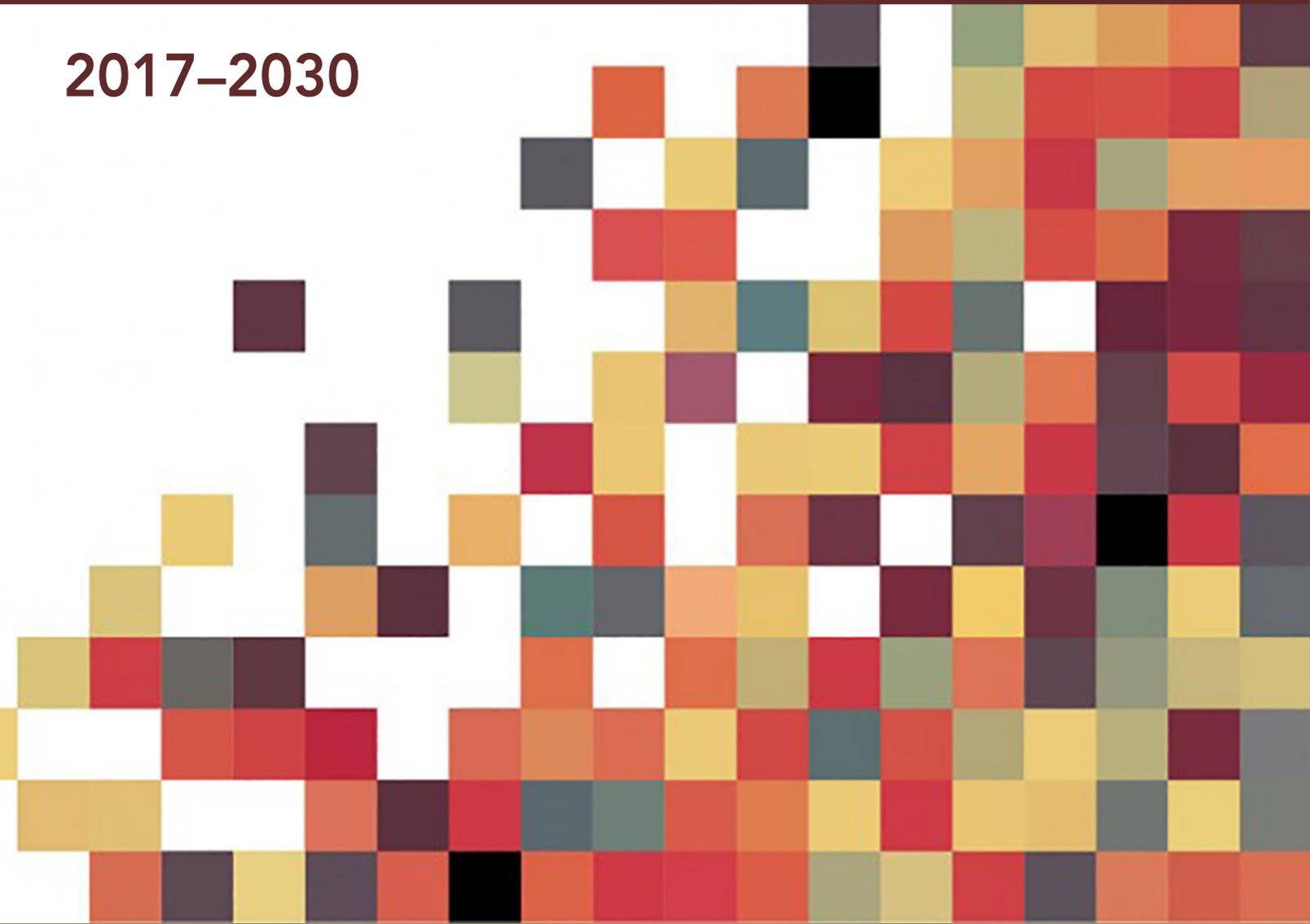


# Framework for action for health workforce development in the Eastern Mediterranean Region

**2017–2030**





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# Contents

<b>Executive summary</b> .....	5
<b>1. Introduction</b> .....	10
<b>2. Health workforce situation in the Region</b> .....	11
<b>3. Framework for action</b> .....	14
3.1 Vision.....	14
3.2 Goal.....	14
3.3 Principles.....	14
3.4 Strategic objectives .....	14
<b>4. Strategic interventions</b> .....	16
<b>5. Implementation of the framework</b> .....	22
5.1 National leadership and commitment .....	22
5.2 Communication and advocacy.....	22
5.3 Involvement of stakeholders.....	22
5.4 Monitoring and evaluation.....	24



# Executive summary

The World Health Organization (WHO's) Eastern Mediterranean Region is facing major health workforce challenges. There is an overall shortage of qualified health workers with suboptimal and imbalanced overall production and availability. The inequitable geographic distribution and skill mix along with the increasing mobility of health workers are daunting challenges to address. There are also concerns in relation to quality, relevance and performance of health workers. A number of countries in the Region are facing a protracted crisis resulting from the outflow of health workers, which has led to shortages and concerns regarding the safety and security of health workers. Reliable and updated health workforce information to guide policies and plans is seriously lacking and the increasing global demand and need for health workers presents additional challenges to countries of the Region.

The global commitments to achieving the 2030 agenda of the Sustainable Development Goals (SDGs) and universal health coverage send a strong message that emphasizes the importance of addressing health workforce issues. The SDGs, with their ambitious targets, call for action across the world to ensure a life with dignity for all. The health workforce is supported by a target to "substantially increase health financing, and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries" (SDG 3.C). *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 attention to the low spending on the health workforce, which requires increasing investment to build a health workforce which is able to respond to 21st century priorities, matching effectively the supply and skills of health workers to 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 emphasized that investment in the health workforce was needed to make progress towards the SDGs, 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 strong political commitment and adequate investment, will lead to the improvements required to attain sustainable results in developing the workforce. Comprehensive strategic planning is fundamental to addressing health workforce challenges in achieving universal health coverage and the targets of the SDGs.

Building on the *Global strategy on human resources for health* and 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* (Table 1) has been expanded towards institutionalizing strategic planning as an approach in responding to health workforce challenges among Member States and at the regional level.

The goal of the regional framework is to ensure the availability of a fit-to-practice, fit-for-purpose health workforce which contributes 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 such as: mobilizing investment in the health workforce, strengthening governance and regulation capacities, and improving health workforce information and evidence to ensure access for all people in the Region to an adequate, competent, well balanced, motivated and responsive health workforce. This is reflected in the four strategic objectives in the overview of the Framework given below.

