



## Health information

Reliable and timely health information is essential for proper health management, evidence-based decision-making, optimal use of resources, and monitoring and evaluation of public health situations, actions and outcomes. Robust health information systems that generate reliable and timely data to inform the development of appropriate, effective and cost-effective health policies, which is essential to achieve, and monitor progress, towards the Sustainable Development Goals (SDGs) and universal health coverage (UHC). Its importance is emphasized repeatedly in WHO's Thirteenth General Programme of Work (GPW 13).

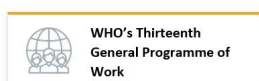
The central focus of GPW 13 is impact in countries and the GPW 13 WHO Impact Framework aims to track the joint efforts of WHO, Member States and partners in achieving the GPW's "triple billion" targets and the measurable impact on people's health at the country level. The Impact Framework maps SDG targets and indicators to GPW targets and indicators.

To strengthen their health information systems, countries in the WHO Eastern Mediterranean Region are reporting on a list of [regional core indicators](#) . The core indicators focus on three main areas:

- monitoring health determinants and risks;
- assessing health status, including morbidity and cause-specific mortality; and
- assessing health system response.

To strengthen national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region, the WHO Regional Office has developed a framework for health information systems, which provides practical actions that countries can take to build national institutional capacity and outlines the support that WHO can provide to facilitate this process.

WHO supports countries of the Region in strengthening national health information systems. This includes conducting comprehensive [health information system assessments](#) , developing national health information system strategies, improving national capacity in death certification and analysis, promoting International Classification of Disease (ICD) coding and (where appropriate) use of DHIS-2 platforms to enhance the reporting of routine data.





**WHO's Impact  
Framework**



**Framework for action  
to improve national  
institutional capacity  
for the use of evidence  
in health policy-  
making**



