Monitoring, evaluation and review of national health policies, strategies and plans

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CHAPTER 1  Introduction: strategizing national health in the 21st century

CHAPTER 2  Population consultation on needs and expectations

CHAPTER 3  Situation analysis of the health sector

CHAPTER 4  Priority-setting for national health policies, strategies and plans

CHAPTER 5  Strategic planning: transforming priorities into plans

CHAPTER 6  Operational planning: transforming plans into action

CHAPTER 7  Estimating cost implications of a national health policy, strategy or plan

CHAPTER 8  Budgeting for health

CHAPTER 9  Monitoring and evaluation and review of national health policies, strategies and plans

Cross-cutting topics relevant to national health planning

CHAPTER 10  Law, regulation and strategizing for health

CHAPTER 11  Strategizing for health at sub-national level

CHAPTER 12  Intersectoral planning for health and health equity

CHAPTER 13  Strategizing in distressed health contexts
Monitoring, evaluation and review of national health policies, strategies and plans

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Contents

Acknowledgements ........................................................................................................ iv
Overview ......................................................................................................................... v

9.1 What do we mean by monitoring, evaluation and review of NHSPs? ................. 1
  9.1.1 What are the differences between monitoring, evaluation and review? ....... 1
  9.1.2 Monitoring, evaluation and review need a strong, country-led M&E platform 1

9.2 Why are monitoring, evaluation and review important? ..................................... 3
  9.2.1 Because progress and performance of the national health strategy need to be tracked 3
  9.2.2 Because country monitoring is the basis for regional and global monitoring of priority health issues ................................................................. 3
  9.2.3 Because reporting progress on health-related SDGs requires sound M&E systems 3
  9.2.4 Because health inequities need to be monitored ........................................... 4
  9.2.5 Because countries need functional surveillance mechanisms ..................... 4
  9.2.6 Because monitoring, evaluation and review are a necessary basis for accountability 4
  9.2.7 Because there is a growing interest and demand for quality data for decision-making and accountability ......................................................... 5

9.3 What are the components of an M&E platform? ..................................................... 7
  9.3.1 Sound policy and institutional environment for M&E .................................... 7
  9.3.2 Well-functioning data sources ...................................................................... 16
  9.3.3 Strong institutional capacity for data collection, management, analysis, use and dissemination ................................................................. 19
  9.3.4 Strong mechanisms for review and action .................................................... 21

9.4 How can a country-led M&E platform be strengthened? ....................................... 24

9.5 Who should be involved in monitoring, evaluation and review? ......................... 26

9.6 When should monitoring, evaluation and review take place? ............................. 27

9.7 What if ...? .............................................................................................................. 29
  3.7.1 What if fragmentation and/or fragility is an issue in your country? ............ 29
  3.7.2 What if your country is decentralized? ......................................................... 30

3.8 Conclusion .............................................................................................................. 33

References ..................................................................................................................... 34

Further reading .................................................................................................................. 35

Annex 9.1 Template/outline of an M&E plan ................................................................. 38
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Overview

This chapter outlines the aim and importance of monitoring, evaluation and review as the basis for tracking progress and performance of national health policies, strategies and plans (NHPSP) and to inform the health policy dialogue. Monitoring, evaluation and review require an integrated approach that builds
on a single country-led monitoring and evaluation (M&E) platform. Key components and attributes of a strong country-led platform for monitoring, evaluation and review are specified here; in addition, key recommendations are made for countries to move forward and strengthen the platform.
Summary

What do we mean by monitoring, evaluation and review of NHPSPs?

Monitoring, evaluation and review are essential functions to ensure that priority health actions outlined in the NHPSP are implemented as planned against stated objectives and desired results.

- Monitoring means bringing all data together to analyse the progress of implementation of activities.
- Evaluation builds upon monitoring and assesses whether the desired results of a NHPSP intervention have been achieved.
- Based on the evidence gathered through M&E processes, reviews are used to assess overall progress and performance, to identify problems and take corrective actions.

A single country-led platform brings together all the elements related to monitoring, evaluation and review of the health sector plan, including national policy and plans relating to M&E and country health information systems (HIS), well-functioning data sources, institutional capacity for data collection, management analyses and use, as well as the country review processes for planning and decision-making.

Why is it important?

Because:

- progress and performance of the national health strategy need to be tracked;
- country monitoring is the basis for regional and global monitoring of priority health issues;
- reporting progress on health-related Sustainable Development Goals (SDGs) requires sound M&E systems;
- health inequities need to be monitored;
- countries need functional surveillance mechanisms;
- accountability is a necessary basis for policy dialogue.

What are the components of an M&E platform

Monitoring, evaluation and review of the national health strategy require an integrated and comprehensive approach that builds on a single country-led platform as described in the IHP+ framework for monitoring national health strategies1 that meets all country data needs and allows monitoring of progress towards the health-related SDGs, with high-level political commitment and investments by countries and international partners. The four main components of an M&E platform should be strengthened:

1. sound policy and institutional environment, including sound governance policies and multi-stakeholder coordination mecha-
nisms, a strong M&E plan as an integral component of the national health strategy, a comprehensive logical framework that guides selection of indicators and targets, use of international data standards, unified data architecture and innovations;

2. well-functioning data sources including civil registration and vital statistics (CRVS) systems, population-based surveys, routine facility information systems, facility surveys, administrative data sources such as national health accounts and health workforce registries, logistical information systems, disease and public health surveillance, research studies among others;

3. strong institutional capacity for data collection, management, analysis, use and dissemination;

4. effective country mechanisms for review and action, such as a regular and transparent system of reviews with broad involvement of key stakeholders and processes for translating results into decision-making.

How to strengthen monitoring, evaluation and review?

Key steps to strengthen the country-led platform include:

1. assess the key attributes of the M&E platform as required and identify priority actions to address key gaps and weaknesses;

2. review and select core indicators and develop baseline and targets for monitoring national priorities and health goals;

3. develop a comprehensive M&E plan, including alignment of disease-specific plans and identification of priority actions;

4. cost the M&E plan and develop a common investment framework as the basis for government and partner investments;

5. review and evaluate the M&E platform regularly.

Who are the key stakeholders?

Stakeholders include national and sub-national policy-makers, programme managers and planners, civil society and development partners.

When should monitoring, evaluation and review take place?

Monitoring, evaluation and review should be linked with the country planning cycles, when progress and performance of the sector are discussed and remedial actions are taken.

Anything else to consider?

- fragile environment;
- decentralized environment.
9.1 What do we mean by monitoring, evaluation and review of NHPSPs?

9.1.1 What are the differences between monitoring, evaluation and review?

Monitoring, evaluation and review are essential functions to ensure that priority health actions outlined in the NHPSP are implemented as planned against stated objectives and desired results.

**Monitoring** means collecting, tracking and analysing data to determine what is happening, where, and to whom. Monitoring uses a set of core indicators and targets to provide timely and accurate information in order to inform progress and performance reviews and decision-making processes. In the context of NHPSP, the indicators and targets should be linked to the strategic directions and key objectives for the health sector.

**Evaluation** builds upon the monitoring data but the analysis goes much deeper. Additional data are often needed to take into account contextual changes and determine if change is attributable to services.

**Reviews** gather evidence through monitoring and evaluation processes to assess progress and performance. Health sector reviews require national institutional mechanisms involving multiple stakeholders to provide the basis for mutual accountability. Reviews should link assessment to country follow-up action including prioritization, resource allocation and policy dialogue. Several characteristics are recommended to ensure a sound health sector situation analysis.

9.1.2 Monitoring, evaluation and review need a strong, country-led M&E platform

Monitoring, evaluation and review of the NHPSP requires an integrated and comprehensive health systems approach that builds on a single country-led M&E platform, as described in the IHP+ framework for monitoring national health strategies. This platform should meet all country data needs and allow monitoring of progress towards national health sector goals as spelled out in the NHPSP as well as the international health-related SDGs, while enjoying high-level political commitment and investments by countries and international partners.

