DRAFT

Framework for Action for Health Workforce Development

In the Eastern Mediterranean Region

2017-2030

(May 2017)
Contents
Abbreviations .......................................................................................................................... 2
Executive Summary .................................................................................................................. 3
Introduction ............................................................................................................................. 9
Health workforce situation in the EMR .................................................................................. 10
The framework for action ....................................................................................................... 14
Vision ...................................................................................................................................... 14
Goal ....................................................................................................................................... 14
Principles ................................................................................................................................. 14
Policy directions and strategies ............................................................................................. 15
Strategic interventions ........................................................................................................... 16
Policy direction 1: To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance, based on understanding of labour market dynamics ................................................................................................................................. 16
Policy Direction 2: To strengthen health workforce governance and regulation capacities in support of national health policies ........................................................................................................ 20
Policy Direction 3: To mobilize and align investment in health workforce to ensure implementation of strategic plans to meet current and future health workforce needs, quantitatively and qualitatively ......................................................................................................................... 21
Policy Direction 4: To strengthen the health workforce information base for designing, implementing and monitoring health workforce strategic plans ........................................................................................................ 23
Implementation arrangements ............................................................................................... 24
National leadership and commitment .................................................................................... 24
Communication and advocacy ............................................................................................... 24
Involvement of stakeholders ................................................................................................. 24
Other national stakeholders ................................................................................................. 26
Monitoring and evaluation of the framework for action .......................................................... 27
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMR</td>
<td>Eastern Mediterranean Region</td>
</tr>
<tr>
<td>EMRO</td>
<td>Eastern Mediterranean Regional Office</td>
</tr>
<tr>
<td>HRH</td>
<td>Human Resources for Health</td>
</tr>
<tr>
<td>HRIS</td>
<td>Human Resource Information System</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>UHC</td>
<td>Universal Health Coverage</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Executive Summary
The Eastern Mediterranean Region (EMR) is facing major health workforce challenges. The region faces overall shortage of qualified health workers with suboptimal and imbalanced overall production and availability in the Region. Inequitable geographic distribution and skill mix as well as increasing health workers mobility areas daunting challenge. Concerns also abound in relation to quality, relevance and performance of health workers. Number of countries face protracted crisis, concerned with outflow of health workers resulting in, shortages, safety and security of health workers. Reliable and updated health workforce information is a serious gap in the Region to guide policies and plans. Similarly the rising global demand and need for health workers, over the next fifteen years, presents additional challenges to the countries in the region.

A strong message emphasizing the importance of addressing health workforce issues is coming from the global commitments to achieving the 2030 agenda of the Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC). The Sustainable Development Goals (SDGs) call for action across the world to ensure a life with dignity for all, with ambitious targets. The health workforce underpins with a target (3c) to “substantially increase health financing, and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries”. The Global Strategy on Human Resources for Health: Workforce 2030, adopted by the World Health Assembly in May 2016, is a response to this vision and draws the attention to low spending in the health workforce which require increasing investment to build health workforce responding to the 21st century priorities, matching effectively the supply and skills of health workers to the population needs today and in the future. The high level commission on health employment and economic growth made recommendations to address the projected shortfall of 18 million health workers, primarily in low- and lower-middle income countries, by 2030. The Commission highlighted that investing in the health workforce is needed to make progress towards the Sustainable Development Goals, including gains in health, global security and inclusive economic growth

Health workforce issues are strategic in nature requiring systematic solutions. Therefore, only long-term actions, backed up by political commitment and adequate investments, will lead to the improvements required to attain sustainable results in developing the health workforce. Comprehensive strategic planning is fundamental to addressing health workforce challenges towards Universal Health Coverage and the Sustainable Development Goals.

Building on the global strategy on human resources for health as well as the recommendations from the high level commission on health employment and economic growth, in addition to earlier regional commitments (Regional framework for action on reforming medical education and framework for action to strengthen nursing and midwifery (2016-2025), the framework for
action for health workforce development in the Eastern Mediterranean Region has been developed towards institutionalizing strategic planning as an approach in responding to health workforce challenges across Member States and at the Regional level.

The goal of the regional strategic framework is to ensure the availability of a fit to practice, fit for purpose health workforce contributing to strengthening health systems to provide universal access to health care in the Eastern Mediterranean Region.

The framework for action emphasizes that the development and implementation of health workforce strategic plans need to be supported with enabling factors as: mobilizing investment in health workforce, strengthening governance and regulation capacities; improving health workforce information and evidence to ensure access of all people in EMR to adequate, competent, well balanced, motivated, and responsive health workforce.

While, ministries of health across EMR Member States should spearhead the process of strategic health workforce development and implementation, providing oversight, leadership and facilitation, the implementation of health workforce strategies requires collaborative multi-sectoral efforts taking into consideration the context and needs of the country.
Overview of framework for action for health workforce development in the Eastern Mediterranean Region

<table>
<thead>
<tr>
<th>Policy Direction 1: To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance, based on understanding of labour market dynamics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 1.1</strong>: Scale up and sustain the production of health workers with the right competencies</td>
</tr>
<tr>
<td><strong>Strategy 1.2</strong>: Improve recruitment, deployment, retention, motivation and performance of health workers</td>
</tr>
<tr>
<td><strong>Strategy 1.3</strong>: Regulate and manage exits from the health labour market</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policy Direction 2: To strengthen capacities for health workforce governance and regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 2.1</strong>: Strengthen capacity of health workforce structures at all levels</td>
</tr>
<tr>
<td><strong>Strategy 2.2</strong>: Establish and strengthen regulation of health workforce practice and education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policy Direction 3: To mobilize and align investment in health workforce to ensure implementation of strategic plans to meet current and future health workforce needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 3.1</strong>: Identify resources and requirements for health workforce production, recruitment, deployment and decent working conditions</td>
</tr>
<tr>
<td><strong>Strategy 3.2</strong>: Mobilize and secure adequate funding for improving production and employment capacity for health professionals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policy Direction 4: To strengthen health workforce information base for designing, implementing and monitoring health workforce strategic plans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 4.1</strong>: Establish/strengthen health workforce databases, information and evidence</td>
</tr>
<tr>
<td><strong>Strategy 4.2</strong>: Ensure mechanisms to collect, report, analyze and use reliable workforce data such as establishing/strengthening a national health workforce observatory</td>
</tr>
</tbody>
</table>
Overview of main strategic interventions to realize the policy directions and strategies proposed for health workforce development in EMR

