NHWA training - Where are we?

- Introduction and context of NHWA
- Assessing HIS and HRH data
- NHWA indicators and sources of HRH data
- NHWA implementation
- Data management and reporting: the NHWA platform
- Use of NHWA on Labour Market analysis, HRH planning and answering policy questions
- Recap of key messages

Case study: HRH assessment & roadmap development

Country examples

NHWA platform – Hands on
Why the need for a platform?

NHWA data platform enables users to record, analyse and visualize information and evidence on health workforce.

The data platform is developed bearing in mind a country perspective

- To have a national level system to systematically record time trend data in a structured manner
- To provide a common place for multi-stakeholder data exchange without disrupting existing stakeholder databases.
- Where all national level stakeholders can view data and visualise data graphics of the recorded national level
NHWA data platform for countries
Overview of the platform architecture

- NHWA data platform is developed on a DHIS2 instance, hosted in WHO.
- Following all the WHO security clearance and data sharing policies.
- The server is co-shared with other departments.
- 4 instances – dev, training preprod, prod
- All exercises we do will be on the dev server
What can you do in the platform?

- NHWA Maturity Assessment
- DATA ENTRY
- EXCEL IMPORTER
- PIVOT TABLES
- DATA VISUALIZER
- DASHBOARD
WHO DOES WHAT?
ROLES AND DATA MANAGEMENT
Knowledge management

Data sharing

HWF monitoring

Policy decisions

Country level DV, DC, DM

Regional level DV, DC, DM

Global level DV, DC, DM

Strategy plans, reports and national databases

Regional reports and databases Regional benchmarks

GHO database UNSDG database NHWA data portal Global benchmarks
Access to the NHWA data platform is possible through individual password protected user accounts.

Each account is assigned a role and geographic location (country/region).

Multiple users from the same country can access the system.

Main 2 categories of users –

- Those who are responsible to enter and maintain the numbers
- Those who have access to view charts/graphics and download data
Who can? What they can?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Data viewer</th>
<th>Data clerk</th>
<th>Data manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>View data entered in the platform in pivot tables</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create charts and dashboards using the data visualization tools</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Enter new data in the platform</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Edit entered/existing data in the platform</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Approve entered data in the platform</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

For this week, we will all be using Data Manager profiles
Data management responsibilities

Data clerk

• Enter and maintain data in the system in a periodic fashion
• Conduct basic data checks on data collection and data entry
• Complete/submit the data
• Maintain audit trail and comments
• Create and update the relevant visualizations based on the team requests

Data Manager

• In addition to all of the above.
• Responsible to validate and approve the data submitted
Data as a global public good

Data as a public good

• Increased collaboration with various stakeholders at national level
• Data used for monitoring trends, analysis and development of national policies

Selected indicators will then be published

• Global Health Observatory, World Health Statistics report, NHWA web portal hosted by WHO
• UN SDG database hosted by the United Nations Statistics Division, United Nations Department of Economic and Social Affairs

Multi-stakeholders engagement and data sharing and data visualisation
Knowledge management
Data sharing
HWF monitoring
Policy decisions

Country level
DV, DC, DM

Regional level
DV, DC, DM

Global level
DV, DC, DM

Strategy plans, reports and national databases
Regional reports and databases
Regional benchmarks
GHO database
UNSDG database
NHWA data portal
Global benchmarks
INTRODUCTION TO THE NHWA DATA PLATFORM
Login page

http://who-dev.essi.upc.edu:8081
Access to functions/apps

Functions are referred to as ‘Apps’ in the system
Available from the Landing page, also from any other page
What can you do in the platform?

- NHWA Maturity Assessment
- Data Entry
- Excel Importer
- Pivot Tables
- Data Visualizer
- Dashboard
### NATIONAL HEALTH WORKFORCE ACCOUNTS ONLINE DATA PLATFORM

**Welcome**

**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.

- [Data entry through the system interface](#)
- [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 existing data.

- [NMHA reports](#)
  
  Access to the NHWA reports.

