MO6 Senior Medical Officer of Health (SMO(H)) – An officer at this level is only assigned in the KSAHD. The officer has a larger staff cadre to manage because of the size of the population and the increased complexity and diversity of the technical areas under their supervision.
2. HPC/MO5 Medical Officer of Health MO(H)- An officer at this level in St. Catherine and St. James Health Departments will be a Senior Medical Officer of Health or Parish Medical Officer of Health. These parishes have complexities that requires additional support and coordination. In the other parishes, the designation will be Medical Officer of Health or Parish Medical Officer of Health.
3. HPC/MO4 Medical Officer of Health (MO(H)) - 2 in St. Catherine; 3 in KSA, 2 in St. James
4. HPC/MO4 Specialist Medical Officer/ Clinical Coordinator – primary care clinical services – 1 in each health dept
5. HPC/MO4 Parish Psychiatrist – 2 General Psychiatrists in all health departments; 3 in KSA; 1 Child and Adolescent Psychiatrist in all health departments
6. HPC/MO3 Medical Officer (Medical Officer of Health in training) – in all health departments; 2 in KSA and St. Catherine
7. HPC/MO2 Medical Officer position to support the MO(H) – one in each health department.
8. HPC/MO1 Support for MO(H) in larger health departments and in RHA. This officer can rotate among parishes and regions for experience in public health.

107 Medical Officers are required to implement the upgrades at health departments in the Primary Health Care Reform. The allocation per parish and level/function is outlined in the table below.

Health Department Cont'd

HEALTH DEPARTMENT	MO1	MO2	MO3 Public Health	MO3 Family Medicine	MO3 Clinical Specialty	MO4 Public Health	MO4 SPEC PSY (incl 1 Child Psychiatrist per parish)	MO4 Family Medicine	MO5 Public Health	MO6	TOTAL
KSA HD	1	1	2	0	0	3	4	1	0	1	13
St. C HD	1	1	2	0	0	2	3	1	1	0	11
ST. T HD	0	1	1	0	0	0	3	1	1	0	7
TOTAL SERHA	2	3	5	0	0	5	10	3	2	1	31
St. Ann HD	1	1	1	0	0	0	3	1	1	0	8
St. Mary HD	0	1	1	0	0	0	3	1	1	0	7
Portland HD	0	1	1	0	0	0	3	1	1	0	7
TOTAL NERHA	1	3	3	0	0	0	9	3	3	0	22
Cla HD	1	1	1	0	0	0	3	1	1	0	8
Man HD	1	1	1	0	0	0	3	1	1	0	8
St. E HD	0	1	1	0	0	0	3	1	1	0	7
TOTAL SRHA	2	3	3	0	0	0	9	3	3	0	23
Wes HD	0	1	1	0	0	0	3	1	1	0	7
Han HD	0	1	1	0	0	0	3	1	1	0	7
St. J HD	1	1	1	0	0	2	3	1	1	0	10
Tre HD	0	1	1	0	0	0	3	1	1	0	7
TOTAL WRHA	1	4	4	0	0	2	12	4	4	0	31
TOTAL ALL REGIONS	6	13	15	0	0	7	40	13	12	1	107

Table 22: Medical Officers per Region posted at Health Departments

Health Centre

The Primary Health Care Reform establishes the health centre types as Comprehensive, District and Community. The service in each type is outlined in the "Primary Health Care Reform" document.

571 medical officers are required to staff these clinics. The staff proposed is for 125 clinics. The other existing clinics will be supported, as they are now, with visits by the expanded staff cadre.

The introduction of MO3 at the health centres is expected to improve the quality and comprehensiveness of care delivered at the primary care level. These doctors represent specialists in Family Medicine, Obstetrics & Gynaecology, Internal Medicine, and Paediatrics. The latter 3 will be employed in the health centres in the parishes of Kingston & St. Andrew. In the other parishes, it is projected that the Specialists from the Type C hospital will provide specialist clinics in the primary care centres in the other parishes. There is no Type C hospital in KSA, and the size of the population warrants these services in primary care.

