Goal 3: Ensure healthy lives and promote well-being for all at all ages
Target 3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
Indicator 3.c.1: Health worker density and distribution

Institutional information

Organization(s):
World Health Organization (WHO)

Concepts and definitions

Definition:

Density of physicians: The density of physicians is defined as the number of physicians, including generalists and specialist medical practitioners per 1000 population in the given national and/or subnational area.
Density of nursing and midwifery personnel: The density of nursing and midwifery personnel is defined as the number of nursing and midwifery personnel per 1000 population in the given national and/or subnational area.
Density of dentistry personnel: The density of dentistry personnel is defined as the number of dentists, dental technician/assistants and related occupation personnel per 1000 population in the given national and/or subnational area.
Density of pharmaceutical personnel: The density of pharmaceutical personnel is defined as the number of pharmacists, pharmaceutical, technicians/assistants and related occupation personnel per 1000 population in the given national and/or subnational area.

Comments and limitations:

Data on health workers tend to be more complete for the public sector and may underestimate the active workforce in the private, military, nongovernmental organization and faith-based health sectors. As data is not always published annually for each country, the latest available data has been used. Due to the differences in data sources, considerable variability remains across countries in the coverage, periodicity, quality and completeness of the original data.

Methodology

Computation Method:

Though, traditionally, this indicator has been estimated using 2 measurements: density of physicians, and density of nursing and midwifery personnel. In the context of the SDG agenda, the dataset is expanded to physicians, nursing personnel, midwifery personnel, dentistry personnel and pharmaceutical personnel. The dataset is planned to progressively move to cover all health cadres.

The method of estimation for number of physicians (including generalist and specialist medical practitioners) depending on the nature of the original data source may include practising physicians only or all registered physicians.

The figures for number of nursing and midwifery include nursing personnel and midwifery personnel, whenever available. In many countries, nurses trained with midwifery skills are counted and reported as nurses. This makes the distinction between nursing personnel and midwifery personnel difficult to draw.

The figures for number of dentistry personnel include dentists, dental technicians/assistants and related occupations. Due to variability of data sources, the professional-level and associate-level occupations may not always be distinguishable.

The figures for number of pharmaceutical personnel include pharmacists, pharmaceutical technicians/assistants and related occupations. Due to variability of data sources, the professional-level and associate-level occupations may not always be distinguishable.

In general, the denominator data for workforce density (i.e. national population estimates) are obtained from the United Nations Population Division's World Population Prospects database. In cases where the official health workforce report provide density indicators instead of counts, estimates of the stock were then calculated using the population estimated from the United Nations Population Division's World population prospects database (2015).

Disaggregation:

National level data

Data Sources

The data is compiled from routine administrative information systems (including reports on public expenditure, staffing and payroll as well as professional training, registration and licensure), population censuses, labour force and employment surveys and health facility assessments. Most of the data from administrative sources are derived from published national health sector reviews and/or official country reports to WHO offices.

Following the adoption of the Global strategy on human resources for health: workforce 2030 and resolution (WHA 69.19) to address human resources for health (HRH) challenges at the 69th World Health Assembly, May 2016, Member States are called on to consolidate a core set of human resources for health data with annual reporting to the Global Health Observatory, as well as progressive implementation of national health workforce accounts, to support national policy and planning and the Global Strategy’s monitoring and accountability framework.

Data Availability

NA

Time series

Available data for 2000-2015

Calendar

Data collection: Ongoing process

Data release: First quarter of 2017

Data providers

NA

Data compilers

NA

References

URL:
http://www.who.int/hrh/statistics/hwfstats/en/

References:

- Sixty-ninth World Health Assembly Agenda Item 16.1. Global strategy on human resources for health: workforce 2030 (2016), available from (http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_R19-en.pdf)
- WHO (2014). Global strategy on human resources for health: Workforce 2030 (http://who.int/hrh/resources/pub_globstrathrh-2030/en/)
- "WHO Global Health Workforce Statistics." World Health Organization, n.d. Web. 24 Feb. 2017. (http://www.who.int/hrh/statistics/hwfstats/en/)
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