**Comprehensive  
assessments of  
national health  
information systems**

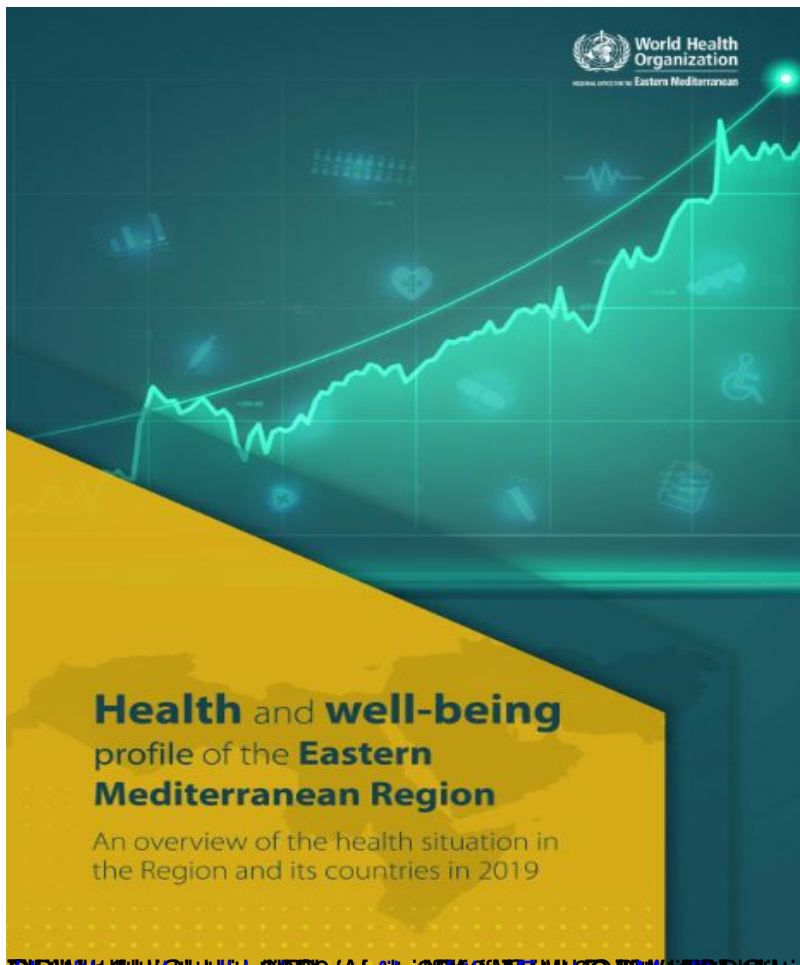


**International  
Classification of  
Disease (ICD)**



**District health  
information system  
(DHIS-2)**

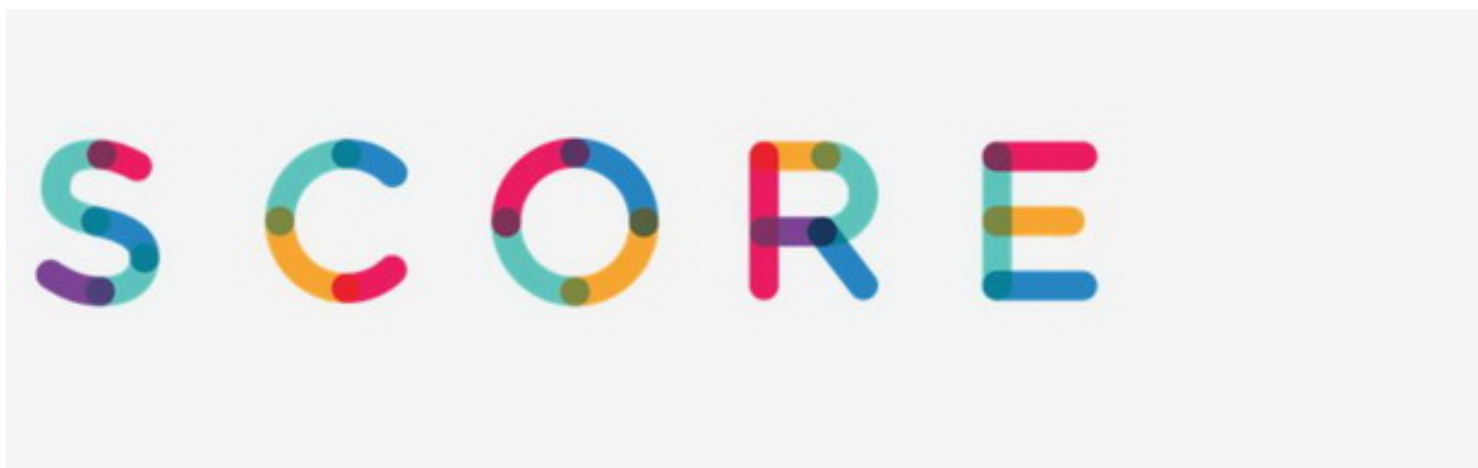
## **Related link**



[Health and well-being profile of the Eastern Mediterranean Region](#)

[News](#)

**SCORE**



The SCORE (*Survey, Count, Optimize, Review, Enable*) for health data technical package aims

to provide support to Member States to strengthen health information systems and capacity to monitor and track progress towards the health-related Sustainable Development Goals (SDGs), including universal health coverage (UHC), and other national and subnational health priorities and targets. Developed by WHO, with the financial support of Bloomberg Philanthropies, SCORE addresses WHO's commitment to support Member States to effectively collect, analyse, report and use data.

The five essential interventions of the "SCORE for health data package" are:

- Survey populations and health risks ... *to know what makes people sick and their risks*
- Count births, deaths and causes of death ... *to know who is born and what people die from*
- Optimize health service data ... *to ensure equitable, quality services for all*
- Review progress and performance ... *to make informed decisions*
- Enable data use for policy and action ... *to accelerate improvement*

The technical package includes a framework of essential interventions and their key elements that can assist in prioritizing investments and actions. The SCORE for health technical package also provides recommended standards, guidance and tools to support implementation of the interventions.