<table>
<thead>
<tr>
<th>Policy directions</th>
<th>Strategies</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance, based on understanding of labour market dynamics</td>
<td>1. Scale up and sustain the production of health workers with adequate numbers and the right competencies to respond to health services needs</td>
<td>• Assess the current and future needs of number, type and competencies of health workers, building consensus around long-term projections and scenarios for supply of health workers to fit with future demand of numbers and skill mix</td>
</tr>
</tbody>
</table>
| | | • Assess and plan the alignment of the production capacities for of all categories of health workers with appropriate skill mix in accordance with current and future quantitative and qualitative needs through:  
  o expanding educational capacities and infrastructures;  
  o recruiting and retaining competent and motivated educators/trainers;  
  o introducing innovative teaching and learning strategies/tools. |
<p>| | | • Adopt enrollment criteria and selection procedures to attract, recruit and retain qualified and motivated candidates for health professional education |
| | | • In countries with conflict, explore strategies to overcome the interruptions in education of health professionals |
| | 1.2 Improve recruitment, deployment, retention, motivation and performance of health workers | • Analyze imbalances in the geographical distribution of health workers and their causes, through monitoring health labour market dynamics (in and outflows, choice of practice location etc.) |
| | | • Develop/implement regulatory, financial, professional and personal support measures to mitigate the effects of health workforce imbalances and to optimize the deployment and retention of health workers in areas with unmet service needs |
| | | • Introduce/strengthen continuing professional development, linked to career development and re-licensing, for all categories of health workers |
| | | • Establish effective personnel administration systems with appropriate management information systems and dashboards to support evidence informed decision-making |
| | | • Identify and implement measures to reduce and eventually eliminate absenteeism without recognized and approved causes |
| | | • Ensure that the defined scope of practice exploits the potential contribution of each professional cadre within the full utilization of their competencies, i.e. nursing and midwifery |</p>
<table>
<thead>
<tr>
<th>Policy directions</th>
<th>Strategies</th>
<th>Interventions</th>
</tr>
</thead>
</table>
| 1.3 Regulate and manage exits from the health labour market | • Assure that health workers have access to infrastructures, equipment, supplies and resources that enable them to deliver quality health services  
• Provide working conditions that enhance stability, productivity and satisfaction (fair pay level/remuneration, career progression, workplace safety, supportive supervision, etc.)  
• In countries with emergencies and conflict, develop policies and strategies to address the gap of health workers emerging from outflow/distress of health workers as well as to allow departing health workers to rapidly integrate into labour markets upon their return | |
| 2. To strengthen capacities for health workforce governance and regulation | 2.1 Strengthen capacity of health workforce structures at all levels | • Develop/enforce policies to regulate various types of exits of health workers (retirement, temporary/permanent, planned/unplanned leaves) in public services to ensure sustainable workforce  
• Design and implement measures to optimize retention of health workers in the national health labour market through monitoring and analysis of international mobility of health workers |
|  | 2.2 Establish and strengthen the regulation of health workforce practice and education to ensure quality response to population needs, public protection and patient safety | • Strengthen the capacity of health workforce structures at national and sub-national levels, notably health workforce units or directorates in ministries of health, with adequate responsibility for health workforce policies and plans, authority, accountability, capacity and resources (financial and staffing)  
• Introduce interventions to ensure capacities of all relevant stakeholders (i.e. relevant departments of other ministries, professional councils/associations, academic institutions, etc) to engage effectively in health workforce development and management  
• Establish/strengthen mechanisms for stakeholder coordination, partnership and policy dialogue such as health workforce committees or stakeholder boards for regular policy dialogues  
• Establish/strengthen regulation of health workforce practice through appropriate institutional arrangements, entry to practice competencies and standards, code of ethics, registration, licensing and relicensing mechanisms, and a patient and provider notification system  
• Develop independent accreditation mechanisms to assess, maintain and improve the social relevance and quality of education programs and institutions |
<table>
<thead>
<tr>
<th>Policy directions</th>
<th>Strategies</th>
<th>Interventions</th>
</tr>
</thead>
</table>
| 3. To mobilize and align investment in health workforce to ensure implementation of strategic plans to meet current and future health workforce needs | 3.1 Identify resources and requirements for health workforce production, recruitment, deployment and decent working conditions that are in line with the national health workforce strategic plans | • Estimate cost of HRH plans to identify resources requirements to produce, recruit and retain health workers  
• Establish effective coordination with ministries of finance to improve fiscal space for health workforce  
• Mobilize and secure adequate funding for HRH strategic plans from different local sources, including both public and private, as well as donor support as relevant |
|                                                                                 | 3.2 Mobilize and secure adequate funding for improving the production and employment capacity for and quality of health professionals | • Increase financial resources for improving the capacity and quality of health professional education institutions  
• Invest in creation of jobs to ensure recruitment of trained health workers in accordance with the needs of the population  
• Invest in improving incentives and working conditions of health workers to enhance retention and performance  
• Ensure emergency response funds to mobilize surge capacity and cover the emerging gaps in health workforce |
| 4. To strengthen the health workforce information base for designing, implementing and monitoring health workforce strategic plans | 4.1 Establish / strengthen health workforce databases, information and evidence | • Agree on common sets of health workforce indicators required for planning, decision making and monitoring the implementation of health workforce strategies and interventions  
• Strengthen health workforce databases and information to meet data requirements for health workforce planning and monitoring with efforts through standardization and interoperability of HRH data from different sources  
• Invest in the improvement of the registries of the national regulatory bodies to maintain reliable and updated information  
• Improve the comprehensiveness and accuracy of the health workforce databases in the ministry of health |
|                                                                                 | 4.2 Ensure mechanisms to collect, report, analyze and use reliable workforce data | • Establish/strengthen mechanisms such as health workforce observatories to ensure coordination among stakeholders for interoperability and sharing data  
• Strengthen capacities to operate, maintain and improve health workforce data information, including analytical capacities by involving academic and research institutions  
• Develop capacities for and perform labour market analysis to improve the understanding and monitoring of the labour market dynamics and their implications on health workforce strategies |
Framework for Action for Health Workforce Development

Introduction

Health workers are the most important resources for health systems. The resilience of health systems is heavily reliant on the availability of competent health workers. In order to strengthen health systems to deliver safe, efficient and appropriate services towards Universal Health Coverage (UHC), a health workforce is needed that is sufficient in number, balanced in skill mix and distribution, competent, well performing, adequately motivated and supported. Research has already demonstrated that the population health outcomes suffer, when health workers are deficient\(^1\). The Sustainable Development Goals (SDGs) follow the Millennium Development Goals for the period 2015-2030, with a call to action to people and leaders across the world to ensure a life with dignity for all with ambitious targets. The health workforce underpins the proposed health goal, with a target (3c) to “substantially increase health financing, and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries”.