While ministries of health in countries of the Region should spearhead the process of strategic health workforce development and implementation by providing oversight, leadership and facilitation, the implementation of strategies to develop the health workforce requires collaborative multisectoral efforts which take into consideration the context and needs of each country.

## Overview of the framework for action for health workforce development in the Region

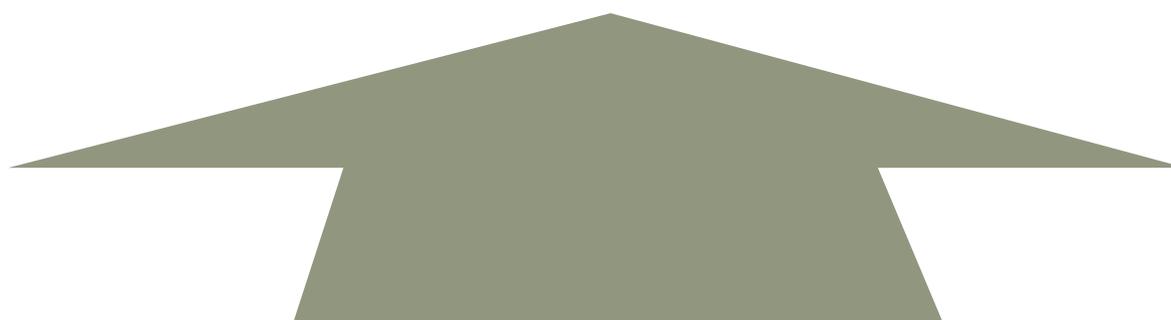
### Strategic objective 1

Develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, accessibility, acceptability, quality and performance, based on an understanding of labour market dynamics

1.1. Scale up and sustain the production of health workers with appropriate quantity, quality and relevance

1.2. Improve recruitment, deployment, retention, motivation and performance of health workers

1.3. Regulate and manage exits from the health labour market



### Strategic objective 2

Strengthen capacities for health workforce governance and regulation

2.1. Strengthen capacity of health workforce structures at all levels

2.2. Establish and strengthen the regulation of health workforce practice and education

### Strategic objective 3

Mobilize and align investment in the 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 and deployment and decent working conditions

3.2. Mobilize and secure adequate funding for improving production and employment capacity for health professionals

### Strategic objective 4

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

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

**Table 1. Framework for action for health workforce development in the Region**

Strategic objective	Strategies	Interventions
<b>1. Develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, accessibility, acceptability quality and performance, based on an understanding of labour market dynamics</b>	<b>1.1. Scale up and sustain the production of health workers with appropriate quantity, quality and relevance to respond to the needs of health services</b>	<p>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.</p> <p>Assess and plan the alignment of the production capacities of health workers with appropriate skill mix in accordance with current and future needs through expanding educational capacities and infrastructures; recruiting and retaining adequate numbers of competent and motivated educators/trainers and introducing innovative teaching and learning strategies, approaches and tools.</p> <p>Adopt enrolment criteria and selection procedures to attract, admit and retain qualified and motivated candidates for health professionals' education.</p> <p>In countries with conflict, explore strategies to overcome the interruptions in education of health professionals.</p>
	<b>1.2. Improve recruitment, deployment, retention, motivation and performance of health workers</b>	<p>Analyse 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.).</p> <p>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.</p> <p>Introduce/strengthen continuing professional development, linked to career development and relicensing, for all categories of health workers.</p> <p>Establish effective personnel administration systems with appropriate management information systems and dashboards to support evidence-informed decision-making.</p> <p>Identify and implement measures to reduce and eventually eliminate absenteeism without recognized and approved cause.</p> <p>Ensure that the defined scope of practice exploits the potential contribution of each professional cadre with full utilization of their competencies, e.g. nursing and midwifery.</p> <p>Ensure that health workers have access to infrastructures, equipment, supplies and resources that enable them to deliver quality health services.</p> <p>Provide working conditions that enhance stability, productivity and satisfaction (fair pay level/remuneration, career progression, workplace safety, supportive supervision, etc.).</p> <p>In countries with emergencies and conflict, develop policies and strategies to address the gap in numbers resulting from outflow/distress of health workers as well as to allow departing health workers to rapidly integrate into labour markets upon their return.</p>
	<b>1.3. Regulate and manage exits from the health labour market</b>	<p>Develop/enforce policies to regulate various types of exits of health workers (retirement, temporary/permanent, planned/unplanned leave) in public services to ensure sustainable workforce.</p> <p>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.</p>

Strategic objective	Strategies	Interventions
<b>2. Strengthen capacities for health workforce governance and regulation</b>	2.1. Strengthen capacity of health workforce structures at all levels	<p>Strengthen the capacity of health workforce structures at national and subnational 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).</p> <p>Introduce interventions to ensure capacities of all relevant stakeholders (e.g. relevant departments of other ministries, professional councils/associations, academic institutions, etc.) to engage effectively in health workforce development and management.</p> <p>Establish/strengthen mechanisms for stakeholder coordination, partnership and policy dialogue, such as health workforce committees or stakeholder boards.</p>
	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	<p>Establish/strengthen regulation of health workforce practice through appropriate institutional arrangements, entry to practice competencies and standards, codes of ethics, registration, licensing and relicensing mechanisms, and a patient and provider notification system.</p> <p>Develop independent accreditation mechanisms to assess, maintain and improve the social relevance and quality of education programmes and institutions.</p>
<b>3. Mobilize and align investment in the health workforce to ensure implementation of strategic plans to meet current and future health workforce needs</b>	3.1. Identify resources and requirements for health workforce production, recruitment and deployment and decent working conditions that are in line with the national health workforce strategic plans and labour market	<p>Estimate the cost of health workforce plans to identify resources requirements to produce, recruit and retain health workers.</p> <p>Establish effective coordination with ministries of finance to improve fiscal space for the health workforce.</p> <p>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.</p>
	3.2. Mobilize and secure adequate funding for improving the production and employment capacity for, and quality of, health professionals	<p>Increase financial resources for improving the capacity and quality of health professionals education institutions.</p> <p>Invest in the creation of jobs to ensure recruitment of trained health workers in accordance with the needs of the population.</p> <p>Invest in improving incentives and working conditions of health workers to enhance retention and performance.</p> <p>Ensure emergency response funds to mobilize surge capacity and cover emerging gaps in the health workforce</p>
<b>4. Strengthen the health workforce information base for designing, implementing and monitoring health workforce strategic plans</b>	4.1. Establish/strengthen health workforce databases, information and evidence	<p>Agree on common sets of health workforce indicators required for planning, decision-making and monitoring the implementation of health workforce strategies and interventions.</p> <p>Strengthen health workforce databases and information to meet data requirements for health workforce planning and monitoring through enhancing standardization and interoperability of health workforce data from different sources with improved reliability.</p> <p>Invest in improving the registries of the national regulatory bodies to maintain reliable and updated information.</p> <p>Improve the comprehensiveness and accuracy of the health workforce databases in the ministry of health.</p>
	4.2. Ensure mechanisms to collect, report, analyse and use reliable workforce data such as establishing/strengthening a national health workforce observatory	<p>Establish/strengthen mechanisms, such as health workforce observatories, to ensure coordination among stakeholders for interoperability and sharing data.</p> <p>Strengthen capacities to operate, maintain and improve health workforce data/information, including analytical capacities by involving academic and research institutions.</p> <p>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.</p>