HEALTH CENTRE MEDICAL OFFICERS	MO1	MO2	MO3	MO4	MO5	MO6	TOTAL
SERHA	115	92	42	0	0	0	249
NERHA	46	23	12	0	0	0	81
SRHA	64	41	15	0	0	0	120
WRHA	61	45	15	0	0	0	121
TOTAL	286	201	84	0	0	0	571

Table 23: Medical Officers per Region posted at Health Centres

Physician Requirements By Region

The total requirements per region per work station (Regional Office, Health Department, Health Centre) for physicians in primary health care per site excluding the category of Senior House Officers is as below:

Work Station	SERHA	SRHA	WRHA	NERHA	TOTAL
Regional Office	8	8	8	8	32
Health Dept	31	23	31	22	107
Health centre	249	120	121	81	571
TOTAL	288	151	160	111	710

Table 24: Primary Healthcare Physician Requirement by Region

The physician staff by level per region is as follows:

SERHA	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TOTAL
Health centre	115	92	42	0	0	0	0	249
Health Dept	2	3	5	18	2	1	0	31
Regional Office	1	0	0	2	3	1	1	8
	118	95	47	20	5	2	1	288
SRHA	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TOTAL
Health centre	64	41	15	0	0	0		120
Health Dept	2	3	3	12	3	0		23
Regional Office	1	0	0	3	2	1	1	8
	67	44	18	15	5	1	1	151
WRHA	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TOTAL
Health centre	65	41	15	0	0	0		121
Health Dept	1	4	4	18	4	0		31
Regional Office	1	0	0	2	3	1	1	8
	67	45	19	20	7	1	1	160
NERHA	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TOTAL
Health centre	46	23	12	0	0	0		81
Health Dept	1	3	3	12	3	0		22
Regional Office	1	0	0	3	2	1	1	8
	48	26	15	15	5	1	1	111
TOTAL FOR ALL REGIONS	300	210	99	70	22	5	4	710

Table 25: Medical Officers per Region posted at Regional Office, Health Departments and Health Centres

Physician Requirements By Parish & Region

710 physicians are required to provide the prescribed coverage in primary health care.

			MO3 Public	MO3 Family Medicine	MO3 Clinical Specialty	MO4-HD: MO(H), RHA: Quality Assurance, CD/HIV, NCD/FH (for SRHA & NERHA)	MO4 Psychiatry (incl 1 Child Psychiatrist per parish)	MO4 Family Medicine	MO5- Parish HD: MO(H), RHA: Psychiatrist, Epidemiologist, NCD/FH(for SERHA & WRHA)	MO6: KSA Parish SMO(H), Clinical Coordinator		TOTAL
KSA HD	1	1	2	0	0	3	4	1	0	1	0	13
KSA HC	69	46	0	21	9	0	0	0	0	0	0	145
St. C HD	1	1	2	0	0	2	3	1	1	0	0	11
St. C HC	36	37	0	8	0	0	0	0	0	0	0	81
ST. T HD	0	1	1	0	0	0	3	1	1	0	0	7
St. T HC	10	9	0	4	0	0	0	0	0	0	0	23
Regional Office	1	0	0	0	0	2	0	0	3	1	1	8
TOTAL SERHA	118	95	5	33	9	7	10	3	5	2	1	288
St. Ann HD	1	1	1	0	0	0	3	1	1	0	0	8
St. Ann HC	20	11	0	5	0	0	0	0	0	0	0	36
St. Mary HD	0	1	1	0	0	0	3	1	1	0	0	7
St. Mary HC	14	7	0	4	0	0	0	0	0	0	0	25
Portland HD	0	1	1	0	0	0	3	1	1	0	0	7
Portland HC	12	5	0	3	0	0	0	0	0	0	0	20
Regional Office	1	0	0	0	0	3	0	0	2	1	1	8
TOTAL NERHA	48	26	3	12	0	3	9	3	5	1	1	111
Clarendon HD	1	1	1	0	0	0	3	1	1	0	0	8
Clarendon HC	32	15	0	7	0	0	0	0	0	0	0	54
Man HD	1	1	1	0	0	0	3	1	1	0	0	8
Man HC	11	12	0	3	0	0	0	0	0	0	0	26
St. E HD	0	1	1	0	0	0	3	1	1	0	0	7
St. E HC	21	14	0	5	0	0	0	0	0	0		40
Regional Office	1	0	0	0	0	3	0	0	2	1	1	8
TOTAL SRHA	67	44	3	15	0	3	9	3	5	1	1	151
Wes HD	0	1	1	0	0	0	3	1	1	0	0	7
Wes HC	17	12	0	5	0	0	0	0	0	0	0	34
Han HD	0	1	1	0	0	0	3	1	1	0	0	7
Han HC	13	8	0	3	0	0	0	0	0	0	0	24
St. J HD	1	1	1	0	0	2	3	1	1	0	0	10
ST. J HC	19	10	0	3	0	0	0	0	0	0	0	32
Tre HD	0	1	1	0	0	0	3	1	1	0	0	7
Tre HC	16	11	0	4	0	0	0	0	0	0	0	31
Regional Office	1	0	0	0	0	2	0	0	3	1	1	8
TOTAL WRHA	67	45	4	15	0	4	12	4	7	1	1	160
	300	210	15	75	9	17	40	13	22	5	4	710