- [Access to an interactive dashboard](#)
NHWA maturity assessment

The NHWA maturity assessment feature enables countries to assess the capacity of their information system to generate NHWA indicators.

- A separate dataset to the Modules, to function as a baseline at the start of the NHWA implementation at country level.

- List of Yes/No questions against each of the NHWA indicators.

- Providing the possibility to record comments to indicate special cases, exceptions etc.
What would your country dashboard look like?

- NHWA dashboard presents the assessment results for easy interpretation and becomes a valuable resource for stakeholders dialogue at the national level.

- Green indicates that country has the country ‘has data on’ a particular indicators, while Red indicating that ‘country does not have data’ on a particular indicators.
NHWA maturity assessment tutorial

https://vimeo.com/265561781/f446326134
# Data validation & reporting

## NATIONAL HEALTH WORKFORCE ACCOUNTS ONLINE DATA PLATFORM

### Welcome

- User Guide
- Logout

### 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.

- Data entry through the system interface
- 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 existing data

- **Access to interactive dashboard**

- **Access to NHWA reports**
### Data validation & reporting

<table>
<thead>
<tr>
<th>Period (Date)</th>
<th>Medical Doctors stock Total</th>
<th>General Medical Practitioners stock Total</th>
<th>Specialist Medical Practitioners stock Total</th>
<th>General Practitioners stock Total</th>
<th>Obstetricians stock Total</th>
<th>Psychiatrists stock Total</th>
<th>GPs stock Total</th>
<th>ODPs stock Total</th>
<th>Nursing stock Total</th>
<th>Midwifery stock Total</th>
<th>Medical Assistants and Technicians stock Total</th>
<th>Pharmacists stock Total</th>
<th>Paramedical stock Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>11 607 873</td>
<td>164 541</td>
<td>1 920</td>
<td>261 391</td>
<td>260 632</td>
<td>169 569</td>
<td>1 048 017</td>
<td>203 590</td>
<td>13 054 619</td>
<td>390 075</td>
<td>873 845</td>
<td>5 899</td>
<td>4 052</td>
</tr>
<tr>
<td>2012</td>
<td>10 219 555</td>
<td>80 241</td>
<td>301</td>
<td>269 650</td>
<td>290 665</td>
<td>162 167</td>
<td>1 044 642</td>
<td>205 740</td>
<td>11 706 702</td>
<td>500 898</td>
<td>769 827</td>
<td>15 544</td>
<td>7 728</td>
</tr>
<tr>
<td>2010</td>
<td>7 864 733</td>
<td>150 011</td>
<td>198 744</td>
<td>147 658</td>
<td>952 659</td>
<td>335 510</td>
<td>1 047 684</td>
<td>488 108</td>
<td>11 706 702</td>
<td>500 898</td>
<td>769 827</td>
<td>15 544</td>
<td>7 728</td>
</tr>
<tr>
<td>2013</td>
<td>6 765 645</td>
<td>117 187</td>
<td>312</td>
<td>247 582</td>
<td>190 632</td>
<td>159 333</td>
<td>1 046 578</td>
<td>344 726</td>
<td>11 166 655</td>
<td>587 666</td>
<td>824 368</td>
<td>6 603</td>
<td>5 667</td>
</tr>
<tr>
<td>2011</td>
<td>7 828 036</td>
<td>229 168</td>
<td>171 265</td>
<td>131 035</td>
<td>929 314</td>
<td>219 699</td>
<td>11 626 161</td>
<td>368 763</td>
<td>13 054 619</td>
<td>390 075</td>
<td>873 845</td>
<td>5 899</td>
<td>4 052</td>
</tr>
<tr>
<td>2015</td>
