

Global Reference List of 100 Core Health Indicators

Version 4

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1. Background

At the informal meeting of Global Health Agency Leaders in New York September 24, 2013, it was decided to establish a group of senior focal points from the participating global health agencies, to critically review respective agency reporting requirements from countries. A multi-agency working group consisting of 19 agency representatives was established and chaired by the Director-General of WHO 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 a global and country perspective, and the key findings and recommendations were published in a report “A rapid assessment of the burden of indicators and reporting requirements for health monitoring¹”.

The report revealed how global investments in disease and program-specific monitoring and evaluation programmes by different agencies have resulted in very large numbers of indicators, diverse indicator definitions, reporting periodicities, fragmented data collection, uncoordinated efforts to strengthen country institutional capacity, causing unnecessary reporting burden to countries and inefficiencies in strengthening country systems.

One of the priority actions identified by the multi-agency working group was for global agencies to bring greater alignment and efficiency in these investments, to rationalize existing reporting demands and to reduce the reporting burden and reporting requirements on countries. To achieve this end, WHO has collaborated with international and multi-lateral partners and countries to move towards agreement on a global reference list of core health indicators that the global community prioritizes for the purposes of monitoring global progress, maintaining programme support and advocating for resources and funding. This list was developed from existing recommended lists that have been proposed in the context of international governing bodies and fora, global and regional health initiatives, technical reference groups and programmes.

The Global Reference List of Core Health Indicators is a means to an end. A core set should help reduce reporting requirements and better facilitate better alignment with and greater investment in one country-led health sector platform for results and accountability that forms the basis for all global reporting².

The purposes of the Global Reference List of Core Health Indicators are to:

- Rationalize and harmonize indicator reporting requirements of agency partners.
- Improve alignment between global reporting needs and country processes for monitoring of progress and performance.
- Enhance efficiency and streamline investments in data sources and analyses for the indicators.
- Improve the quality of results-based monitoring by focusing on better data for fewer indicators.

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 the Department of Health Statistics and Information Systems, World Health Organization, February 2014.

² Monitoring, Evaluation and Review of National Health Strategies. A country-led platform for information and accountability. IHP+, WHO, 2011.

2. Indicator classification

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

The Global Reference List of Core Health Indicators 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. The latter includes service delivery including quality of care, health financing, essential medicines, health workforce and health information. Second, each indicator is further categorised into sub-domains. This includes communicable diseases (HIV/AIDS, STI, TB, malaria, neglected tropical diseases outbreak/epidemic diseases), reproductive, maternal, newborn, child and adolescent health (including sexual health and reproductive rights and immunization), noncommunicable diseases (including chronic disease and health promotion, nutrition, mental health, substance abuse), injuries and violence and environment.

The third dimension is according to levels of the results chain framework (input, output, outcome and impact), as defined for the IHP+ technical M&E framework.² 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, 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.³ The focus is 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.

³ World Health Organization and World Bank Group (2014). Monitoring progress towards universal health coverage at country and global levels: framework, measures and targets. Geneva. (http://www.who.int/healthinfo/universal_health_coverage/en/, accessed 7/7/2014)

3. Process and criteria for selecting indicators

3.1 Process

The process for selecting a global reference set of core indicators has been guided by the priority global monitoring requirements relating to the MDG era as well as consideration of the measurement requirements for universal health coverage, noncommunicable diseases and 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 indicators and reporting requirements relating to:

(i) -Monitoring of international commitments and resolutions in which governments have committed their countries such as UN and World Health Assembly declarations and resolutions:

Examples include, but not limited to:

- The United Nations Millennium Development Goals (MDGs),
- World Health Resolutions that are associated with monitoring of international
- the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) *Declaration of Commitment*
- the Commission on Information and Accountability for Women's and Children's Health
- Framework of actions for the follow-up to the Programme of Action of the International Conference on Population and Development beyond 2014

(ii) Disease and programme-specific indicators and reporting requirements recommended through technical monitoring and evaluation reference groups and processes involving UN, multi-lateral, bilateral agencies and countries.

Examples include but not limited to:

- 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 diseases
- WHO/PEPFAR/UNAIDS. A guide to monitoring and evaluation for collaborative TB/HIV activities.

A complete list of the reference group documents is shown in an Annex 1.

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

3.2 Indicator prioritization

Working from the master list of indicators, and further to removing duplications and variations of similar indicators, an indicator prioritization process was applied. This process resulted in a first draft core list of indicators that was circulated for peer review to the members of the working group and further distributed to several agency M&E groups. This current version of the Global Reference list of Core Health Indicators (Version 4) reflects, to the extent possible, the comments and inputs from those groups.

The criteria for indicator selection have been used to distinguish between Core (C) and Additional core indicators (A).

Core indicators:

Indicators are prioritized as **Core** if they meet 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 program areas.
2. The indicator is scientifically robust, useful, accessible, understandable and SMART (specific, measurable, achievable, relevant and time-bound).
3. There is a strong track record of extensive measurement experience with the indicator (possibly 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 distinguish a small set of the most “powerful” indicators that can guide political commitment to health beyond the health sector. Some health MDG indicators, such as the child mortality rate and the maternal mortality ratio, are good examples.