The Global Strategy on Human Resources for Health: Workforce 2030\(^2\), adopted by the World Health Assembly in May 2016, emphasizes this vision and draws the attention to low spending in the health workforce which require increasing investment to build health workforce responding to the 21\(^{st}\) century priorities, matching effectively the supply and skills of health workers to the population needs today and in the future\(^3\).

The High-Level Commission on Health Employment and Economic Growth, launched by the United Nations Secretary-General highlighted that health sector will continue to create new jobs and a shortfall or 18 million health workers is projected by 2030. Thus, investing in the health workforce is needed to make progress towards the Sustainable Development Goals, including gains in health, global security and inclusive economic growth\(^4\).

The Eastern Mediterranean Region (EMR) faces major health workforce shortcomings. The WHO Eastern Mediterranean Regional Office has clearly identified strengthening the health

---


workforce as pressing priority within the context of strengthening health systems and moving towards Universal Health Coverage. A number of regional resolutions\(^5\) on health workforce development were adopted. The regional framework for action to strengthen nursing and midwifery (2016-2025) has been developed identifying the actions needed to scale up nursing and midwifery workforce\(^6\). The regional framework for action on reforming medical education was adopted by the Regional Committee in 2015\(^7\). Building on the global strategy on human resources for health, it is imperative for the EMR to strive towards institutionalizing strategic planning as an approach in responding to health workforce challenges across Member States and at the Regional level.

**Health workforce situation in the EMR**

The health workforce situation in the EMR mimics global trends, where health workforce shortages and challenges are constraining health systems, making it difficult to achieve the targets set for UHC and SDGs. The region faces overall shortage of qualified health workers with suboptimal and imbalanced overall production and availability in the Region. There is however, huge variation in availability of health workers with very low densities in some countries (Figure 1). The World Health Report 2006 on Human Resources for Health identified seven countries (namely Afghanistan, Djibouti, Morocco, Pakistan, Somalia, Iraq and Yemen) in the EMR as crises countries. Low production capacities and unmanaged migration of health workers is exacerbating the situation in these and other countries\(^8\).

Inequitable geographic distribution and skill mix as well as increasing health workers mobility areas daunting challenge. Concerns also abound in relation to quality, relevance and performance of health workers.

---


\(^6\) [http://apps.who.int/iris/bitstream/10665/250372/1/EMROPUB_2016_EN_18976.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/250372/1/EMROPUB_2016_EN_18976.pdf?ua=1)

\(^7\) [http://applications.emro.who.int/docs/RC62_Resolutions_2015_R4_16579_EN.pdf?ua=1](http://applications.emro.who.int/docs/RC62_Resolutions_2015_R4_16579_EN.pdf?ua=1)

Even though, there has been an increase in the number of health professional education institutions\(^9\), the increase in health workforce densities has not been significant and able to keep the pace with the population growth and attrition of health workers as seen in Figure 2. The steady increase in Group 1 countries (Member States of the Gulf Cooperation Council) is mainly attributed to recruitment of the expatriate health workers.

---

http://applications.emro.who.int/docs/RC_technical_papers_2015_3_16503_EN.pdf?ua=1
Policies and strategies for health workforce development are generally inadequate in the Region. There are only five countries in the EMR (Afghanistan, Iran, Somalia, Sudan and Yemen), that recently developed comprehensive HRH strategic plans. The health workforce governance capacities remain limited in addressing health workforce challenges with undermined status of HRH departments/directorates in the ministries of health, lack of skilled HRH managers and suboptimal multi-sectoral collaboration.

Reliable and updated health workforce information is a serious gap in the Region which requires specific attention. This gap is not only limited to numbers, but the information on financing health workforce and labour market dynamics is also limited.

The unprecedented magnitude and scale of crises, involving almost two thirds of countries in the region, probably represent the single most important challenge with ramifications on the health workforce. Violence and conflicts are directly affecting health workers and pushing them out with consequent service gaps in many places, e.g. polio vaccination in Afghanistan and Pakistan. Those who remain work under risky conditions and shortage of equipment and supplies and health professional education is interrupted. Attacks against health care facilities and workers were reported in eight countries of the Region accounting for 83% of all attacks globally in 2016. In addition, the Region bears the greatest burden of displaced populations globally, with more than 30 million displaced people across the Region. Over the past few years, the Region has seen massive internal displacement in Afghanistan, Iraq, Somalia, Syria and Yemen. Thus, the demand for health services continues to place a large burden on national health systems across the region. The available health workers have to respond and manage the increasing caseloads of people requiring trauma care, treatment for communicable and non-communicable diseases and mental health disorders, maternal and child health care, as well as requirements of populations with special needs.

Table 1 summarizes the health workforce challenges faced by the EMR Member States.

