National Health Workforce Accounts (NHWA): Concepts and Mechanisms for Implementation

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Outline

• Definition and purpose
• Justification
• Indicators and handbook
• Tools and Guidelines
• Governance mechanisms
• Capacity building and technical support
NHWA: Definition

A system by which countries progressively improve the quality, availability and use of health workforce data and evidence through progressive monitoring of a set of indicators to support achievement of Universal Health Coverage, SDGs and other health goals.
Purpose: National, Regional & Global

**General purpose:** to facilitate standardization of a health workforce information system for interoperability, and support tracking HRH policy performance towards universal health coverage.

The NHWA is built up of a set of indicators and data characteristics that can be progressively measured in order:

- to generate reliable HRH information and evidence;
- to enable the planning, implementation and monitoring of workforce policies towards UHC;
- to improve the comparability of the health workforce landscape nationally and globally; and
- to enable research to be performed about future trends regarding health workforce, systems and resilience planning.
Current challenges of the HRH Information systems in many countries

- Fragmented sub-systems not always inter-operable
- Inward looking approach (health alone) in many countries
- Challenges in providing disaggregated data (sub-national levels, private sectors)
- Relevant governance and labour market indicators not documented
- Change of data culture:
  - Production for use, not only for reporting
  - Limited Analysis, dissemination and use
- Lack of standardization of tools, definitions across countries
- Un-coordinated data collection efforts
Strategic approach for implementing the NHWA

- Research
- Innovation
- Capacity building
- Resource mobilization
- Technical support for HRHIS
- Standardization of indicators
- Guidelines and Tools
- Knowledge Management and sharing
Standardization of Indicators
Health Labour Market Framework for UHC

Economy, population and broader societal drivers

Education sector
- Education in health
- Education in other fields

Pool of qualified health workers*
- Employed
- Unemployed
- Out of labour force
- Abroad
- Other sectors

Labour market dynamics

Health care sector**
- Health workforce equipped to deliver quality health service

Policies on production
- on infrastructure and material
- on enrolment
- on selecting students
- on teaching staff

Policies to address inflows and outflows
- to address migration and emigration
- to attract unemployed health workers
- to bring health workers back into the health care sector

Policies to address maldistribution and inefficiencies
- to improve productivity and performance
- to improve skill mix composition
- to retain health workers in underserved areas

Policies to regulate the private sector
- to manage dual practice
- to improve quality of training
- to enhance service delivery

Universal health coverage with safe, effective, person-centred health services
National Health Workforce Accounts Handbook

Use of the Health Labour Market Framework.

Indicators covering 10 modules to obtain comprehensive data on all aspects of health workforce

• A handbook
• An implementation guide
• A web platform for data reporting, monitoring and visualisation
National Health Workforce Accounts: Modular overview

## Active health workforce stock
- Stock:
  - Health worker density
  - Health worker density at subnational level
- Distribution:
  - Health worker distribution by age group
  - Female health workforce
  - Health worker distribution by facility ownership type
  - Health worker distribution by facility type

## Education and training
- Applications:
  - Master list of accredited health workforce education and training institutions
  - Duration of education and training
  - Applications for education and training
- Admissions:
  - Ratio of admissions to available places
  - Ratio of students to qualified educators for education and training
  - Exit / drop out:
    - Exit / drop out rate from education and training programmes

## Education and training regulation and accreditation
- Regulation:
  - Standards for the duration and content of education and training
- Accreditation:
  - Accreditation mechanisms for education and training institutions and their programmes
  - Standards for social accountability
  - Standards for social accountability effectively implemented

## Education finances
- Financing of higher education:
  - Total expenditure on higher education
  - Total expenditure on health workforce education
  - Average tuition fee per student
- Investment:
  - Adequate budgetary resources for investments in transformative education
  - Education expenditure
  - Expenditure per graduate on health workforce education

## Health labour market flows
- Entry into labour market:
  - Graduates starting practice within one year
  - Reemployment rate from domestic efforts
  - Exit rate of foreign health workers
- Exit from labour market:
  - Voluntary exit rate from health labour market
  - Involuntary exit rate from health labour market