Some of the indicators prioritized as core could be considered aspirational. For several core indicators many countries will not be able to report regular data. An example is causes of death in the population. Yet, few would argue that cause of death indicators should not be included as a core indicator, be it mortality due to AIDS, malaria, road traffic accidents or lung cancer. The indicators are fundamental for health resource allocation and planning, and monitoring of progress and impact.

Additional indicators:

Indicators are considered as **Additional** if they meet at least the first, second and fourth criteria, but do not fully meet the third. This implies that new indicators generally included in this additional category.

Project and grant monitoring

A third category of indicators exists that relate to specific project management and /or donor reporting. They have not been included as part of the global core or additional sets as they tend to be used by specific projects and donors for more specific programme management and accountability purposes.

The grant and project monitoring indicators differ in multiple ways: they are more often input or output indicators and tend to be based on crude data (counting events). The scope is often subnational, 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 population as a whole.

While there is some overlap in the indicators collected for specific projects and donors with the Global Reference List of Core Health Indicators, reporting burden for such projects will not be mitigated at the country level for a significant number of indicators. The data collection investments are local and related to the project and generally not aiming to strengthen the country system. Sometimes national monitoring systems are weakened because of critical staff moving to grant and project monitoring and, if there are multiple projects in parallel, because it becomes more difficult to obtain a national picture from disparate projects.

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

3.3 Indicator metadata

For many of the indicators in the Global Reference List of Core Health Indicators, a comprehensive metadata set is available. These 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 the numerator and denominator. For some indicators further work is required to fine-tune definitions. For some indicators only a numerator is reported by the country, as models are used to estimate the denominator (but models also need reported data).
- **Disaggregations** that include equity stratifiers such as age and sex, geography, socioeconomic status, and place of residence, among others.
- 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).
- **References** : The key reference group, governing body, resolutions, or programme publication that specifies monitoring of that particular indicator.
- **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 includes routine facility information systems and health facility assessments and surveys
 - Administrative data sources such as financial and human resource information systems
 - Other: indicators that other sources including estimation and modelling.

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 overly long interviews on data quality. Facility data are collected on a continuous basis and reported on a frequent basis. 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.

Reporting periodicity is a critical factor that affects the reporting burden and will be included in the next version of the metadata dictionary. Rationalization of indicators needs to go hand in hand with rationalization of reporting requirements. For some indicators annual reporting is desirable: those that can change rapidly and can be measured with great accuracy.

Going forward a priority action will be to publish the Global Reference List of Core Indicators and a full metadata registry both as an online database and in printed form. This will continually be updated and amended as global and country priorities and directions evolve.

4. Global Reference List of Core Health Indicators

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Health status			
Mortality by age and sex			
Life expectancy at birth	Average number of years that a newborn could expect to live, if exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year	Place of residence Sex Education level	16, 19
Adult mortality rate between 15-60 years	Probability that a 15 year old person will die before reaching his/her 60th birthday.	Place of residence Socio-economic status Sex	16
Under 5 mortality rate	Probability of dying by age five per 1,000 live births, if subject to age-specific mortality rates of a specified time period	Place of residence Socio-economic status Sex	1,2,4,16,20, 36
Infant mortality rate	Probability of dying by age 1 per 1,000 live births, if subject to age-specific mortality rates of that period	Place of residence Socio-economic status Sex	1,2,16,20, 36
Neonatal mortality rate	N of deaths during the first 28 completed days of life per 1,000 live births in a given year or other period	Place of residence Socio-economic status Sex Age in days/weeks Birth-weight	5,16, 36, 46
Mortality by cause			
Mortality rates by cause of death (main causes)	Deaths by cause, per 100,000 population, age-standardized, for the year indicated.	Place of residence Socio-economic status Sex Age	16, 36, 7
Maternal mortality ratio	N of deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified time period	Place of residence Socio-economic status Age	1,2,4,16,18,2 0, 36, 46
TB mortality rate	N of deaths due to tuberculosis (all forms), excluding HIV, per 100,000 population (age-standardized)	Age sex	1,2,13,16, 36
HIV/AIDS mortality rate	N of deaths due to HIV/AIDS per 100,000 population (age-standardized)	Age sex TB/HIV co-infected	2, 16, 36, 37
Malaria mortality rate	N of deaths due to malaria per 100,000 population (age-standardized)	Age sex	1, 2, 16, 17, 21, 36
Mortality between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	Unconditional probability of dying between the exact ages 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	Place of residence Socio-economic status Sex	7,16, 46
Suicide mortality rate	Suicide rate per 100,000 population in a specified period (age-standardized)	Age, sex	8
Mortality rate from road traffic injuries	N of road traffic fatal injury deaths per 100,000 population (age-standardized)	Per motor vehicles, motor vehicle-km and passenger-km	11, 19, 22
Fertility			
Adolescent fertility rate	N of births to women aged 15-19 occurring during a given reference period per 1,000 females 15-19.	Place of residence Socio-economic status Marital status	18, 24, 46
Total fertility rate	N of children born to a woman according to the current fertility rates	Place of residence Socio-economic status	18