- is a **one-stop solution** to address data availability, timeliness, and comparability;
- contains **all elements that comprise an optimal health information system** in a single package;
- is a tool to help **focus priority investments** for data, analytical and statistical capacity;
- provides guidance for countries to take **targeted policy action** to address inequalities and improve population health outcomes;
- provides a method to **improve data quality** to monitor progress towards global goals with the ability to adapt to local contexts;
- is a means to develop strong health information systems for **emergency preparedness and response**, not only for COVID-19 but for any public health threat.

[SCORE package](#)

## Data sources

### Communicable disease surveillance systems



Surveillance is the ongoing systematic collection, analysis, and interpretation of outcome specific data for use in planning, implementing and evaluating public health policies and practices. A communicable disease surveillance system serves two key functions; early warning of potential threats to public health and programme monitoring functions which may be disease-specific or multi-disease in nature.

The early warning functions of surveillance are fundamental for national, regional and global health security. The COVID-19 pandemic and recent outbreaks of severe acute respiratory syndrome (SARS) and avian influenza, and potential threats from biological and chemical agents, demonstrate the importance of effective national surveillance and response systems.

## Hospital information systems



The availability of high quality data on health systems is crucial for informing policy development, monitoring performance, allocating resources efficiently, and ensuring proper functioning of the health system within national policy and regulatory frameworks.

Information and communication technology (ICT) within hospitals has clear links with internal management (including procurement, monitoring and reporting) and clinical management (with electronic records supporting quality development and health system cooperation). ICT and decision support systems can improve the appropriateness of clinical decisions, such as antimicrobial prescribing.

The ability to share information between hospitals and other parts of the national health information system is becoming increasingly important for: treating patients (coordinating care, avoiding medication errors and supporting quality improvement); developing proactive population health management (using analytics to identify patients at risk, targeting early intervention or running recall and screening programmes); effectively managing the

performance of providers and identifying opportunities for improvement; and ensuring that patients have access to their own records.

Effective national health information system projects have been implemented in many countries, including low- and middle-income countries, under the initiatives of governments and key stakeholders.

## **District health information systems**

Globally, countries use different systems to collect, process, analyse and report data for decision-making. One platform currently in use is DHIS-2 – a flexible, web-based open-source information system with important visualization features, including the Geographic Information System, charts and pivot tables. DHIS-2 enables users to manage aggregate data with a flexible model first implemented more than 15 years ago. DHIS-2 is being used to monitor patient health, improve disease surveillance and locate outbreaks and speed up access to health data.

Several countries in WHO's Eastern Mediterranean Region are using or piloting DHIS-2 to collect, process, analyse and disseminate health information at national level or within specific programmes.

[\*\*Read more about DHIS 2\*\*](#)

[\*\*DHIS COVID-19 Surveillance Digital Data Package\*\*](#)

[\*\*DHIS COVID-19 Surveillance Digital Data Package\*\*](#)



## Surveys



Information about population health and health risks is a cornerstone of preventing disease and disability. It enables evidence-informed planning and evaluation of health policies and preventive activities. Health and health risks, which predict future health, are key issues for people's welfare, maintaining a fit-for-purpose workforce while minimizing the need for health care for the ageing population. Surveys provide critical information from other sectors such as poverty programmes, education, water and sanitation, living conditions, nutrition, air quality and security.

Population-based surveys are among the main data sources for understanding population health status and health risks and are a prominent source of data for many health-related Sustainable Development Goal (SDG) indicators. Of the 232 SDG indicators, 77 are derived from household surveys; and surveys are often the only source of data for indicators of behaviour and risk factors. They represent the most important instrument to assess inequalities.

A number of countries such as in the Region such as Islamic Republic of Iran, Sudan and Qatar have developed national survey plans as a consolidated approach to guide data collection efforts.

### Related links

[United Arab Emirates national health survey report 2017–2018](#)

[Tunisian Health Examination Survey, 2016](#)

## Civil registration and vital statistics

A well-functioning civil registration and vital statistics (CRVS) system registers all births and deaths, issues birth and death certificates, and compiles and disseminates vital statistics, including cause of death information. It may also record marriages and divorces.

