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Abstract

Problem In 2018, the Egyptian government enacted a universal health coverage law mandating provision of high-quality, effective and equitable health care. Achieving this mandate would require expanding availability and use of evidence-based national clinical practice and public health guidelines.

Approach In 2022, Egypt's Ministry of Health and Population requested support from the World Health Organization (WHO) to establish a national guideline development and adaptation programme. To inform the process, WHO conducted a situation analysis. The findings led to a collaboration between WHO and national stakeholders including the newly established Egyptian Health Council. In partnership they delivered capacity-building, developed a roadmap and implemented the programme.

Local setting Egypt is a lower middle-income country of 117 million people. Health services are provided by agencies in public (governmental and semi-governmental) and private sectors (providers and professional syndicates). No national guideline programme existed before 2022.

Relevant changes In total, 225 individuals attended the capacity-building workshops. After the council ratified the roadmap, the ministry, WHO and the council formally launched the national guideline programme in July 2024. Implementation of the programme led to clearer delineation of responsibilities, eliminated role overlaps and

harmonized processes across different professional societies, teaching hospitals, nurses and allied health professionals.

Lessons learnt Consistent, informed political support and stakeholder commitment contributed to successful implementation. WHO's approach to contextualizing global guidelines added value. Challenges included reliance on international experts, constrained resources and insufficient institutional capacity. Moving forward, sustained institutional development, coaching, monitoring and evaluation, funding and stakeholder engagement are needed.

Introduction

Clinical practice and public health guidelines are documents assisting health workers and patients in deciding on appropriate health care. These documents also inform decision-makers about policies and strategies that can help prevent disease, promote population well-being and improve health outcomes.¹ Developing appropriate guidelines, which often include systematically developed, evidence-based recommendations, is costly, time consuming and requires institutions with strong technical capacities.^{2,3} Since international guidelines often require modifications to fit local contexts, many countries establish guideline adaptation programmes to ensure a thorough and rigorous process.²

Most countries in the World Health Organization (WHO) Eastern Mediterranean Region lack established national guideline programmes.^{4,5} In 2019, the 66th Session of WHO's Regional Committee for the Eastern Mediterranean approved an approach for enhancing national institutional capacity for evidence-informed policy-making, including the establishment of national guideline programmes.⁶

In January 2018, the Egyptian government enacted a universal health insurance law to provide universal health coverage to its population within 10 years. The law mandated high-quality, effective and equitable health care and aimed to reduce variations in the provision and access to care. However, the many national clinical practice and public health guidelines needed to achieve these objectives were either lacking or of low quality. Here we describe the efforts made to improve guideline quality, reduce inconsistencies and ultimately improve health outcomes.

Local setting

Egypt is a lower middle-income country with a population of 117 million. Health services are provided by agencies in public (governmental and semi-governmental) and private sectors

(providers and professional syndicates). There have been considerable efforts to reform the health system since 2015.

Approach

In 2022, the Minister of Health and Population sought WHO's assistance to establish a national guideline development and adaptation programme. The request initiated extensive collaboration between WHO and two main stakeholders with relevant policy-making roles: the Egyptian Health Council and the Ministry of Health and Populations. The Egyptian Health Council, established in 2022, is a public service body mandated to develop and implement evidence-based national guidelines and reports to the Egyptian President.⁷ The council includes the Higher Committee for Guidelines, which identified priority topics for the national guidelines and supervised the development and adaptation of the guidelines; its members represent national stakeholders. The Ministry of Health and Population set the agenda as a policy priority and ensured engagement with national stakeholders.

To inform programme development, WHO conducted a situation analysis in November 2022. The analysis comprised a desk review of existing regulations, processes and published guidelines, together with a series of structured meetings with stakeholders and other key informants (Box 1). Each meeting followed a prepared template to assess existing processes, technical capacities and challenges as well as priorities for action for the development, adaptation, adoption and implementation of the guidelines.