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Morbidity			
New cases of vaccine preventable diseases	N of confirmed new cases of vaccine preventable diseases (VPDs) that are included in the WHO recommended standards for surveillance of selected VPDs and VPD reported on the WHO-UNICEF reporting form in a specified time period	Measles, (congenital) rubella, poliomyelitis, meningitis etc. Also: Interruption of measles, CRS transmission > 12 months District	2, 14, 16
New cases of IHR notifiable diseases	N of new confirmed cases of IHR notifiable diseases	Smallpox, polio (wild-type virus), influenza with pandemic potential, SARS	9, 16
New cases of other notifiable diseases	N of confirmed new cases of other notifiable diseases	Plague, rabies, cholera, meningitis, viral haemorrhagic fevers .	9, 16
HIV incidence	N of new HIV infections per year	General population Key populations (MSM, sex workers, IDU) Sex and age groups (0-14, 15-24, 15-49) Child <3 years, < 1 year Place of residence Socioeconomic status	1,2,3,18, 36,37, 46
HIV prevalence in key populations	Percentage of people living with HIV in key populations (MSM, sex worker, people who inject drugs, transgender people, people in prisons)	Also: General population Age (<25,25+) Sex	2,3, 36, 37, 46
TB incidence rate	Estimated N of new and relapse TB cases arising in a given year, expressed as the rate per 100 000 population (all forms of TB included, including people living with HIV)	Age, sex	1,2,13, 36, 38
TB notification rate	N of new and relapse cases of TB that are notified per 100,000 population	Type TB (bacteriologically confirmed / clinically diagnosed, pulmonary/ extrapulmonary) Age sex Prisons	2, 13, 36, 38
TB prevalence rate	Estimated N of TB cases (all forms) at a given point in time per 100,000 population	Bacteriologically confirmed TB; all forms of TB Age sex	1, 2, 13, 36, 38
Confirmed cases of MDR-TB	N of confirmed cases of MDR-TB detected during a specified time period	Treatment history Patterns of drug resistance	2, 13, 35, 36, 38
Parasite prevalence among children 6-59 months	Percentage of children aged 6-59 months diagnosed with malaria infection detected by rapid diagnostic test or microscopy	Age , sex geographical area time (year and month)	2,17,21, 36
Malaria incidence rate	N of confirmed reported malaria cases (microscopy or RDT) per 1,000 persons per year	Age geographical area time (year and month)	1,2,16,17,21, 36
Cancer incidence, by type of cancer	N of new cancers of a specific site/type occurring per 100,000 population (lung, breast, cervix, prostate, other leading)	Type age, sex	2, 7
Risk factors			
Nutrition			
Exclusive breastfeeding rate 0-5 months of age	Percentage of infants 0-5 months of age who are currently exclusively breastfed	Continued breastfeeding at 1 year	2,4, 5, 6,16,20, 29, 35, 36, 37
Early initiation breastfeeding	Percentage of infants breastfed within 1 hour of birth	Also : First day	
Incidence of low birth-weight among new-borns	Percentage of live births that weigh less than 2,500 g out of the total of live births during the same time period	Place of residence Socioeconomic status Birth-weight category Preterm	2,6,19,20

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Children under 5 who are stunted	Percentage of children under five whose height-for-age is below minus two (-2) standard deviations from the median of the WHO Child Growth Standard	Sex Place of residence Socioeconomic status Also: Below -3 SD	2,4,6,16,20,39, 40
Children under 5 who are wasted	Percentage of children under five whose weight-for-height is below minus two (-2) standard deviations of the median of the WHO Child Growth Standard median	Sex Place of residence Socioeconomic status Also: Below - 3SD	2,6,16,20,39, 40
Children under 5 who are overweight	Percentage of children under 5 whose weight-for-height is above +2 standard deviations of the WHO Child Growth Standards median	Sex Place of residence Socioeconomic status	2,6,7,16,19, 39,41
Anaemia in children	Percentage of children aged 6-59 months with a haemoglobin measurement of <8g/dl	Age Place of residence Socioeconomic status Also: <11 g/dl	6, 17,21, 36
Anaemia prevalence among women of reproductive age	Percentage of women ages 15-49 screened for haemoglobin levels who have a level less than 12g/dl (pregnant women less than 11g/dl)	Age parity Reproductive status (pregnant, lactating) Trimester of pregnancy Severity of anaemia Socioeconomic status	2,6, 41, 46
Non Communicable Diseases			
Total alcohol per capita (aged 15+ years old) consumption	Consumption (recorded and unrecorded) of pure alcohol (ethanol) in litres per person aged 15+ during one calendar year.		2,7,16
Current tobacco use among persons aged 15+ years	Percentage of adults (15+ years) who used any tobacco product (smoked or smokeless)	Also: adolescents 10-19years Sex Socioeconomic status	2,7,16,19
Obesity and overweight among adults	Percentage of adults (18+ years) who are overweight and obesity in persons.	Also among adolescents 10 – 19 years Sex Socioeconomic status	2,6,7,16,19, 39,40
Raised blood pressure among adults	Percentage of adults (18+ years) with raised blood pressure defined as systolic blood pressure ≥ 140 and/or diastolic blood pressure ≥ 90	Sex Socioeconomic status	2,7,16
Raised blood glucose/diabetes among adults	Percentage of adults (18+ years) with raised blood glucose/diabetes defined as fasting plasma glucose value ≥ 7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose	Sex Socioeconomic status	2,7,16,19
Population intake of salt	Mean population intake in persons aged 18+ years of salt (sodium chloride) in grams per day	Sex Socioeconomic status	
Insufficient physical activity in adults	Prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	Sex Also adolescents 10 - 19 Socioeconomic status	
Infections			
Condom use at last sex among people with multiple sexual partnerships in past 12 months	Percentage of person 15–49 who had more than one sexual partner in the past 12 months who report the use of a condom during their last sexual intercourse	Sex (15-24, 15-49)	1,3,16, 36, 37, 46
Condom use among key populations (sex workers, men who have sex with men, IDU)	Percentage of sex workers / MSM / IDU reporting the use of a condom the last time they had sex with a client / male partner / any partner respectively	Sex workers: by sex (F/M/transgender); age (<25/25+) MSM: age (<25/25+) IDU: sex; age (<25/25+)	3,36, 37
Injuries			
Intimate partner violence prevalence	Percentage of ever-partnered women 15-49 years who have experienced physical and/or sexual violence by an intimate partner in the last 12 months	Age (15-19, 20-24 and 25-49) HIV status	3, 34, 36, 46