# 1. Introduction

Health workers are the most important resource for health systems, whose resilience is heavily reliant on the availability of competent health workers. In order to strengthen health systems to deliver safe, efficient and appropriate services and move towards universal health coverage, a health workforce is needed that is sufficient in number, balanced in skill mix and distribution, competent, functioning, adequately motivated and supported. Research demonstrates that population health outcomes suffer when health workers are deficient.<sup>1</sup> 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 (SDG 3.C) to “Substantially increase health financing, and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries”. Health workforce has impact beyond SDG3; it is an integral part of achieving several SDGs, including Goals 1, 4, 5, 8, 10 and 17.

The High-Level Commission on Health Employment and Economic Growth, whose appointment was announced by the United Nations Secretary-General in March 2016, also stressed that the health sector will continue to create new jobs, however, a shortfall of 18 million health workers is projected by 2030. Thus,

investment in the health workforce is needed to make progress towards the SDGs, including gains in health, global security and inclusive economic growth.<sup>2</sup>

The *Global strategy on human resources for health: Workforce 2030*<sup>3</sup>, adopted by the World Health Assembly in May 2016, emphasizes this vision and draws attention to low spending on the health workforce, which requires increased investment to build a workforce able to respond to 21st century priorities and match effectively the supply and skills of health workers to the population needs today and in the future.<sup>4</sup>

WHO’s Eastern Mediterranean Region faces major health workforce shortcomings. The Regional Office for the Eastern Mediterranean has clearly identified the need to strengthen the health workforce as a pressing priority within the context of health system strengthening and moving towards universal health coverage. A number of regional resolutions<sup>5</sup> on health workforce development have been adopted. A framework for action to strengthen nursing and midwifery (2016–2025) was developed and identifies the actions needed to scale up the nursing and midwifery workforce.<sup>6</sup> The regional framework for action on reforming medical education was adopted by the Regional Committee in 2015.<sup>7</sup> Building on the global strategy on human resources for health, it is imperative that the Region strives towards institutionalizing strategic planning as an approach in responding to health workforce challenges both across Member States and at the regional level.

<sup>1</sup> Anand S, Bärnighausen T. Human resources and health outcomes: cross-country econometric study. *Lancet*. 2004;364:1603–9.

<sup>2</sup> Report of the High-Level Commission on Health Employment and Economic Growth: Working for health and growth: investing in the health workforce. Geneva: World Health Organization; 2016 (<http://www.who.int/hrh/com-heeg/reports/en/>, accessed 29 January 2018).

<sup>3</sup> Global strategy on human resources for health: Workforce 2030. Geneva: World Health Organization; 2016 (<http://www.who.int/hrh/resources/globstrathrh-2030/en/>, accessed 29 January 2018).

<sup>4</sup> Shaping the future of health in the WHO Eastern Mediterranean Region: reinforcing the role of WHO 2012–2016, progress report. Cairo: WHO Regional Office for the Eastern Mediterranean; 2016 ([http://applications.emro.who.int/dsaf/EMROPUB\\_2016\\_EN\\_18776.pdf](http://applications.emro.who.int/dsaf/EMROPUB_2016_EN_18776.pdf), accessed 29 January 2018).

<sup>5</sup> Examples include: EM/RC62/R.4, EM/RC56/R.10, EM/RC55/R.5, EM/RC50/R.9, EM/RC49/R.11, EM/RC45/R.12.

<sup>6</sup> Strengthening nursing and midwifery in the Eastern Mediterranean Region - a framework for action 2016–2025. Cairo: World Health Organization; 2016 ([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), accessed 29 January 2018).

<sup>7</sup> Resolution EM/RC62/R.4: Medical education: a framework for action. Cairo: World Health Organization; 2015 (EM/RC62/R.4;[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), accessed 29 January 2018).

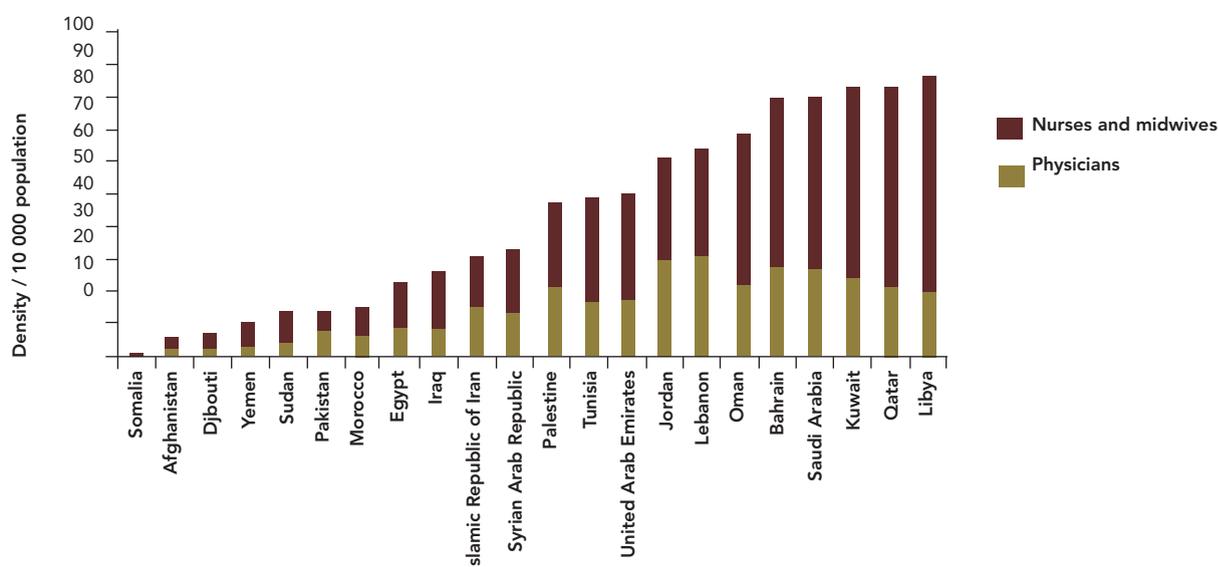
## 2. Health workforce situation in the Region