A single country-led platform brings together all the elements related to monitoring, evaluation and review of the NHPSP, including specific policy and plans relating to M&E and country health information systems (see Fig. 9.1). In addition, the country’s data sources and institutions for data generation, compilation, analysis, synthesis and dissemination form an integral part of the single platform. Country review processes should make use of the platform’s evidence base as an anchor for planning and decision-making.

The platform covers health system components and major disease programmes; it serves as the mechanism for sub-national, national and global reporting, aligning health sector stakeholders at country and global levels around a common country-led approach.
The platform aims to be relevant for countries and for global health partnerships, donors and agencies alike, and to result in better alignment of country and global monitoring systems. The platform should reduce duplication of efforts, focus on health sector results monitoring, and result in better accountability and harmonization of M&E systems.

Fig. 9.1 M&E platform and its links with HIS

<table>
<thead>
<tr>
<th>National health policies, strategies and plans (NHPSP)</th>
</tr>
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<tbody>
<tr>
<td><strong>M&amp;E Platform</strong></td>
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<tr>
<td>Effective country mechanisms for review and action</td>
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<tr>
<td>Strong institutional capacity for data collection, analysis and use</td>
</tr>
<tr>
<td>Well functioning data sources</td>
</tr>
<tr>
<td>Health facility and community information systems</td>
</tr>
<tr>
<td>Population-based surveys and census</td>
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<tr>
<td>Civil registration and vital statistics</td>
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<tr>
<td>Surveillance</td>
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<tr>
<td>Health systems monitoring sources</td>
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<tr>
<td>Other non-health sector sources</td>
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<tr>
<td>Sound policy, governance and institutional environment</td>
</tr>
</tbody>
</table>

A single-led country platform for monitoring, evaluation and review should allow monitoring of progress towards national health sector goals as spelled out in the NHPSP and international health-related SDGs.

The platform is often described by the M&E plan and/or the HIS strategic plan. The M&E plan is normally developed in parallel to the development of the NHPSP, and reflects its priorities. In some countries, the national health strategy has a specific M&E chapter giving an overview of indicators and priorities for strengthening M&E systems. This is often accompanied by a separate detailed M&E plan. In some countries, the HIS strategy is used as an operational plan to strengthen data sources and the overall HIS, to respond to the monitoring needs of the national health strategy.

Both the M&E plan and the HIS strategic plan can help to align health partners, governments and other stakeholders around the national priorities to strengthen the systems that generate health information. They are complementary, and both M&E and HIS strategic plans can cover all functions outlined previously.
9.2 Why are monitoring, evaluation and review important?

9.2.1 Because progress and performance of the national health strategy need to be tracked

The NHPSP addresses the public health needs of the country and lays out a plan to address these issues. Monitoring, evaluation and review are important, as they provide the basic measurement systems and accountability mechanisms to plan, manage and account for the objectives and targets of the national health strategy. Indicators are required to support programme planning, monitoring, reviews and accountability for the health sector as a whole, and for specific programmes.

All countries need to be able to generate statistics on mortality by age, sex and cause of death; disease incidence and prevalence; coverage of interventions, including quality of services; prevalence of risk factors; financial protection; and data on health system inputs and outputs to manage and plan services. The data generated through the country information system allows a country to monitor the progress and performance of both the overall health sector plan and disease-specific subplans, such as those for HIV, tuberculosis, malaria, etc. at both national and sub-national level. By starting from a known baseline, progress can be paced appropriately given the available resources.

9.2.2 Because country monitoring is the basis for regional and global monitoring of priority health issues

Over 90 targets have been endorsed by Member States at the World Health Assembly and other governing bodies. There are also hundreds of recommended indicators to cover the wide array of health and disease programmes. WHO and partners have agreed on a Global Reference Set of 100 Core Indicators to be prioritized for the purposes of monitoring progress.3

Monitoring, evaluation and review provide the basic measurement systems and accountability mechanisms to plan, manage and account for the objectives and targets of the national health strategy.

9.2.3 Because reporting progress on health-related SDGs requires sound M&E systems

The overarching health goal is associated with 13 targets (or subgoals), including three related to the MDGs, three related to the emerging agenda of noncommunicable diseases and injuries, and three cross-cutting or health systems focused, including universal health coverage (UHC) (See Fig. 9.2). Additional health-related indicators are included in other SDG goals.

Reporting progress on the 13 targets of health-related SDGs, such as universal health coverage, requires sound M&E systems.
9.2.4 Because health inequities need to be monitored.

Statistics should highlight health inequalities by major stratifiers, including demographic (age, sex/gender), socioeconomic status (wealth, education), and geography (province/district) or other characteristics (migration, minorities etc.). Data on levels and inequalities in financial protection and coverage of interventions are the core of UHC monitoring.

9.2.5 Because countries need functional surveillance mechanisms

All countries need active disease/public health surveillance for detecting, reporting and responding to specific notifiable conditions and events, in particular epidemic-prone communicable diseases. Surveillance systems draw upon multiple sources of information, including routine health and disease records and sentinel surveillance systems in specific populations.

9.2.6 Because monitoring, evaluation and review are a necessary basis for accountability

The monitoring of national priorities, including health-related SDGs, requires well-established mechanisms for accountability at country, regional and global levels. Such mechanisms need to be inclusive, independent, evidence-based and transparent, and lead to remedial actions.
In the Summit on Measurement and Accountability for Results in Health in June 2015, over 600 global health leaders, decision-makers, thought-leaders and implementers from over 60 countries representing development partners, partner country governments, and civil society endorsed the Health Measurement and Accountability Post-2015 Roadmap⁵ and 5-Point Call to Action.⁶ The Call to Action identifies a set of priority actions and targets that aims at strengthening country data and accountability systems for the post-2015 sustainable development agenda. The Health Data Collaborative was formed as a result of a call from Global Health Agency leaders (September 2015) to do more together to support countries implementing the five point call to action. The value add of the Collaborative is collective and aligned action that aims to reduce fragmentation in country HISs, to maximize the impact of respective investments and to enhance sustainability.

Fig. 9.2 Health SDG monitoring framework⁴

### 9.2.7 Because there is a growing interest and demand for quality data for decision-making and accountability

In the Summit on Measurement and Accountability for Results in Health in June 2015, over 600 global health leaders, decision-makers, thought-leaders and implementers from over 60 countries representing development partners, partner country governments, and civil society endorsed the Health Measurement and Accountability Post-2015 Roadmap⁵ and 5-Point Call to Action.⁶ The Call to Action identifies a set of priority actions and targets that aims at strengthening country data and accountability systems for the post-2015 sustainable development agenda. The Health Data Collaborative was formed as a result of a call from Global Health Agency leaders (September 2015) to do more together to support countries implementing the five point call to action. The value add of the Collaborative is collective and aligned action that aims to reduce fragmentation in country HISs, to maximize the impact of respective investments and to enhance sustainability.

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**SDG 3: Ensure healthy lives and promote well-being for all at all ages**

**Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services, medicines and vaccines for all**

<table>
<thead>
<tr>
<th>MDG unfinished and expanded agenda</th>
<th>New SDG 3 targets</th>
<th>SDG3 means of implementation targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Reduce maternal mortality</td>
<td>3.4 Reduce mortality from NCD and promote mental health</td>
<td>3.a Strengthen implementation of framework convention on tobacco control</td>
</tr>
<tr>
<td>3.2 End preventable new-born and child deaths</td>
<td>3.5 Strengthen prevention and treatment of substance abuse</td>
<td>3.b Provide access to medicines and vaccines for all, support R&amp;D of vaccines and medicines for all</td>
</tr>
<tr>
<td>3.3 End the epidemics of HIV, TB, malaria and NTD and combat hepatitis, waterborne and other communicable diseases</td>
<td>3.6 Halve global deaths and injuries from road traffic accidents</td>
<td>3.c Increase health financing and health workforce in developing countries</td>
</tr>
<tr>
<td>3.7 Ensure universal access to sexual and reproductive health-care services</td>
<td>3.9 Reduce deaths from hazardous chemicals and air, water and soil pollution and contamination</td>
<td>3.d Strengthen capacity for early warning, risk reduction and management of health risks</td>
</tr>
</tbody>
</table>

*Interventions with economic, other social and environmental SDGs and SDG 17 on means of implementation*
9.3 What are the components of an M&E platform?

