

# CORE DATA

HUMAN RESOURCES FOR HEALTH

Stocks and Flows - Education - Management

# MONTSERRAT

# 2011

Tracking

**Regional Goals**

for Human

Resources

for Health

**A Shared Commitment**



**Pan American  
Health  
Organization**

Department of the  
World Health Organization



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Washington, DC  
August 2011



Area of Health Systems based on Primary Health Care (HSS)  
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# General Introduction

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## Context

In its 2006 annual report, the World Health Organization (WHO) described the Human Resources for Health (HRH) situation among its 192 member states.<sup>1</sup> This report recognized the widely varying data availability, with many non-OECD nations having limited access to information on their health workforce. National data were collected as part of this effort, using three approaches: WHO national surveys conducted through its regional and country offices, contacting various national administrative sources, or data “compiled from a previous version of the WHO’s global database on the health workforce.”<sup>2</sup> Data from many Caribbean nations were collected using this third approach, which obtained very little detail, with information that had not been updated for a number of years.

To improve this paucity of information, the Human Resources for Health Unit of the Pan-American Health Organization (PAHO) has partnered with the Ministries of Health in the Eastern Caribbean Countries (ECC) to support the systematic collection and country-level analysis of HRH data as part of the Region’s 10-year commitment to health workforce development.

The purpose of this data collection project was to establish a Core Data Set for the countries of the Caribbean region comprising the required information to establish the current status of HRH in each country. This core data investigation took place in Barbados in November 2007, and following on from this, a number of the Eastern Caribbean Countries conducted the same project study.

There are seven Eastern Caribbean countries involved in this project (Barbados, Dominica, Grenada, Saint Lucia, Saint Vincent and the Grenadines, Anguilla and Montserrat), which has proceeded in two work phases: Phase 1, Data collection for Core Data Set, and Phase 2, Data collection to establish baseline indicators for the 20 Regional Goals for Human Resources in Health.

This report describes the first initiative in Montserrat and its result.

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1. World Health Organization. The World Health Report 2006: Working Together for Health. WHO Press, Geneva.
  2. Antigua and Barbuda, Bahamas, Barbados, Dominica, Grenada, Guyana, Haiti, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

## Montserrat Notes

Montserrat is a British overseas territory located in the Leeward Islands, part of the chain of islands called the Lesser Antilles in the Caribbean Sea. It measures approximately 16 km (10 miles) long and 11 km (7 miles) wide, giving an area of 104 km<sup>2</sup> (40 square miles)<sup>3</sup> and is increasing gradually owing to volcanic deposits on the southeast coast of the island.

Montserrat is divided into three parishes: Saint Anthony, Saint George's and Saint Peter. Saint Peter covers the north-west of the island and is the only inhabited parish, as it was least affected by the eruptions of the Soufrière Hills volcano.

Montserrat has a population density of 58 people per square kilometer with a population of 5118 (2010 estimate).<sup>4</sup> From the 2001 census the proportions of nationals and non-nationals were 82% and 18%, respectively.

The Ministry is functionally divided into Headquarters (responsible for planning and policy analysis to support and strengthen the health system, as well as reviewing any legislation under the remit of the Ministry) and the Department of Health (responsible for providing and administering primary and secondary health care services in the country and assisting Montserratians who wish to access tertiary care elsewhere in the Caribbean.) The health care delivery system is organized into primary and secondary health care services.<sup>5</sup>

Primary health care services are provided via four health districts (Salem, St. Peter's, Cudjoe Head and St. John's). Montserrat has one 30-bed hospital (Glendon Hospital) and services provided at the hospital are generally accessed by referral from primary health care, medical or surgical outpatients, private doctors' offices, or from casualty. Patients from Primary Health Care (PHC) attending the district clinics (health centres) also attend the hospital for laboratory, pharmacy, X-ray and physiotherapy services. There are also two residential care homes: the Margetson Memorial Home that provides high dependence care, and the Golden Year home, which is run by the Red Cross and supports independent living.

The public-sector health service requires fee payment at the point of care. However, these same services are free for specific categories of residents (children, public sector workers, those over 60 years old and those with chronic disease).

The private sector in Montserrat is limited to three full time doctors in private practice.

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3. <https://www.cia.gov/library/publications/the-world-factbook/geos/mh.html>.