The health workforce situation in the Eastern Mediterranean Region mimics global trends, where overall health workforce shortages and challenges are constraining health systems and making it difficult to achieve the targets set for universal health coverage and the SDGs. The Region faces an overall shortage of qualified health workers, with suboptimal and imbalanced production and availability. There is, however, huge variation in the availability of health workers, with very low densities of these workers

in some countries (Fig.1). The 2006 World health report identified seven countries in the Region (Afghanistan, Djibouti, Iraq, Morocco, Pakistan, Somalia and Yemen) experiencing health workforce crises. Low production capacities and the unmanaged migration of health workers are exacerbating the situation in these and other countries of the Region.<sup>8</sup>

Inequitable geographic distribution and skill mix, as well as increasing health worker mobility, are daunting challenges to address. There are also concerns in relation to the quality, relevance and performance of health workers.

In spite of an increase in the number of health professionals education institutions,<sup>9</sup> the increase in the density of the health workforce has not been significant nor has it been able to keep pace with population growth and the attrition of health workers (Fig. 2). The steady increase in Group 1 countries<sup>10</sup> (member countries of the Gulf Cooperation Council) has been mainly



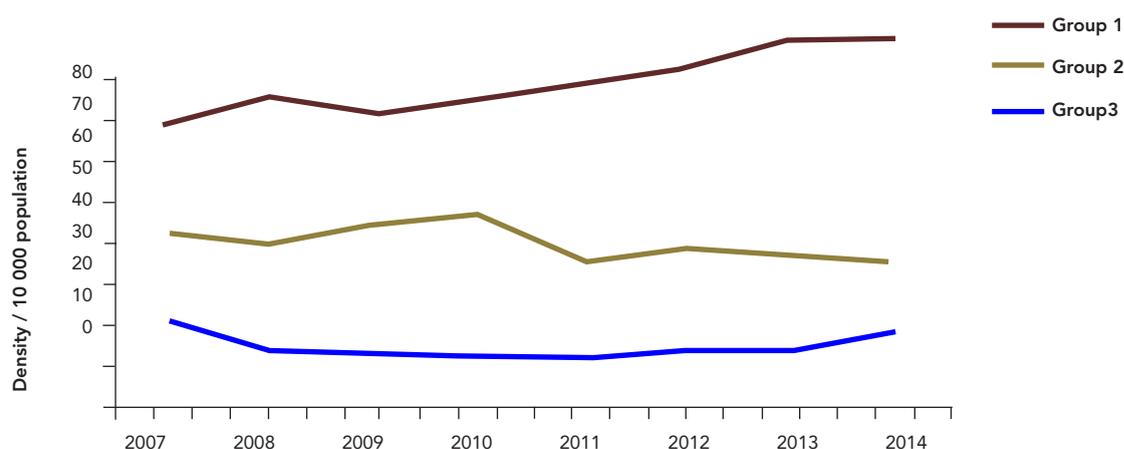
Source: Regional Health Observatory

**Fig. 1.** Density of doctors, nurses and midwives per 10 000 population in the Eastern Mediterranean Region (2014)

<sup>8</sup> World health report: working together for health. Geneva: World Health Organization; 2006.

<sup>9</sup> Review of medical education in the Eastern Mediterranean Region: challenges, priorities and a framework for action. Cairo: World Health Organization; 2015 (EM/RC62/3 Rev.1; [http://applications.emro.who.int/docs/RC\\_technical\\_papers\\_2015\\_3\\_16503\\_EN.pdf?ua=1](http://applications.emro.who.int/docs/RC_technical_papers_2015_3_16503_EN.pdf?ua=1), accessed 29 January 2018).

<sup>10</sup> Countries in the Eastern Mediterranean Region have been categorized into three broad groups based on population health outcomes, health system performance and level of health expenditure. Health systems strengthening in countries of the Eastern Mediterranean Region: challenges, priorities and options for future action. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2013 (EM/RC59/Tech.Disc.1; [http://applications.emro.who.int/docs/RC\\_technical\\_papers\\_2012\\_Tech\\_Disc\\_1\\_14613\\_EN.pdf?ua=1](http://applications.emro.who.int/docs/RC_technical_papers_2012_Tech_Disc_1_14613_EN.pdf?ua=1), accessed 29 January 2018).



Source: Regional Health Observatory

**Fig. 2.** Trends in densities of physicians, nurses and midwives in the three groups of countries<sup>10</sup> in the Eastern Mediterranean Region (2007–2014)

attributed to the recruitment of expatriate health workers.

Policies and strategies for health workforce development are generally inadequate in the Region. There are only five countries (Afghanistan, Islamic Republic of Iran, Somalia, Sudan and Yemen) that have recently developed comprehensive health workforce strategic plans. Health workforce governance capacities remain limited in addressing health workforce challenges, with the weak status of health workforce departments/directorates in ministries of health, lack of skilled health workforce managers and suboptimal multisectoral collaboration.

Reliable and updated health workforce information is critically lacking in the Region, and this requires particular attention. The deficiency is not only limited to numbers: information on financing the health workforce and labour market dynamics is also limited.