---

Table 1: Major health workforce challenges in the Eastern Mediterranean Region

<table>
<thead>
<tr>
<th>Health workforce challenges in the EMR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Common challenges across all Member States</strong></td>
</tr>
<tr>
<td>HRH governance</td>
</tr>
<tr>
<td>• Lack of comprehensive national health workforce strategies</td>
</tr>
<tr>
<td>• Limited health workforce governance and leadership capacities</td>
</tr>
<tr>
<td>• Suboptimal multi-stakeholder coordination for health workforce</td>
</tr>
<tr>
<td>• Increasing involvement of non-state actors</td>
</tr>
<tr>
<td>• Insufficient regulatory frameworks and capacities</td>
</tr>
<tr>
<td>• Weak human resources for health management systems</td>
</tr>
<tr>
<td>• Paucity of data and information on health workforce</td>
</tr>
<tr>
<td>Health workforce production</td>
</tr>
<tr>
<td>• Inadequate and/or imbalanced production capacity of health workers</td>
</tr>
<tr>
<td>• Concerns around the quality and relevance of health professionals education</td>
</tr>
<tr>
<td>Availability, accessibility and quality</td>
</tr>
<tr>
<td>• Overall health workforce shortages</td>
</tr>
<tr>
<td>• Skill mix and geographical distribution imbalances</td>
</tr>
<tr>
<td>• Quality and performance concerns</td>
</tr>
<tr>
<td>• Dual practice</td>
</tr>
<tr>
<td>• Health workers safety and security</td>
</tr>
<tr>
<td>• Inadequate capacity for emergency response</td>
</tr>
<tr>
<td>Attrition</td>
</tr>
<tr>
<td>• Health workers mobility (i.e. international and public to private)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 1: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Shortage of national health workers</td>
</tr>
<tr>
<td>• High reliance on expatriate staff, challenges of cultural competency and acceptability of expatriate staff</td>
</tr>
<tr>
<td>• Limited health professionals production capacity</td>
</tr>
<tr>
<td>• High turnover of expatriate health workers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2: Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, Tunisia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Limited employment capacities (underemployment and unemployment)</td>
</tr>
<tr>
<td>• Skill mix imbalances</td>
</tr>
<tr>
<td>• Geographic imbalances</td>
</tr>
<tr>
<td>• Low retention in rural and remote areas</td>
</tr>
<tr>
<td>• Health worker performance and motivation concerns</td>
</tr>
<tr>
<td>• Inadequately managed emigration of health workers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 3: Afghanistan, Djibouti, Pakistan, Somalia, Sudan, Yemen</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Critical shortage of health workers</td>
</tr>
<tr>
<td>• Low production capacities</td>
</tr>
<tr>
<td>• Limited employment capacities</td>
</tr>
<tr>
<td>• Geographic imbalances</td>
</tr>
<tr>
<td>• Low retention especially in rural and remote areas</td>
</tr>
<tr>
<td>• Poor performance and low motivation of health workers</td>
</tr>
<tr>
<td>• Unmanaged emigration exacerbating health worker shortages</td>
</tr>
</tbody>
</table>
The framework for action

In responding to the health workforce challenges and priority issues in the EMR, a framework for action for health workforce development is proposed based on an articulated vision for the future. It is expected that the framework for action will guide the country and regional action to strengthen the health workforce in Member States across the Region. This framework for action builds on the Global Strategy on Human Resources for Health: Workforce 2030\(^\text{11}\) and the existing regional frameworks for action as: Framework for action on reforming undergraduate medical education\(^\text{12}\) and framework for action on strengthening nursing and midwifery\(^\text{13}\).

Vision

The vision is to ensure access for all people in the EMR to an adequate, competent, well balanced, motivated, and responsive health workforce functioning within robust health systems geared towards Universal Health Coverage.

Goal

The goal for the framework for action is to ensure the availability of a fit to practice, fit for purpose health workforce contributing to strengthening health systems to provide universal access to health care in the Eastern Mediterranean Region.

Principles

The regional framework for health workforce development is based on the following principles and values:

- equity of access to responsive health services towards UHC and SDGs;
- promoting the alignment with regional priorities and strategies;
- ensuring the health systems linkages and alignment to population needs and requirements of integrated and people-centred health services\(^\text{14}\) that can benefit from multidisciplinary team-based care;
- recognizing the regional diversity and the need to promote a flexible and adaptable system;
- promoting the principles of solidarity, partnership, transparency and accountability;
- adhering to professionalism and professional standards, including ethical conduct;
- ensuring gender-balance, cultural-sensitivity and innovations for health workforce strengthening;
- guaranteeing a respectful working environment, safety and security for health workers;

\(^{11}\) [http://www.who.int/hrh/resources/pub_globstrathrh-2030/en/](http://www.who.int/hrh/resources/pub_globstrathrh-2030/en/)

\(^{12}\) [http://applications.emro.who.int/docs/RC62_Resolutions_2015_R4_16579_EN.pdf?ua=1](http://applications.emro.who.int/docs/RC62_Resolutions_2015_R4_16579_EN.pdf?ua=1)

\(^{13}\) [http://apps.who.int/iris/bitstream/10665/250372/1/EMROPUB_2016_EN_18976.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/250372/1/EMROPUB_2016_EN_18976.pdf?ua=1)

\(^{14}\) Reference is made to framework on integrated, people-centred health services (forthcoming)
Policy directions and strategies

Health workforce issues, by nature require strategic positioning and systematic solutions. Therefore, the framework for action emphasizes the development and implementation of evidence-informed health workforce policies and strategic plans as a pre-requisite and a fundamental step to providing a strategic vision in addressing health workforce challenges in the Region. Health workforce policies and strategic plans need to be in line with the overall health strategy and broader development strategies to strengthen health systems. Such strategies should cover all cadres of health workers, taking into account the labour market dynamics, population needs, economic growth, demographic and epidemiologic changes of a country.

The development and especially implementation of the health workforce policies and strategic plans require enabling factors in place. Capacities for governance and regulation are critical for the implementation. Similarly, adequate investment and resources should be available to make plans reality. Information and evidence are prerequisites for both effective and realistic planning and monitoring the progress in addressing health workforce challenges.

Within this framework for action, four policy directions are defined that are, in line with the Global Strategy on Human Resources for Health: Workforce 2030.

1. To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance, based on understanding of labour market dynamics.
2. To strengthen capacities for health workforce governance and regulation.
3. To mobilize and align investment in health workforce to ensure implementation of strategic plans to meet current and future health workforce needs.
4. To strengthen the health workforce information base for designing, implementing and monitoring health workforce strategic plans.