The situation analysis identified several challenges, including: (i) different specialty societies, university departments and hospitals had produced or adapted guidelines using inconsistent methods; (ii) most institutions had limited or no technical capacity to use the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) standards to develop or adapt guidelines; (iii) nursing and allied health professionals were rarely involved in clinical care guideline panels and produced their guidelines without consulting clinicians or other disciplines; (iv) there was no formal process for engaging the private sector; and (v) there was no central system to monitor guideline implementation, nor was there a national compendium of existing guidelines. The analysis also identified strengths and opportunities: (i) high-level support for evidence-based practice gave the programme visibility and helped secure budget allocation; (ii) the council provided a structure for streamlining the development and adaptation of the national guidelines; and (iii) parallel processes for hospital accreditation and health

technology assessment programmes provided an opportunity to link the use of national guidelines to the requirements of these programmes.

Following the situation analysis, WHO used the findings to support the establishment of the National Programme for Guideline Development and Adaptation. This support involved designing and conducting technical capacity-building workshops on guideline development and adaptation for stakeholders and creating a national roadmap for the guideline programme.

Technical capacity-building

WHO organized two workshops in November 2022 and February 2023 for senior decision-makers from stakeholder organizations (Box 1) and key technical teams. Further capacity-building events in October and November 2023 focused on those involved in developing or adapting the guidelines and covered GRADE methods and tools. The events covered the methods for developing and adapting guidelines, such as priority setting, scoping, assessing existing guidelines, finding and appraising evidence, use of cost data, developing evidence-to-decision tables, formulating recommendations and decision-making processes of the guideline development group (Table 1).^{2,8-10}

In addition to building capacity, the workshops were designed to increase awareness among key policy actors on the importance of the role and use of evidence-based guidelines in service delivery and the technical and procedural requirements for the adaptation and development of evidence-based guidelines.

National roadmap for guidelines

WHO, in consultation with the health council, developed the roadmap for the National Programme for Guideline Development and Adaptation in October 2023. The roadmap outlined key steps in adaptation of evidence-based guidelines to the national context, the roles and responsibilities of key stakeholders (Table 2) and standard operating procedures for guideline development groups that should be established for each guideline.⁷ The roadmap also specified criteria for setting guideline priorities, principles for documentation, a template for drafting national guidelines, minimum criteria for implementation plans and strategies for monitoring and evaluation (Table 2). Additionally, WHO developed a plan for longer-term technical capacity-building to ensure the sustainability of the programme in Egypt, using national expertise.

Relevant changes

In total, 225 individuals from more than 20 national stakeholders attended the capacity-building workshops. After the workshops, these individuals started applying the taught methods and approaches for guideline development and adaptation. The workshops built a common understanding of the approaches among stakeholders, including clinicians, nurses, allied health professionals and the private sector. The workshops also generated wider political support for the programme and empowered national experts and methodologists to engage with it.⁸

The council ratified the roadmap and in July 2024 the ministry, WHO and the council formally launched the programme. Implementation of the programme led to clearer delineation of responsibilities (e.g. for those developing and ratifying new guidelines), eliminated role overlaps (e.g. between the ministry and the council) and harmonized processes across different professional societies, teaching hospitals, nurses and other health workers.

The programme resulted in the publication of 49 clinical practice and public health guidelines between 2024 and February 2026, available on the online repository.⁷ Further plans are in place to review progress in 2026. The roadmap developed for Egypt's national guideline programme also served as the basis for a generic guide for countries in similar situations.¹¹

Lessons learnt

The establishment of Egypt's national guideline programme followed a multidisciplinary, collaborative approach, involving stakeholders from various ministries, institutions, regulatory agencies, professional societies and WHO. Political commitment at the highest levels was a key factor in the success of the agenda, as observed in Kenya and Saudi Arabia.^{12,13} While policy-makers often support guidelines to enhance care and efficiency, they may not welcome the limitations that a national guideline programme imposes on their decision-making power. They may also be hesitant to engage professional societies that wish to develop, adapt or adopt clinical guidelines without oversight from a national programme. In Egypt, national policy-makers established the vision and demand for the programme, driving the agenda forward and ensuring stakeholder buy-in.