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Environmental risk factors			
Population using a safely managed drinking water service	Percentage of population using an improved drinking water source on premises accessible to all members of the household which delivers sufficient water to meet domestic needs	Socioeconomic status Place of residence (urban - rural) Definition:-functional \leq 2 days in the last 2 weeks), meets WHO guideline values for E.coli, fluoride and arsenic, and is subject to a verified risk management plan.	25a, 25b, 25c, 25d, 46
Population using a safely managed sanitation service	Percentage of people who use an adequate sanitation facility	Socioeconomic status Place of residence (urban - rural) Definition includes: and whose excreta is safely transported to a designated disposal/treatment site, or treated in situ before being re-used or returned to the environment	25a, 25b, 25c, 46
Population using modern fuels for cooking/heating/lighting (indoor air)	Percentage of households / population using modern fuels for cooking/ heating/ lighting	Sex Place of residence Socio-economic status Fuel type End use (i.e. cooking, heating, lighting)	16a, 16b
Service coverage			
Reproductive, maternal, newborn, child and adolescent			
Demand for family planning satisfied with modern methods	Percentage of women of reproductive age (15-49 years) who are either married or in union have their need for family planning satisfied with modern methods	Also : sexually active Age Socio economic status Place of residence	2,4,24, 46
Modern contraceptive prevalence rate	Percentage of women of reproductive age (15-49 years), either married or in union who are currently using, or whose sexual partner is currently using , at least one contraceptive method, regardless of the method used (modern or traditional)	Also : sexually active Age Socio economic status Place of residence By: method (short, long, permanent)	1,2,4,20,24, 35, 46
Antenatal care coverage	Percentage of pregnant women 15-49 years who have made at least 4 antenatal care visits (any provider)	Age Socio economic status Place of residence Type of provider Also: at least one visit	1,2, 4, 20, 36
Skilled birth attendance	Percentage of live births attended by skilled health personnel	Also: institutional delivery coverage Age Parity Socio economic status Place of residence By type of provider	1,4,5,20, 36, 46
Postpartum care coverage	Percentage of mothers and babies who received postpartum care within two days of childbirth (regardless of place of delivery)	Age Parity Marital status Socio economic status Place of residence Facility ownership	4,5, 20, 35
Care seeking for pneumonia	Percentage of children under 5 with suspected pneumonia (cough and difficulty breathing) in the two weeks preceding the survey taken to an appropriate health provider	Also: with "receiving appropriate antibiotics" By provider	30
Children with diarrhoea receiving oral rehydration solution (ORS)	Percentage of children under 5 with diarrhoea in the last two weeks receiving ORS (fluids made from ORS packets or pre-packaged ORS fluids)	Also: with continued feeding	30, 35
Vitamin A supplementation coverage	Percentage of children 6–59 months who received 2 age-appropriate doses of vitamin A in the past 12 months	Age (6-11,12-23,24-59 months) Socio economic status Place of residence	16, 20, 30, 35