This framework involves nine main strategies under four policy directions to address priority health workforce challenges in the EMR. Three strategies under policy direction 1 elaborate the issues to be addressed in the comprehensive health workforce strategic plans. Under each strategy, a set of strategic interventions are provided to realize the strategies and enable moving towards the stipulated policy directions (see overview on page 5).
Strategic interventions

Policy direction 1: To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance, based on understanding of labour market dynamics

Strategy 1.1: Scale up and sustain the production of health workers with adequate numbers and the right competencies to respond to health services needs

- Assess the current and future needs of number, types and competencies of health workers, including preparing and building consensus around long-term health workforce projections and scenarios for future supply of health workers to fit with future demand in terms of numbers and skill mix\textsuperscript{15, 16}.
- Assess and plan the alignment of the production capacities for all categories of health workers with appropriate skill mix, in accordance with current and future quantitative and qualitative needs. This should cover:\textsuperscript{17, 18}
  - the needed infrastructure and resources (teaching facilities, libraries, small groups tutorial rooms, and laboratories, clinical training sites, including at primary care and community levels);
  - the recruitment and retention of competent and motivated educators and trainers;
  - the use of innovative teaching and learning strategies and tools towards transforming to a more effective, student-centred, socially accountable education (i.e. problem-based learning, community-based, competency-based curricula, inter-professional education, distance education, harness on information communication technologies);
  - additional skills such as leadership, ethics, communication that enable the graduates to respond to the needs, cultural sensitivities and expectations of the communities and to build trust and professionalism.
- Adopt enrollment criteria and selection procedures to attract, recruit and retain qualified and motivated candidates for health professional education. This may include:
  - implementing quotas for admission of students to ensure representation of different geographic areas or specific underserved communities.\textsuperscript{19}

\textsuperscript{15} Countries may refer to http://www.who.int/hrh/tools/planning/en/
\textsuperscript{18} http://applications.emro.who.int/docs/RC62_Resolutions_2015_R4_16579_EN.pdf?ua=1
\textsuperscript{19} Countries can refer to the WHO Global Recommendations on Increasing Retention of Health Workers in Remote and Rural Areas. Available from: http://www.who.int/hrh/retention/guidelines/en/
o Decentralize education programs as appropriate to promote and facilitate recruitment and retention of health workers from local communities;
o Introduce/improve ways (i.e. working with ministries of education and basic education institutions) and provide incentives to attract and retain a sufficient and balanced pool of qualified applicants to the health professions in general and specifically to the understaffed specialties. Incentives could be a mix of financial (e.g. scholarships, stipends, housing and travel benefits) and non-financial (e.g. mentorship, learning material, academic advising, facilitated access to specialty training) ones.\(^{20}\)

- In countries with conflict, explore strategies to overcome the interruptions in education of health professionals.

**Strategy 1.2: Improve recruitment, deployment, retention, motivation and performance of health workers**

- Analyze the imbalances in the geographical distribution of health workers and their causes, through monitoring health workforce labour market dynamics (in and outflows, choice of practice location etc.).\(^{21}\)

- Develop / implement regulatory, financial, professional and personal support measures to mitigate the effects of health workforce imbalances and to optimize the deployment and retention of health workers in areas with unmet service needs. These may include a mix of measures, such as: \(^{22}\)
  - packages of financial and non-financial incentives (e.g. improved compensation, in-kind benefits such as, access to accommodation, transport);
  - professional and personal support (e.g. improved access to continuing education in understaffed regions, mentoring, career advancement advantages, support to family- spouse’s access to employment, education of children, periodic leaves, safety and security);
  - organizational innovations, such as telemedicine, e-health/m-health and mobile clinics;
  - regulatory changes (e.g. fair and transparent distribution and transfer policies and practices, expansion of scope of practice of certain categories of workers like nurses, creation of new cadres, contracting with private sector and NGOs). If bonding or community service are considered, ensure that these are regarded as legitimate and opportunities to gain experience.

\(^{20}\) Countries can refer to the High-Level Commission on Health Employment and Economic Growth. Available from http://apps.who.int/iris/bitstream/10665/250047/1/9789241511308-eng.pdf?ua=1

\(^{21}\) Countries may conduct discrete choice experiments (DCE) studies to assess future and current staff needs and expectations; a methodological guide is available at: http://www.who.int/hrh/resources/dceguide/en/

\(^{22}\) Countries can refer to the WHO Global Recommendations on Increasing Retention of Health Workers in Remote and Rural Areas. Available from: http://www.who.int/hrh/retention/guidelines/en/
• Where international recruitment takes place, ensure the implementation of the Global Code of Practice on the International Recruitment of Health Personnel\(^\text{23}\), e.g., use of competency-based criteria of selection and equitable working conditions and pay rates. This should be accompanied with appropriate regulatory systems to register, license and relicense the foreign trained health professionals, with an adequate support for their integration into the health systems.

• Introduce/strengthen continuing professional development, linked to career development and re-licensing, for all categories of health workers to motivate them, maintain and improve their skills and capacity.

• Establish effective personnel administration systems with appropriate management information systems and dashboards to support evidence informed decision-making.

• Identify and implement measures to reduce and eventually eliminate absenteeism, without recognized and approved causes.

• Ensure that the defined scope of practice exploits the potential contribution of each professional cadre within the full utilization of their competencies, while avoiding under-utilization of skills. For example, the scope of practice for nursing and midwifery professionals has shown to be adaptable to population and patient health needs, allowing to use their full potential.

• Provide health workers with access to infrastructure, equipment, supplies, resources, information and communication technologies that support the provision of effective and efficient services and that enable them to deliver quality of work.

• Provide working conditions that enhance stability, productivity and satisfaction (fair pay level/remuneration, career progression, workplace safety, supportive supervision, etc.)\(^\text{24}\):

• In countries with emergencies and conflict, develop policies and strategies to address the gap of health workers emerging from outflow/distress of health workers as well as to allow departing health workers to rapidly integrate into labour markets upon their return.

\(^{23}\) The Global Code of Practice [http://www.who.int/hrh/migration/code/code_en.pdf]

\(^{24}\) Use international Labour Organization “Decent work indicators” as they apply to the health sector [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf]
Strategy 1.3: Regulate and manage exits from the health labour market

- Develop/enforce policies to regulate various types of exits of health workers (retirement, temporary permanent, planned/unplanned leaves) in public services to ensure sustainable workforce, through:
  - monitoring exits of health workers through a national HRIS and analyzing trends and their determinants, including exits from public services to the private sector or to non-health sectors;
  - introducing/promoting flexible employment and working conditions through actions including, introducing flexible contracts or work modalities;
  - promoting female-friendly/family friendly work environment and conditions such as adjustable working hours, favorable shifts, female amenities, child care services;
  - reviewing retirement age and providing part-time work modalities to retain or reintegrate retired staff for improving availability of health workers.