Another important lesson was the need to establish institutional capacity and define roles. National guideline programmes cannot rely on external expertise, so the programme prioritized strengthening national technical capacity. The workshops addressed the shortage of local

methodologists identified in the situation analysis and reported in similar settings.¹⁴ Legislation integrating the programme into the Egyptian Health Council helped align those stakeholders who did not report to the ministry. The integration bridged divides among teaching, military, police and insurance sector hospitals and facilitated engagement with private sector physicians. The council addressed key challenges, including funding constraints and inadequate standards, technical staff and infrastructure, by establishing a dedicated executive team and delivering extensive training (Box 2).

WHO and the national stakeholders also identified the importance of tailoring the process to the context. Development of the national roadmap was a major contributor to enabling the establishment of the programme.^{5,15} Although international frameworks and tools offer guidance on national agendas, they often overlook the specific needs and challenges faced by low- and middle-income countries. This initiative produced a roadmap, in line with the experiences in other countries with similar contexts and broader critiques of global frameworks, while outlining and contextualizing the standard operating procedures to the Egyptian context.¹⁶ The roadmap avoided technical details for each step, as existing guidance already covers these aspects.²

The collaboration among WHO's country, regional and headquarters offices complemented each other and supported the programme. The WHO country office served as the focal point, coordinating the programme between the ministry, the council and WHO. The regional office provided hands-on strategic and technical support and mobilized international resources. WHO headquarters provided further technical support when needed.

Existing programme resources covered the operational costs, totalling about 40 000 United States dollars, including organization of training activities and engagement of external trainers.

Moving forward, monitoring and evaluating the development and adaptation processes, as well as the impact of the guidelines, are essential. Ensuring sustained funding, capacity-building, stakeholder engagement and strong governance structures will be vital to the programme's long-term success. Sharing these experiences and lessons can benefit other countries or organizations in establishing similar national guideline programmes and improving health-care systems worldwide.^{8,11}

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Competing interests:

AR, MK and MT have a responsibility to expand such programmes in the countries of the region. NF, AR and MK have served on the WHO Guidelines Review Committee. MML holds an advisory role with the Egypt Health Council. PG and EA have long standing interest in the topic and served as independent consultants on the programme.

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Box 1. Stakeholders engaged in the situation analysis for the roadmap in Egypt, November 2022

- Ministry of Health and Population: 3 participants
- Central Administration for Critical and Urgent Care: 1 participant
- Chamber of Health Service Providers in the Private Sector: 2 participants
- Egyptian Drug Authority: 1 participant
- Egyptian Health care Authority: 2 participants
- General Authority for Healthcare Accreditation and Regulation: 1 participant
- General Organisation for Teaching Hospitals and Institutes: 5 participants
- Medical Services Sector at the Ministry of Interior: 6 participants
- Ministry of Health and Population: 3 participants
- Ministry of Defence: 1 participant
- Presidential Initiative to End Waiting Lists: 2 participants
- Professional societies (Egyptian Society of Cardiology, Egyptian Otorhinolaryngology Society, Egypt Society of Obstetrics and Gynaecology, Egyptian Society of Nephrology and Transplantation, Society for Diagnostic Radiology, Egyptian Society of Neurological Surgeons, Egyptian Association of Urology, Egyptian Society of Chest Diseases and Tuberculosis, Egyptian Society of Laboratory Medicine and Egyptian Orthopaedic Association): 11 participants
- Supreme Council of University Hospitals: 1 participant

Total: 39 participants

Note: numbers from a situation analysis conducted by the World Health Organization, compiled by the authors.

