Technical Notes - Global Health Workforce Statistics database

The data presented in the Global Health Workforce Statistics database are compiled from several sources such as national population censuses, labour force and employment surveys, national statistical products, and routine administrative information systems. As a result, considerable variability remains across countries in the coverage, quality and reference year of the original data.

In general, the denominator data for health workforce density (i.e. national population estimates) were obtained from the United Nations Population Division's World population prospects database. In some cases, the official report provided only workforce density indicators, from which estimates of the stock were then calculated.

The data presented here are of two types: aggregated and disaggregated. Both data sets provide information on the stock (absolute numbers) of health workers. The aggregated set also includes data on workforce density (per 1000 population). Data included in the aggregated set tend to be more complete.

The classification of health workers used is based on criteria for vocational education and training, regulation of health professions, and activities and tasks of jobs, i.e. a framework for categorizing key workforce variables according to shared characteristics. The WHO framework largely draws on the latest revisions to the internationally standardized classification systems of the International Labour Organization (International Standard Classification of Occupations), United Nations Educational, Scientific and Cultural Organization (International Standard Classification of Education), and the United Nations Statistics Division (International Standard Industrial Classification of All Economic Activities). Depending on the nature of each country's situation and the means of measurement, data are available for up to 9 categories of health workers in the aggregated set, and up to 18 categories in the disaggregated set. The latter essentially reflects attempts to better distinguish some subgroups of the workforce according to assumed differences in skill level and skill specialization.

Health Workforce: Aggregated Data

In the aggregated data set, the health workforce is classified according to the following 9 broad categories:

**Physicians**
Includes generalist medical practitioners and specialist medical practitioners.

**Nursing and midwifery personnel**
Includes nursing professionals, midwifery professionals, nursing associate professionals and midwifery associate professionals. Traditional midwives are not classified here, but as community/traditional health workers (see below).

**Dentistry personnel**
Includes dentists, dental assistants, dental technicians and related occupations.

**Pharmaceutical personnel**
Includes pharmacists, pharmaceutical assistants, pharmaceutical technicians and related occupations.

**Laboratory health workers**
Includes laboratory scientists, laboratory assistants, laboratory technicians, radiographers and related occupations.

**Environment and public health workers**
Includes environmental and public health officers, environmental and public health technicians, sanitarians, hygienists, district health officers, public health inspectors, food sanitation and safety inspectors and related occupations.

**Community and traditional health workers**
Includes community health officers, community health-education workers, family health workers, traditional and complementary medicine practitioners, traditional midwives and related occupations.

**Other health workers**
Includes a large range of other cadres of health service providers such as medical assistants, dieticians, nutritionists, occupational therapists, medical imaging and therapeutic equipment technicians, optometrists, ophthalmic opticians, physiotherapists, personal care workers, speech pathologists and medical trainees.

**Health management and support workers**
Includes other categories of health systems personnel, such as managers of health and personal-care services, health economists, health statisticians, health policy lawyers, medical records technicians, health information technicians, ambulance drivers, building maintenance staff, and other general management and support staff.
Health Workforce: Disaggregated Data

In the disaggregated data set, the health workforce is classified according to the following 18 categories:

* For some categories of health workers in the disaggregated set – physicians, environmental and public health workers, and health management and support workers – the data is the same as that captured in the aggregated set.

Physicians*
Includes generalist medical practitioners and specialist medical practitioners.

Nursing personnel
Includes nursing professionals and nursing associate professionals.

Midwifery personnel
Includes midwifery professionals and midwifery associate professionals. 
(Note that for some countries, nurses with midwifery training are counted under nursing personnel.)

Dentists
Includes dentists.

Dental technicians/assistants
Includes dental technicians, dental assistants and related occupations.

Pharmacists
Includes pharmacists.

Pharmaceutical technicians/assistants
Includes pharmaceutical technicians, pharmaceutical assistants and related occupations.

Laboratory scientists
Includes laboratory scientists.

Laboratory technicians/assistants
Includes laboratory assistants, laboratory technicians and related occupations.

Radiographers
Includes radiographers and related occupations.

Environmental and public health workers*
Includes environmental and public health officers, environmental and public health technicians, sanitarians, hygienists, district health officers, public health inspectors, food sanitation and safety inspectors and related occupations.

Community health workers
Includes community health officers, community health-education workers, family health workers and related occupations. Does not include traditional midwives.

Traditional medicine practitioners
Includes traditional and complementary medicine practitioners and associates.

Traditional birth attendants
Includes traditional midwives.

Medical assistants
Includes medical assistants, clinical officers and related occupations.

Personal care workers
Includes institution-based personal care workers, home-based personal care workers, health care assistants and other categories of care attendants in health services.

Other health workers
Includes a large range of other cadres of health service providers such as dieticians, nutritionists, occupational therapists, medical imaging and therapeutic equipment technicians, optometrists, ophthalmic opticians, physiotherapists, speech pathologists and medical trainees.

Health management and support workers*
Includes other categories of health systems personnel, such as managers of health and personal-care services, health economists, health statisticians, health policy lawyers, medical records technicians, health information technicians, ambulance drivers, building maintenance staff, and other general management and support staff.