World Health Organization

Global Reference List of 100 Core Health Indicators

2015

global reference list **global reference list** global reference list

Background

At the informal meeting of global health agency leaders in New York, United States, on 24 September 2013, it was decided to establish a group of senior focal points from the participating global health agencies to review critically the respective agency requirements for reporting from countries with the aim of reducing the reporting burden for countries. An interagency Working Group on Indicators and Reporting Burden, consisting of 19 agency representatives and chaired by the Director-General of WHO, was established and a rapid assessment of the burden of indicators and reporting requirements for health monitoring was conducted. The assessment included an analysis of the situation from both global and country perspectives. Key findings and recommendations were published in *A rapid assessment of the burden of indicators and reporting requirements for health monitoring.*[1]

The report revealed how global investments in disease- and programme-specific monitoring and evaluation programmes by different agencies have contributed to very large numbers of indicators, diverse indicator definitions and reporting frequencies, fragmented data collection, and uncoordinated efforts to strengthen national institutional capacity, resulting in an unnecessary reporting burden on countries and inefficiencies in strengthening country health information systems.

One of the priority actions identified by the interagency working group was that global agencies should bring greater alignment and efficiency to their investments by rationalizing existing reporting demands in order to reduce reporting requirements and ease the reporting burden on countries. To achieve this end, WHO collaborated with international and multilateral partners and countries to develop and agree on a global reference list of 100 core health indicators that the global community would prioritize for the purposes of monitoring national and global progress, maintaining programme support and advocating for resources and funding. The list was developed from existing lists that had been recommended in the context of international governing bodies of international organizations and forums, global and regional health initiatives, technical reference groups and programmes.

Scope

The Global Reference List of 100 Core Health Indicators for results monitoring, referred to herafter as *"The Global Reference List,"* is a standard set of 100 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* contains indicators of relevance to country, regional and global reporting across the spectrum of global health priorities relating to the post-2015 health goals of the Sustainable Development Goals.[2] These include the Millennium Development Goals (MDGs) agenda, new and emerging priorities such as noncommunicable diseases, universal health coverage and other issues in the post-2015 development agenda.

The Global Reference List is not an exclusive list of indicators and it is not intended to limit information collection only to that which meets management and programmatic needs. Rather, the list is intended as a general reference and guide for

1 A rapid assessment of the burden of indicators and reporting requirements for health monitoring. Prepared for the multi-agency working group on indicators and reporting requirements by WHO's Department of Health Statistics and Information Systems. Geneva: World Health Organization; 2014.

2 Sustainable Development Goals. https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals.

standard indicators and definitions that countries can use for monitoring in accordance with their own health priorities and capacity.

Purpose

The aim of *the Global Reference List* is to contribute to the reduction of reporting requirements and to promote greater alignment with, and investment in, one country-led health sector platform for results and accountability that forms the basis for global reporting.[3] *The Global Reference List* aims at rationalization and encourages stakeholders to consider only the most important and critical indicators.

The Global Reference List is a means to an end. The main objectives are:

- to guide monitoring of health results nationally and globally;
- to reduce excessive and duplicative reporting requirements;
- to enhance efficiency of data collection investments in countries;
- to enhance availability and quality of data on results; and
- to improve transparency and accountability.

The outcome statement of the meeting of global health agency leaders on 24 September 2015, presented hereafter, puts The Global Reference List in a broader context.

3 Monitoring, evaluation and review of national health strategies. A country-led platform for information and accountability. Geneva: World Health Organization; 2011.

Outcome statement of the Working Group on Indicators and Reporting Burden, September 2014

Preamble

a. This statement is the result of the work of a multi-agency working group, established by Global Health Agency Leaders in September 2013 and chaired by the DG-WHO, aiming to reduce the indicators reporting burden for countries. On 27–28 August 2014 the working group, country and civil society representatives met under the auspices of IHP+ in Geneva to discuss and produce a statement for consideration by the Global Health Agency Leaders.

b. As described in the IHP+ Monitoring & Evaluation (M&E) framework, strong country M&E systems are characterized by a comprehensive national M&E plan; institutional capacity among state and non-state actors; an M&E framework that specifies core indicators; data sources, analysis and use; and inclusive transparent country mechanisms for review and action. A tested, relevant, balanced and parsimonious set of core indicators is one critical element that contributes to the overall strengthening of country M&E systems and accountability.