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Immunization			
Immunization coverage rate, by vaccine for each vaccine in the national schedule	Percentage of target population who have received the appropriate doses of the recommended vaccines in the national schedule by recommended age.	Age, sex Socio economic status Place of residence % fully immunized with all vaccine DTP1 - DTP3 dropout rate; MCV1-MCV2 dropout	
HIV			
Aware of positive HIV status	Percentage of all people living with HIV who are aware of their positive HIV status	Age Sex Pregnancy Key population	36,37, 46
Prevention of Mother-to-Child Transmission	Percentage of HIV-infected pregnant women provided with ARV drugs to reduce the risk of mother-to-child transmission during pregnancy and delivery in the last 12 months	By regimen	3, 4, 36, 37, 46
Antiretroviral Therapy (ART) coverage	Percentage of adults and children currently receiving antiretroviral therapy among all adults and children living with HIV at the end of the reporting period	Sex Age Key populations, pregnant women Persons newly initiating ART during the last year	1, 3, 36, 37, 46
Viral load suppression	Percentage of people on ART tested for viral load (VL) who have an undetectable viral load in reporting period (2013) or VL level below ≤ 1000 copies after 12 months of therapy	Sex Age Also: Undetectable	3,36
HIV/TB			
TB preventive therapy for HIV-positive people newly enrolled in HIV care	Percentage of eligible adults and children newly enrolled in HIV care (pre-ART and ART) starting treatment for latent TB infection in a specified time period	Adults / children	3, 31,36, 37
TB patients, new and relapse, tested for HIV	Percentage of new and relapse TB patients registered who had an HIV test result recorded in the TB register among the total number of new and relapse TB patients registered in a specified time period	Age Sex	2, 13, 3, 36, 37
Antiretroviral therapy (ART) during TB treatment	Percentage of HIV-positive TB patients who received (or are receiving) ART during or at the end of TB treatment, among all HIV positive TB patients registered during the reporting period	Age Sex	3, 31, 36, 37
Co-management of Tuberculosis and HIV Treatment	Percentage of adults and children with HIV infection who received ART and were started on TB treatment among HIV-positive incident TB cases		3, 31, 36, 37
Tuberculosis			
TB cases with result for drug susceptibility testing	Percentage of TB cases (new and previously treated) with results for diagnostic drug susceptibility testing during the specified period of assessment	Treatment history	31, 36
TB case detection rate	Percentage of estimated new and relapse tuberculosis (TB) cases detected and reported in a given year		1, 2, 13, 36
Malaria			
Intermittent preventive therapy for malaria during pregnancy (IPTp)	Percentage of women who received 3 or more doses of intermittent preventive treatment during ANC visits during their last pregnancy	Age Place of residence Socioeconomic status	2, 17, 20, 21, 36
Use of insecticide treated nets (ITN)	Percentage of people who slept under an ITN the previous night	Also : Children under 5; pregnant women Place of residence Socioeconomic status	1,2,17,20,21, 36
Access to an ITN in the household	Percentage of population at risk with access to an ITN in the household	Each ITN is assumed to be used by 2 people	2,17,20,21, 36
Indoor residual spraying (IRS) coverage	Percentage of population at risk protected by IRS during a specified time period		2,17,20,21, 35, 36
NTD			

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Coverage of preventive chemotherapy for selected neglected tropical diseases	Percentage of the target population living in endemic areas in a country that receive preventive chemotherapy for each of the selected diseases (Schistosomiasis, soil transmitted helminths, lymphatic filariasis, onchocerciasis)	Age (pre-school age children 1-4); school aged (5-14 years) and adults >15 years	2, 12,16, 35
Screening and preventive care			
Cervical cancer screening	Percentage of women between the ages of 30–49 screened for cervical cancer at least once, or more often, and for lower or higher age groups according to national programmes or policies		2, 7, 19, 23, 44, 46
Mental Health			
Coverage of services for severe mental health disorders	Percentage of persons with a severe mental disorder (psychosis; bipolar affective disorder; moderate-severe depression) who are using services		2
Health systems			
Quality and safety of care			
Surgical wound infection rate	Percentage of all surgical operations that have post-operative wound infection		19, 23
Institutional maternal mortality ratio	N of maternal deaths among 100,000 deliveries in health facilities / institutions	Age, parity, geography, cause	1,2,4,16,18,20, 37
Maternal death reviews	Percentage of maternal deaths occurring in the facility that were audited	Also: community deaths	32
Post Abortion Care	Percentage of complications of abortions that are treated in medical facilities		
ART retention rate	Percentage of adults and children with HIV still alive and known to be on antiretroviral therapy 12, 24 and 60 months after initiating treatment among patients initiating antiretroviral therapy during a specified time period	Age, sex, pregnancy, breastfeeding	1, 3, 36, 37
TB treatment success rate	Percentage of TB cases successfully treated (cured plus treatment completed) among all new TB cases notified to the national health authorities during a specified period	Age Sex Treatment history: new and relapse/previously treated (excl. relapse) HIV Bacteriology Also :Drug-susceptible and MDR-TB treatment success rate	1, 2, 13, 31, 36
Second line treatment coverage among MDR-TB cases	Percentage of notified TB patients estimated to have MDR-TB that were detected with MDR-TB and enrolled in second-line anti-TB treatment during the specified period of assessment	New, previously treated	31, 35, 36
Service-specific availability and readiness	Density of health facilities offering specific services per 10,000 population (e.g. FP, delivery, BEMOC, CEMOC, etc.) and meet minimum service standards based on a set of tracer criteria for specific services etc.)	Facility type, managing authority Also: average N of items for each service per facility	15, 36, 37, 46
Access			
Outpatient department (OPD) service utilization per person	N of OPD visits per 100 population in a specified time period	Age Sex Geography	15, 36
Health facility density	Total N of health facilities per 10,000 population (Total N of hospitals per 100,000)	Facility ownership; type Geography Density of specific services	15,16, 36
Hospital bed density	Total number of hospital beds per 10,000 population	Geography By type of bed	15,16
Availability of essential medicines and commodities	Percentage of health facilities with essential life-saving commodities in stock on the day of visit (and mean availability)	Facility type, managing authority Specific type of medicine / commodity (e.g Availability and affordability of quality, safe and efficacious essential NCD medicines, Family planning ART, vaccines, etc)	1,7,15, 36, 37, 46