- Design and implement measures to optimize the retention of health workers in the national health labour market with monitoring and analysis of international mobility flows of health workers.
  - Monitor out-of-country exits of health workers through a national health workforce information systems and analyze trends and their determinants\(^\text{25}\). This includes, supporting professional organizations in keeping track of their members and conducting research on intentions and reasons to emigrate (temporarily, permanently).
  - Explore the financial costs of losses of health workers to emigration and their impact of the availability and accessibility of services.
  - Design and implement measures to reduce emigration due to dissatisfaction of health workers\(^\text{26, 27}\).
  - Design and implement, in collaboration with professional associations, programs to attract back health workers in diaspora to support health services and health professional education in home country.

\(^{25}\) The Global Code of Practice [http://www.who.int/hrh/migration/code/code_en.pdf](http://www.who.int/hrh/migration/code/code_en.pdf)

\(^{26}\) Such measures should not preclude workers’ rights to free movement.

\(^{27}\) Refer to strategies 5 and 6.
Policy Direction 2: To strengthen capacities for health workforce governance and regulation

Strategy 2.1: Strengthen capacity of health workforce structures at all levels

- Strengthen the capacity of health workforce structures at national and sub-national levels, notably health workforce units or directorates in the ministries of health, through:
  - improving capacity, responsibility, resources and accountability for a standard set of core functions of health workforce policy, planning and governance, data management and reporting and other functions as appropriate;
  - ensuring a lead role in ministries’ hierarchy and mandate on strategic health workforce development, as well as qualified and adequate number of staff;
  - building capacities for emergency preparedness and response for health workforce.

- Introduce interventions to ensure capacities of all relevant stakeholders (i.e. educational institutions, professional councils, professional associations, relevant departments of other ministries, etc.) to engage effectively in health workforce development and management.

- Provide leadership and capacity building activities for health workforce development.

- Ensure training and recruitment of qualified managers. Provide them with career development opportunities such as access to further education and to information on good practices and successful experiences, and fair and transparent system for performance appraisal linking to incentives and promotion performance.

- Give facilities and managers sufficient autonomy to manage the performance and career of their staff from recruitment to career progression.

- Establish/strengthen mechanisms for multi-stakeholder coordination, partnership and policy dialogue for health workforce, such as HRH committees or stakeholder boards. Attention must be given to engage a wide range of entities concerned with health workforce including ministry of health, ministry of higher education, ministry of finance, ministry of civil service and other related ministries, academic institutions, regulatory councils and bodies, professional associations and groups, private sector representatives, employers, development partners and international agencies, etc. Increasing involvement of private sector in both health professional education and practice can be nurtured.

---

28 Countries may make use of the WHO EMRO tool on strengthening national and sub-national HRH departments. Available from: [http://applications.emro.who.int/dsaf/dsa954.pdf](http://applications.emro.who.int/dsaf/dsa954.pdf)
Strategy 2.2: Establish and strengthen the regulation of health workforce practice and education to ensure quality response to population needs, public protection and patient safety

- Establish/strengthen regulation of health workforce practice through appropriate institutional arrangements, entry to practice competencies and standards, code of ethics, registration, licensing and relicensing mechanisms, and a patient and provider notification system.
  - The regulatory systems should take into account transparency and accountability, proportionality, consistency and shared information.
  - Regulatory bodies should play a central role in ensuring that both public and private sector professionals are competent and adhere to agreed standards of practice.

- Develop independent accreditation mechanisms\(^{29}\) to assess, maintain and improve to the social relevance and quality of education programs and institutions.

Policy Direction 3: To mobilize and align investment in health workforce to ensure implementation of strategic plans to meet current and future health workforce needs, quantitatively and qualitatively

Strategy 3.1: Identify resources and requirements for health workforce production, recruitment, deployment and decent working conditions that are in line with the national health workforce strategic plans

- Improve financial resources for increased investment in health workforce through\(^{30}\):
  - estimating cost of HRH plans, to identify resources requirements to produce, recruit and retain health workers;
  - ensuring effective coordination with the ministry of finance and other stakeholders to improve fiscal space for health workforce and in the identification and allocation of resources and the development of plans to secure long term and sustainable funding;
  - establishing cases for investment in health workforce towards achieving UHC and SDGs.

\(^{29}\) Countries can adapt the guidelines and standards developed by the World Federation of Medical Education. Available from: [http://www.wfme.org/standards](http://www.wfme.org/standards)

\(^{30}\) Countries can refer to the High-Level Commission on Health Employment and Economic Growth. Available from [http://apps.who.int/iris/bitstream/10665/250047/1/9789241511308-eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/250047/1/9789241511308-eng.pdf?ua=1)
• Mobilize and secure adequate funding for health workforce strategic plans from different local sources, including both public and private, as well as donor support, as relevant.

Strategy 3.2: Mobilize and secure adequate funding for improving the production and employment capacity for and quality of health professionals

• Increase financial resources for improving the capacity and quality of health professional education institutions.
• Invest in creation of jobs to ensure recruitment of trained health workers in accordance with the needs of the population.
• Invest in improving incentives and working conditions of health workers to enhance retention and performance.
• Ensure emergency response funds to mobilize surge capacity and cover the emerging gaps in health workforce.
Policy Direction 4: To strengthen the health workforce information base for designing, implementing and monitoring health workforce strategic plans

Strategy 4.1: Establish / strengthen health workforce databases, information and evidence

- Agree on common sets of health workforce indicators required for planning, decision making and monitoring the implementation of health workforce strategies and interventions.
- Strengthen health workforce databases and information to meet data requirements for health workforce planning and monitoring with efforts through standardization and interoperability of health workforce data from different sources\(^{31,32}\).
- Invest in the improvement of the registries of the national regulatory bodies, to maintain reliable and updated information on health professionals.
- Improve the comprehensiveness and accuracy of the health workforce databases in the ministry of health.