Global Reference List of 100 Core Health Indicators

a. *The Global Reference List of 100 Core Health Indicators* for results monitoring is a standard set of 100 indicators prioritized by the global community to provide concise information of the health situation and trends, including responses at national and global levels. *The Global Reference List* reflects indicators of relevance for country, regional and global reporting across the full spectrum of global health priorities relating to the MDG agenda, as well as to new and emerging priorities such as NCDs, universal health coverage and other key issues in the post-2015 development agenda. This list will be a "living document", updated periodically as technologies develop, new priorities emerge and interventions change.

b. *The Global Reference List* will contribute to reduced reporting requirements and to greater alignment and smarter investment in country data and M&E systems. The list does not focus on those indicators that are required for more detailed programme management at national and sub-national levels or for financial tracking of specific grants and projects. It is recommended, however, that investments in monitoring of specific project management indicators be made in a way that strengthens the country M&E systems, and minimizes the use of parallel reporting systems that are not interoperable with the national health information system. *The Global Reference List* and the behaviours described below are drafted in the spirit of the IHP+ and should be understood within that framework.

c. The purpose of *The Global Reference List* is to:

- reduce excessive and duplicative reporting requirements;
- serve as a general reference and guidance for standard indicators and definitions;
- enhance efficiency of data collection investments in countries;
- enhance availability and quality of data on results; and
- improve transparency and accountability.

d. *The Global Reference List* should be used as normative guidance, rather than as a required or exclusive list, to:

- guide monitoring of health results nationally and globally;
- guide the selection of priority indicators;
- provide a basis for the rationalization and alignment of reporting requirements on results by global partners;
- contribute to higher quality global data bases of health results;
- facilitate more harmonized investments in country data systems and analytical capacity;
- reflect evolving public health priorities and as such be updated and maintained in a sustainable way.

Global partners should aspire to the following behaviours

a. Use of core indicators for rationalizing reporting requirements: focus results reporting requirements on *The Global Reference List,* including disaggregation (by gender, age, socioeconomic status, place of residence), and the related M&E system strengthening investments.

b. Align reporting cycles: rationalize reporting requirements in terms of contents and frequency and progressively align with countries' own monitoring practices.

c. Ensure global data collection investments meet country health data and M&E systems needs, including data quality, in the most efficient manner.

d. Include a significant proportion of investments for country institutional capacity and M&E system strengthening, including government and non-government actors.

e. Broaden monitoring to focus on measuring overall country results, which may include specific contributions to collective results.

Good behaviours at the country level (with examples of actions)

a. Countries lead and invest in strengthening their M&E and review platforms that have the key attributes and characteristics of the IHP+ monitoring framework. Examples include:

- existence of a good quality comprehensive costed national M&E plan;
- adequate and qualified staffing of the M&E system, centrally and sub-nationally;
- institutionalization of routine mechanisms to independently assess data quality, including transparent accessible quality databases and explicit mechanisms for data sharing and use by state and non-state actors;
- regular system of household surveys;
- high quality timely results reports for national joint annual health reviews and other accountability processes;
- systematic use of common, sustainable and interoperable digital solutions where feasible and appropriate; and
- existence of an effective country-led coordination mechanism for M&E and review with active involvement and support of relevant development partners, civil society and other non-state actors.

b. Development partners support the strengthening of a single country-led platform for information and accountability, as described in the IHP+ framework for monitoring national health strategies. Examples include:

- support for the country M&E plan, including a process for progressive alignment of program-specific monitoring and reviews with the overall health strategy, using the same indicators, data collection, and time cycles;
- use of a common investment framework based on comprehensive assessment of country needs for a multi-year period;
- alignment of results reporting requirements related to specific grants with the country monitoring system including a process of progressive alignment, using the same indicators;
- investments in data collection and quality verification investments that strengthen the national monitoring and accountability platforms including surveys and health facility data collection; and
- investment in and use of common, sustainable and interoperable digital solutions where feasible and appropriate.

Indicator classification

Many indicators and indicator definitions have been developed by international organizations, reference groups, interagency groups, countries, academics, advocacy groups and others. The indicators are often used for different purposes, including programme management, allocation of resources, monitoring in-country progress, performance-based disbursement and global reporting.

The Global Reference List presents the indicators according to multiple dimensions. First, each indicator belongs to one of four domains: health status, risk factors, service coverage and health systems. This last domain includes service delivery which includes quality of care, health financing, essential medicines, the health workforce and health information.

Second, each indicator is further categorized into subdomains. These include communicable diseases (HIV/AIDS, sexually transmitted infections [STIs], tuberculosis [TB], malaria, neglected tropical diseases, outbreaks, epidemic diseases), reproductive, maternal, newborn, child and adolescent health (including sexual health and reproductive rights and immunization), noncommunicable diseases (including chronic disease, health promotion, nutrition, mental health and substance abuse), injuries and violence and the environment.