As part of the civil registration and vital statistics agenda, a regional strategy was developed and implemented for 2014–2019. Assessments of civil registration and vital statistics systems were conducted in all countries of the Region, and road maps and improvement plans were developed for all countries. These resulted in notable improvements in birth and death registration, and quality of reporting of causes of death.

In 2013, birth registration completeness ranged from 0% to 100% in different countries of the Region, with a regional average of 62%. Death registration also ranged from 0% to 100%, but with a regional average of 23%. By 2018, the timely registration of births and deaths in the Region had reached 70% and 54%, respectively.

One of the key steps towards strengthening health information systems in the Region is improving the capacity of countries in accurate registration of vital statistics, including civil registration and cause-specific mortality. All countries of the Region have birth registration systems, although the level of coverage varies. Coverage of birth registration is above 90% in 14 countries of the Region and under 70% in six low-income countries. All countries of the Region except Somalia have death registration, with different levels of coverage. In half of the countries, the coverage of death registration is 90% or above. In 2018, 14 countries reported mortality data disaggregated by cause of death based on ICD-10, with data completeness above 60% in six countries. The average of data completeness for cause of death in the Region is 32%, which is lower than the global rate (49%) and only higher than the African and South-East Asian regions.

[Read more about civil registration and vital statistics](#)

[Revealing the toll of COVID-19 A technical package for rapid mortality surveillance and epidemic response](#)

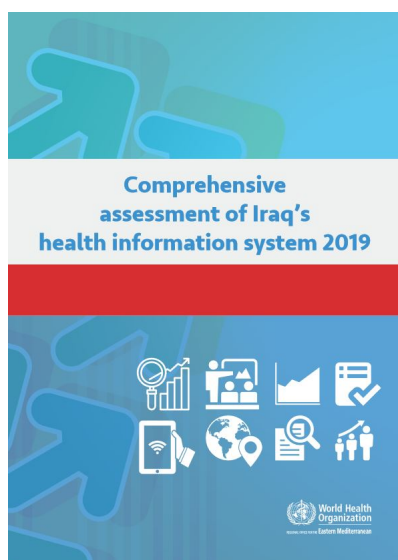
[Regional strategy for the improvement of civil registration and vital statistics systems 2014-2019](#) | [Arabic](#) | [French](#)

## Information resources

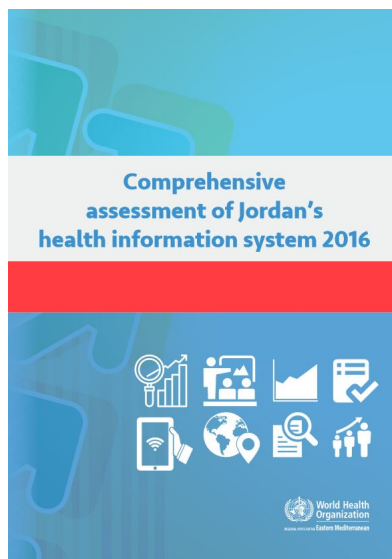
### Health information system assessments



[Comprehensive assessment of Afghanistan's health information system](#)



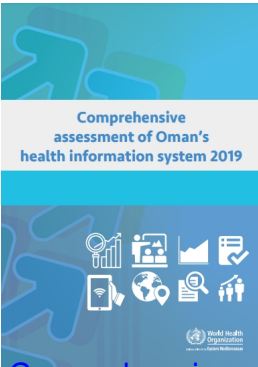
[Comprehensive assessment of Iraq's health information system](#)



[Comprehensive assessment of Jordan's health information system](#)



[Comprehensive assessment of Libya's health information system](#)



[Comprehensive assessment of Oman's health information system](#)



[Comprehensive assessment of Pakistan's health information system](#)