Strategy 4.2: Ensure mechanisms to collect, report, analyze and use reliable workforce data such as establishing /strengthening a national health workforce observatory

- Recognizing that health workforce data can be obtained from different sources, establish mechanisms such as health workforce observatories\(^{33}\) which can:
  - ensure coordination among stakeholders for interoperability and sharing data;
  - ensure sharing, dissemination and use of health workforce information.
- Strengthen capacities to operate, maintain and improve health workforce data and information, including analytical capacities by involving academic and research institutions.
- Develop capacities for and perform labour market analysis to improve the understanding and monitoring of the labour market and education market dynamics and implications on health workforce strategies. The labour market analysis should include documenting and analyzing in- and outflows, choices of practice location, imbalances in the geographical distribution of health workers and their causes.


Implementation arrangements

The implementation of this framework for action and its translation into country level strategic plans and actions requires concerted efforts by the member states and WHO Regional Office for Eastern Mediterranean. The activities to be implemented in a collaborative manner should be based on the Member States’ context and needs in adopting the proposed framework for action and its broad health workforce strategic directions.

National leadership and commitment

Individual member states’ efforts to formulate and strengthen national health workforce policies and plans along the directions of the regional framework for action are a pivotal step in strengthening the health workforce. Political commitment from higher government levels, backed by technical competency, is fundamental for mobilizing the resources and required partnership for coordinated strategic health workforce planning and implementation. National advocacy is needed to ensure strategic positioning of the health workforce highlighting the critical role of health workers in saving lives and improving population health. The national health workforce strategies should be developed through participatory process, involving all stakeholders, in order to ensure political commitment and ownership by all.

Communication and advocacy

In order to ensure awareness and commitment for action, widely sharing and dissemination of these strategies will be critical. Consistent and coherent key messages should be communicated to its various target audiences to ensure successful implementation health workforce strategies. Effective and proactive ways of communication can position health workforce issues high on the political agendas of countries and the regional community as well as stimulating, shaping and supporting country-based actions. This will also facilitate synergy in implementation among stakeholders.

Involvement of stakeholders

Ministries of health

Ministries of health across EMR Member States should spearhead the process of strategic health workforce development and implementation through provision of oversight, leadership and facilitation. National health authorities can play the following fundamental roles:

- secure government commitment to support health workforce strategies and interventions including allocation and mobilization of required resources;
- coordinate and streamline involvement and contribution of relevant stakeholders to health workforce development;
• lead the process of developing the national health workforce strategic plan based on multi-stakeholder consensus and buy-in (including the private sector and the professions);
• provide guidance, develop capacity and coordinate with sub-national authorities and entities on health workforce development issues including preparation, implementation and monitoring of the health workforce strategic plan;
• liaise with WHO and relevant agencies on matters related to strengthening the health workforce and capacity building.

Health workforce observatories and networks
Health workforce observatories can play an important role in planning, supporting and monitoring health workforce development strategies. National observatories or similar networks can perform the following:
  • developing and maintaining robust health workforce information systems including generation, provision, assimilation of evidence for health workforce policy development and decision making;
  • generating evidence through health workforce research to support policy and decision making and strengthen relevant capacities;
  • supporting ministries of health in bringing together and harmonizing the multitude of stakeholders concerned with health workforce issues;
  • monitoring and evaluation of the progress in health workforce strategy implementation and suggest remedial actions.

The regional health workforce observatory can play a role in supporting health workforce development at regional and national levels through generation of evidence and collation of data and information and strengthening capacities for health workforce research for monitoring and evaluation.

Educational governing bodies and educational institutions
Ministries or governing bodies responsible for education of health professionals as part of their mandate, together with educational institutions should assume the following responsibilities.
  • Develop and implement necessary policies and plans in coordination with health authorities in order to ensure effective and harmonized health workforce planning, balancing the supply and demand of health workers as well, the competencies required to deliver services.
  • Embark on educational reforms to ensure relevance of graduates to health system and population needs and promote social accountability.
  • Develop regulations and accreditation systems to ensure standards and quality in education and preparation of health workers.
Other national stakeholders
The roles and involvement of other stakeholders in both the public and the private sectors are critical in accelerating the implementation of the health workforce agenda, including other ministries such as ministries of finance and public service, other ministries involved in health service delivery, relevant professional associations, unions, national statistics office and research centers and institutes.

Development and humanitarian partners
Efforts should extend to tap and harmonize the contribution of development partners including bilateral and multilateral entities. Development and humanitarian partners together with funding agencies should seek to support countries where relevant along the following lines.

- Scale up the financial and technical support to health workforce development along national priorities including sustained financing.
- Harmonize the contribution of different development partners to ensure efficiency and avoid duplication and waste of resources.
- Support monitoring and evaluation of health workforce strategies through generation of evidence including commissioning of research and relevant studies.

WHO’s enabling role
The role of WHO is critical and could include the following.

- Facilitating technical cooperation with Member States in preparing, implementing and monitoring national health workforce strategic plans, strengthening capacity at regional, national and sub-national levels to ensure the critical mass of qualified HRH professionals, facilitating the training on health workforce governance.
- Convening Member States to discuss health workforce challenges and issues for enhancing implementation and monitoring of strategic plans through shared learning and exchange of experience.
- Production and dissemination of relevant regional tools and guiding documents on health workforce development.
- Promotion of regional networks and effective partnerships for health workforce strengthening including harmonizing and streamlining the role of regional and sub-regional entities to support health workforce development at both regional and national levels.
- Liaison with other development agencies to increase and harmonize financial and technical investment in health workforce development.

Communities
The involvement of communities is essential in taking forward any health related strategy. It becomes more critical in emergency situations. The role of communities in emergencies includes the following.
- Support community-based actions in managing health workforce challenges in emergencies.
- Plan for support mechanisms to community-based health workforce during relevant emergency phase and undertake capacity building projects when appropriate.
- Integrate community-based health workforce with primary care initiatives.
- Engage humanitarian and development partners in enhancing their capacity.