Table 26: Medical Officers per Health Department

Summary Of Post Types

At the Regional Level the following posts are required:

1. HPC/MO7 Regional Technical Director (4)
2. HPC/MO6 Regional Clinical Coordinator (4)
3. HPC/MO5 Regional Epidemiologist (4)
4. HPC/MO4 Regional Quality Control Officer (4)
5. HPC/MO4 Regional Priority Communicable Diseases Coordinator (4)
6. HPC/MO5 (SERHA, WRHA) HPC/MO4 (NERHA, SRHA) Regional Priority Non-Communicable Diseases Coordinator/ Family Health (2)(2)
7. HPC/MO5 Regional Psychiatrist (4)
8. HPC/MO1 Training position for rotation of Medical Officers of Health in Training (4)

At the Health Department level, the following posts are required:

1. HPC/MO6 Senior Medical Officer of Health (SMO(H)) – An officer at this level is only assigned in the KSAHD. The officer has a larger staff cadre to manage because of the size of the population and the increased complexity and diversity of the technical areas under their supervision. (1)
2. HPC/MO5 Medical Officer of Health MO(H)- An officer at this level in St. Catherine and St. James Health Departments will be a Senior Medical Officer of Health or Parish Medical Officer of Health. These parishes have complexities that requires additional support and coordination. In the other parishes, the designation will be Medical Officer of Health or Parish Medical Officer of Health. (12)
3. HPC/MO4 Medical Officer of Health (MO(H)) - 2 in St. Catherine; 3 in KSA, 2 in St. James (7)
4. HPC/MO4 Specialist Medical Officer/ Clinical Coordinator – primary care clinical services – 1 in each health dept (13)
5. HPC/MO4 Parish Psychiatrist – 2 General Psychiatrists in all health departments; 3 in KSA; 1 Child and Adolescent Psychiatrist in all health departments (40)
6. HPC/MO3 Medical Officer (Medical Officer of Health in training) – in all health departments; 2 in KSA and St. Catherine (15)
7. HPC/MO2 Medical Officer position to support the MO(H) – one in each health department. (13)
8. HPC/MO1 Support for MO(H) in larger health departments and in RHA. This officer can rotate among parishes and regions for experience in public health. (6)

At the Health Centre, the following posts are required:

1. HPC/MO3 Specialist: Family Medicine, Obstetrics & Gynaecology, Internal Medicine, Paediatrics. Family Medicine Physician required in all District and Comprehensive Health Centres. Specialists provide supervision and specialist consultations [84]
2. HPC/MO2 – required in all health centres for provision of basic package of care [201]
3. HPC/MO1 – require in all health centres for provision of basic package of care [286]

SECTION 3

GAP ANALYSIS PHYSICIAN WORKFORCE

Situation Overview

The Secondary Care Model proposes 2675 medical Officers. At present 1443 medical officers are employed with 424 in posts and 1019 on contracts. This does not include Interns and Senior House Officers. Interns do a rotation in Internal Medicine, General Surgery, Obstetrics & Gynaecology and Paediatrics. Senior House Officers do rotations through areas of interest in particular the subspecialties that are not staffed by interns.