The unprecedented magnitude and scale of crises, affecting almost two thirds of countries in the Region, represent a serious challenge with ramifications for the health workforce. Violence and conflict are directly affecting health workers and compelling them to leave, with consequent service gaps in numerous countries, e.g. conflict

in the Syrian Arab Republic and Yemen and attacks against polio workers in Afghanistan and Pakistan. Those who remain are often working under dangerous conditions with shortages of equipment and supplies. The education of health professionals is also being interrupted in areas of conflict. Attacks against health care facilities and workers have been reported in eight countries of the Region, accounting for 83% of all attacks globally in 2016.<sup>11</sup> In addition, the Region bears the greatest burden of displaced populations globally, with more than 30 million people displaced. Over the past few years, the Region has seen massive internal displacement in Afghanistan, Iraq, Somalia, Syrian Arab Republic and Yemen and external displacement in Jordan and Lebanon. Thus, the demand for health services continues to place a huge burden on national health systems across the Region. Health workers have to respond to and manage the increasing caseloads of people requiring trauma care, treatment for communicable and noncommunicable diseases and mental health disorders, and maternal and child health care, as well as the requirements of populations with special needs.<sup>12</sup> The health workforce challenges faced by Member States in the Region are summarized in Table 2.

<sup>11</sup> Report on attacks on health care in emergencies. Geneva: World Health Organization; 2016 (<http://www.who.int/hac/techguidance/attacksreport.pdf>, accessed 29 January 2018).

<sup>12</sup> Roadmap 2017–2021: Stronger organization and better response to the needs of Member States in the Eastern Mediterranean Region. *East Mediterr Health J.* 2017;23(5):327–8.

**Table 2. Major health workforce challenges in the Region**

<b>Common challenges across all countries</b>		
<b>Health workforce governance</b>		
<ul style="list-style-type: none"> <li>· Lack of comprehensive national health workforce strategies</li> <li>· Limited health workforce governance and leadership capacities</li> <li>· Suboptimal multistakeholder coordination for health workforce</li> <li>· Increasing involvement of non-state actors</li> <li>· Insufficient regulatory frameworks and capacities</li> <li>· Weak health workforce management systems</li> <li>· Paucity of data and information on health workforce</li> </ul>		
<b>Health workforce production</b>		
<ul style="list-style-type: none"> <li>· Inadequate and/or imbalanced production capacity of health workers</li> <li>· Concerns around the quality and relevance of health professionals education</li> </ul>		
<b>Availability, accessibility and quality</b>		
<ul style="list-style-type: none"> <li>· Overall health workforce shortages</li> <li>· Skill mix and geographical distribution imbalances</li> <li>· Inadequate material and financial resources</li> <li>· Quality and performance concerns</li> <li>· Dual practice</li> <li>· Safety and security of health workers</li> <li>· Inadequate capacity for emergency response</li> <li>· Health worker mobility (international and public to private)</li> </ul>		
<b>Group 1:</b>	<b>Group 2:</b>	<b>Group 3:</b>
Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates	Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Palestine, Syrian Arab Republic, Tunisia	Afghanistan, Djibouti, Pakistan, Somalia, Sudan, Yemen
<ul style="list-style-type: none"> <li>· Shortage of national health workers</li> <li>· High reliance on expatriate staff, challenges of cultural competency and acceptability of expatriate staff</li> <li>· Limited capacity for the production of health professionals</li> <li>· High turnover of expatriate health workers</li> </ul>	<ul style="list-style-type: none"> <li>· Limited employment capacities (underemployment and unemployment)</li> <li>· Skill mix imbalances</li> <li>· Geographic imbalances</li> <li>· Low retention in rural and remote areas</li> <li>· Health worker performance and motivation concerns</li> <li>· Inadequately managed emigration of health workers</li> </ul>	<ul style="list-style-type: none"> <li>· Critical shortage of health workers</li> <li>· Low production capacities</li> <li>· Limited employment capacities</li> <li>· Geographic imbalances</li> <li>· Low retention, especially in rural and remote areas</li> <li>· Poor performance and low motivation of health workers</li> <li>· Unmanaged emigration exacerbating health worker shortages</li> </ul>

# 3. Framework for action

## 3.1 Vision

To respond to health workforce challenges and priority issues in the Region, a framework for action for health workforce development has been developed to guide country and regional action to strengthen the health workforce in Member States. The framework builds on the *Global strategy on human resources for health: Workforce 2030*<sup>3</sup> and existing regional frameworks: *Framework for action on reforming undergraduate medical education*<sup>7</sup> and *Framework for action on strengthening nursing and midwifery*.<sup>6</sup> Its vision is to ensure access for all people in the Region to an adequate, competent, well balanced, motivated and responsive health workforce functioning within robust health systems geared towards universal health coverage.

## 3.2 Goal

The goal of the 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 Region.

## 3.3 Principles

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

- equity of access to responsive health services working towards universal health coverage and the SDGs;
- promoting alignment with regional and country priorities and strategies;
- ensuring health systems linkages and

alignment to population needs and the requirements of integrated, people-centred health services<sup>13</sup> that can benefit from multidisciplinary team-based care;

- recognizing 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 strengthening the health workforce;
- guaranteeing a respectful working environment, safety and security for health workers.

## 3.4 Strategic objectives

Health workforce issues, inherently require strategic positioning and systematic solutions. Therefore, the framework emphasizes the development and implementation of evidence-informed health workforce policies and strategic plans as a prerequisite for, and a fundamental step towards, 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 labour market dynamics, population needs, economic growth and demographic and epidemiologic changes in a country.

The development, and especially the implementation, of health workforce policies and strategic plans require enabling factors to be in place. Capacities for governance and regulation are critical for implementation. Similarly, adequate investment and resources should be available to transform plans into reality. Information and

<sup>13</sup> Framework on integrated, people-centred health services. Report by the secretariat (69th World Health Assembly). Geneva: World Health Organization; 2016 (A69/39; [http://apps.who.int/gb/ebwha/pdf\\_files/WHA69/A69\\_39-en.pdf?ua=1](http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua=1), accessed 29 January 2018).

evidence are prerequisites for planning to be both effective and realistic and for monitoring progress in addressing health workforce challenges.

The framework is built around four strategic objectives which are underpinned by nine strategies representing the actions to be taken by countries to develop their health workforce.

1. Develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, accessibility, acceptability, quality and performance, based on an understanding of labour market dynamics.
2. Strengthen capacities for health workforce governance and regulation.
3. Mobilize and align investment in the health workforce to ensure implementation of

strategic plans to meet current and future health workforce needs.

4. Strengthen the health workforce information base for designing, implementing and monitoring health workforce strategic plans.

The three strategies under Strategic Objective 1 elaborate the issues to be addressed in the comprehensive health workforce strategic plans, addressing the lifespan of health workers and covering planning, production, recruitment, employment, deployment, performance and exits from the health labour market. Under each strategy, a set of interventions are provided to realize the strategy and enable progress towards the main strategic objective (see Overview on page 7).