4. <http://data.un.org/Data.aspx?q=montserrat&d=PopDiv&f=variableID%3A14%3BcrID%3A500>.

5. Montserrat - Health in the Americas Volume II. PAHO. Accessed: <http://www.paho.org/hia/archivosvol2/pais-ising/Montserrat%20English.pdf>.

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# 1. Core Data Set Introduction

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## 1.1. Objectives of the Project

The overall aims of the Data Management Project for Human Resources in Health are (A) to assess and analyze human resources in health, and (B) To support countries in their efforts to establish information systems and networks for knowledge exchange and evidence-building that are sustainable. The specific objectives for the two parts of this project will be discussed in the relevant section of the report.

## 1.2. Types of Potential HRH Data Sources

There was no centralized data source containing information on the three health-care sectors (private healthcare, public healthcare and Non-Governmental Organizations —NGOs), and data were collected on a sector by sector basis. Consequently, each sector has different data sources.

There are various sources from which quantitative data pertaining to HRH can be collected. The sources that are directly involved in HRH management can be broadly divided into the following types:

- **Type 1 - Public Sector** (Defined as public finance / provision of health care services) Consisting of Ministry of Health (MoH) controlled facilities.
- **Type 2 - Private Sector** (Defined as privately funded / provision of services on a cost basis to the patient) Consisting of private physician offices, private laboratories, private imaging centres, private nursing services and private treatment centres. No detailed data were available for this sector.
- **Type 3 - NGOs** (Defined as not-for-profit non-governmental organizations that are related to disease areas or healthcare. In Montserrat no significant input (requiring MoH staff) from NGOs was declared.
- **Type 4 - Registration councils.** All healthcare professionals must register with their appropriate council in order to practice. In Montserrat there are no national registration councils, and health professionals must register with an appropriate overseas registration council.

- **Type 5 Educational institutions.** Montserratians have access to both the University of the West Indies and overseas universities. The island does also have a Community College that provides training for nurses and nursing assistants.

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## 2. Methods

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### 2.1. Background

The success of health services depends critically on the size, calibre and commitment of the health workforce. However, relevant information on health workers remains widely dispersed and un-standardized. These limitations impede the ability to make informed decisions on resource allocation in the health sector. In Montserrat, quantitative data on human resources for healthcare (HRH) and education have been assessed and collected from a wide range of sources. These sources can be grouped into the following areas:

- **Socioeconomic and demographic:** Census and household labour survey information.
- **Administrative registers:** Ministry of Health personnel databases, college databases for graduation information.
- **Other sources:** Ministry of health estimates/budgets.

#### **Defining occupational groups**

To summarize occupations among health workers, this project highlights 11 professional categories, which are described in Appendix Two. All health sector jobs were mapped to these broad categories.

#### **Non-health trained workers in health industries**

There are many non-health trained workers in health industries, such as managers, computing professionals, trade, clerical, and service workers. They provide managerial and infrastructure support, without which a healthcare system could not function—they are a valid component of the healthcare workforce.

## 2.2. Education for HRH – Data Source Details

The primary data sources are the administrative databases/records held at the education institutions.

### **Administrative databases**

[The University of the West Indies \(UWI\)](#): The UWI maintains statutes on all ratified undergraduate and postgraduate degree programmes, and produces annual aggregate data on the number of student admissions and the number of graduate and postgraduate degrees awarded.

[Montserrat Community College \(MCC\)](#): MCC has only recently started to train nurses and nursing assistants. No data were available for use in this report.

## 2.3. Data Set Limitations

No data were available regarding stratification variables such as health worker age and sex combined. The ability to stratify into public and private healthcare workers is an important one, but this was not possible with this data set. However, many clinicians work in both sectors, and the relative time spent in each sector cannot be ascertained.

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## 3. Results

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### 3.1. Stocks and Flows

#### Public-sector HRH workers by facility type

The Ministry of Health (MoH) Montserrat is responsible for providing primary and secondary health care services, access to tertiary care is via referral to overseas facilities. Additional MoH resources are used to staff the Margetson Memorial Home. The healthcare workers are documented and maintained via the [Schedule of Personal Emoluments](#). For national comparisons, these jobs have been grouped into 11 occupational categories defined at the inception of this HRH data management project.<sup>6</sup>

The healthcare workers are documented and maintained via the Nominal Roll, which is the MS Word document detailing names & positions of all employees within the Ministry of Health. For national comparisons, these jobs have been grouped into 11 occupational categories defined at the inception of this HRH data management project. It should be noted that the Ministry of Health is not responsible for the provision of social services as these come under the aegis of Community Services.