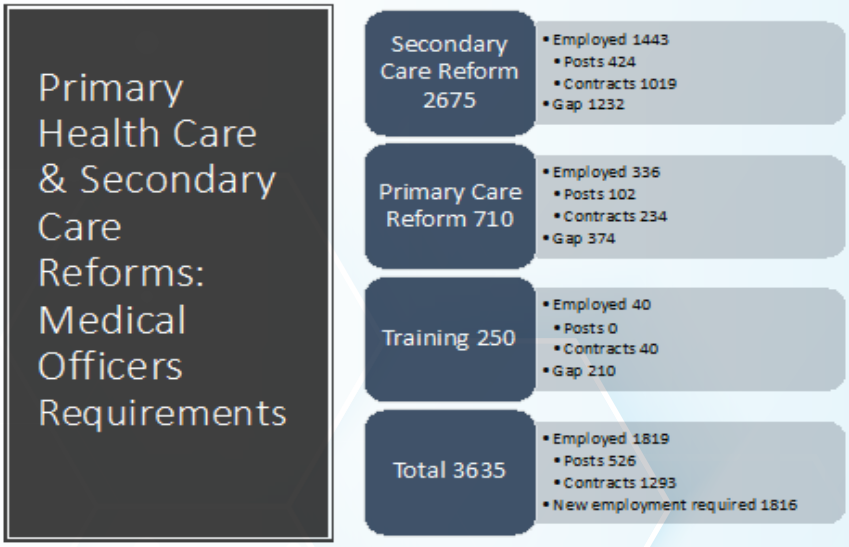
The Primary Health Care Reform proposes 710 medical officers. At present, 336 medical officers are employed with 102 in posts and 234 on contracts. This does not include Senior House Officers who are required to do a primary care rotation.

Two hundred and fifty additional training posts are requested to prevent disruption to service delivery when doctors move from hospitals for training. The training period lasts between 4 to 7 years and may be longer. There are currently 230 doctors in post graduate programmes of which 40 are hired at the MOHW. The balance is in contracts at the RHAs.

The overall requirements by post type are listed below:

	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TOTAL
Primary Care	300	210	99	70	22	5	4	710
Secondary Care	928	591	492	545	106	13	0	2675
Training	100	140	5	5	0	0	0	250
	1328	941	596	620	128	18	4	3635

Table 27: Number of posts required by professional level and level of care



Secondary Care Reform

Secondary care reform will entail upgrading of all hospitals to improve access and meet the needs of the population with respect to specialty and subspecialty services. It will regularize and standardize the current increase in services that have occurred in response to need but without policy direction. There will be a complimentary assessment of all categories of staff. 2675 medical officers will be required for this comprehensive upgrade. The numbers per facility are shown below.

HOSPITALS	MO1	MO2	MO3	MO4	MO5	MO6	TOTAL
Princess Margaret	25	12	9	10	1	0	57
Linstead	25	11	9	9	1	0	55
New Hospital	25	11	9	9	1	0	55
Spanish Town Hospital	64	46	41	43	7	1	202
KPH	87	69	72	79	17	1	325
VJH	27	6	12	13	2	1	61
NCH	8	13	7	11	1	0	40
BHC	59	62	41	46	8	1	217
Bellevue	12	13	4	9	0	1	39
Hope	2	2	2	2	1	0	9
SJGRH	2	4	4	3	1	0	14
SERHA	336	249	210	234	40	5	1074
Lionel Town Hospital	25	11	9	9	1	0	55
Percy Junor Hospital	25	11	9	9	1	0	55
Black River Hospital	46	25	16	22	7	1	117
May Pen Hospital	46	25	16	22	7	1	117
Mandeville Regional	64	46	41	43	7	1	202
SRHA	206	118	91	105	23	3	546
Noel Holmes Hospital	25	12	9	10	1	0	57
Falmouth Hospital	25	12	9	10	1	0	57
Savanna-la-Mar Hospital	46	25	16	22	7	1	117
CRH/WCAH	130	81	82	80	18	2	393
WRHA	226	130	116	122	27	3	624
Port Antonio Hospital	25	12	9	10	1	0	57
Port Maria Hospital	25	11	9	9	1	0	55
Annotto Bay Hospital	46	25	16	22	7	1	117
St. Ann's Bay Hospital	64	46	41	43	7	1	202
NERHA	160	94	75	84	16	2	431
	928	591	492	545	106	13	2675

Table 28: Physician Requirement in Secondary Care facilities

Secondary Care Reform Cont'd

The numbers required by region are displayed below:

REGIONAL HEALTH AUTHORITY	MO1	MO2	MO3	MO4	MO5	MO6	TOTAL
SERHA	336	249	210	234	40	5	1074
SRHA	206	118	91	105	23	3	546
WRHA	226	130	116	122	27	3	624
NERHA	160	94	75	84	16	2	431
TOTAL	928	591	492	545	106	13	2675