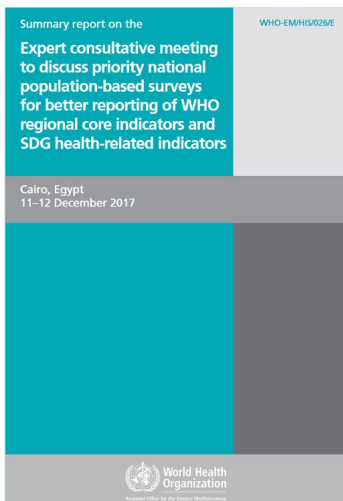


[Assessment of Sudan's health information system](#)

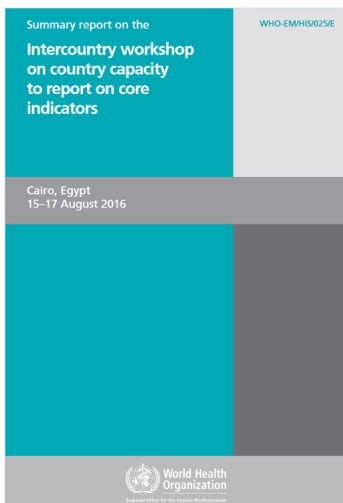
**Meeting reports**



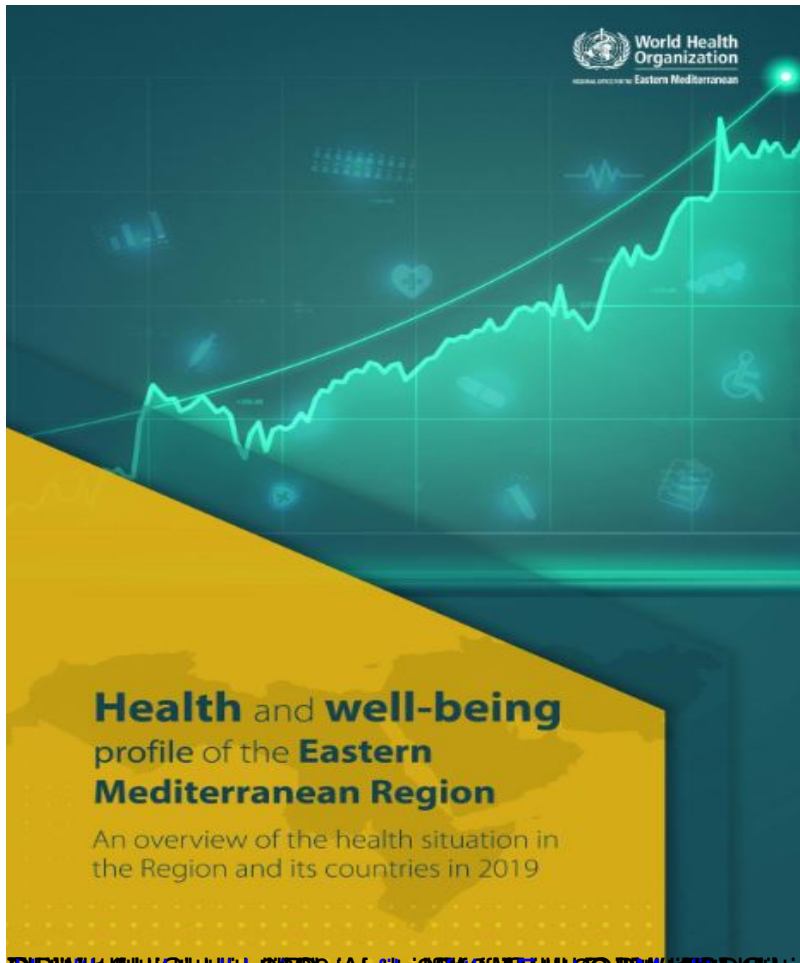
[Summary report on the Expert meeting on the guide for implementing the humanitarian-development-peace nexus \(HDPNx\) for health, Cairo, Egypt, 10-12 February 2020](#)



[Summary report on the expert consultative meeting to discuss priority national population-based surveys for better reporting of WHO regional core indicators and SDG health-related indicators, Cairo, Egypt, 11-12 December 2017](#)