In order for an M&E platform to be strengthened, it is important to understand the desirable end result: a sound country-led platform for monitoring, evaluation and review. It has four main components. These are:

- sound policy and institutional environment;
- well-functioning data sources;
- strong institutional capacity for data collection, management, analysis, use and dissemination;
- effective country mechanisms for review and action.

This section reviews the main components of the M&E platform.

9.3.1 Sound policy and institutional environment for M&E

A sound policy and institutional environment includes the following key elements.

Effective governance structure and coordination mechanisms

The monitoring, evaluation and review platform requires an effective governance structure, in which key institutions and stakeholders have clear roles and responsibilities in the process of collecting, analyzing and using data for decision-making. An effective governance structure includes a country-led coordination mechanism for conducting monitoring, evaluation, and periodic review of the health sector with active multi-stakeholder participation (government, development partners, and civil society). Typically this coordination mechanism is a sub-group of the overarching Health Sector Coordination Committee.

A strong M&E plan

A strong M&E plan addresses the goals and objectives of the NHPS and is based on a sound situation analysis of the M&E system in the country. The M&E plan is comprehensive and addresses the selection of a balanced parsimonious set of core indicators with well-defined baselines and targets, identifies the data sources for each indicator and specifies plans for addressing data gaps and weaknesses and conducting data quality assessments, specifies analytical outputs, and plans for communication and dissemination of results. The plan also outlines ways to address institutional capacity-building in data collection, analysis and dissemination. Annex 9.1 provides a template outline for the development of a comprehensive M&E plan. The M&E plan can also be accompanied by a comprehensive national HIS strategy that provides additional details for strengthening the country HIS.

A comprehensive M&E framework guides the monitoring, evaluation and review work, including the selection of core indicators and targets. The IHP+ common M&E logical framework (see Fig. 9.3) provides a logical and results-chain representation of the M&E and review work, and shows how inputs into the health system (e.g. financing and infrastructure) and processes (e.g.
supply chain) are reflected in outputs (such as the availability of services and interventions) and eventual outcomes (e.g. intervention coverage) and impact (e.g. improved health outcomes). The framework not only facilitates the identification of core indicators of the NHPSP along each link in the results chain, but also links indicators to data collection methods. The common M&E framework can be used by all stakeholders and government to demonstrate performance of both programmes and health systems.

Fig. 9.3 The IHP+ common M&E logical framework for a national health strategy

<table>
<thead>
<tr>
<th>Data collection</th>
<th>Indicator domains</th>
<th>Analysis &amp; synthesis</th>
<th>Communication &amp; use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative sources</td>
<td>Governance</td>
<td>Infrastructure/ITC</td>
<td>Data quality assessment, Estimates and projections, Use of research results, Assessment of progress and performance Evaluation</td>
</tr>
<tr>
<td>Financial tracking system, NHA Databases and records, HR, infrastructure, medicines, etc. Policy data</td>
<td>Financing</td>
<td>Health workforce</td>
<td>Targeted and comprehensive reporting, Regular country review processes, Global reporting</td>
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<tr>
<td>Supply chain</td>
<td>Information</td>
<td>Facility assessments</td>
<td>Vital registration</td>
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<tr>
<td>Information</td>
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<td>Population-based surveys</td>
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<td>Coverage, Health status, equity, risk protection, responsiveness</td>
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<td>Facility reporting systems</td>
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<td>Service readiness, quality, coverage, health status</td>
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<td>Outputs</td>
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<td>Intervention access and services readiness</td>
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<td>Outputs</td>
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<td>Intervention quality, safety and efficiency</td>
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<td>Outcomes</td>
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<td>Coverage of interventions</td>
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<td>Outcomes</td>
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<td>Prevalence risk behaviours and factors</td>
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<td>Impact</td>
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<td>Improved health outcomes and equity</td>
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<td>Impact</td>
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<td>Social and financial risk protection</td>
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<td>Impact</td>
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<tr>
<td></td>
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<td>Responsiveness</td>
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Core indicators and targets based on international data standards

Core indicators

Selection of indicators should be informed by considerations of scientific soundness, relevance, usefulness for decision-making, responsiveness to change, and data availability. The challenge is to ensure a balanced parsimonious set of core indicators with well-defined baseline and targets. The core indicator set should be responsive to the information needs for monitoring progress and performance towards the main objectives of the NHPSP, and there should be an appropriate balance across the logical framework (i.e. covering inputs, outputs, outcomes and impact) and across major programme areas (see Box 9.1).

It is important to keep in mind that quantitative indicators are intended to be indicative of reality, i.e. they are tracer indicators and they are not intended to describe the totality of what is happening.
Adopting international standardized indicators allows countries to benchmark their performance against similar countries in their region or income category. It also reduces the effort in generating separate reports for in-country and external stakeholders. The Global Reference List of 100 Core Health Indicators is a standard set of core indicators prioritized by the global community to provide concise information on the health situation and trends, including responses at national and global levels. The Global Reference List of 100 Core Health Indicators contains indicators of relevance to country, regional and global reporting across the spectrum of global health priorities, including the post-2015 health goals of the SDGs. Countries can choose the set of indicators that match their national health strategy’s priorities and their capacity to collect the necessary data. Fig. 9.4 provides an overview of the Global Reference List of 100 Core Health Indicators.

### Mortality by age and sex
- Life expectancy at birth
- Adult mortality rate between 15 and 60 years of age
- Under-five mortality rate
- Infant mortality rate
- Neonatal mortality rate
- Stillbirth rate
- Mortality by cause

### Maternal mortality ratio
- TB mortality rate
- AIDS-related mortality rate
- Malaria mortality rate
- Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Suicide rate
- Mortality rate from road traffic injuries

### Fertility
- Adolescent fertility rate
- Total fertility rate

### Morbidity
- New cases of vaccine-preventable diseases
- New cases of IHR-notifiable diseases and other notifiable diseases
- HIV incidence rate
- HIV prevalence rate
- Hepatitis B surface antigen prevalence
- Sexually transmitted infections (STIs) incidence rate
- TB incidence rate
- TB notification rate
- TB prevalence rate
- Malaria parasite prevalence among children aged 6-59 months
- Malaria incidence rate
- Cancer incidence, by type of cancer
### Fig. 9.4 Global Reference List of 100 Core health indicators

#### Risk factors

**Nutrition**
- Exclusive breastfeeding rate 0-5 months of age
- Early initiation of breastfeeding
- Incidence of low birth weight among newborns
- Children under 5 years who are stunted
- Children under 5 years who are wasted
- Anaemia prevalence in children
- Anaemia prevalence in women of reproductive age

**Infections**
- Condom use at last sex with high-risk partner

**Environmental risk factors**
- Population using safely managed drinking-water services
- Population using safely managed sanitation services
- Population using modern fuels for cooking/heating/lighting
- Air pollution level in cities

**Noncommunicable diseases**
- Total alcohol per capita (age 15+ years) consumption
- Tobacco use among persons aged 18+ years
- Children aged under 5 years who are overweight
- Overweight and obesity in adults (Also: adolescents)
- Raised blood pressure among adults
- Raised blood glucose/diabetes among adults
- Salt intake
- Insufficient physical activity in adults (Also: adolescents)