<td>8 219 645</td>
<td>100 186</td>
<td>50 245</td>
<td>115 567</td>
<td>136 638</td>
<td>103 140</td>
<td>621 147</td>
<td>54 195</td>
<td>11 218 473</td>
<td>406 239</td>
<td>425 089</td>
<td>7 811</td>
<td>2 685</td>
</tr>
<tr>
<td>2016</td>
<td>2 003 051</td>
<td>0 070</td>
<td>3 019</td>
<td>49 823</td>
<td>41 124</td>
<td>34 400</td>
<td>236 632</td>
<td>15 018</td>
<td>4 919 011</td>
<td>132 191</td>
<td>392 855</td>
<td>5 524</td>
<td>1 002 095</td>
</tr>
<tr>
<td>2017</td>
<td>1 1 1 1 1 1 1 1 1 1 1 1 1</td>
<td>9 828 117</td>
<td>320 049</td>
<td>70 072</td>
<td>27 585</td>
<td>2 287</td>
<td>1 075 590</td>
<td>80 792</td>
<td>19 057</td>
<td>99 308</td>
<td>63 907</td>
<td>431 196</td>
<td>36 977</td>
</tr>
<tr>
<td>2008</td>
<td>2 619 095</td>
<td>79 997</td>
<td>8 928 117</td>
<td>320 049</td>
<td>70 072</td>
<td>27 585</td>
<td>1 075 590</td>
<td>80 792</td>
<td>19 057</td>
<td>99 308</td>
<td>63 907</td>
<td>431 196</td>
<td>36 977</td>
</tr>
<tr>
<td>2009</td>
<td>1 782 265</td>
<td>3 816 284</td>
<td>116 500</td>
<td>431 796</td>
<td>39 174</td>
<td>367</td>
<td>204 556</td>
<td>5 256</td>
<td>3 585</td>
<td>3 585</td>
<td>3 585</td>
<td>3 585</td>
<td>3 585</td>
</tr>
<tr>
<td>2011</td>
<td>4 158 250</td>
<td>8 373 483</td>
<td>164 547</td>
<td>637 265</td>
<td>338 711</td>
<td>55 188</td>
<td>1 043 385</td>
<td>11 557</td>
<td>558 037</td>
<td>558 037</td>
<td>558 037</td>
<td>558 037</td>
<td>558 037</td>
</tr>
<tr>
<td>2013</td>
<td>3 124 499</td>
<td>4 078 707</td>
<td>223 960</td>
<td>307 373</td>
<td>1 638</td>
<td>4 634</td>
<td>742 767</td>
<td>131 291</td>
<td>22 806</td>
<td>22 806</td>
<td>22 806</td>
<td>22 806</td>
<td>22 806</td>
</tr>
<tr>
<td>2014</td>
<td>3 252 955</td>
<td>6 091 617</td>
<td>698 264</td>
<td>617 746</td>
<td>46 967</td>
<td>20 146</td>
<td>921 814</td>
<td>19 120</td>
<td>63 907</td>
<td>63 907</td>
<td>63 907</td>
<td>63 907</td>
<td>63 907</td>
</tr>
<tr>
<td>2015</td>
<td>2 308 205</td>
<td>6 102 377</td>
<td>700 602</td>
<td>502 870</td>
<td>190 303</td>
<td>17 454</td>
<td>977 454</td>
<td>11 113</td>
<td>28 730</td>
<td>28 730</td>
<td>28 730</td>
<td>28 730</td>
<td>28 730</td>
</tr>
<tr>
<td>2016</td>
<td>2 357 333</td>
<td>5 745 600</td>
<td>261 233</td>
<td>601 721</td>
<td>22 437</td>
<td>152</td>
<td>1 034 355</td>
<td>11 542</td>
<td>17 256</td>
<td>17 256</td>
<td>17 256</td>
<td>17 256</td>
<td>17 256</td>
</tr>
<tr>
<td>2017</td>
<td>2 858 075</td>
<td>6 982 629</td>
<td>242 220</td>
<td>540 781</td>
<td>4 941</td>
<td>2 117</td>
<td>772 665</td>
<td>16 402</td>
<td>18 402</td>
<td>18 402</td>
<td>18 402</td>
<td>18 402</td>
<td>18 402</td>
</tr>
<tr>
<td>2018</td>
<td>4 831 274</td>
<td>8 624 820</td>
<td>247 832</td>
<td>598 677</td>
<td>5 189</td>
<td>9 387</td>
<td>1 303 988</td>
<td>20 200</td>
<td>20 200</td>
<td>20 200</td>
<td>20 200</td>
<td>20 200</td>
<td>20 200</td>
</tr>
</tbody>
</table>
Data entry

NATIONAL HEALTH WORKFORCE ACCOUNTS ONLINE DATA PLATFORM

Welcome

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

Data entry through the system interface  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.