Box 2. Summary of main lessons learnt

- Multidisciplinary engagement and strong political commitment are essential for successful national guideline programmes.
- Training dedicated teams and building technical capacity for guideline development and adaptation is vital.
- Effective implementation requires tailoring guideline adaptation processes to country-specific needs, especially in low-resource settings.

Table 1. **Capacity strengthening activities for stakeholders engaged in guideline development in Egypt**

Workshop title	Date	Objective	No. of participants
Workshops before the launch of the programme			
High-level workshop on development, revision and implementation of the National Guideline Development and Adaptation Programme	22–23 Nov 2022	To bring together a group of national policy-makers and experts to review and discuss the country experience in the development, adoption and adaptation of guidelines, including challenges and implementation of guidelines in practice; agree on the main action points for establishing the national programme for development and adaptation of guidelines in Egypt	55
Technical workshop on the National Programme for Guideline Development and Adaptation	30 Jan–2 Feb 2023	To enhance the technical capacity for development and adaptation of guidelines and to conduct training of trainers for development and adaptation of the guidelines	60
Technical capacity building workshop on GRADE methodology	9–11 Oct 2023	To enhance participants' knowledge and practical skills to develop and adapt clinical guidelines, including prioritizing topics and questions, conducting and critically appraising evidence searches, assessing the quality and certainty of evidence using the GRADE methods and preparing structured evidence tables using GRADEpro software	50
Virtual technical capacity building workshop on GRADE methodology	6–8 Nov 2023	To strengthen participants' understanding of the GRADE-ADOLOPMENT methods and guideline statement types and build their capacity to assess health effects and contextual factors, gather relevant information and effectively use evidence-to-decision and adolopment tables within GRADEpro software	60
WHO-supported training after the launch of the programme			
Virtual guideline methodologist training	22–24 Apr 2025	To build the capacity of national methodologists to understand and apply the full process of guideline development and adaptation using the GRADE approach and effectively contribute to national guideline development and adaptation in alignment with international standards	21
2nd national training workshop for methodologists on guideline adaptation using GRADE methodology	11–12 Aug 2025	To build a sustainable cadre of national methodologists to support guideline development in Egypt	20

GRADE: grading of recommendations, assessment, development and evaluation.

Note: numbers are from registration information at the capacity building events, compiled by the authors.

Table 2. Key specifications of the roadmap for the National Programme for Guideline Development and Adaptation in Egypt, October 2023⁷

Main step	Required functions and responsibilities	Responsible entity
Identifying key stakeholders for the programme	Defining roles and responsibilities	Egyptian Health Council
Priority setting for guidelines	Identifying priority topics using the minimum criteria: <ul style="list-style-type: none"> • Health and cost burden of the disease; • Practice variation or lack of established policies; • Potential impact to improve health outcomes 	Higher Committee for Guidelines
Scoping the guidelines: questions to be addressed	Guidelines should include: <ul style="list-style-type: none"> • Guideline target group, such as patients and professionals; • Care setting, such as public health and primary care; • Aspects of care affected, such as promotion, prevention, diagnosis and treatment 	Higher Committee for Guidelines; Guideline development groups
Establishing the guideline development groups and technical support teams	Establishing roles and responsibilities; Ensuring multidisciplinary participation, such as both clinicians and nurses; Managing conflicts of interest	Higher Committee for Guidelines; Egyptian Health Council
Writing guidelines	Ensuring standardization, clarity and ease of use	Guideline development groups; Egyptian Health Council (for approval and publishing)
Ensuring implementation plan, monitoring and evaluation plan for each guideline are in place and followed	Identifying potential barriers and facilitators; Noting the availability of resources Developing implementation strategies; Establishing performance indicators, such as for guideline dissemination, end-user knowledge, delivery of care and health outcomes	Egyptian Health Council; other key stakeholders, including the Ministry of Health and Population, specialty societies, teaching hospitals and the private sector

Note: roadmap for the National Programme for Guideline Development and Adaptation, compiled by the authors.