Information on the number of public-sector HRH workers by “facility” is presented in Table 3.2. Details of the professional categories of within each “facility” are given in Table 3.3.

Table 3.1: Summary of HRH workers in each public-sector facility group

Facility	Number of workers (%)
Primary Health Care <sup>a</sup>	39 (21%)
Secondary Health Care (Glendon Hospital)	131 (71%)
Ministry of Health	15 (8%)
<b>TOTAL workers</b>	<b>185<sup>b</sup></b>

<sup>a</sup>PHC delivered via 4 health district: Salem, St. Peter's, Cudjoe Head & St. John's.

<sup>b</sup>This figure does not include 2 summer interns or the 17 vacant posts.

6. The 11 occupation categories are: Medical doctors, Nurses and midwives, Dentists and allied trades, Pharmacists and allied trades, Social workers, Rehabilitation workers, Laboratory Technologists, Public health practitioners, Nutritionists, Mental-health practitioners, Other health workers.

The hospital is the largest employer of healthcare workers, with 66% of the entire public-sector HRH workforce. The community primary care services employ another (23%) of the HRH workforce (Table 3.1). Tertiary referral services are sought overseas.

## Public-sector HRH workers by major occupational category

Montserrat has 185 public-sector healthcare workers, and the numbers, are presented by occupational category in Table 3.2 (below). Clinical doctors represented 2.7 percent of the total public sector HRH workforce, nurses, and midwives represented 19.5 percent. Management and support workers comprise 53.5 percent, and this is above the world average of 33 percent reported by the World Health Organization In 2006.<sup>7</sup>

Table 3.2: Numbers of HRH by facility and professional category

Occupation	Number of workers per facility <sup>a</sup> (Vacancies)		Total
	Hospital	Community	
Medical doctors	5	0 (1)	5
Nurses + Midwives <sup>b</sup>	30 (1)	6 (1)	36
Dentists and allied	0	4 <sup>c</sup>	4
Pharmacists and allied	2	0	2
Rehabilitation workers	0	1 (1)	1
Technologists	6 (2)	0	6
Public health practitioners	2	9 (1) <sup>d</sup>	11
Nutritionists	2	0	2
Mental-health practitioners	0	4 <sup>e</sup>	4
Other health workers	84 (9)	15 (1)	99
<b>ALL health workers</b>	<b>131 (12)</b>	<b>39 (5)</b>	<b>170</b>

<sup>a</sup> Does not include MoH headquarters - which employs a further 15 individuals in "other" 3 of which are management posts.

<sup>b</sup> Does not include nursing assistants who are included in "other": Hospital - 7 (excludes 4 vacancies) or specialist nurses in the community. Note that nurses and midwives are counted together because all midwives are also nurses (even though all nurses are not also midwives).

<sup>c</sup> Includes 1 dental nurse.

<sup>d</sup> Includes 1 public health nurse.

<sup>e</sup> Includes 3 mental health nurses.

In Table 3.3 ahead, HRH counts have been used with population data from the 2010 population estimates present density of health professionals per 10,000 population. In the public sector, there are 9.8 physicians per 10,000 population (or 1 doctor for every 1023 Montserratians). With 36 nurses (nurses/midwives) in the public-health

7. [The World Health Report 2006: Working Together for Health](#); (page xvi).

system (a density of 19.5 per 10,000) there is one nurse for every 142 Montserratians and roughly 2 nurses for each doctor.

Table 3.3: Public-sector HRH workers per 10,000 population by the project's occupational groupings (Population = 5,118 - 2010 estimates)

Occupation	Number of workers (%) <sup>a</sup>	Density per 10,000 population
Medical doctors	5 (2.7%)	9.8
Nurses and midwives	36 <sup>b</sup> (19.4%)	67.5
Dentists and allied	4 (2.1%)	7.8
Pharmacists and allied	2 (1.1%)	3.9
Rehabilitation workers	1 (0.5%)	1.9
Technologists <sup>b</sup>	6 (3.2%)	11.7
Public health practitioners	11 (5.9%)	21.5
Nutritionists	2 (1.1%)	3.9
Mental-health practitioners	4 (2.1%)	7.8
Other health workers	99 (53.5%)	193.4

<sup>a</sup> Based on total of 185 health workers.