## 4. Strategic interventions

**Strategic objective 1: Develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, accessibility, acceptability, quality and performance based on an understanding of labour market dynamics**

**Strategy 1.1: Scale up and sustain the production of health workers with appropriate quantity, quality and relevance to respond to the needs of health services.**

- Assess the current and future needs of numbers, types and competencies of health workers, including preparing and building consensus around long-term health workforce projections and scenarios for the future supply of health workers to match future demand in terms of numbers and skill mix.<sup>14,15</sup>
- 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.<sup>7,16</sup>
  - required infrastructure and resources (teaching facilities, libraries, lecture halls tutorial rooms, and laboratories, clinical training sites, including at primary care and community levels);
  - recruitment and retention of adequate numbers of competent and motivated educators and trainers;
  - use of innovative teaching and learning

strategies, approaches and tools towards switching to a more effective, student-centred, socially accountable education (i.e. problem-based learning, community-based, competency-based curricula, inter-professional education, distance education, utilizing information communication technologies);

- additional skills, such as leadership, ethics and communication, that enable graduates to respond to the needs, cultural sensitivities and expectations of communities and to build trust and professionalism.
- Adopt enrolment criteria and selection procedures to attract, admit and retain qualified and motivated candidates for health professionals education. This may include:
  - implementing quotas for admission of students to ensure representation of different geographic areas or specific underserved communities;<sup>17</sup>
  - decentralizing education programmes, as appropriate, to promote and facilitate recruitment and retention of health workers from local communities;
  - working with ministries of education/ higher education and basic educational institutions, provide mechanisms and incentives to attract and retain a sufficient and balanced pool of qualified applicants to the health professions in general, and specifically to the understaffed professions, such as nursing and midwifery. Incentives could be a mix of financial (e.g. scholarships, stipends, housing and travel benefits) and non-financial (e.g. mentorship,

<sup>14</sup> Countries may refer to: Human resources for health (HRH) tools and guidelines. Geneva: World Health Organization; 2015 (<http://www.who.int/hrh/tools/planning/en/>, accessed 29 January 2018).

<sup>15</sup> Assessing financing, education, management and policy context for strategic planning of human resources for health. Geneva: World Health Organization; 2007 ([http://www.who.int/hrh/tools/assessing\\_financing.pdf?ua=1](http://www.who.int/hrh/tools/assessing_financing.pdf?ua=1), accessed 29 January 2018).

<sup>16</sup> Countries can adapt the guidelines on Transforming and scaling up health professionals' education and training ([http://whoeducationguidelines.org/sites/default/files/uploads/WHO\\_EduGuidelines\\_20131202\\_high\\_print.pdf](http://whoeducationguidelines.org/sites/default/files/uploads/WHO_EduGuidelines_20131202_high_print.pdf), accessed 29 January 2018).

<sup>17</sup> Countries can refer to the WHO global policy recommendations in: Increasing retention of health workers in remote and rural areas. Geneva: World health Organization; 2010 (<http://www.who.int/hrh/retention/guidelines/en/>, accessed 29 January 2018).

learning materials, academic counselling, facilitated access to specialty training).<sup>2</sup>

- In countries affected by emergencies and conflict, explore strategies to overcome interruptions in the education of health professionals.

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

- Analyse the 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.)<sup>18</sup>
- 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:
  - packages of financial and non-financial incentives, e.g. improved compensation, in-kind benefits, such as access to accommodation or transport;
  - professional and personal support, e.g. improved access to continuing education in understaffed regions, mentoring, career advancement advantages, support for access of family/spouse 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 of policies and practices, expansion of scope of practice of certain categories of workers like nurses, creation of new cadres, contracting with the

private sector and nongovernmental organizations (if bonding or mandatory community service are considered, ensure that these are regarded as legitimate and provide opportunities to gain experience).

- Where international recruitment takes place, ensure the implementation of the Global code of practice on the international recruitment of health personnel,<sup>19</sup> e.g. use of competency-based criteria for selection and equitable working conditions and pay rates. This should be accompanied by appropriate regulatory systems to register, license and relicense foreign-trained health professionals, with adequate support for their integration into health systems.
- Introduce/strengthen continuing professional development, linked to career development and relicensing, for all categories of health workers to motivate them and 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 cause.
- 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 been shown to be adaptable to population and patient health needs, allowing them to employ their full potential.

<sup>18</sup> Countries may conduct discrete choice experiments studies to assess future and current staff needs and expectations using the methodological guide How to conduct a discrete choice experiment for health workforce recruitment and retention in remote and rural areas: a user guide with case studies (<http://www.who.int/hrh/resources/dceguide/en/>, accessed 29 January 2018).

<sup>19</sup> WHA63.16 Global code of practice on the international recruitment of health personnel ([http://www.who.int/hrh/migration/code/code\\_en.pdf](http://www.who.int/hrh/migration/code/code_en.pdf), accessed 29 January 2018).

- Provide health workers with access to infrastructure, equipment, supplies, resources, information and communication technologies that support the provision of effective and efficient services and enable health workers to deliver quality work.
  - Provide working conditions that enhance stability, productivity and satisfaction (fair pay level/remuneration, career progression, workplace safety, supportive supervision, etc.).<sup>20</sup>
  - In countries affected by emergencies and conflict, develop policies and strategies to address the gap in numbers resulting from outflow/distress of health workers, as well as to allow departing health workers to rapidly integrate into labour markets upon their return, with appropriate incentives.
- shifts, female amenities, child care services;
  - reviewing retirement age and providing part-time work modalities to retain or reintegrate retired staff to increase the availability of health workers.
- Design and implement measures to optimize retention of health workers in the national health labour market with monitoring and analysis of international mobility flows of health workers.
  - Monitoring out-of-country exits of health workers through a national health workforce information system and analyse trends and their determinants<sup>19</sup> (includes supporting professional organizations in keeping track of their members and conducting research on intentions and reasons for emigrating, temporarily or permanently);
    - exploring the financial costs of losses of health workers to emigration and their impact on the availability and accessibility of services;
    - designing and implementing measures to reduce emigration due to dissatisfaction among health workers;<sup>21</sup>
    - in collaboration with professional associations, designing and implementing programmes to attract health workers who have been displaced to return to support health services and health professionals education in their home country.