The third dimension presents the indicators according to levels of the results chain framework (input, output, outcome and impact), as defined for the International Health Partnership (IHP+) technical monitoring and evaluation (M&E) framework.[4] This framework not only facilitates the identification of core indicators along each link in the results chain but also links indicators to underlying country data systems and data collection methods, highlights the need for analysis and synthesis of data from multiple sources, emphasizes regular data quality assessment, and demonstrates how the data need to be communicated and used for both country and global reporting purposes.

The results chain framework has also been used to develop a monitoring framework for universal health coverage.[5] The monitoring of universal health coverage focuses on coverage of interventions and financial risk protection, supported by evidence on selected indicators of health system inputs, service delivery and quality, and health and developmental outcomes.

4 Monitoring, evaluation and review of national health strategies. A country-led platform for information and accountability. Geneva: World Health Organization; 2011.

5 Monitoring progress towards universal health coverage at country and global levels: framework, measures and targets. Geneva: World Health Organization and The World Bank; 2014 (http://www.who.int/healthinfo/universal_health_coverage/en/, accessed 7 July 2014).

Process and criteria for selecting indicators

Process

The process of selecting a global reference set of 100 core health indicators was guided by the priority global monitoring requirements relating to the MDGs, as well as by consideration of the measurement requirements for universal health coverage, noncommunicable diseases, other new global health challenges and the post-2015 development agenda.

To this end, an initial landscaping exercise was undertaken to take stock of existing global indicator sets and related reporting requirements that have been developed through global agreements, initiatives and reference groups. The exercise took into consideration the indicators and reporting requirements relating to:

1. Monitoring of international commitments and resolutions by which governments have committed their countries, such as United Nations and World Health Assembly declarations and resolutions.

   Examples include:
   - United Nations MDGs
   - World Health Assembly resolutions associated with monitoring of international commitments[6]
   - Declaration of Commitment of the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS
   - The recommended indicators of the Commission on Information and Accountability for Women's and Children's Health[7]
   - Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development (ICPD) beyond 2014.

2. Disease- and programme-specific indicators and reporting requirements recommended through technical monitoring and evaluation reference groups and processes involving United Nations, multilateral and bilateral agencies, and countries.

   Examples include:
   - Monitoring and Evaluation Technical Reference Group for Roll-Back Malaria
   - WHO/UNICEF joint reporting for immunization
   - UNICEF/WHO Every Newborn action plan to end preventable deaths
   - WHO/PEPFAR/UNAIDS guide to monitoring and evaluation for collaborative TB/HIV activities.

The landscaping assessment resulted in an initial master list of over 800 global indicators that included many similar indicators of varying definitions and periodicities.

Indicator prioritization

After duplications and variations of similar indicators were removed from the master list, a prioritization process was applied. This resulted in a first draft core list of indicators that was circulated to the members of the working group and was fur-

[6] Where a World Health Assembly resolution is associated with the monitoring of international commitments on a specific indicator, the indicator's metadata includes a link to the WHO Governing Body documentation section of the WHO website (http://apps.who.int/gb/or/)

[7] http://www.who.int/woman_child_accountability/progress_information/recommendation2/en/

ther distributed to several agency M&E groups. The current version of *The Global Reference List* reflects as far as possible the comments and inputs from those groups.

An indicator is prioritized as part of the 100 core health indicators if it meets the following criteria:

1. The indicator is prominent in the monitoring of major international declarations to which all member states have agreed, or has been identified through international mechanisms such as reference or interagency groups as a priority indicator in specific programme areas.
2. The indicator is scientifically robust, useful, accessible, understandable as well as specific, measurable, achievable, relevant and time-bound (SMART).
3. There is a strong track record of extensive measurement experience with the indicator (preferably supported by an international database).
4. The indicator is being used by countries in the monitoring of national plans and programmes.

Within the core set it may be important to further identify a small set of the most "powerful" indicators that can guide political commitment to health from beyond the health sector. Some health-related MDG indicators, such as the child mortality rate and the maternal mortality ratio, are examples of this. Some of the indicators prioritized as part of the 100 core health indicators could be considered aspirational. Many countries will not be able to report regular data on several core indicators – such as causes of death in the population. Yet, few would argue that cause-of-death indicators should not be included as core, whether mortality is due to human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), malaria, road traffic accidents or lung cancer. The indicators are fundamental for health resource allocation and planning, and for the monitoring of progress and impact.