<sup>b</sup> Including mental health, public health and dental nurses there are 41 nurses in total giving density of 80 per 10,000.

No details were available regarding professional category by age and gender.

Within the public health sector there are 185 posts with an additional 17 posts that are currently vacant.

## 3.2. Regulatory Framework and Management Practices

For the public sector much of the regulatory tools concerning health employment are described in Human Resources Management Unit Policies and General Orders. Legislation is also in place for unionization, dispute resolution and professional registration/licensure. Table 3.4 details which legislation is associated with the various items of the core data set (ITEMS 3A to 3K).

Table 3.4: Descriptive data required concerning public sector management practices of human resources in health, and categories of potential information sources

Item	Descriptive data	Source	Reference	Comments
3a	Regulatory tools concerning University training programmes, accreditation, approval and financing.		See Section 3.5	

*Continues on next page...*

Continuation of Table 3.4...

Item	Descriptive data	Source	Reference	Comments
3b	Main regulatory tools for health employment: career paths selection systems, performance management and evaluation.	Montserrat Law	General Orders Human Resources Management Unit (HRMU) policies	
3c	Main regulatory tools regarding licensing of professional practice	Montserrat Law MOH website	Medical Act and Nurses and Midwives Act	The Medical Act cover doctors, dentists, pharmacists and opticians
3d	Regulatory and Licensing requirements for foreign workers	Government of Montserrat - Department of Labour website	Immigration Act Work permit application procedure The Medical Act The Nurses and Midwives Act	<p>As there is no readily available pool of skilled and semi-skilled labour due to the small population and the previous emigration. Where it can be shown that the right calibre of staff is not available locally, the government will grant work permits to employ foreign staff. Every person who is not a national of Montserrat must have a work permit before taking up employment in the country. Normally, a work permit will be issued for a specific period to a non-national to fill a particular post and only when qualified nationals are unavailable.</p> <p>Posts must be advertised in the local newspaper and radio station prior to the submission of an application for a work permit. Advertisements should reflect faithfully the duties to be performed and the minimum qualifications and experience required. This requirement is to ensure that suitable nationals are given an opportunity to fill the vacancy.</p> <p>A prospective employer is required to submit the application for a work permit to the Labour Department for processing. Before processing applications for work permits to non-nationals, the Labour Department takes into account the number of nationals and non-nationals employed in the Company at the time of application. Regulations are also taken into consideration. Work permits are approved by Executive Council.</p>
3e	Main regulatory framework regarding unionization and collective actions	Montserrat Law	Trade Unions Act Chapter 15.20 Trade Dispute Act (1939 revised 2002)	

Continues on next page...

Continuation of Table 3.4...

Item	Descriptive data	Source	Reference	Comments
3f	Contracting models (Is the permanent tenure in the public service vs flexible, short term contract)	Nominal Roll		Main contract types: Contract, permanent, non-established and special agreement. The latter two types could consider precarious employment
3g	Selection process (Is there any selection process established or is the discretionary appointment the norm?)	Human Resources Management Unit		
3h	Salary, payment scales + relative values (i) Are there important differences between the medical and non-medical workers? (ii) Is the salary scale in health sector competitive with employment in other sectors?	Discussion with some Ministry of Health personnel		Pay scales differ across districts and ministries and within the MoH there are no standardised criteria to determine on what point someone should be appointed.
3i	Performance measurement: Is there any formal process of evaluation?	Human Resources Management Unit	Data unavailable	
3j	CSME regulatory and accreditation requirements for free circulation and contracting of personnel			Not applicable. Montserrat is a British Overseas Territory and only an Associate member of CARICOM
3k	Any data on migration			Unknown

### 3.3. Education System Related to HRH

#### Education system related to HRH

There is only one education institution that trains health personnel, and that is Montserrat Community College, which provides training for nurses and nursing assistants. The courses are not run annually and to date there has been two cohorts of nursing assistants (Start: 2006, 2009) and one cohort of nurses (Start: 2006).<sup>8</sup> Therefore, residents of Montserrat, access one of the following options for health profes-

8. For nursing assistants, the number of graduates in the 2006 cohort was 6, and the 2009 class graduated a cohort of 7. For nurses, there are currently six students enrolled in this first class of the Montserrat Community College.

sional training; The University of the West Indies or various universities overseas, in particular, the UK.