Table 29: Physician Requirement Secondary care by Region

1443 persons are already engaged in posts or contracts. The existing posts by regions and hospitals are displayed below:

	MO 1	MO 2	MO 3	MO 4	MO 5	MO 6	TOTAL
SERHA	97	52	33	83	2	4	271
SRHA	29	9	7	15	1	1	62
WRHA	5	13	11	32	1	1	63
NERHA	14	2	2	9	0	1	28
	145	76	53	139	4	7	424

Table 30: Existing posts Secondary Care by Region

Secondary Care Reform Cont'd

	Hospitals	MO 1	MO 2	MO 3	MO 4	MO 5	MO 6	TOTAL
	Princess Margaret Hospital	1	0	0	0	0	0	1
	Linstead Hospital	3	1	1	0	0	0	5
	New Hospital	0	0	0	0	0	0	0
	Spanish Town Hospital	10	6	3	17	0	1	37
	Kingston Public Hospital	49	23	19	39	1	1	132
	Victoria Jubilee Hospital	10	6	6	5	0	1	28
	National Chest Hospital	5	1	0	3	1	0	10
	Bustamante Hospital for Children	19	15	3	18	0	1	56
	Bellevue	0	0	0	0	0	0	0
	Hope Institute	0	0	0	0	0	0	0
	Sir John Golding Rehabilitation Centre	0	0	1	1	0	0	2
SERHA	Sub Total	97	52	33	83	2	4	271
	Lionel Town Hospital	2	1	0	0	0	0	3
	Percy Junor Hospital	5	1	1	1	0	0	8
	Black River Hospital	7	2	0	1	0	0	10
	May Pen Hospital	6	2	3	4	1	0	16
	Mandeville Regional Hospital	9	3	3	9	0	1	25
SRHA	Sub Total	29	9	7	15	1	1	62
	Noel Holmes Memorial Hospital	0	0	0	1	0	0	1
	Falmouth Hospital	1	0	0	1	0	0	2
	Savanna-La-Mar Hospital	1	2	1	2	1	0	7
	Cornwall Regional Hospital	3	11	10	28	0	1	53
WRHA	Sub Total	5	13	11	32	1	1	63
	Port Antonio Hospital	0	1	0	1	0	0	2
	Port Maria Hospital	0	0	0	0	0	0	0
	Annotto Bay Hospital	9	1	1	1	0	0	12
	St. Ann's Bay Regional Hospital	5		1	7	0	1	14
NERHA	Sub Total	14	2	2	9	0	1	28
	Total	145	76	53	139	4	7	424

Table 31:Existing Posts Secondary Care by Region and Hospital

There are 1019 doctors engaged on contracts. This number is broken out by hospital and region in the following table. These contracts are to be converted to posts and an additional 1232 new engagements are proposed to reach the overall requirement in hospitals to 2675.

Secondary Care Reform Cont'd

Number of Medical Officers on Contracts in Hospitals by Regions							
	Hospitals	MO1	MO2	MO3	MO4	MO5	MO6
SERHA	Princess Margaret Hospital	10	7	4	4	0	0
	Linstead Hospital	6	4	0	1	0	0
	New Hospital	0	0	0	0	0	0
	Spanish Town Hospital	84	17	19	7	0	0
	Kingston Public Hospital	117	59	14	24	0	0
	Victoria Jubilee Hospital	18	10	14	4	0	0
	National Chest Hospital	6	3	1	0	0	0
	Bustamante Hospital for Children	75	14	14	11	0	0
	Bellevue						
	Hope Institute	2	1	1	1	0	0
	Sir John Golding Rehabilitation Centre	1	4	0	0	0	0
	Sub Total	319	119	67	52	0	0
SRHA	Lionel Town Hospital	6	1	0	1	0	0
	Percy Junor Hospital	7	3	1	2	0	0
	Black River Hospital	3	5	2	2	0	0
	May Pen Hospital	35	4	6	12	0	0
	Mandeville Regional Hospital	44	7	4	13	0	0
	Sub Total	95	20	13	30	0	0
WRHA	Noel Holmes Memorial Hospital	7	0	0	0	0	0
	Falmouth Hospital	7	3	2	3	0	0
	Savanna-La-Mar Hospital	31	8	7	2	0	0
	Cornwall Regional Hospital	72	12	4	20	0	1
	Sub Total	117	23	13	25	0	1
NERHA	Port Antonio Hospital	3	4	4	0	0	0
	Port Maria Hospital	9	1		1	0	0
	Annotto Bay Hospital	12	11	3	5	0	0
	St. Ann's Bay Regional Hospital	46	12	9	5	0	0
	Sub Total	70	28	16	11	0	0
	Total	601	190	109	118	0	1