## Employment characteristics and working conditions
- Working time:
  - Standard working hours
  - Health workers with a part-time contract
- Labour market characteristics:
  - Health worker status in employment
  - Regulation on dual practice
  - Regulation on compulsory service
- Working conditions:
  - Measures to prevent attacks on health workers
  - Attacks on health-care system

### Abbreviated name
Health worker distribution by age group

**Dimension: Distribution**

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Percentage of active health workers in different age groups</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of active health workers in a specific age group</td>
</tr>
</tbody>
</table>

**Definition**
Percentage of active health workers in the given age groups, by occupation.

**Glossary**
- Active health worker
- Age group
- Occupation

**Data reporting frequency**
Annual

**Potential data sources**
- Health workforce registry or database
- Aggregate data from health facilities (routine administrative records, Health Management Information System, District Health Information System census and/or survey)
- Professional council/chamber/association registers
- Labour force surveys
- Population census data

**Further information and related links**

**Additional references**
Tools and guidance
NHWA data process: country at the center of data collection/validation

Data entry by NHWA focal point* in NHWA online platform

Data from external partners (OECD, ICN, ...)

Data collected by HQ entered in NHWA platform (LFS, census, data mining, ...)

Data triangulation and validation (Countries, RO, HQ)

Validated data

Dissemination and use at all levels: Country, RO, HQ, Partner organisations

* in charge of country reporting and validation of data entered in the platform.
Welcome Teena Kunjumen

NHWA maturity assessment
NHWA maturity assessment enables countries to assess their national information system and its capacity to address the NHWA indicators.

Validate existing baseline data
The validation exercise enables countries to view existing data and undertake necessary action of data correction/update as required.

NHWA data entry
Data entry into the system can be done (i) directly through the system interface or (ii) as batch upload through excel sheets.

Visualise data
Access programmed data infographics or create customised data visualisation with the existing data.

Pivot Table
Enables users to create pivot tables, using available data.

Data Visualizer
Enables users to easily create dynamic data analysis and visualizations through charts and data tables.

GIS
Enables users to visualize data in Geographical location system.

Dashboard
Access pre populated data infographics based on

iDashboard
Access to an interactive dashboard

NHWA Regional profile
Access to the NHWA Regional profile
NHWA web portal (soon to be published)
What is NHWA implementation guide?

- Proposals and recommendations to countries on how to implement NHWA
- For policy makers and programme managers

Some guiding principles:

• Countries are in the driving seat, these resources are there to facilitate and harmonise
• “A la carte”: pick elements in the guide that are relevant to your country, adapt, shake, blend, …, it is your cookbook
• Do not harm: should not have any detrimental effect on current health status and other initiatives improving global health
• Not reinventing the wheel: NHWA is being implemented in most countries using existing resources and working scheme already in place. Limited adaptation on existing system is required.
Implementation of the NHWA

- WHO is developing an **Implementation guide** to help countries run NHWA in a sustainable manner.
- For policy makers and programme managers
Capacity Building and Technical Support for NHWA Implementation for strengthening HRH information systems using the NHWA approach
Network of systems: A system strengthening approach

- LabMIS
- Medical supplies MIS
- HRHIS
- Health Financing
- HIS
- Morbidity and mortality indicators
- Health Determinants and other
- LFS and census data
- Routine admin registries
- HRHIS
- Health Education data
- Finance/Payroll
- Prof councils registries
- Regulation Accreditation data
NHWA a system

**Education** : Production of health workers

**Training** : On-the-job training – quality improvement

**Management** : Planning, Recruitment, deployment, skill-mix

**Finance** : Wages, incentives, sustainable funding

**Governance** : Public/private, non-health actors, roles and resp.

**Information System** : Data, monitoring, evaluation, research

**Planning** : Integrated and supportive long-term plans

**Partnerships** : Coordinated, collaborative, sustainable plans

**Leadership** : Vision, political, technical & admin support
DEPARTMENT OF HEALTH

- Integrated Database
  - KMITS
    - iClinicSys
  - EB
    - FHSIS
- HHRDB
- NDHRHIS
  - HFSRB
    - LTO
  - AS – PAD
    - Staffing Pattern