### **Public University: The University of the West Indies**

The system is complicated somewhat by the five campus model of the University: three main campuses in Barbados (Cave Hill), Jamaica (Mona), and Trinidad & Tobago (St. Augustine), one further campus in Bahamas, and the Open Campus dedicated to distance education. The majority of health-sector training is offered in Jamaica and Trinidad & Tobago with Cave Hill now offering a medical degree (MBBS). The UWI admissions process is organized at the campus-level, and so information on applicants, admissions, and graduates requires access to three administrative centres.

At the completion of this report, two centres have provided information (Barbados and Jamaica), but no Montserratians had attended these campuses, suggesting that nationals prefer to leave the region for tertiary education.

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## 4. Recommendations

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Strategic HRH planning involves four distinct stages:

- (1) Situational analysis.
- (2) Assessing and forecasting demand for HRH.
- (3) Analyzing the supply of HRH.
- (4) Developing action plans to close any gap between HRH supply & demand.

This project forms the first stage. To be a valuable tool in HRH planning, data collected for the situation analysis needs to be accurate, complete, accessible, easily made anonymous, and relevant to policy makers. Ongoing successful data collection requires those collecting the data to understand that without complete and accurate HRH data, HRH planning cannot be useful.

Continuing data collection will enable realistic forecasting, while good links with the education institutions will enable the estimation of HRH supply.

In addition to the quantitative information needed for HRH planning, a framework of supporting policies is also required to manage processes such as staff recruitment and performance management.

As part of the second phase of Public Sector Reform, Montserrat has identified Human Resource Management and Development as a “component” that requires further improvements. The objective of this component is to ensure that the needs of Government of Montserrat’s Human Resource Management are accurately defined and substantially met. This component will develop central HR administrative capacity for use by all ministries and government departments. Additionally, as part of the Government of Montserrat Medium Term Expenditure Framework (MTEF), the Ministry of Health developed “Strategic Objectives” with a view to creating a “healthy population with full access to required healthcare.” These objectives include the “sustainable development of human resource capacity for health,” and these data can provide a starting point for the achievement of this objective. At present HR strategic planning etc are carried out by the Ministry of Health and the administrative aspects of HR are passed on to the HR Unit.

## 4.1. HRH Data

This data sub-set was divided into the three data groups: public healthcare sector, private healthcare sector and NGOs.

### The public sector

Data for public sector HRH staff came from Ministry of Health Nominal Roll. A more reliable and usable data source (individual - level and electronic) could be the payroll system. As all health professionals must register to practice, it was anticipated that information held by the registration councils would be a good alternate data source for this sector. Unfortunately, no data were available. Registration councils could be extremely valuable as an information source. More data are needed, with the information collected being stored and regularly updated in electronic format using purpose-built databases.

## 4.2. HRH Data - Descriptive

Much of the public healthcare sector regulatory framework and management practices are described in legislation.

Table 4.1: Recommendations for policy-makers and users

Recommendations for policy-makers	Recommendations for users
<ul style="list-style-type: none"><li>■ Utilise full functionality of payroll system within the public healthcare sector.</li><li>■ Develop mechanism to monitor and control professional registration with enforceable consequences for practising without registration</li></ul>	<ul style="list-style-type: none"><li>■ Utilize full functionality of payroll system</li></ul>

## 4.3. Education Data Related to HRH

Across the ECC residents have two public choices for local/regional further education, Community/State Colleges (CC) and the University of the West Indies (UWI). Additionally, residents of some countries also have access to off-shore universities (mostly for medical degrees). Montserrat differs from this model, with few (if any) students attending UWI and choosing to go overseas for tertiary education. Unfortunately very little data were made available from the community college that is responsible for training nurse and nursing assistants.