Monitoring and evaluation of the framework for action

Monitoring and evaluation of the EMR health workforce framework for action are critical for its successful implementation. There are two levels for monitoring and evaluation in this respect. The macro level involves region-wide monitoring for the uptake by member states of the main Policy directions and strategies. Indicators for this could include aspects, such as, number of countries developing and implementing national health workforce strategies, based on the framework for action. Regional monitoring would also involve the holistic health workforce progress and functions such as, status of overall production of health workers, regional density and skills mix, balance among country groups, and progress on regional collaboration including health professional educational and health worker mobility. Using the current base-line situation, progress at the regional level can be assessed based on relevant indicators (see Table 2).

The micro-level monitoring and evaluation occurs at country level and should be based on development and implementation of national health workforce strategic plans. Monitoring and evaluation frameworks should be built into the national plans, as relevant to the selected strategic objectives, interventions and health workforce actions. Specific indicators should also be developed and the responsibility for their monitoring and evaluation should be assigned to suitable entities. Monitoring the progress of the development and the implementation of health workforce strategies at the country level would feed into the macro-level monitoring and evaluation of health workforce development in the EMR as a whole. WHO can also strengthen monitoring and evaluation efforts through supporting appropriate and relevant studies and the production of reports and other related publications.

It is suggested that the evaluation cycle for this framework for action happens at 5 year interval, when in-depth assessment could be conducted by WHO, in collaboration with Member States and using other relevant external entities. The evaluation shall look into the overall implementation and progress, achievement of objectives and targets, and attainment of desired outcomes, especially in relation to impact on health systems and population health outcomes. Lessons and guidance emerging from evaluation would be expected to feed into improving the next phase of the strategy and the future cycles of strategic planning. Following
indicators are proposed for monitoring and evaluation of various policies and strategies mentioned in the framework for action at the Regional and national levels.
## Indicators for monitoring and evaluation of framework for action for health workforce development in EMR

<table>
<thead>
<tr>
<th>Policy directions</th>
<th>Strategies</th>
<th>M&amp;E indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance based on understanding of labour market dynamics</td>
<td>1.1 Scale up and sustain the production of health workers with the right competencies</td>
<td>• Existence of endorsed national health workforce policy / strategic plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Density of students admitted for health professionals education by occupations and gender by year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Density of graduates of health professionals education institutions by profession and gender by year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ratio of male to female graduates</td>
</tr>
<tr>
<td></td>
<td>1.2 Improve recruitment, deployment, retention, motivation and performance of health workers</td>
<td>• Unemployment rates among health workers by profession</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Density of health workers per 1000 population by profession and subnational level/administrative units</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ratio of generalist physicians among all physicians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ratio of health workers employed by type of facility (primary, secondary, tertiary).</td>
</tr>
<tr>
<td></td>
<td>1.3 Regulate and manage exits from the labour market</td>
<td>• Ratio of health workers resigning from public sector jobs by profession and gender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Attrition rates among health workers, by gender and by profession</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ratio of non-nationals to national health workers, by profession and country of origin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Existence of active bilateral/multilateral agreements to manage migration</td>
</tr>
<tr>
<td>To strengthen health workforce governance capacities and regulation of education and practice in support of national health policies</td>
<td>2.1 Strengthen capacity of HRH structures at all levels</td>
<td>• Existence of a multi-stakeholder mechanism for HRH partnership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Existence of health workforce directorates/unit with responsibility for development and monitoring of policies and plans</td>
</tr>
<tr>
<td></td>
<td>2.2 Establish and strengthen regulation of health workforce practice and education to ensure quality response to population needs, public protection and patient safety</td>
<td>• Existence of functioning regulatory bodies for health professions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of regulated health professions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Existence of accreditation/regulatory mechanisms for health professional education institutions</td>
</tr>
</tbody>
</table>

---

To implement and monitor health workforce policies and strategies effectively, the following indicators are proposed:

1. **To develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, quality and performance based on understanding of labour market dynamics**
   - **1.1 Scale up and sustain the production of health workers with the right competencies**
     - Presence of endorsed national health workforce policy / strategic plan
     - Density of students admitted for health professionals education by occupations and gender by year
     - Density of graduates of health professionals education institutions by profession and gender by year
     - Ratio of male to female graduates
   - **1.2 Improve recruitment, deployment, retention, motivation and performance of health workers**
     - Unemployment rates among health workers by profession
     - Density of health workers per 1000 population by profession and subnational level/administrative units
     - Ratio of generalist physicians among all physicians
     - Ratio of health workers employed by type of facility (primary, secondary, tertiary)
   - **1.3 Regulate and manage exits from the labour market**
     - Ratio of health workers resigning from public sector jobs by profession and gender
     - Attrition rates among health workers, by gender and by profession
     - Ratio of non-nationals to national health workers, by profession and country of origin
     - Existence of active bilateral/multilateral agreements to manage migration

2. **To strengthen health workforce governance capacities and regulation of education and practice in support of national health policies**
   - **2.1 Strengthen capacity of HRH structures at all levels**
     - Existence of a multi-stakeholder mechanism for HRH partnership
     - Existence of health workforce directorates/unit with responsibility for development and monitoring of policies and plans
   - **2.2 Establish and strengthen regulation of health workforce practice and education to ensure quality response to population needs, public protection and patient safety**
     - Existence of functioning regulatory bodies for health professions
     - Number of regulated health professions
     - Existence of accreditation/regulatory mechanisms for health professional education institutions
<table>
<thead>
<tr>
<th>To mobilize and align investment in health workforce to ensure implementation of strategic plans to meet current and future health workforce needs.</th>
<th>3.1 Identify resources and requirements for health workforce production, recruitment, deployment and decent working conditions of health workforce that is in line with the national health workforce strategic plans</th>
<th>Total expenditure on health workforce as a percentage of total health expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Mobilize and secure adequate funding for improving production and employment capacity for and quality of health professionals</td>
<td>Cost per graduate in education and training programmes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To strengthen health workforce information base for designing, implementing and monitoring health workforce strategic plans</th>
<th>4.1 Establish/strengthen health workforce databases, information and evidence</th>
<th>• Availability of health workforce data with disaggregation of at least 10 professions by age, gender and place of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Ensure mechanisms to collect, report, analyze and use reliable workforce data such as establishing/strengthening a national health workforce observatory</td>
<td>• Existence of a functioning health workforce observatory or health workforce information systems</td>
<td></td>
</tr>
</tbody>
</table>