**Injuries**
- Intimate partner violence prevalence

#### Service coverage

**Reproductive, maternal, newborn, child, and adolescent**
- Demand for family planning satisfied with modern methods
- Contraceptive prevalence rate
- Antenatal care coverage
- Births attended by skilled health personnel
- Postpartum care coverage
- Care-seeking for symptoms of pneumonia
- Children with diarrhoea receiving oral rehydration solution (ORS)
- Vitamin A supplementation coverage

**Immunization**
- Immunization coverage rate by vaccine for each vaccine in the national schedule

**HIV**
- People living with HIV who have been diagnosed
- Prevention of mother-to-child transmission
- HIV care coverage
- Antiretroviral therapy (ART) coverage
- HIV viral load suppression

**HIV/TB**
- TB preventive therapy for HIV-positive people newly enrolled in HIV care
- HIV test results for registered new and relapse TB patients
- HIV-positive new and relapse TB patients on ART during TB treatment

**Tuberculosis**
- TB patients with results for drug susceptibility testing
- TB case detection rate
- Second-line treatment coverage among multidrug resistant tuberculosis (MDR-TB) cases

**Malaria**
- Intermittent preventative therapy for malaria during pregnancy (IPTp)
- Use of insecticide treated nets (ITNs)
- Treatment of confirmed malaria cases
- Indoor residual spraying (IRS) coverage

**Neglected tropical diseases**
- Coverage of preventive chemotherapy for selected neglected tropical diseases

**Screening and preventive care**
- Cervical cancer screening

**Mental Health**
- Coverage of services for severe mental health disorders

#### Health systems

**Quality and safety of care**
- Perioperative mortality rate
- Obstetric and gynaecological admissions
- Owing to abortion
- Institutional maternal mortality ratio
- Maternal death reviews
- ART retention rate
- TB treatment success rate
- Service-specific availability and readiness

**Access**
- Service utilization
- Health service areas
- Hospital bed density
- Availability of essential medicines and commodities

**Health workforce**
- Health worker density and distribution
- Output training institutions

**Health information**
- Birth registration coverage
- Death registration coverage
- Completeness of reporting by facilities

**Health financing**
- Total current expenditure on health (% of gross domestic product)
- Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)
- Out-of-pocket payment for health (% of current expenditure on health)
- Externally sourced funding (% of current expenditure on health)
- Total capital expenditure on health (% current + capital expenditure on health)
- Headcount ratio of catastrophic health expenditure
- Headcount ratio of impoverishing health expenditure

**Health security**
- International Health Regulations (IHR) core capacity index
Baselines and targets

Each core indicator must have a defined, time-bound target. Setting targets requires a baseline measurement that provides the starting point from which achievements are defined. Targets describe a level of progress that is realistic but meaningful given the resource investment. Target definitions must also take into account the methods used for measurement and the feasibility and frequency with which measurements are taken (see Box 9.2 and Fig. 9.5).

Box 9.2
Target setting approaches

There are several approaches to framing targets, depending on the type of achievement and information available.

- Absolute targets: a specific numerical target citing a baseline value, e.g. measles vaccination coverage from 70% to 85% in five years.
- Relative targets: a relative change that is independent of the initial value of the starting point (for example, a reduction of the under-five mortality rate by two thirds (Millennium Development Goal 4). Relative target-setting is often used when baselines are uncertain.
- Annual rates of change: describes the pace of change expected, especially during a period of ramping up services, e.g. increase in expanded coverage from 2% per year to 4% per year.
Fig. 9.5 Core indicators of the United Republic of Tanzania Health Sector Strategic Plan (HSSP) III

<table>
<thead>
<tr>
<th>HEALTH STATUS</th>
<th>Overall Progress</th>
<th>Achievement</th>
<th>Target 2015</th>
<th>Equity</th>
<th>Compare (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy (years)</td>
<td></td>
<td>61 [F]/58 [M] (2011)</td>
<td>62/59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under-5 mortality rate</td>
<td></td>
<td>81/1,000 (2006-10)</td>
<td>54</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td></td>
<td>26/1,000 (2006-10)</td>
<td>19</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td></td>
<td>51/1,000 (2006-10)</td>
<td>-</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Child stunting rate</td>
<td></td>
<td>35% (2011)</td>
<td>22%</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Child underweight rate</td>
<td></td>
<td>14% (2011)</td>
<td>14%</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Maternal mortality rate</td>
<td></td>
<td>456/100,000 (2004-10)</td>
<td>156</td>
<td>G</td>
<td>2</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td></td>
<td>5.4 (2008-10)</td>
<td>5.1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Adolescent fertility rate</td>
<td></td>
<td>44% (2010)</td>
<td>39%</td>
<td></td>
<td>GRW 5</td>
</tr>
<tr>
<td>HIV prevalence among young people</td>
<td></td>
<td>2.0% (2011/2)</td>
<td>-</td>
<td></td>
<td>G</td>
</tr>
<tr>
<td>HIV prevalence, pregnant women (15-24)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB notification rate</td>
<td></td>
<td>75% (2011) 52% (2012)</td>
<td>70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leprosy cases diagnosed and treated</td>
<td></td>
<td>343 cases</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholera incidence rate</td>
<td></td>
<td>4.1%</td>
<td>&lt;1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholera case fatality rate</td>
<td></td>
<td>33% <a href="2012">under 5</a></td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria prevalence among OPD (lab)</td>
<td></td>
<td>9.2% (2012)</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COVERAGE OF INTERVENTIONS</th>
<th>Overall Progress</th>
<th>Achievement</th>
<th>Target 2015</th>
<th>Equity</th>
<th>Compare (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles immunization coverage</td>
<td></td>
<td>100% (2012)</td>
<td>85%</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DTP-Hb 3 immunization coverage</td>
<td></td>
<td>95% (2012)</td>
<td>85%</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Vit A coverage (2 doses)</td>
<td></td>
<td>60% (2010)</td>
<td>-</td>
<td></td>
<td>GW 7</td>
</tr>
<tr>
<td>TT2 immunization coverage</td>
<td></td>
<td>88% (2011)</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANC first visit → 16 weeks</td>
<td></td>
<td>15% (2006-10)</td>
<td>60%</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>ANC at least 4 visits</td>
<td></td>
<td>36% (2009-10)</td>
<td>90%</td>
<td></td>
<td>R 7</td>
</tr>
<tr>
<td>Births in health facilities</td>
<td></td>
<td>58% (2011)</td>
<td>70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled birth attendance</td>
<td></td>
<td>62% (2010-11)</td>
<td>80%</td>
<td></td>
<td>GRW 8</td>
</tr>
<tr>
<td>Postnatal care coverage</td>
<td></td>
<td>31% (2006-10)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contraceptive prevalence rate</td>
<td></td>
<td>27% (2010)</td>
<td>60%</td>
<td></td>
<td>GRW 5</td>
</tr>
<tr>
<td>ITN use (children/pregnant women)</td>
<td></td>
<td>73%/75% (2011/12)</td>
<td>80%</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>eMTCT coverage among pregnant women</td>
<td></td>
<td>77% (2011)</td>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART coverage among those in need</td>
<td></td>
<td>65% (2012)</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TB treatment success rate</td>
<td></td>
<td>90% (2011)</td>
<td>85%</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEALTH SYSTEMS</th>
<th>Overall Progress</th>
<th>Achievement</th>
<th>Target 2015</th>
<th>Equity</th>
<th>Compare (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government expenditure on health [%]</td>
<td></td>
<td>7.3% (2011)</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total health expenditure per capita</td>
<td></td>
<td>$37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance coverage [CHF/TIKA]</td>
<td></td>
<td>3% (2010)</td>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health worker density: doctors &amp; AMO</td>
<td></td>
<td>0.9/10,000</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health worker density: nurse-midwives</td>
<td></td>
<td>4.9/10,000</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health worker density: pharmacists</td>
<td></td>
<td>0.12/10,000</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient visits per capita/year</td>
<td></td>
<td>0.73 per person</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training institutes with full accreditation</td>
<td></td>
<td></td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockouts of tracer meds &amp; vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Unified data architecture

Countries benefit from instituting policies and enforcing commitment to implement a data architecture which is integrated with the national HIS. This includes providing comprehensive specifications on the content and accessibility of data sources. The availability of fully documented data standards for the national HIS fosters compatibility between data sources and across programme areas that maintain separate M&E systems.