DOH - RO

Primary Healthcare
- BHS
- RHU

Hospital and Others
- LGU
- Private
- DOH

Issues
- DOH has no mandate to collect HRH data
- Lack of governance structure
- Lack of policy to share/collection data

Legend:
- consolidated reports (non-electronic data)
- electronic data (iClinicSys or eFHSIS)
- electronic data through HRH Information Systems

Fig: Current HRH Data Flow in the Philippines
Policy priorities identified
NHWA roadmap drafted

Governance structure designed with TORs
Stakeholders identified and engaged
NHWA meetings conducted

NHWA indicators identified and prioritized
Data sources mapped and gaps identified
Monitoring and evaluation standards developed

Data dictionary updated
Data sharing standards defined
Data sharing agreements updated
Data collection tools developed

Minimum data set for HWR defined
Data quality improved and information systems strengthened

Data submitted by stakeholders to the NHWA focal point
Data quality checked and consolidated

Data analysis and validation

Use of NHWA data for HRH Country Profile
Use of NHWA data for HRH planning
Use of NHWA data for HRH policies
 Continuous identification of policy directions

Implementation for successes and challenges reviewed

Governance and institutionalization reviewed

Standards, guidelines and SOPs updated
DISSEMINATION AND USE

&

Networking and Partnerships
Uses of NHWA for decision making

• Support evidence based decision making by providing quality and timely evidence for:
  – Answering policy questions
  – Informing development of national and sub-national health plans, investment cases and strategies
  – Informing advocacy and resource mobilization efforts
  – Standardizing tools and methodologies across various stakeholders
DISSEMINATION

• THE Global Health Observatory
• SDG and WB reporting
• HRH investment cases
• Planned strategic dissemination
  – The GPW13 impact Framework
  – The State of the World Nursing Report 2020

But primarily for country use (tables, graphs, maps, profiles, dashboards)
Increase in availability of data
Comparison through GHO releases

<table>
<thead>
<tr>
<th>Occupation</th>
<th>GHO2013</th>
<th>GHO2014</th>
<th>GHO2016</th>
<th>GHO2017</th>
<th>GHO2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical doctors</td>
<td>972</td>
<td>1210</td>
<td>1387</td>
<td>1502</td>
<td>1715</td>
</tr>
<tr>
<td>Nursing and midwifery personnel</td>
<td>837</td>
<td>1110</td>
<td>1077</td>
<td>1383</td>
<td>1608</td>
</tr>
<tr>
<td>Dentists</td>
<td>773</td>
<td>1019</td>
<td>1195</td>
<td>1274</td>
<td>1448</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>691</td>
<td>870</td>
<td>1031</td>
<td>1123</td>
<td>1263</td>
</tr>
</tbody>
</table>

!! Availability of occupations other than the top 5 have increased
!! More disaggregation also available
The Health Data Collaborative (HDC) Network
National Health Workforce Accounts: Scope

• Beyond a list of indicators
  • Inclusive multi-sectoral governance
  • Diversification of data sources
  • System’s strengthening approach
  • Key principle: Countries needs and interest first
  • Partnership for HRH data, country support and capacity building
• Analytical work and key tools and products for country use
• Data use for decision making, raising awareness on HRH and resource mobilization
• Common open-source data platform
NHWA: From past/current to Future

From a fragmented system that creates redundancies and inefficiencies

NHWA: A system will consolidate information and provide a foundation for unifying efforts

Data flows
Stakeholders
Indicators
Coordination mechanisms
Occupation categories

Data sources

Tools

Data sources
Stakeholders
Indicators
Coordination mechanisms
Occupation categories

Joint data dissemination mechanisms

Coordinated Health Information Exchange
Shared Network applications
Common Data repository

Data flows
THANK YOU VERY MUCH

Contact us at hrhstatistics@who.int