Table 32: Medical Officers on contracts in Secondary Care facilities by Hospital and Region

Secondary Care Reform Cont'd

The number of contracts at the lower levels, MO1 and MO2 levels sometimes exceed the number of posts required. This resulted from an inability to promote persons to the next post above because of lack of pots. Some persons are in training posts that are provided for separately. In some cases, the creation of higher level posts will allow for promotion and correction of that imbalance.

The number of posts to be created for hospitals is 2251. This is shown below by hospital and region. 803 posts are required in SERHA, 484 in SRHA, 561 in WRHA, 403 in NERHA

HOSPITALS	MO1	MO2	MO3	MO4	MO5	MO6	TOTAL
Princess Margaret	24	12	9	10	1	0	56
Linstead	22	10	8	9	1	0	50
New Hospital	25	11	9	9	1	0	55
Spanish Town Hospital	54	40	38	26	7	0	165
KPH	38	46	53	40	16	0	193
VJH	17	0	6	8	2	0	33
NCH	3	12	7	8	0	0	30
BHC	40	47	38	28	8	0	161
Bellevue	12	13	4	9	0	1	39
Hope	2	2	2	2	1	0	9
SJGRH	2	4	3	2	1	0	12
SERHA	239	197	177	151	38	1	803
Lionel Town Hospital	23	10	9	9	1	0	52
Percy Junor Hospital	20	10	8	8	1	0	47
Black River Hospital	39	23	16	21	7	1	107
May Pen Hospital	40	23	13	18	6	1	101
Mandeville Regional	55	43	38	34	7	0	177
SRHA	177	109	84	90	22	2	484
Noel Holmes Hospital	25	12	9	9	1	0	56
Falmouth Hospital	24	12	9	9	1	0	55
Savanna-la-Mar Hospital	45	23	15	20	6	1	110
CRH/WCAH	127	70	72	52	18	1	340
WRHA	221	117	105	90	26	2	561
Port Antonio Hospital	25	11	9	9	1	0	55
Port Maria Hospital	25	11	9	9	1	0	55
Annotto Bay Hospital	37	24	15	21	7	1	105
St. Ann's Bay Hospital	59	46	40	36	7	0	188
NERHA	146	92	73	75	16	1	403
	783	515	439	406	102	6	2251

Table 33: Number of additional medical officers posts required for Secondary Care Upgrade by hospital and Region

Secondary Care Reform Cont'd

All posts will be implemented in a phased approach to allow for establishment of services and build out of infrastructure.

Infrastructure upgrades to Spanish Town Hospital, St. Ann's Bay Hospital, May Pen Hospital, the new building for Cornwall Regional Hospital and a new Western Child and Adolescent Hospital are already in progress.

A next phase will see a new hospital is to be established in St. Catherine, the Operating theatres at Noel Holmes Hospital, Lionel Town Hospital and Linstead Hospital being re-established and improvements in Obstetric infrastructure at Port Antonio Hospital, Savanna-La-Mar Hospital and Victoria Jubilee Hospital.

Primary Care Reform

The primary health care reform proposes to structure the primary health care architecture to manage the needs of the population. Several primary health care services have grown without policy direction. The physician workforce in primary health care manages, delivers and monitors public health and individual care services. The staff at the Regional Health Authority, the health departments and the health centres form this workforce. With renewed prioritization of delivery of comprehensive and quality primary health care services in tackling the social and economic burden of non-communicable diseases, the strengthening of this workforce is essential.

The PHC reform will see the upgrade of 125 health centres to Comprehensive, District and Community health centres. It will regularize and standardize the services to meet population needs. There is an increased number of services offered in keeping with the goal to provide comprehensive & quality services. There will be a complimentary increase in staff and required support services. 710 medical officers are required for this reform at the Regional Offices, health departments and health centres. The breakout by region is shown in the tables below.