NMWA reports

Access to the NHWA reports

Dashboard

Access pre populated data infographics based on existing data

Dashboard

Access to an interactive dashboard
Data entry

- Data entry through the system interface
- Data entry through excel sheets
Data entry forms

Applicable to Data Clerks and Data Managers

To enter data, choose your Data Set and year

NHWA modules are categorized into Datasets in the platform

- Within each data set, indicators are categorized into tabs as according to the NHWA Handbook dimensions
Data entry through the system interface
NHWA Modules

**Education**
- Module 2: Education and training
- Module 3: Education and training regulation and accreditation
- Module 4: Education finances

**Labour Force**
- Module 1: Active health workforce stock
- Module 5: Health labour market flows
- Module 6: Employment characteristics and working conditions
- Module 7: Health workforce spending and remuneration

**Serving Population Health Needs**
- Module 8: Skill-mix composition for models of care
- Module 9: Governance and health workforce policies
- Module 10: Health workforce information systems
## NHWA Indicators

### 1. 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
- **Migration**
  - Share of foreign-born health workers
  - Share of foreign-trained health workers
  - Distribution
    - Share of workers across health and social sectors

### 2. 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 rate from education and training programmes
- **Graduation**
  - Graduation rate from education and training programmes

### 3. 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

### 4. 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
  - Cost per graduates of medical specialist education programmes
  - Cost of qualified educators per graduate
  - Lifelong learning
    - In-service training
    - Continuing professional development

### 5. Health labour market flows
- **Entry into labour market**
  - Graduates starting practice within one year
  - Replenishment rate from domestic efforts
  - Entry rate of foreign health workers
- **Exit from labour market**
  - Voluntary rate from health workforce
  - Involuntary exit rates from health workforce
- **Labour market imbalances**
  - Unemployment rate
  - Vacancy rate

### 6. Employment characteristics and working conditions
- **Working time**
  - Standard working hours
  - Health workers with a part-time contract
- **Decent work**
  - Regulation on working hours and conditions
  - Regulation on minimum wage
  - Regulation on social protection
- **Labour market characteristics**
  - Health worker status in employment
  - Regulation on dual practice
  - Regulation on compulsory service

### 7. Health workforce spending and remuneration
- **Health workforce expenditure**
  - Total expenditure on health workforce
  - Total official development assistance on health workforce
- **Health workforce remuneration**
  - Total expenditure on compensation of health workers
  - Public expenditure on compensation of health workers

### 8. Skill-mix composition for models of care
- **Sectoral workforce composition**
  - Percentage of health workforce working in hospitals
  - Percentage of health workforce working in residential long-term care facilities
  - Percentage of health workforce working in ambulatory health care (primary health care level facilities)
- **Skill distribution**
  - Specialist surgical workforce
  - Family medicine practitioners
  - Existence of advanced nursing roles
- **International Health Regulation capacity**
  - Availability of human resources to implement the International Health Regulations
  - Applied epidemiology training programme

### 9. Governance and health workforce policies
- **Governance**
  - Mechanisms to coordinate an intersectoral health workforce agenda
  - Central health workforce unit
- **Health workforce policies**
  - Health workforce planning processes
  - Education plans aligned with national health plan
  - Institutional models for assessing health care staffing needs

### 10. Health workforce information systems
- **HRHIS for international reporting**
  - HRHIS for reporting on FRH
  - HRHIS for WHO Code of Practice reporting
  - HRHIS for reporting on skill attendance at birth requirements
- **HRHIS to track HWF**
  - HRHIS for tracking the number of exits from the labour market
  - HRHIS for tracking the number of active stock on the labour market
  - HRHIS for tracking the number of health facilities
### Data entry through the system interface