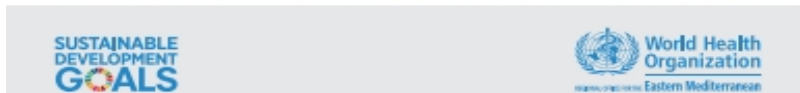
[Summary report on the intercountry workshop on country capacity to report on core indicators, Cairo, Egypt, 15-17 August 2016](#)  
**Health and well-being profile of the Eastern Mediterranean Region**



**Health and well-being**  
profile of the **Eastern**  
**Mediterranean Region**

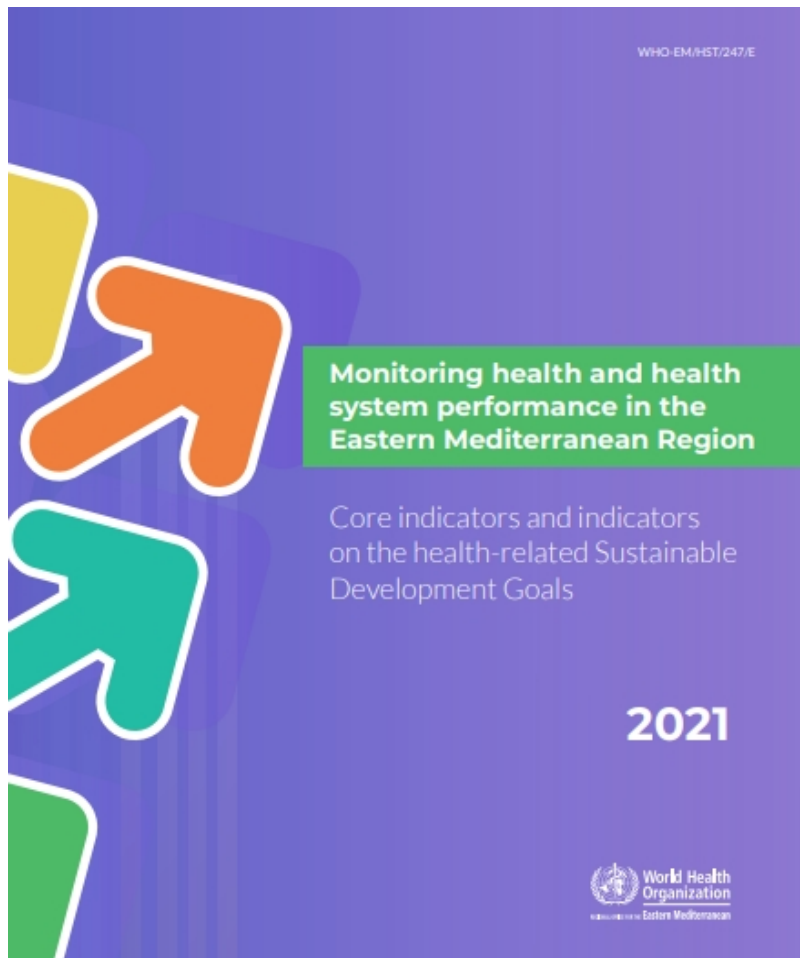
An overview of the health situation in  
the Region and its countries in 2019

[Health and well-being profile of the Eastern Mediterranean Region](#)  
**Progress on the health-related Sustainable Development Goals and  
targets in the Eastern Mediterranean Region, 2020**




**Core indicators and indicators on the health-related Sustainable Development Goals**





Monitoring health and health system performance in the Eastern Mediterranean Region: Core indicators and indicators Framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region (2020-2024)