Innovative Information technologies can play a role in strengthening data sources; for example, the use of electronic patient and facility records, application of hand-held devices for data collection, and data sharing and exchange through interoperable databases, which may be located at facility, district, regional and national levels. Countries should provide the overall legal and policy framework for technical and other innovations in health information. This includes use of electronic devices for web-based reporting of health events and feedback, which may occur at individual and aggregate levels. Development partners should support innovations that focus on scalable sustainable national approaches, and capacity development including public-private partnerships, collaborative arrangements with academia, and use of IT, as well as south-south and peer-to-peer collaboration.

A common investment framework

The comprehensive M&E plan provides the basis for a multiyear costing and investment framework for M&E that government and development partners at all levels can commit to funding in order to monitor, evaluate and review the national health strategy. Through a common investment framework, the government and its partners can identify shortfalls in funding, as well as avoid duplication of investment [see Box 9.3].
Box 9.3

Kenya case study: roadmap for one costed M&E Plan

In many countries, single disease-focused M&E systems sometimes operate in isolation instead of talking to each other and linking up with government-led efforts. Some of these systems gather data on indicators that do not match up with those identified by countries in their national health plans. This creates inefficiencies and burdens health workers with reporting requirements.

In Kenya, to support the health ministry’s leadership in integrating these M&E systems into a unified, more efficient framework, global health partners are now working together to harmonize their financial and technical resources and ensure they are in line with country priorities. During a four-day meeting in Nairobi in May 2016, various stakeholders signed a joint statement of commitments to support a unified “One M&E Framework” and launch the Kenya Health Data Collaborative. Partners in attendance included CDC (United States Centers for Disease Control and Prevention), GAVI (Global Alliance for Vaccines and Immunization), GIZ (Deutsche Gezellschaft für International Zusammenarbeit), Global Fund (Global Fund to fight AIDS, Tuberculosis and Malaria), PEPFAR (President’s Emergency Fund for AIDS Relief), UNAIDS (Joint United Nations Programme on HIV/AIDS), UNICEF (United Nations Children’s Fund), USAID (United States Agency for International Development), WHO, and World Bank Group.

The Ministry of Health (MoH) has drafted a detailed costed roadmap to be implemented by technical working groups focused on data analytics, quality of care, a new national health data observatory, civil registration and vital statistics, and informatics.

This collaborative approach will strengthen Kenya’s HIS through a united front supporting and investing in one national M&E plan.
9.3.2 Well-functioning data sources

The broad array of health-related indicators that need to be monitored means that no single data source is able to meet all statistical needs. Country HISs should draw upon multiple data sources, led by competent country institutions for data collection, compilation and sharing, analysis and synthesis, and communication and use of results. The main data sources for health statistics as well as their predominant characteristics are outlined below (see also Fig. 9.6).

Census of population and housing

This is the primary information source for determining the size of a population, its geographical distribution, and its social, demographic and economic characteristics. Censuses provide a denominator for the computation of vital statistics and many health indicators, especially in the absence of reliable information from the CRVS systems. Ideally the census should be conducted every 10 years, and it provides comprehensive vital statistical data.

CRVS systems

All countries should have CRVS systems that record the occurrence and characteristics of births, deaths and other vital events to produce fertility and mortality statistics. Statistics on causes of death are generated from the medical certification of cause of death according to the standards set out in the International Statistical Classification of Diseases (ICD). Where this is not possible, verbal autopsy can be used to estimate cause of death distributions in the population. Sample vital event registration systems are used as an intermediate measure to generate vital statistics using innovative methods.

Population-based surveys

Countries should have in place a multiyear programme of national health surveys for monitoring progress on key aspects on population health status, service coverage, health-related behaviours and risk factors, and out-of-pocket spending on health, including equity dimensions and the use of biomarkers. A survey programme identifies strategic priorities, periodicity and scope of data collection and enforces quality assurance, ethical practices, transparency and data sharing in accordance with stringent confidentiality protocols and in line with international standards for measurement to ensure comparability of results between populations and over time.

Health facility and community information systems

Timely and reliable statistics should be produced by health facilities (public and private) and communities to monitor health system inputs, disease patterns, health service provision and outcomes, including facility-based mortality and cause of death. Wherever feasible, electronic
recording and web-based reporting systems should be used. The data are analysed and used in combination with other sources for planning, reviews and action at local, district and national levels of the health system. The facility information system includes verification through facility assessments to monitor quality of service delivery and care provided as well as data quality.

**Public health/disease surveillance**

Public health/disease surveillance systems detect, report, and respond to notifiable communicable diseases and other health events. Data generated by notifications should lead to immediate action for outbreak control. Wherever feasible, disease surveillance and response systems should be linked to routine facility and community information systems. Effective surveillance should improve detection and prediction of epidemics, as well as provide an objective assessment and efficient monitoring of intervention programmes. A well-defined set of core functions and surveillance capacities is monitored by WHO under the International Health Regulations.

**Non-health sector data sources**

Data sources from other sectors could also provide information related to the major causes of the global burden of disease or threats to health security, such as information on water and sanitation, air pollution, or the education sector.

**Administrative data sources**

All countries should have comprehensive databases and electronic tracking systems on health expenditures, logistics management, including commodities, medicines, equipment and supplies. An electronic health workforce registry can be used to track health workforce statistics. Systems of health accounts and health workforce accounts should be kept according to international standards.
**Fig. 9.6 Preferred data sources for core health indicators**

<table>
<thead>
<tr>
<th><strong>EXAMPLE OF CORE INDICATORS</strong></th>
<th><strong>PREFERRED DATA SOURCES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vital events</strong></td>
<td></td>
</tr>
<tr>
<td>Noncommunicable disease mortality</td>
<td>Civil registration and vital statistics system</td>
</tr>
<tr>
<td>Suicide mortality rate</td>
<td></td>
</tr>
<tr>
<td>Pollution-related mortality and illness</td>
<td></td>
</tr>
<tr>
<td>Birth (death) registration</td>
<td></td>
</tr>
<tr>
<td><strong>Morbidity</strong></td>
<td></td>
</tr>
<tr>
<td>HIV incidence</td>
<td>Household surveys</td>
</tr>
<tr>
<td><strong>Risk factors</strong></td>
<td></td>
</tr>
<tr>
<td>Malnutrition; insufficient physical activity; anaemia; tobacco use; acceptable diet; early breastfeeding; exclusive breastfeeding</td>
<td></td>
</tr>
<tr>
<td><strong>Health systems</strong></td>
<td></td>
</tr>
<tr>
<td>Financial protection; sexual and reproductive health (SRH) knowledge</td>
<td></td>
</tr>
<tr>
<td><strong>Coverage of interventions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Prevention</strong>: skilled birth attendant; postpartum contact; syphilis</td>
<td>Routine health facility and community information systems</td>
</tr>
<tr>
<td><strong>Screening</strong>: immunization coverage; Insecticide-treated nets; family planning needs</td>
<td></td>
</tr>
<tr>
<td><strong>Treatment</strong>: Oral rehydration solution treatment; Skilled birth attendants; pneumonia care seeking; Anti-retroviral therapy;</td>
<td>Health facility assessments</td>
</tr>
<tr>
<td><strong>Policy environment</strong></td>
<td></td>
</tr>
<tr>
<td>Country’s laws- SRH access</td>
<td>Administrative data sources</td>
</tr>
</tbody>
</table>

**EXAMPLE OF CORE INDICATORS**
- Vital events
  - Noncommunicable disease mortality
  - Suicide mortality rate
  - Pollution-related mortality and illness
  - Birth (death) registration

**PREFERRED DATA SOURCES**
- Civil registration and vital statistics system
- Household surveys
- Routine health facility and community information systems
- Health facility assessments
- Administrative data sources
9.3.3 Strong institutional capacity for data collection, management, analysis, use and dissemination

All countries should have adequate institutional capacity for health data collection, compilation and sharing, data quality assurance, analysis and synthesis using all relevant data sources, and for communication and use of results. Capacity strengthening of country institutions, including MoH, national statistical office, and national public health and academic institutions are supported by global partners where relevant.