**SECTION 1: HWF WORKING DETAILS**

<table>
<thead>
<tr>
<th>SN</th>
<th>Occupation</th>
<th>Total</th>
<th>Activity Level</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medical Doctors</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>General Medical Practitioners</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Specialist Medical Practitioners</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.1</td>
<td>General paediatricists</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.2</td>
<td>Obstetricians and Gynaecologists</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.3</td>
<td>Psychiatrists Practitioners</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.4</td>
<td>Medical group of Specialists Practitioners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.5</td>
<td>Surgical group of Specialists Practitioners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.6</td>
<td>Other Specialists Practitioners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nursing Personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Nursing Professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Nursing Associate Professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Midwifery personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Midwifery Professionals</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data entry through the system interface

<table>
<thead>
<tr>
<th></th>
<th>Engineering and maintenance staff</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td></td>
<td>99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Other non-medical professional staff</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td></td>
<td>99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Other non-medical support staff</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td></td>
<td>99</td>
</tr>
</tbody>
</table>

If you have data on occupations and their source title, that are not listed above, please add them here.

Complete
Incomplete
Run validation
Comments and audit trail
Excel data importer

Alternative way to enter data

Help Tips:
- Single or Multiple .xlsx data files can be uploaded using upload button.
- Template .xlsx file can be generated using download button; this is useful to compare the datasheet format with actual template.
- Make sure that the template and datasheet mapping is in sync, if find any discrepancies please contact admin.
Applicable to Data Managers only

- In addition to the data entry functions, Data Approver data
Keywords to know

Organisation unit

Periods

Indicators

Datasets

NHWA maturity assessment
Experiences from countries in the South East Asia Region

Background paper on:
Second review of progress on the Decade of Strengthening Human Resources for Health in the South-East Asia Region 2015–2024

Why this meeting and why now?

The South-East Asia Region has a number of well-known health workforce challenges. These include shortages, unequal distribution; out-migration; adapting health workers’ education to fit rapidly changing health needs and health worker performance. These challenges matter, because health services cannot be delivered without health workers. The graph below shows the level of essential health services coverage in the South-East Asia Region, using latest data.

Box 1 Overview of essential health services coverage in SEAR.

<table>
<thead>
<tr>
<th>Country</th>
<th>UHC services coverage index (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>77</td>
</tr>
<tr>
<td>DPRK</td>
<td>76</td>
</tr>
<tr>
<td>Bhutan</td>
<td>66</td>
</tr>
<tr>
<td>Nepal</td>
<td>64</td>
</tr>
<tr>
<td>Maldives</td>
<td>64</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>64</td>
</tr>
<tr>
<td>India</td>
<td>57</td>
</tr>
<tr>
<td>Indonesia</td>
<td>56</td>
</tr>
<tr>
<td>Myanmar</td>
<td>51</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>50</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>46</td>
</tr>
</tbody>
</table>

Source: Based on the UHC services coverage index estimates, WHO 2017
14 agreed indicators to monitor progress on the Decade of HRH in SEAR