 <b>World Health Organization</b> <small>REGIONAL OFFICE FOR THE Eastern Mediterranean</small>		
<b>Framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region (2020-2024)</b>		
Country categories	Country action	Support from WHO and other development partners
<b>A</b> All countries	<ul style="list-style-type: none"> <li>Establish mechanisms to regulate and manage conflicts of interests in policy-making</li> <li>Enhance the capacity of the ministry of health planning department for critical appraisal of knowledge products and evidence synthesis reports (i.e. policy briefs, health technology assessments, guidelines and systematic reviews)</li> <li>Ensure access of the ministry of health to sources of research evidence for health (e.g. through the WHO mINARI programme)</li> <li>Improve cause of death reports and national observatory for national health indicators including surveillance reports</li> </ul>	<ul style="list-style-type: none"> <li>Provide technical support for selection of appropriate national institutional methods for evidence-informed policy-making</li> <li>Provide technical support for key national capacity-building for evidence-informed policy-making</li> <li>Support the development of policy briefs of regional importance</li> <li>Support the adaptation of global WHO guidelines to the regional context for high priority topics</li> <li>Support the development of multicountry or regional guidelines for high priority topics</li> <li>Establish a regional network of institutions that actively supports evidence-informed policy-making at the national level</li> </ul>
<b>B</b> Countries with limited academic resources, in addition to A:	<ul style="list-style-type: none"> <li>Ensure a minimum capacity (epidemiology and cost analysis) for development of policy reports</li> <li>Focus on adaptation of high priority evidence synthesis reports to the national setting</li> <li>Include resource funds for evidence-to-policy activities in donor requests to enhance national capacity</li> </ul>	<ul style="list-style-type: none"> <li>Support the development of policy briefs and adaptation of WHO guidelines for national priorities</li> </ul>
<b>C</b> Countries affected by protracted or acute emergencies, in addition to A & B:	<ul style="list-style-type: none"> <li>Ensure a minimum capacity (epidemiology and cost analysis) for development of policy reports</li> <li>Focus on adaptation of high priority evidence synthesis reports to the national setting</li> <li>Include resource funds for evidence-to-policy activities in donor requests to enhance national capacity</li> </ul>	<ul style="list-style-type: none"> <li>Support rapid processes for adaptation or development of policy synthesis products for the country's needs</li> </ul>
<b>D</b> Countries with large academic capacity and small populations, in addition to A:	<ul style="list-style-type: none"> <li>Establish programmes for national health technology assessments and guideline adaptation/development in collaboration with academic institutions</li> <li>Establish formalized evidence-to-policy processes, including for developing policy briefs and conducting policy dialogues</li> <li>Establish an evidence-to-policy team within the ministry of health including all key areas of expertise</li> <li>Develop plans for mid-term (e.g. 10-year) national household surveys</li> <li>Establish an effective cancer registry and pharmacovigilance programme</li> </ul>	As in A
<b>E</b> Countries with large academic capacity and large populations, in addition to A & D:	<ul style="list-style-type: none"> <li>Establish institutes affiliated with the ministry of health (e.g. NIPH, NIHR, NICE)* tasked with commissioning, developing, appraising or adapting national guidelines, health technology assessments and policy briefs</li> <li>Enhance the capacity of academic institutions to cover all areas needed for evidence-to-policy processes</li> </ul>	As in A



\*NIPH: National Institute for Public Health; NIHR: National Institute for Health Research; NICE: National Institute of Health and Clinical Excellence

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[Framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region](#)

[Arabic](#) | [French](#)

## **Regional Committee documentation**

### **Technical papers**

EM/RC66/INF.DOC.3

Regional strategy for the improvement of civil registration and vital statistics systems, 2014–2019

[English](#) | [Arabic](#) | [French](#)

EM/RC60/10

Regional strategy for the improvement of civil registration and vital statistics systems

[English](#) - [Arabic](#) - [French](#)

### **Resolutions**

EM/RC66/R.5

Developing national institutional capacity for evidence-informed policy-making for health

[English](#) | [Arabic](#) | [French](#)

EM/RC60/R.7

Regional strategy for the improvement of civil registration and vital statistics systems 2014–2019

[English](#) - [Arabic](#) - [French](#)

### **Progress reports**

EM/RC64/INF.DOC.5

Regional strategy for the improvement of civil registration and vital statistics systems  
2014–2019

[English](#) | [Arabic](#) | [French](#)

EM/RC62/INF.DOC.8

Regional strategy for the improvement of civil registration and vital statistics systems 2014-2019

[English](#) | [Arabic](#) | [French](#)

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