**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 leave) in public services to ensure a sustainable workforce, through:
  - monitoring exits of health workers through a national human resources information system and analysing trends and their determinants, including exits from public services to the private sector or to non-health sectors, as well as migration to other countries;
  - introducing/promoting flexible employment and working conditions through actions, including the introduction of flexible contracts or work modalities;
  - promoting female friendly/family friendly work environments and conditions, such as adjustable working hours, favourable

**Strategic objective 2: Strengthen capacities for health workforce governance and regulation**

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

- Strengthen the capacity of health workforce structures<sup>22</sup> at national and subnational

<sup>20</sup> Decent work indicators: guidelines for producers and users of statistical and legal framework indicators ILO manual, 2nd ed. Geneva: International Labour Office; 2013 ([http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms\\_229374.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf), accessed 29 January 2018).

<sup>21</sup> Such measures should not preclude workers' rights to free movement.

<sup>22</sup> Countries may make use of the WHO tool: Strengthening national and sub-national human resources for health departments. Cairo: World Health Organization; 2008 (<http://applications.emro.who.int/dsaf/dsa954.pdf>, accessed 29 January 2018).

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 ministry hierarchy, and mandate on strategic health workforce development, as well as qualified and adequate numbers of staff;
  - building capacities in emergency preparedness and response for the health workforce.
- Introduce interventions to ensure capacities of all relevant stakeholders (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 a fair and transparent system for performance appraisal linking to incentives and promotion.
  - Give facilities and managers sufficient autonomy to manage the performance and career of their staff from recruitment to career progression.
  - Establish/strengthen mechanisms for multistakeholder coordination, partnership and policy dialogue for the health workforce, such as human resources for health committees or stakeholder boards.

Attention must be given to engaging a wide range of bodies concerned with the health workforce, including ministries of health, higher education, finance and civil service and other related ministries, academic institutions, regulatory councils and bodies, professional associations and groups, private sector representatives, employers, patient associations, development partners and international agencies, etc. Increasing involvement of the private sector in both health professionals education and practice can be nurtured.

**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 efficient and effective regulatory mechanisms with appropriate institutional arrangements, entry to practice competencies and standards, codes of ethics, registration, licensing and re-licensing 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<sup>23</sup> to assess, maintain and improve social relevance and quality of education programmes and institutions.
- Establish and strengthen professional associations and societies that protect their professionals' interests and rights.

<sup>23</sup> Countries can adapt the guidelines and standards developed by the World Federation of Medical Education (<http://wfme.org/standards>, accessed 29 January 2018).

**Strategic objective 3: Mobilize and align investment in the health workforce to ensure implementation of strategic plans to meet current and future health workforce needs**

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

- Improve financial resources for increased investment in the health workforce through:<sup>21</sup>
  - estimating the cost of health workforce development 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 the 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 the health workforce towards achieving universal health coverage and the SDGs.
- Mobilize and secure adequate funding for health workforce strategic plans from various local sources, both public and private, as well as donor support, as relevant.

**Strategy 3.2: Mobilize and secure adequate funding to improve the production and employment capacity for and quality of health professionals.**

- Increase financial resources for improving the capacity and quality of health professionals educational institutions.
- Invest in the 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 emerging gaps in the health workforce.

**Strategic objective 4: 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 through enhancing standardization and interoperability of health workforce data from different sources with improved reliability.<sup>24,25</sup>
- Invest in improving the registries of 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, analyse and use reliable workforce data, such as establishing/strengthening a national health workforce observatory.**

- Recognizing that health workforce data can be obtained from various sources, establish mechanisms such as health workforce

<sup>24</sup> Countries may refer to Human resources for health information system: minimum data set for health workforce registry. Geneva: World Health Organization; 2015. ([http://www.who.int/hrh/statistics/minimum\\_data\\_set/en](http://www.who.int/hrh/statistics/minimum_data_set/en), accessed 29 January 2018).

<sup>25</sup> Handbook on monitoring and evaluation of human resources for health with special applications for low- and middle-income countries, Geneva, World Health Organization, 2009 (<http://www.who.int/workforcealliance/knowledge/toolkit/25/en/>, accessed 29 January 2018).

observatories<sup>26</sup> 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 and perform labour market analysis to improve the understanding and monitoring of labour market and education market dynamics and the implications for health workforce strategies. The analysis should include documenting and analysing in- and outflows, choice of practice location and imbalances in the geographical distribution of health workers and their causes.

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<sup>26</sup> Human resources for health observatories: contributing to evidence-based policy decisions. Human resources for health observer – Issue No. 10. Geneva: World Health Organization; 2012 (<http://www.who.int/hrh/resources/observer10/en/>, accessed 29 January 2018).

# 5. Implementation of the framework

## 5.1 National leadership and commitment

Implementation of the framework and its translation into country level strategic plans and actions require concerted efforts by Member States and the WHO Regional Office for the Eastern Mediterranean. The activities to be implemented in adopting the proposed framework and its broad health workforce strategic objectives need to be carried out in a collaborative manner and should be based on the context and needs within each country.

The efforts of individual Member States 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 at higher levels of government, 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. To ensure political commitment and ownership by all, national health workforce strategies should be developed through a participatory process involving all stakeholders.

## 5.2 Communication and advocacy

In order to ensure awareness and commitment for action, distributing and disseminating these strategies extensively will be critical. Consistent and coherent key messages should be communicated to the target audiences to ensure successful implementation of health workforce strategies. Effective and proactive methods of communication can ensure health workforce issues remain high on the political agenda 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.

## 5.3 Involvement of stakeholders

### *Ministries of health*

Ministries of health across countries of the Region should spearhead the process of strategic health workforce development and implementation through the provision of oversight, leadership and facilitation. National health authorities can perform the following fundamental roles.

- Secure government commitment to support health workforce strategies and interventions, including allocation and mobilization of required resources.
- Coordinate and streamline the involvement and contribution of relevant stakeholders to health workforce development.
- Lead the process of developing the national health workforce strategic plan based on multistakeholder consensus and buy-in (including the private sector and the professions).
- Provide guidance, develop capacity and coordinate with subnational 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 undertake the following actions.

- Develop and maintain robust health workforce information systems, including generation, provision and assimilation of evidence for health workforce policy development and decision-making.

- Generate evidence through health workforce research to support policy-making and decision-making and strengthen relevant capacities.
- Support ministries of health in bringing together and coordinating the multiplicity of stakeholders concerned with health workforce issues.
- Monitor and evaluate progress in implementing the health workforce strategy and suggesting remedial actions.