RHA	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TO-TAL
SERHA	118	95	47	20	5	2	1	288
NERHA	48	26	15	15	5	1	1	111
SRHA	67	44	18	15	5	1	1	151
WRHA	67	45	19	20	7	1	1	160
	300	210	99	70	22	5	4	710

Table 34:Primary Healthcare Physician workforce by Region and Grade

Primary Care Reform Cont'd

Work Station			MO3 Public	MO3 Family Medicine	MO3 Clinical Specialty	MO4-HD:	MO4 Psychiatry (incl 1 Child Psychiatrist per parish)	MO4 Family Medicine	MO5- Parish HD: MO(H), RHA: Psychiatrist, Epidemiologist, NCD/FH(for SERHA & WRHA)	MO6: KSA Parish SMO(H), Clinical Coordinator		TOTAL
KSA HD	1	1	2	0	0	3	4	1	0	1	0	13
KSA HC	69	46	0	21	9	0	0	0	0	0	0	145
St. C HD	1	1	2	0	0	2	3	1	1	0	0	11
St. C HC	36	37	0	8	0	0	0	0	0	0	0	81
ST. T HD	0	1	1	0	0	0	3	1	1	0	0	7
St. T HC	10	9	0	4	0	0	0	0	0	0	0	23
Regional Office	1	0	0	0	0	2	0	0	3	1	1	8
TOTAL SERHA	118	95	5	33	9	7	10	3	5	2	1	288
St. Ann HD	1	1	1	0	0	0	3	1	1	0	0	8
St. Ann HC	20	11	0	5	0	0	0	0	0	0	0	36
St. Mary HD	0	1	1	0	0	0	3	1	1	0	0	7
St. Mary HC	14	7	0	4	0	0	0	0	0	0	0	25
Portland HD	0	1	1	0	0	0	3	1	1	0	0	7
Portland HC	12	5	0	3	0	0	0	0	0	0	0	20
Regional Office	1	0	0	0	0	3	0	0	2	1	1	8
TOTAL NERHA	48	26	3	12	0	3	9	3	5	1	1	111
Cla HD	1	1	1	0	0	0	3	1	1	0	0	8
Cla HC	32	15	0	7	0	0	0	0	0	0	0	54
Man HD	1	1	1	0	0	0	3	1	1	0	0	8
Man HC	11	12	0	3	0	0	0	0	0	0	0	26
St. E HD	0	1	1	0	0	0	3	1	1	0	0	7
St. E HC	21	14	0	5	0	0	0	0	0	0		40
Regional Office	1	0	0	0	0	3	0	0	2	1	1	8
TOTAL SRHA	67	44	3	15	0	3	9	3	5	1	1	151
Wes HD	0	1	1	0	0	0	3	1	1	0	0	7
Wes HC	17	12	0	5	0	0	0	0	0	0	0	34
Han HD	0	1	1	0	0	0	3	1	1	0	0	7
Han HC	13	8	0	3	0	0	0	0	0	0	0	24
St. J HD	1	1	1	0	0	2	3	1	1	0	0	10
ST. J HC	19	10	0	3	0	0	0	0	0	0	0	32
Tre HD	0	1	1	0	0	0	3	1	1	0	0	7
Tre HC	16	11	0	4	0	0	0	0	0	0	0	31
Regional Office	1	0	0	0	0	2	0	0	3	1	1	8
TOTAL WRHA	67	45	4	15	0	4	12	4	7	1	1	160
	300	210	15	75	9	17	40	13	22	5	4	710

Table 35: Medical Officers required for Primary Health Care Reform by Region, Work station and Grade

Primary Care Reform Cont'd

336 medical officers are already engaged: 102 in posts and 234 on contracts. The numbers per parish are shown below.