The specific areas in which capacity is required include the following.

**Data collection**

In general, the national statistics office (NSO) is responsible for household health surveys and vital statistics from birth and death registrations. However, the MoH often plays a major role as well. The MoH often leads on the compilation of administrative and clinical data, and may work with specific institutions to assess data quality. In addition, facility assessments are often conducted by the MoH, in which case, some degree of independence is needed for data collection, e.g. by employing staff from training schools for the field work.

**Data compilation and storage**

This involves bringing together data generated by the NSO, MoH, researchers, donors, development partners, nongovernmental organizations and others. This is usually the responsibility of the MoH or the NSO, but sometimes a semi-independent institution plays a major role. Providing public access to the health data is a critical element of transparency in a sound M&E system.

**Data quality assessment, validation and adjustment**

This should include independent assessments of the quality of data generated from clinical and administrative sources, ad-hoc surveys, and other data sources. This is ideally done by independent country institutions such as research and academic centres, working in collaboration with the MoH and the NSO.

**Data analysis and performance reviews.**

This involves synthesizing data from multiple sources for the purpose of reviews, planning, policy analysis, regional and global reporting, and evaluation. This work is ideally carried out by country institutions in collaboration with the MoH and NSO. Global partners may also provide technical assistance.

**Estimation and statistical modelling.**

Focusing on key health statistics, this includes the application of global standards, tools and methods to correct for bias and missing values; the generation of estimates; and forecasting for
planning purposes. Academic institutions as well as data analysis staff in the MoH or NSO have the main responsibility for estimation and statistical modelling.

Data presentation and dissemination to different target audiences.

The focus of data presentation and dissemination is on major decision-making processes, where effective communication of results may lead to an adjustment of implementation and revisions of plans. Global reporting should be aligned as much as possible with national reporting. Communicating to the general public and media is also critical and usually requires special skills. The responsibility for data presentation and dissemination often lies with data analysts in government and academic institutions, but special communication skills are required.

Box 9.4

Presenting data to assess equity

Achieving a goal such as UHC is fundamentally a question of equity. The figure below provides an example of how to display coverage inequity between the poorest quintile and richest quintile of a population for an array of essential health services.

Presenting measures of equity in health service coverage

Equity

Socioeconomic inequities in coverage

Household wealth quintile: Poorest 20% Richest 20%

- Demand for family planning satisfied
- Antenatal care 1+ visit
- Antenatal care 4+ visit
- Skilled birth attendant
- Early initiation of breastfeeding
- ITN use among children <5 years
- DTP3
- Measles
- Vitamin A (6 months)
- ORT & continued feeding
- Care-seeking for pneumonia

Source DHS 2007

Coverage levels are shown for the poorest 20% (red circles) and the richest 20% (orange circles). The longer the line between the two groups, the greater the inequality. These estimates may differ from other charts due to differences in data sources.

The use of standard reports and graphics (such as above) help decision-makers to identify gaps easily and allow comparisons in performance between local areas and national level. Similar graphics can be used to assess equity in terms of other population characteristics such as geographical location, sex, and age.
9.3.4 Strong mechanisms for review and action

The value of an M&E platform depends on the extent to which data are reviewed, and used to take action to improve health outcomes (see Box 9.5). A clear indication that results from reviews do influence decision-making is when they are used to guide resource allocation and financial disbursement.

Box 9.5

Using health data in a situation analysis or sector review

Health data should be an integral part and parcel of any health sector situation analysis or review. A health sector situation analysis is an in-depth look at all aspects related to inputs, processes, and outputs of the health sector, i.e. a full snapshot of the sector. This information is extremely relevant and useful to compare and contrast with existing data and information to better monitor progress. If existing data and information is sparse, a situation analysis can serve as a baseline to inform future monitoring and evaluation rounds. In a health sector review, the focus of the analysis is more on medium- to long-term trends, and on understanding root causes in order to propose feasible and viable solutions.

A health data analysis, combined with an examination of how activities in the health sector have been implemented and whether they are in line with the planned budget, can provide a solid evidence base for policy dialogue on why certain policies, strategies or plans have worked or not. The figure below demonstrates how health data is directly used and fed into the health sector policy dialogue.

A clear indication that results from reviews do influence decision-making is when they are used to guide resource allocation and financial disbursement.

For more information, see Chapter 3 “Situation analysis of the health sector” in this handbook.
Strong mechanisms for review and action have the following key attributes.

**Mechanisms to provide routine feedback**

Feedback loops should be bidirectional, allowing local service providers the information needed to address gaps in coverage or quality and for central level analysts to more effectively analyse and interpret data given local context and information needs. Open and transparent data systems are necessary to ensure all stakeholders can participate fully in the review and action planning process. This includes sub-national levels and nongovernmental stakeholders, among others. Service providers also benefit from benchmarking their performance against their peers as part of a supportive supervision approach, rather than a review system that penalizes open and candid examination of achievements and challenges.

**A system of progress and performance reviews**

There should be a system of joint periodic progress and performance reviews that involves a broad array of key stakeholders. The process must be a transparent system in which the measures of success and methods of measurement are documented and the results made available for public review. Reviews should take place at different intervals with different objectives (see Box 9.6).

### Box 9.6

**Types of reviews**

**Annual review:** The annual review is focused on the indicators and targets specified in annual operational plans. These are mainly input, process and output indicators. If available, coverage indicators are also used. Annual reviews should help inform evaluation on a regular basis.

**Mid-term review:** This is normally conducted half way through implementation of the NHPSP. It covers all the targets mentioned in the strategy, including targets for outcome and impact indicators, and also takes contextual changes into account. The mid-term review should coincide with the annual review (e.g. the third year in a five-year plan). The results are used to adjust national priorities and objectives.

**Final review:** This involves a comprehensive analysis of progress and performance for the whole period of the NHPSP. The final review builds upon the annual and mid-term reviews, but also brings in results of specific research and of prospective evaluation that should be built in from the beginning.
Programme-specific reviews should not be conducted as separate, parallel activities – rather, they should be linked to the overall health sector review and contribute to it. This includes both the timing of the review and the methodology or analyses of data required.

**Evaluation is planned in advance and implemented prospectively**

A well-designed evaluation is planned at the same time as the development of the monitoring and evaluation plan for the national health strategy. Prospective evaluation combines data from routine monitoring systems for key indicators, complemented by in-depth studies – both quantitative (preferably longitudinal) and qualitative. These data are analysed together to draw conclusions about the attribution of changes to specific interventions and the contribution of contextual changes. Where possible, evaluations should use data from, and strengthen, health sector reviews. They should build upon existing country systems and include an explicit capacity-building and system-strengthening objective, where appropriate.
9.4 How can a country-led M&E platform be strengthened?

1. Assess the key attributes of the M&E platform as required and identify priority actions to address key gaps and weaknesses.

The country’s M&E platform must be assessed according to the standards and attributes of a well-functioning platform in order to identify its gaps, strengths and weaknesses. Priorities should be identified based on the gaps.