Table 4.2: Recommendations for policy-makers and users

Recommendations for policy-makers	Recommendations for users
<ul style="list-style-type: none"> <li>■ Ensure regular communication regarding number of applications, graduates etc with those institutions taking bonded students.</li> </ul>	<ul style="list-style-type: none"> <li>■ Ensure regular communication regarding number of applications, graduates etc with those institutions taking bonded students.</li> <li>■ Identify and meet cross-institutional person responsible for admissions/bond approval.</li> <li>■ Establish methods/processes for future data collection.</li> </ul>



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# APPENDIX ONE

## CORE DATA SET FOR MONTSERRAT

### DATA MANAGEMENT PROJECT

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Developed through discussions with four research teams (Barbados/Eastern Caribbean, Belize, Jamaica, and Trinidad & Tobago) in Barbados, November 2007.

#### **1. Stocks and Flows**

##### **1A. Number of workers in health activities**

Numbers of workers reported in each professional group (check and footnote differences with ISCO 88 —see below— if necessary) and are to be reported in the following categories:

1. Total head count
2. Total head count in active practice
3. Total hours worked
4. A definition of full time equivalent for the profession in the country (if exists)

Numbers in the above three areas must be also shown for:

- Combined totals
- Gender specific totals
- Age specific groupings (it is recommended to report age groupings by decade: 20-29 years; 30-39 years; etc. This grouping will match most census reports).

##### **1B. Distribution of workers in health activities**

- Distribution according to geographical units (i.e., regional health authorities, parishes, etc.).
- Distribution by population size (i.e., numbers per 10.000 pop.).

- Distribution by urban vs. rural areas (group recognized that there is a common understanding of the terms “urban” and “rural” but that specific definitions vary—please footnote general description).
- Distribution working in hospitals vs. non-hospital settings (clinics, etc.) (footnote or specify those that work in both when possible).
- Distribution working in public practice vs. private practice vs. NGO's (footnote or specify those that work in both when possible, or quote studies showing evidence of double or multiple employment with estimates of relative weight of this condition).
- Distribution by geographically distinct minority populations (this should be gathered through secondary data sources).
  - In this study, minority populations are defined by ethnicity, language and religious groups that are in smaller numbers than the majority population group. In addition, and socio-economic status?
  - In this study, minority populations that are included are only those living in distinct geographic areas.
- Distribution by socio-economic level (recommended through proxies, such as human development index).

### **1C. Professional and subsets of workers in health activities:**

The following professionals and subsets should be included in the core data set. Standard definitions of each professional category and subset to be included can be compared to the international guideline of the International Labour Organization (ILO) in the International Standard Classification of Occupations (ISCO 88) and point out those professions that differ from the ILO classification:

[Http://www.ilo.org/public/english/bureau/stat/isco/isco88/major.htm](http://www.ilo.org/public/english/bureau/stat/isco/isco88/major.htm)

Individual country teams may expand this set to suit specific interests of each country.

- Medical doctors - general practitioners and specialists.
- Nurses - registered nurses and other types of nurses (titles and brief qualifying description).
- Dentists and allied professions in the “family” of dentistry.
- Pharmacists and allied professions in the “family” of pharmacy.
- Social workers (optional: to report total number of social workers, and then any significant subset).
- Rehabilitation workers (physical therapists, occupational therapists, etc.).
- Technologists (laboratory, radiation, etc.).

- Public health practitioners (e.g., public health officers, health educators, environmental health officers/workers, etc.).
- Nutritionists
- Mental health *other than* psychiatrists (e.g., psychologists).
- Traditional/alternative health practitioners (e.g., traditional healer, acupuncturist, etc.).
- Other relevant groups.

### **Additional data information to include in Stocks and Flow**

- a. Number of health workers as a percentage of the whole workforce in the country/region.
- b. Number of positions in health services (e.g., hospitals, health centers, etc.).
- c. Number of positions that are unfilled or vacant (for 90 days or more), and the percentage of total positions that this number represents (vacancy rate). If other definition or measure is used, please explain.
- d. Projected public budgets (salaries and benefits) for health and projected budget for HRH over the next five years.
- e. Approved loans or donors' projects involving scaling-up health facilities that will require staffing in the next 5 years.