The list does not focus on those indicators that are required for more detailed programme management at national and sub-national levels or for financial tracking of specific grants and projects. The indicators for grant and project monitoring differ in multiple ways: they are often input or output indicators and tend to be based on crude data (i.e. counting of events). The scope is often subnational and limited to a certain population, area or set of clinics engaged in the project. The indicators tend to be computed against a grant or project target rather than the population as a whole.

It will be important over the longer term to work towards further rationalization of this category of indicators. A key principle is that grant and project monitoring should be carried out in such a way that the national monitoring and evaluation system as a whole is strengthened.

An additional list of indicators is included in Annex 2 for reference. These are indicators which are considered relevant and desirable but did not meet all the criteria mentioned above or currently have serious measurement challenges.

Indicator metadata

For many of the indicators in *The Global Reference List*, a comprehensive set of metadata is available (Annex 1). The metadata have been derived from existing sources such as the WHO Indicator and Metadata Registry and programme-specific monitoring and evaluation guides. Key metadata include:

- Indicator definition, including numerator and denominator. Further work is required to fine-tune the definitions of some indicators. For some indicators only a numerator is reported by the country, while models are used to estimate the denominator (although models also need reported data).

- Disaggregations that include equity stratifiers (e.g. age and sex, geography, socioeconomic status, place of residence).

- In some cases, additional dimensions are used to include further breakdowns of the indicator (e.g. mortality rates by main cause of death or neglected disease incidence rates of neglected tropical diseases by disease).

- Data sources: The main (preferred) data source or data collection methodology is specified for each indicator, including:
  - civil registration and vital statistics systems;
  - population-based health surveys;
  - facility-generated data that include routine facility information systems and health facility assessments and surveys;
  - administrative data sources such as financial and human resources information systems;
  - indicators from other sources, including modelling.

- Further information and related links i.e. the key reference group, governing body, resolution, or programme publication that specifies monitoring of that particular indicator.

The extent to which an indicator is associated with a reporting burden differs by data source. Household surveys require a large investment and are conducted at a relatively low frequency. Adding an indicator or disaggregation is often considered a relatively small burden, although there are always concerns about the potential effect of over-long interviews on data quality. Facility data are collected continuously and are reported at short time intervals. The bulk of the burden of collecting and reporting often falls on health service providers. A simple new disaggregation may double the recording workload for health workers.

Rationalization of indicators needs to go hand in hand with rationalization of reporting requirements. Annual reporting is desirable for some indicators – i.e. those that can change rapidly and can be measured with great accuracy.

Process for updating

The Global Reference List will be reviewed and updated periodically as global and country priorities evolve and measurement methods improve. The review will be conducted under the auspices of the multi-agency working group on indicators and reporting requirements. This document contains the 2015 version.

Health status

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
- 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

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

2015

100 Core Health Indicators

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 preventive 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 access
- 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

Abbreviated name	Suicide rate
Indicator name	Suicide rate (per 100 000 population)
Domain	Health status
Subdomain	Injury and violence
Associated terms	Mortality by cause
Definition	Suicide rate per 100 000 population in a specified period (age-standardized).
Numerator	Number of suicides.
Denominator	Number of years of exposure.
Disaggregation/ additional dimension	Age, place of residence, sex, socioeconomic status
Method of measurement	Death registration data using ICD-10, often with adjustments for underreporting.
Method of estimation	Modelling, using multiple inputs, is often used if no complete and accurate data are available.
Measurement frequency	Annual if civil registration data are available, otherwise every five years
Monitoring and evaluation framework	Impact
Preferred data sources	Civil registration and vital statistics systems with full coverage
Other possible data sources	Special studies
Further information and related links	Mental Health Action Plan, 2013–2020. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf?ua=1, accessed 29 March 2015).

Coverage of services for severe mental health disorders

Abbreviated name	Coverage of services for severe mental health disorders
Indicator name	Coverage of services for severe mental health disorders
Domain	Service coverage
Subdomain	NCDs and nutrition
Associated terms	Mental health
Definition	Percentage of persons with a severe mental disorder (psychosis, bipolar affective disorder, moderate-severe depression) who are using services.
Numerator	Number of people receiving services.
Denominator	Total number of people in need.
Disaggregation/ additional dimension	Age, sex
Method of measurement	
Method of estimation	
Measurement frequency	
Monitoring and evaluation framework	Outcome
Preferred data sources	Household surveys
Other possible data sources	Facility information systems
Further information and related links	World Health Assembly governing body documentation: official records. Geneva: World Health Organization (http://apps.who.int/gb/or/, accessed 29 March 2015).