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Median consumer price ratio of selected medicines	Median consumer price ratio (ratio of median local unit price to Management Sciences for Health international reference price) of selected originator medicines.	Public/Private	1, 15, 37
Health workforce			
Health worker concentration	N of health workers per 1000 population	By cadre (physicians, midwives, nurses.... Place of employment Urban/rural Subnational (district)	15,16, 36, 37, 43, 46
Output training institutions	N of graduates from health workforce educational institutions (including schools of dentistry, medicine, midwifery, nursing, pharmacy) during the last academic year per 1000 population	Level and field of education Also: Sex, age at graduation, home postcode on entry to education institution	15, 35, 36, 43
Health information			
Birth registration coverage	Percentage of births that are registered (within one month of age)	Sex Place of residence Socioeconomic status	15
Death registration coverage	Percentage of deaths that are registered (with age and sex)	Place of residence Socioeconomic status Also: with cause (ICD)	15, 36
Completeness of reporting facilities / districts (general, by disease type)	Percentage of facilities /districts that submit reports with in the required deadline	Facility type, managing authority geography	15, 35, 36
Health financing			
Current expenditure on health by general government and compulsory schemes % CHE	Current expenditure on health by general government and compulsory schemes as a share of total current expenditure on health	Financing source institutional unit; Disease; Input; Sub-National Level SES	24,36,37, 45, 46
Total current expenditure on health % GDP	Total current expenditure on health as a percentage of gross domestic product (expressed as a % of GDP),	Financing source institutional unit; Main type of care Main type of provider Disease Sub-National Level SES	24,45, 46
Out-of-pocket payment for health as a share of total current expenditure	Share of total current expenditure on health paid by households out-of-pocket (Expressed as a % of total current expenditure on health, this is the households' out-of-pocket expenditure)	Financing source institutional unit; Disease; Input; Sub-National Level SES	24, 36
Externally sourced funding as share of total current expenditures	Share of total current expenditure on health funded by external (rest of the world) institutional units providing revenues to financing schemes	By external financing source institutional unit	
Total capital expenditure on health as share of GDP	Total capital expenditure on health as a percentage of gross domestic product (expressed as a % of GDP)	Financing source institutional unit; financing agent; provider; disease	
Incidence of catastrophic health expenditure	Direct OOP exceeding 40% of household income net of subsistence needs	By sub national variables available in survey data	15
Incidence of impoverishment due to OOP	Number of households falling below the poverty line due to direct OOP	By sub national variables available in survey data	15
Health security			
IHR core capacity index	Percentage of attributes of 13 core capacities that have been attained at a specific point in time		2