## **2. Regulatory Framework and Management Practices (Descriptive)**

- a. Main regulatory tools concerning university training programs, accreditation, approval, and financing.
- b. Main regulatory tools concerning health employment: Public sector regulations, private sector, NGO's specifically: selection systems, performance management, career paths, incentives and evaluation.
- c. Main regulatory tools regarding licensing of professional practice (through professional boards, periodic register).
- d. Regulatory and licensing requirements for foreign workers.
- e. Main regulatory framework regarding unionization and collective actions.
- f. Contracting models. (Is the permanent tenure in the public service the norm? Is the flexible, short term contract the norm?)
- g. Selection process. (Is there any selection process established? Or is the discretionary appointment the norm?)

- h. Salary and payment scales and relative values. (Are there important differences between the medical and non-medical workers? The wage scale in the health sector is competitive with employment in other sectors?)
- i. Performance measurement: Is there any formal process of evaluation?
- j. CSME regulatory and accreditation requirements for free circulation and contracting of personnel.
- k. As per suggested in the workshop, if there are data on migration that can be quoted, please do it here.

### **3. Education System (Descriptive)**

The assessment of the Education component of the HRH field calls for review not only of professional training, such as Medical or Nursing schools, but also of the multiple continuing education, in-service, and life-long training activities.

- a. How many schools and programs to train health professionals are in the country?
- b. How many are accredited?
- c. Within the schools and programs, how many degree levels are offered/required?
- d. How many universities are public/private/off-shore?
- e. How many seats are in each school and in each program? (Per year, and, if possible, for each year over the last five years).
- f. How many persons enter each school and program each year? (Per year, and, if possible, for each year over the last five years)
- g. How many graduates in each school and program? (Per year, and, if possible, for each year over the last five years. Also proportion of graduates from identified minority populations).
- h. Number of years of training needed for each profession.
- i. Requirements for applying for entry to each profession.
- j. Number of candidates who apply to the programs, and how many are accepted, and what percentage of the applicants are actually accepted into the programs. For those that are denied, is the denial due to requirements, number of positions available, or shortages in professors, etc.?
- k. Tuition cost of education for each profession.
- l. Average age when students graduate from each program.

- m. Gender ratios in each program.
- n. Professional programs that include ethnic/social sensitivity as part of the training.
- o. Are there shortages in faculty members?
- p. Is the curriculum content of the various university or training institutions related to the health situation (such as matching the epidemiological profile needs and/or health priorities) of the country?
- q. Are there socio-cultural training components within the health curricula? If so, what type of training for what type of sensitization?
- r. Description of curriculum renewal (process, frequency, etc.).
- s. Are there processes and lines of communication between curriculum developers/academic leaders to coordinate curriculum design, academic priorities, and research focus with national strategic plans for health and/or health human resources development?
- t. Description of in-service training activities.
- u. Estimates of the total number of hours and persons in in-service training.
- v. Estimates of credits offered and required in each profession for advancement. Which of those credits are also eligible as credits toward advanced degrees?
- w. How many fellowships/bursaries are offered annually in each of the academic program areas?
- x. Professions requiring continuing education/license renewal.

As per suggested by participants, please include any significant program/funding for scholarships.



## APPENDIX TWO

### PROFESSIONAL CATEGORIES

Mapping eleven occupational categories to health professions (traditional healers is not included for Montserrat).

Core Data Set Professional Categories	Examples of Specific Profession Types
Medical Doctors – General Practitioners and Specialists	General Practice Paediatrics Obstetrics & Gynaecology General Surgery
Nurses	Registered Nurses Mental Health Nurses Midwives
Dentistry	Dentists Dental Nurses Dental Assistants
Pharmacy	Pharmacists
Social Work	Not applicable
Rehabilitation Work	Physiotherapists Occupational Therapists
Technologists	Laboratory Technicians Radiographers
Public Health Practitioners	Health Promotion Officer Health Education Officer Public Health Nurses Environmental Health Officers
Nutritionists	Nutritionists Dieticians
Mental Health	Mental Health/Psychiatric Nurse Warden
Other Relevant Groups	Nursing Assistants Care/Health Aids Professional (e.g., accountants + health planning officers) Administrative (e.g., stenotypists and clerical officers) Ancillary (e.g., maids and orderlies)





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