<table>
<thead>
<tr>
<th>Health Workforce indicator</th>
<th>NHWA*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health worker density and distribution</strong></td>
<td></td>
</tr>
<tr>
<td>1 Health worker density</td>
<td>1-01</td>
</tr>
<tr>
<td>2 Health worker density at subnational level</td>
<td>1-02</td>
</tr>
<tr>
<td>3 Health worker distribution by age group</td>
<td>1-03</td>
</tr>
<tr>
<td>4 Female health workforce</td>
<td>1-04</td>
</tr>
<tr>
<td><strong>Health professional education</strong></td>
<td></td>
</tr>
<tr>
<td>5 Graduation rate from education and training programmes</td>
<td>2-07</td>
</tr>
<tr>
<td>6 Accreditation mechanisms for education and training institutions and their programmes</td>
<td>3-02</td>
</tr>
<tr>
<td>7 Continuing professional development</td>
<td>3-08</td>
</tr>
<tr>
<td><strong>Retention of health workers</strong></td>
<td></td>
</tr>
<tr>
<td>8 Vacancy rate</td>
<td>5-07</td>
</tr>
<tr>
<td>9 Share of foreign-born health workers</td>
<td>1-07</td>
</tr>
<tr>
<td>10 Share of foreign-trained health workers</td>
<td>1-08</td>
</tr>
<tr>
<td><strong>HRH Governance</strong></td>
<td></td>
</tr>
<tr>
<td>11 Mechanisms to coordinate and intersectoral health workforce agenda</td>
<td>9-01</td>
</tr>
<tr>
<td>12 Central health workforce unit</td>
<td>9-02</td>
</tr>
<tr>
<td>13 Health workforce planning processes</td>
<td>9-03</td>
</tr>
<tr>
<td><strong>HRH information systems</strong></td>
<td></td>
</tr>
<tr>
<td>14 HRHIS for reporting on outputs from education and training institutions</td>
<td>10-04</td>
</tr>
<tr>
<td>HRHIS for tracking the number of entrants to the labour market</td>
<td>10-05</td>
</tr>
<tr>
<td>HRHIS for tracking the number of active stock on the labour market</td>
<td>10-06</td>
</tr>
<tr>
<td>HRHIS for tracking the number of exits from the labour market</td>
<td>10-07</td>
</tr>
<tr>
<td>HRHIS for producing the geocoded location of health facilities</td>
<td>10-08</td>
</tr>
</tbody>
</table>

* refers to NHWA handbook
## Data availability and sharing improved

### 2018 data so far—much improved, but more to do

<p>| | | | | | | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAN</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
<td>3 MD. DF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BHU</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPRK</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INO</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAL</td>
<td>partial</td>
<td>N/A</td>
<td>N/A</td>
<td>partial</td>
<td></td>
<td></td>
<td>partial</td>
<td>partial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEP</td>
<td>5</td>
<td>4 MW</td>
<td>4 MW</td>
<td>partial</td>
<td></td>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRL</td>
<td>5</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>5</td>
<td></td>
<td></td>
<td>N/A</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THA</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4 MW (related INS)</td>
<td></td>
<td></td>
<td>3 MD. DF</td>
<td>4 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLS</td>
<td>5</td>
<td>5</td>
<td>4 MW</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td>4 MW</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Completed**
- **Not Yet Completed**
- **Not Available**
Health worker distribution by age group

Young health workforce in SEAR (nurses)

TIMOR-LESTE (2017)

THAILAND (2017)

NEPAL (2017)

MALDIVES (2016)

0% 20% 40% 60% 80% 100%

Female health workforce

Nurse distribution by gender

BANGLADESH (2017)

THAILAND (2017)

NEPAL (2017)

BHUTAN (2017)

TIMOR-LESTE (2017)

< 25 yrs
94%
95%
88%

25-34 yrs
6%
5%
12%

35-44 yrs

45-54 yrs

55-64 yrs

> 65 yrs

Male
Female

Source: country data reported to WHO

8- Vacancy rate

BANGLADESH

Medical Doctors

Nurses

Midwives

Dentists

Pharmacists

BHUTAN

Medical Doctors

Nurses

Midwives

Dentists

Pharmacists

THAILAND

Medical Doctors

Nurses

Midwives

Dentists

Pharmacists

TIMOR-LESTE

Medical Doctors

Nurses

Midwives

Dentists

Pharmacists

Source: country data reported to WHO, 2018
Decade for health workforce strengthening in the South-East Asia Region 2015–2024

Second review of progress, 2018
Exercises

Ex 1.1

BASELINE – NHWA Maturity assessment

• Complete and approve the NHWA Maturity assessment for your country

Ex 1.2

Data entry - Tables provided

• Enter the data provided in the exercise sheet, complete and approve

• Login URL: http://who-dev.essi.upc.edu:8081
NHWA data entry tutorial

https://vimeo.com/265561404/0e6d7301ba
User Guide

NHWA User guide

• Guides users to navigate through the system

• Detailed steps for data entry and data visualizations

• Accessible from the NHWA data platform
Thank you

WHO

20, Avenue Appia
1211 Geneva

Switzerland

Teena Kunjumen, Technical Officer, Health Workforce department