Core indicators by results chain

Inputs and processes	Output	Outcome	Impact
<p>Health financing</p> <p>Current expenditure on health by general government and compulsory schemes % CHE</p> <p>Total current expenditure on health % GDP</p> <p>Externally sourced funding as a share of total current expenditures</p> <p>Total capital expenditure on health as share of GDP</p> <p>Health workforce</p> <p>Health worker concentration</p> <p>Output training institutions</p> <p>Health infrastructure</p> <p>Health facility density</p> <p>Hospital bed density</p> <p>Health information</p> <p>Birth registration coverage</p> <p>Death registration coverage</p> <p>Completeness of reporting facilities / districts</p>	<p>Service access and availability</p> <p>Outpatient department (OPD) service utilization per person</p> <p>Service-specific availability and readiness</p> <p>Availability of essential medicines and commodities</p> <p>Median consumer price ratio of selected medicines</p> <p>Service quality and safety</p> <p>Surgical wound infection rate</p> <p>Post Abortion Care</p> <p>Institutional maternal mortality ratio</p> <p>Maternal death reviews</p> <p>ART retention rate</p> <p>TB treatment success rate</p> <p>Confirmed cases of MDR-TB</p> <p>Second line treatment coverage among MDR-TB cases</p> <p>Health security</p> <p>IHR core capacity index</p>	<p>Coverage of Interventions</p> <p>Demand for family planning satisfied with modern methods</p> <p>Modern contraceptive prevalence rate</p> <p>Antenatal care coverage</p> <p>Skilled birth attendance</p> <p>Postpartum care coverage</p> <p>Care seeking for pneumonia</p> <p>Children with diarrhoea receiving oral rehydration solution</p> <p>Vitamin A supplementation coverage</p> <p>Immunization coverage rate, by vaccine for each vaccine in the national schedule by recommended age</p> <p>People living with HIV who are aware of positive HIV status</p> <p>Prevention of Mother-to-Child Transmission</p> <p>Antiretroviral Therapy (ART) coverage</p> <p>Viral load suppression</p> <p>TB notification rate</p> <p>TB cases with result for drug susceptibility testing</p> <p>TB case detection rate</p> <p>TB preventive therapy for HIV-positive people newly enrolled in HIV care</p> <p>TB patients, new and relapse, tested for HIV</p> <p>Antiretroviral therapy (ART) during TB treatment</p> <p>Co-management of Tuberculosis and HIV Treatment</p> <p>Intermittent preventive therapy for malaria during pregnancy (IPTp)</p> <p>Parasite prevalence among children 6-59 months</p> <p>Use of insecticide treated nets (ITN)</p> <p>Access to an ITN in the household</p> <p>Indoor residual spraying (IRS) coverage</p> <p>Coverage of regular administration of chemotherapy to all school-aged children at risk of schisto-somiasis & soil-transmitted helminth infection</p> <p>Cervical cancer screening</p> <p>Coverage of services for severe mental health disorders</p> <p>Risk factors and behaviours</p> <p>Exclusive breastfeeding rate 0-5 months of age</p> <p>Early initiation breastfeeding</p> <p>Incidence of low birthweight among newborns</p> <p>Children under 5 who are stunted</p> <p>Children under 5 who are wasted</p> <p>Anaemia in children</p> <p>Anaemia prevalence among women of reproductive age</p> <p>Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol</p> <p>Current tobacco use among persons aged 15 + years</p> <p>Obesity and overweight in adults</p> <p>Raised blood pressure among adults</p> <p>Raised blood glucose/diabetes among adults</p> <p>Population intake of salt</p> <p>Insufficient physical activity in adults</p> <p>Condom use at last sex among people with multiple sexual partnerships in past 12 months</p> <p>Condom use among key populations (sex workers, men who have sex with men, IDU)</p> <p>Intimate partner violence prevalence</p> <p>Population using a safely managed drinking water service</p> <p>Population using a safely managed sanitation service</p> <p>Population using modern fuels for cooking/heating/lighting (indoor air)</p>	<p>Health status</p> <p>Life expectancy at birth</p> <p>Adult mortality rate between 15-60 years</p> <p>Under 5 mortality rate</p> <p>Infant mortality rate</p> <p>Neonatal mortality rate</p> <p>Mortality rates by cause of death (main causes)</p> <p>Maternal mortality ratio</p> <p>TB mortality rate</p> <p>HIV/AIDS mortality rate</p> <p>Malaria mortality rate</p> <p>Mortality between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases</p> <p>Mortality rate from suicides</p> <p>Mortality rate from road traffic injuries</p> <p>Adolescent fertility rate</p> <p>Total fertility rate</p> <p>New cases of vaccine preventable diseases (VPDs)</p> <p>New cases of IHR notifiable diseases</p> <p>New cases of other notifiable diseases</p> <p>HIV incidence</p> <p>HIV prevalence among key populations</p> <p>TB incidence rate</p> <p>TB prevalence rate</p> <p>Malaria incidence rate</p> <p>Cancer incidence, by type of cancer</p> <p>Financial risk protection</p> <p>Out-of-pocket payment for health as a share of total current expenditure</p> <p>Incidence of catastrophic health expenditure</p> <p>Incidence of impoverishment due to OOP</p>

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Annex 1: Additional indicators (Global reference list of health indicators)

Additional indicators

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Health status			
Mortality by age and sex			
Life expectancy at age 60	The average number of years that a person of 60 years old could expect to live, if exposed to the sex- and age-specific death rates prevailing at the time of his/her 60th birthday	Sex	16, 19
Stillbirth rate	N of stillbirths per 1,000 births (live and stillbirths)	Fresh / macerated	5,16
Healthy life expectancy at birth	Average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury	Sex	16, 19
Mortality by cause			
Distribution of causes of death in health facilities	Percent distribution of main causes of death in health facilities, expressed as percentage of total deaths in health facilities	Age (under 5, 5+) Vaccine preventable diseases	15
Morbidity			
Leading outpatient diagnosis (morbidity)	Rate per 1000 population and percent distribution for the main diagnostic categories	Age (under 5, 5+) sex	15, 19, 36
Leading inpatient admissions by diagnosis	Number, rate per 1000 population and per cent distribution for the main diagnostic categories	Age (under 5, 5+) sex	15, 19
Sexually transmitted infections incidence rate	N of new cases of reported STIs (syndromic or etiological reporting) in a specified time period	Age Sex Syndrome / pathogen (maternal syphilis ..) Key populations	28, 36, 46
Neglected tropical disease incidence rates	N of cases of NTD (Buruli ulcer, dengue, rabies, trachoma, yaws, leprosy, Chagas disease, trypanosomiasis, leishmaniasis, dracunculiasis, lymphatic filariasis, onchocerciasis, schistosomiasis, cysticercosis/taeniasis, echinococcosis, foodborne trematodiasis, soil-transmitted helminths) per 100,000 population	Disease age, sex	2, 12, 16
Prevalence of severe mental disorders	N of cases of severe mental disorders per 100,000 population	Type Age, sex	2, 8
Prevalence of visual impairment	N of persons living with severe visual impairment per 100,000 population	By cause Age, sex	2
Risk factors			
Nutrition			
Children under 5 who are underweight	Percentage of children under 5 whose weight-for-age is below - 2 standard deviations of the WHO Child Growth Standard median	Sex Place of residence Socioeconomic status	1,2,6,16,20
Percentage of women of reproductive age who are underweight	Percentage of women 15-49 years with low BMI (<18.5 kg/m ²)	Place of residence Socioeconomic status	2, 6, 16, 20, 41
Minimum acceptable diet	Percentage of children 6-23 months of age who receive a minimal acceptable diet		29
Urinary iodine concentration in children 6-12 years old	Median urinary iodine concentration (µg/L) in children aged 6-12 years	Sex Place of residence Socioeconomic status	2, 6
Households that have iodized salt	Percentage of households that have iodized salt (>15 ppm)	Place of residence Socioeconomic status Also: compute by children instead of households	2,6