The regional health workforce observatory can play a role in supporting health workforce development at regional and national levels through the generation of evidence, the 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 the 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 for health workers, as well as the competencies required to deliver services.
- Embark on educational reforms to ensure the relevance of graduates to health system and population needs and to promote social accountability.
- Develop regulations and accreditation systems to ensure standards and quality in education and the preparation of health workers.

#### ***Other national stakeholders***

The roles and involvement of other stakeholders in both the public and the private sectors are critical to accelerating the implementation of the health workforce agenda. These include,

for example, ministries of finance and public service, other ministries involved in health service delivery, relevant professional associations, unions, national statistics offices and research centres and institutes.

#### ***Development and humanitarian partners***

Efforts should focus on benefitting from and synchronizing the contributions of development partners, both bilateral and multilateral bodies. Development and humanitarian partners together with funding agencies should seek to support countries, where relevant, along the following lines.

- Scale up financial and technical support to health workforce development along national priorities, including sustained financing.
- Coordinate 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 the generation of evidence, including commissioning research and relevant studies.

#### ***WHO's enabling role***

The role of WHO is critical and could include:

- facilitating technical cooperation with Member States in preparing, implementing and monitoring national health workforce strategic plans, strengthening capacity at regional, national and subnational levels to ensure the critical mass of qualified human resources for health professionals and facilitating 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;
- producing and disseminating relevant regional tools and guiding documents on health workforce development;

- promoting regional networks and effective partnerships for health workforce strengthening, including harmonizing and streamlining the role of regional and subregional entities to support health workforce development at both regional and national levels;
- liaising with other development agencies to increase and coordinate financial and technical investment in health workforce development.

### **Communities**

The involvement of the community is essential in advancing any health-related strategy. It becomes more critical in emergency situations. The role of the community in emergencies includes:

- supporting community-based actions in addressing the health workforce challenges;
- planning for relevant support mechanisms for the community-based health workforce during emergency phases and undertaking capacity-building projects, when appropriate;
- integrating the community-based health workforce with primary care initiatives;
- engaging humanitarian and development partners in enhancing their capacity.

## **5.4 Monitoring and evaluation**

Monitoring and evaluation of the framework are critical for its successful implementation. There are two levels for monitoring and evaluation in this respect. The macro-level involves Region-wide monitoring of the uptake by Member States of the main strategic objectives and related strategies. Indicators for this could include, for example, the number of countries developing and implementing national health workforce strategies based on the framework. Regional monitoring would also involve measuring progress and assessing functions in the holistic health workforce, 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 professionals' education and health worker mobility. Using the current situation as the baseline, progress at the regional level can be assessed according to relevant indicators.

Micro-level monitoring and evaluation occurs at country level and should be based on the development and implementation of national health workforce strategic plans. Monitoring and evaluation frameworks should be built into 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 progress of the development and implementation of health workforce strategies at the country level would feed into the macro-level monitoring and evaluation of health workforce development in the Region 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 for this framework is carried out at 5-year intervals when in-depth assessment can be conducted by WHO, in collaboration with Member States, and using other external entities, where relevant. The evaluation will look into overall implementation and progress, achievement of objectives and targets and attainment of desired outcomes, especially in relation to the impact on health systems and population health outcomes. Lessons and guidance emerging from the evaluation would be expected to feed into improving the next phase of the strategy and future cycles of strategic planning. The indicators proposed for monitoring and evaluating implementation of strategies outlined in the framework at regional and national levels are given in Table 3.

**Table 3. Indicators for monitoring and evaluation of the Framework for action for health workforce development**

Strategic objective	Strategies	Monitoring and evaluation indicators
1. Develop and implement comprehensive health workforce policies and strategic plans to optimize health workforce availability, accessibility, acceptability, quality and performance based on an understanding of labour market dynamics	1.1. Scale up and sustain the production of health workers with appropriate quantity, quality and relevance	Existence of endorsed national health workforce policy/strategic plan Density of students enrolled for health professionals education, by occupation, sex and at subnational/administrative unit levels Density of graduates of health professionals education institutions, by profession and sex Ratio of male-to-female health professionals education graduates, by occupation
	1.2. Improve recruitment, deployment, retention, motivation and performance of health workers	Unemployment rates among health workers by profession and sex Density of health workers by profession and by subnational/administrative unit levels Ratio of nurses to physicians at subnational/administrative unit levels Percentage of generalist physicians among all physicians at subnational/administrative unit levels Percentage of health workers employed by type of facility (primary, secondary, tertiary) and at subnational/administrative unit levels
	1.3. Regulate and manage exits from the health labour market	Percentage of health workers resigning from public sector jobs, by profession, sex and age groups Attrition rates among health workers by profession and sex Percentage of non-national to national health workers, by profession, country of origin and sex Existence of active bilateral/multilateral agreements to manage migration
2. Strengthen capacities for health workforce governance and regulation	2.1. Strengthen capacity of health workforce structures at all levels	Existence of a multi stakeholder mechanisms for human resources for health partnerships Existence of health workforce directorates/units with responsibility for development and monitoring 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 professionals Number of regulated health professions Existence of accreditation/regulatory mechanisms for health professionals education institutions Existence of national systems for continuing professional development
3. Mobilize and align investment in the 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 and deployment and decent working conditions that are in line with the national health workforce strategic plans and labour market	Total expenditure on health workforce as a percentage of total health expenditure
	3.2. Mobilize and secure adequate funding for improving production and employment capacity for, and quality of, health professionals	Cost per graduate in education and training programmes
4. 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	Availability of health workforce data with disaggregation of at least 10 professions by age, sex and place of work
	4.2. Ensure mechanisms to collect, report, analyse and use reliable workforce data such as establishing/strengthening a national health workforce observatory	Existence of a functioning health workforce observatory or health workforce information systems



The *Framework for action for health workforce development in the Eastern Mediterranean Region* has been developed in response to the health workforce challenges facing the Region and in recognition of the need for countries, in line with Sustainable Development Goal target 3.C to increase the recruitment, development, training and retention of the health workforce. The framework, which builds on the *Global strategy on human resources for health: Workforce 2030*, aims to guide country and regional action to strengthen the health workforce to ensure access for all people to an adequate, competent, well balanced, motivated and responsive health workforce which contributes to health systems strengthening and progress towards universal health coverage in the Region.