2. Review and select core set of indicators and develop baseline and targets for monitoring national priorities and health goals.

Based on the priorities set out in the national health strategy, MoH – jointly with stakeholders – must review and select a set of national core indicators. Programme-specific strategies should be reviewed alongside the overall NHPSP to identify and harmonize core indicators (see Box 9.7).

3. Develop a comprehensive M&E plan, ensuring alignment of disease-specific plans and identification of priority actions.

The M&E plan should specify the coordination and alignment of M&E processes and mechanisms across specific programmes. The alignment of disease- and programme-specific plans with the NHPSP can be improved by ensuring that there is one comprehensive national M&E plan that specifies how it is linked to the disease-specific M&E plans in a logical and cascading manner.

4. Cost the M&E plan and develop a common investment framework as the basis for domestic and partner investments.

A prioritized, costed action plan is the first step in garnering resources to strengthen the M&E platform. For each set of activities, domestic and partner investments should be identified and documented as a part of a common investment framework.

5. Review and evaluate the M&E platform regularly.

Regular planned assessments of the M&E system are required in order to ensure that indicators are measuring what they are meant to; that data are generated according to standards; that data analysis and communication of results give the information needed by decision-makers; and that data management includes an assessment of overall data quality.
Box 9.7

Malawi case study: “More can actually mean less”

Malawi’s process for selecting the indicators included in the M&E framework of the country’s second Health Sector Strategic Plan (HSSP II) began in late 2014. The list started with 195 indicators, and was progressively reduced. The Ministry of Health Department of Planning and Policy Development refined the list with collaboration of all MoH departments and in-country health partners. Stakeholders recognized that too many indicators place too much of a burden on data collection efforts and can obscure the view into the country’s health priorities.

“We have a plethora of suggested indicators,” says Dr Simon Ndira, a senior technical advisor on health information systems at the Ministry of Health. “But there is a general tendency to want to capture lots and lots of data without necessarily reflecting back to realize that more can actually mean less.”

The criteria for selecting the core indicators considers several factors:

1. whether they are needed to track the new health-related SDGs;

2. whether they correspond with the list of 100 core indicators recommended by WHO;

3. whether they are included in the previous NHPSP, to allow tracking indicators over time;

4. whether they align with programme-specific indicators; and

5. whether they make sense in the context of Malawi’s health priorities.

One major change in the list of core indicators included in HSSP II compared to HSSP I are measures to track newly emerging health problems, particularly noncommunicable diseases such as diabetes and hypertension; and multi-sectorial issues, such as sanitation, environment and nutrition.

As Malawi selects its core indicators, stakeholders also plan how to strengthen the relevant sources for collecting the data, such as the CRVS programme, and other administrative data sources.
9.5 Who should be involved in monitoring, evaluation and review?

At the request of the MoH, and under country leadership, key stakeholders – including different levels of government, civil society organizations (CSOs), international development partners, and local research institutions, among others – should be involved through the different steps to strengthen the M&E platform. Table 9.1 outlines some of their potential roles, which are country-specific and should be tailored to the context.

<table>
<thead>
<tr>
<th>Actor</th>
<th>Regular monitoring</th>
<th>Evaluation</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>MoH</td>
<td>Lead role in the periodic monitoring of the implementation of health policies, the utilization of health resources, and the attainment of health targets</td>
<td>Oversight of the process Identify processes, methods and tools to conduct the evaluation jointly with the implementer of the evaluation, if relevant</td>
<td>Coordination of the joint annual review, mid-term review, and others Oversight role</td>
</tr>
<tr>
<td>Other government institutions (ministry of finance, NSO, national registration bureau ...)</td>
<td>Collect, share and analyse relevant information for the health sector [e.g. births and death registration; population denominators; expenditure tracking …]</td>
<td>Provide inputs (financial information …) to the evaluation process</td>
<td>Provide inputs and contribute meaningfully to the review process, including making available the required information</td>
</tr>
<tr>
<td>National public health institute</td>
<td>Disease and programme-specific annual reviews, if relevant</td>
<td>Neutral and independent review of performance and analysis of barriers to progress in the sector</td>
<td>Findings from programme reviews and other studies and research should feed into the joint annual health reviews</td>
</tr>
<tr>
<td>International development partners</td>
<td>Promote and allow mutual accountability on delivering development partners’ commitments and workplans in terms of funds, supplies or services</td>
<td>Promote mutual accountability, including evaluation of development partners’ commitments, including reporting on indicators and behaviours set out in the compact or memorandum of understanding with MoH, if relevant</td>
<td>Promote mutual accountability, including demonstrating how any project support is aligned with the national strategy</td>
</tr>
<tr>
<td>CSOs</td>
<td>Monitor sector performance, highlighting shortfalls both to the authorities as well as the broader public</td>
<td>Advocate and communicate the results of the evaluation Provide CSOs’ views at national/regional/provincial level</td>
<td>Be part of mutual accountability processes and discuss findings from the review</td>
</tr>
<tr>
<td>National research institutions</td>
<td>Analysis of progress and trends for coverage, utilization of services and health status</td>
<td>Act as independent body to conduct and/or complement an independent evaluation of the performance and progress of the sector</td>
<td>Findings from programme reviews and other studies and research should feed into the joint annual health reviews</td>
</tr>
</tbody>
</table>
9.6 When should monitoring, evaluation and review take place?

Monitoring, evaluation and review should be linked with the country planning cycles, when progress and performance of the sector are discussed and remedial actions are taken.

Fig. 9.7 illustrates how a system of reviews may roll out over the course of a national policy and planning cycle.

Fig. 9.7 Sample schedule for national health strategies’ progress and performance reviews

Ideally the annual reports or data products generated should meet the needs for country-level programme management, global reporting, and/or development partner reporting.
Box 9.8

Mozambique case study: Plan as One, to Deliver as One

Joint annual planning based on the results of the monitoring and review processes is essential to identify effective evidence-informed actions, and to avoid duplication of efforts and funding for the same activities. In Mozambique’s Zambezia province, for example, joint annual planning meetings follow evaluations and reviews, identifying effective approaches to prioritize investments in what works. These processes are led by the Provincial Directorate of Planning and Cooperation, and include all departments of the provincial health directorate, UNFPA [United Nations Population Fund], UNICEF, WFP [World Food Programme], donors, representatives from the districts and partners in the province, including CSOs. Results of the reviews inform planning, leading to synergistic results between partners and MoH.

In the immunization area, UNICEF and WHO have found ways to complement each other’s work. UNICEF supports vaccine logistics, providing fridges and cold boxes for ensuring proper distribution and motorbikes for supervision. WHO provides training on its vaccine data management tool and technical support for supervision. Such complementary roles have helped to achieve the targets set by the MoH on three indicators related to immunization.
9.7 What if...?

9.7.1 What if fragmentation and/or fragility is an issue in your country?

Monitoring, evaluation and review of NHPSPs in fragile contexts poses additional challenges to the regular monitoring process. Despite the variety of situations of fragility that have been described in previous chapters of the handbook, some common challenges to monitor, evaluate and review health progress and performance can be identified: dysfunctional policy and institutional environment; weak or inexistent data sources; significant data quality risks; weak institutional capacities to analyse and use data; inadequate capacities to monitor service delivery; ad hoc or changing planning and review cycles; limited stewardship capacities of the public sector; and rapidly changing health needs and priorities make difficult to standardize a monitoring and evaluation approach.

Health partners, donors and governments have been progressively adapting their monitoring, evaluation and review approach in these contexts. Various health partners have been working to address monitoring needs in fragile situations by focusing on a limited set of input and output indicators; adding indicators of conflict and violence to the monitoring framework; and supporting specific efforts of data collection, including working with local partners and international contractors. Ebola-affected countries in West Africa have been also tailoring the planning and monitoring cycles to the post-Ebola recovery scenario. Sierra Leone has shortened the overall national planning cycle, has developed the 24-month Post-Ebola Recovery Strategy, spanning July 2015 to June 2017, which acts as an overarching frame for other sector strategies and plans. This has resulted in the development of specific sets of key performance indicators monitored on a monthly and quarterly basis.