102 Medical Officers in Posts in 4 Regional Offices, 13 Health Departments & 320 Health Centres

Number of Medical Officers in posts at Health Centres/Dept/RO by Parish								
	Parishes	MO 1	MO 2	MO 3	MO 4	MO5	MO6	TOTAL
NERHA	Portland	0	0	0	1			1
	St. Mary	0	0	0	1			1
	St. Ann	1	3	2	1			7
	Regional Office	0	0	1	2	0	1	4
	Sub Total	1	3	3	5	0	1	13
SERHA	St. Thomas	1	1	1	1			4
	Kingston and St. Andrew	10	9	4	2			25
	St. Catherine	2	2	2	2			8
	Regional Office	0	0	0	1	0	1	2
	Sub Total	13	12	7	6	0	1	39
SRHA	Clarendon	2	0	0	1			3
	Manchester	2	1	3	1			7
	St. Elizabeth	5	4	5	1			15
	Regional Office	0	0	1	2	0	1	4
	Sub Total	9	5	9	5	0	1	29
WRHA	Trelawny	1	2	0	1			4
	St. James	0	4	1	1			6
	Hanover	1	1	0	1			3
	Westmoreland	1	0	0	1			2
	Regional Office	0	0	0	3	1	2	6
	Sub Total	3	7	1	7	1	2	21
	Total	26	27	20	23	1	5	102

Table 36: Medical Officers in Posts in Primary Care

234 Medical Officers on Contracts – These are to be converted to posts

Number of Medical Officers in contracts at Health Centres/ Dept/ RO by Parish								
	Parishes	MO 1	MO 2	MO 3	MO 4	MO5	MO6	TOTAL
NERHA	Portland	4	1	0	0			5
	St. Mary	6	1	0	0			7
	St. Ann	9	0	0	0			9
	Regional Office	0	0	0	0	0	0	0
	Sub Total	19	2	0	0	0	0	21
SERHA	St. Thomas	0	8	0	0			8
	Kingston and St. Andrew	36	18	2	4			60
	St. Catherine	35	12	1	1			49
	Regional Office	0	0	1	4	0	0	5
	Sub Total	71	38	4	9	0	0	122
SRHA	Clarendon	23	0	1	0			24
	Manchester	13	3	2	0			18
	St. Elizabeth	11	1	1	0			13
	Regional Office	0	0	0	0	0	0	0
	Sub Total	47	4	4	0	0	0	55
WRHA	Trelawny	7	2	0	0			9
	St. James	7	8	0	0			15
	Hanover	7	1	0	0			8
	Westmoreland	2	2	0	0			4
	Regional Office	0	0	0	0	0		0
	Sub Total	23	13	0	0	0	0	36
	Total	160	57	8	9	0	0	234

Table 37: Medical Officers in contracts in Primary Care by parish and Region

374 new engagements (after conversion of contracts to posts) are required to implement the upgrades.

RHA	MO1	MO2	MO3	MO4	MO5	MO6	MO7	TOTAL
SERHA	34	45	36	5	5	1	1	127
NERHA	28	21	12	10	5	0	1	77
SRHA	11	35	5	10	5	0	1	67
WRHA	41	25	18	13	6	-1	1	103
	114	126	71	38	21	0	4	374

Table 38: Additional Medical Officers posts required for Primary Health Care Reform by Region and Grade

The overall implementation is to be phased to immediately convert contracts to posts (234) and then to implement the new posts (374) over three years in preparation for upgrade of facilities.

Training Posts

All training posts are to be held at Ministry of Health and Wellness Head Office. The posts will operate as contracts and no doctor will be appointed permanently in these posts. Over 200 doctors are presently in training at various levels of the post graduate programmes. 250 training posts are to be implemented. 100 at the MO1 level and 140 at the MO2 level. Five posts at each of the MO3 and MO4 level should be reserved for sub-specialist training. Doctors will be assigned to posts in the Regions and transferred to training posts through an application process. This allows the Regions to hire persons to fill the vacated posts for the duration of study leave of the owner of the post. This allows the MOHW to rotate doctors in training to service delivery areas accredited for training by the UHWI.

Summary

This document gives a comprehensive overview of the proposed Primary and Secondary Care Services Physician workforce and rationale for expansion of the services. 3635 medical officers are required in the upgraded public health system. The implementation will be phased in keeping with the expansion of infrastructure. The first phase will comprise of converting existing approximately 1300 contracted officers to posts and the new engagements of about 1800 doctors will be split over subsequent phases.

This will lead to an improvement in the physician to population ratio and improved benefits to the population. The upgrade is required to manage the change in epidemiology and demography that has occurred in the country over the last forty years. The focus to more patient centred care and a focus on the life stage approach in primary health care aims to improve population awareness and health seeking behaviour that will mitigate the growing epidemic of non-communicable diseases including mental health.

Physicians form the backbone of the health services, and the expansion of services begins with the increase in human resources in the areas of strategic planning and monitoring as well as in service delivery. This expansion will allow for the delivery of quality and comprehensive service to the population.

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