Potential approaches to track progress and performance of NHPSPs in distressed health systems or fragile contexts include those listed below.

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Adapt the monitoring, evaluation and review processes to the changing planning cycles (e.g. more frequent operational joint reviews could be relevant in contexts with insufficient and incomplete data generated by the routine health information system).

Include specific and priority-based indicators, such as gender-based violence indicators or conflict-related indicators.

Increase investments in health data systems, including verification and oversight processes, from a health systems strengthening perspective.

Engage local and non-state actors in the monitoring process, including data collection, analysis and use.

Gradually increase country system capacities, in coordination with partners, government and other actors.

Build capacity of the MoH for stronger oversight and monitoring.

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In a fragile context, health partners can adapt monitoring and evaluation by focusing on limited sets of input and output indicators, adding indicators of conflict and monitoring to the framework, and supporting specific efforts of data collection.
9.7.2 What if your country is decentralized?

Many countries have decentralized decision-making processes, including administrative and implementation functions of the health care system. Monitoring and evaluation in these contexts need to be tailored, taking in consideration some key aspects:

**Monitoring and evaluation at national level in a decentralized context**

- **Alignment between national and sub-national strategies and plans**

  The NHPSP should identify and lay out a sound and comprehensive monitoring and evaluation component.\(^{13}\) However, the design of this component, or framework, needs to be coordinated and translated to sub-national documents for coherence. Likewise, sub-national strategies should form the basis for the national M&E framework. A constant interaction between the national and sub-national levels is crucial for the success, repeatability and reproducibility of monitoring, evaluation and review mechanisms.

- **Review mechanisms and feedback loops to be comprehensive and inclusive to ensure accountability**

  The review mechanisms chosen should be comprehensive – not just in terms of sectoral and programme related aspects but also in regard to national and sub-national levels. Thorough monitoring and evaluation activities require inclusive policy dialogue and systematic and regular assessments.\(^\text{14}\) Those mechanisms – and the tools and methods to use them – need to be adapted to the formalized and non-formalized (especially in regard to dialogue processes) decentralization features that are prevailing in the country. Accountability towards the results of monitoring and evaluation needs to be claimed at every government level.

- **Allowing reflections on the status of decentralization**

  When undertaking monitoring and evaluation in a decentralized context, it is important to consider the ways in which decentralization has been integrated and used in all the previous planning steps. As a consequence of the breadth of evaluation, process-related issues might be considered as well – apart from health-related issues. It might be beneficial for the planning process to establish a link between health outcomes and decentralization. For example, the set of indicators related to health outcomes could be complemented by political, administrative and fiscal indicators for monitoring and evaluation purposes of the performance of sub-national planning features. Thus, routine data collection needs to be adapted, since those indicators are not always part of the collection set in many countries.\(^\text{15}\) As a consequence of including decentralization in the evaluation, current responsibility, authority and accountability arrangements might need to be adapted.\(^\text{6}\)

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\(^\text{11}\) Hutchinson and LaFond (see endnote reference 15) developed a “Conceptual Framework for Evaluating Decentralization”, which offers a detailed guide for monitoring and evaluation of decentralization in the health sector, with an emphasis on conceptual questions and concrete options for action.
Monitoring sub-national regional inequalities

Monitoring health inequalities between sub-national levels can inform targeted health programmes and policies, especially if disparities are substantial. Summary measures of inequality can condense disaggregated data into concise outputs, which could be used to show trends and make comparisons. The selection of appropriate summary measures to quantify sub-national inequalities should be carefully chosen (i.e. pairwise differences and ratios), to provide a good understanding of sub-national-level inequalities to policymakers, partners and civil society, among others, and thus to facilitate targeting and deploying interventions to disadvantaged subpopulations.

Special issues to consider for monitoring and evaluation at sub-national level

Selection of tools and assessment methods

The analysis and assessment tools that will determine the success and validity of the M&E exercises, as well as increase accountability towards its results need to be selected according to the features of the health system. It is important to ensure consistency and comparability across the different sub-national levels and to support those levels (capacity and financial) to be able to analyse and use the data.

Sub-national M&E plans

Countries that have been going through devolution processes, such as Kenya, have created a new layer of sub-national government, with allocated resources and prescribed functions. Access to sub-national-level data to monitor performance is paramount to track progress and performance of the sub-national health sector strategic and investment plans. Kenya has updated its M&E roadmap to ensure the M&E needs of its counties are identified and eventually addressed, including strengthening counties’ analytical capacities.
9.8 Conclusion

There is a growing interest and demand for quality data for decision-making and accountability. A strong monitoring, evaluation and review platform is needed to track progress and performance of the national health strategy; to report progress on health-related SDGs and regional and global monitoring of priority health issues, including health inequalities; and to provide the basis for accountability and policy dialogue.

A single country-led platform brings together all the elements related to monitoring, evaluation and review of the health sector plan, including national policy and plans relating to M&E and country HISs, well-functioning data sources, institutional capacity for data collection, management analyses and use, as well as the country review processes for planning and decision-making.

Aligning partners and governments around a country-led M&E platform is a unique opportunity to scale up enhanced technical support for strengthening country M&E capacities and data systems. A robust country-led monitoring and evaluation plan should form the basis for strengthening the country M&E platform and for improved alignment of domestic and partner investments. More on this approach can be found at: http://www.healthdatacollaborative.org/.
References


2 Ibid.


14 Ibid.


Further reading

Policy and institutional environment


Well-functioning data sources

Facility information systems


CRVS


Data analysis


Institutional capacity for data management, analysis and communication
Progress and performance review and accountability


Monitoring, evaluation and review in distressed health systems


### Annex 9.1
Template/outline of an M&E plan

<table>
<thead>
<tr>
<th>Chapter 1: National health strategy as basis for results and accountability</th>
<th>Chapter 3: Monitoring and evaluation framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Goals and objectives of the national health strategy</td>
<td>3.1 Monitoring and evaluation framework</td>
</tr>
<tr>
<td>1.2 Current status of the health information system</td>
<td>3.2 Indicators</td>
</tr>
<tr>
<td>1.3 Process for development of the monitoring, evaluation and review component</td>
<td>3.3 Data sources</td>
</tr>
<tr>
<td>1.4 Disease- and programme-specific monitoring, evaluation and review alignment</td>
<td>‣ Data collection needs for all core indicators</td>
</tr>
<tr>
<td></td>
<td>‣ Critical data gaps and weaknesses and how to address these</td>
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<td></td>
<td>‣ Data management</td>
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<td>3.4 Data analysis, synthesis and quality</td>
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<tr>
<td></td>
<td>‣ Data analysis and synthesis work</td>
</tr>
<tr>
<td></td>
<td>‣ Regular assessments of progress and performance</td>
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<tr>
<td></td>
<td>‣ Processes for data quality assurance</td>
</tr>
<tr>
<td></td>
<td>3.5 Evaluation component</td>
</tr>
<tr>
<td></td>
<td>3.6 Data dissemination and use</td>
</tr>
<tr>
<td></td>
<td>‣ Analytical outputs and responsibilities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 2: Institutional capacity</th>
<th>Chapter 4: Country mechanisms for review and action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Key country-led coordination mechanisms</td>
<td>4.1 System of joint periodic progress and performance reviews for use in decision-making</td>
</tr>
<tr>
<td>2.2 Roles and responsibilities of key country institutions and stakeholders</td>
<td>4.2 Links between programme-specific reviews and the general health sector review</td>
</tr>
<tr>
<td>2.3 Country capacity-building strategy</td>
<td>4.3 Decision-making processes for remedial action and financial disbursement</td>
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</table>