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Lifestyle			
Prevalence of heavy episodic drinking	Percentage of adults (15+ years) who have had at least 60 grams or more of pure alcohol on at least one occasion weekly (approximately to 6 standard alcoholic drinks)	Also: adolescents (5 or more standard drinks) Sex Socioeconomic status Place of residence	2,7, 46
Abstainers	Percentage of adults (15+ years) in a given population who have not consumed any alcohol during their life time	Age Sex Socioeconomic status Place of residence Also: not in last 12 months	2,7
Low consumption of fruit and vegetables among adults	Percentage of adults (18 years and over) who eat less than five servings of fruit and/or vegetables (400 grams) on average per day (age standardized)	Sex Socioeconomic status Place of residence	2,7,19
Total energy intake from saturated fatty acids	Age-standardized mean percentage of total energy intake that is from saturated fatty acids in persons aged 18+ years	Sex Socioeconomic status Place of residence	2,7
Raised cholesterol among adults	Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (Defined as total cholesterol \geq 5.0 mmol/L or 190 mg/dl); and mean total cholesterol)	Sex Socioeconomic status Place of residence	2,7
Risk factors infections			
Safe injecting practices among injecting drug users	Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected	sex and by age (<25/25+)	3, 36, 37
Multiple sexual partnerships	Percentage of women and men aged 15-49 who have had sexual intercourse with more than one partner in the last 12 months	Sex Age (15-19, 20-24 and 25-49)	3, 36, 37
Discriminatory attitudes towards people living with HIV	Percentage of women and men aged 15-49 who report discriminatory attitudes towards people living with HIV in two standard survey questions (respond "No" or "It depends" to any of two questions)	Age Sex HIV status	3, 37
Risk factors injuries			
Prevalence of female genital mutilation	Percentage of women aged 15-49 who have undergone female genital mutilation-cutting	Age, socioeconomic status, place of residence	46
Non-partner sexual violence prevalence	Percentage of women 20-29 years who have ever experienced sexual violence by a non-partner from age 15 on	Age	34, 46
Seat-belt wearing rate	Percentage of car occupants (i.e. drivers and passengers) who use seat-belts.		11, 19,22
Helmet wearing rate	Percentage of motor occupants (i.e. drivers and passengers) who use helmets		11, 22
Environmental risk factors			
Population with basic hand-washing facilities with soap and water at home	Percentage of population with soap and water at a hand-washing facility commonly used by family members.	Socioeconomic status Place of residence (urban - rural) Also : Proportion of schools providing basic drinking-water & sanitation	25a, 25b, 25c
Proportion of schools with basic drinking-water, sanitation and hygiene	Proportion of schools with basic drinking-water, sanitation and hygiene		25a,- 25c, 25f
Air pollution level in cities (particulate matter (PM))	Mean air pollution level in cities (population-weighted annual mean PM2.5, or PM10 when not available)		33a, 33b
Service coverage			
RMNCAH			
Timing first antenatal visit	Percentage of pregnant women 15-49 years who have made their first antenatal visit in the first trimester (before 16 weeks)	Age Socio economic status Place of residence Type of provider	1,2, 21, 36
Zinc for treatment of diarrhoea	Percentage of children aged 0-59 months with diarrhoea receiving zinc supplementation		30, 35
HIV services			

Indicator name	Definition	Disaggregation/ Additional dimensions	References
HIV testing in key populations	Percentage of key populations (sex workers / MSM /IDU) who received an HIV test in the past 12 months and know their results	Sex workers: by sex (F/M/transgender); age (<25/25+) MSM: age (<25/25+) IDU: sex; age (<25/25+)	3, 36, 37, 46
Pregnant women counselled and tested for HIV	Percent of women who were counselled during antenatal care for their most recent pregnancy, accepted an offer of testing and received their test results, of all women who were pregnant at any time in the two years preceding the survey		3, 36,37, 46
Prevention of mother-to-child transmission during breastfeeding	Percentage of women living with HIV who are provided with ARV prophylaxis for themselves or their infants to reduce the risk of mother-to-child transmission during breastfeeding		3, 4 , 36, 37
Early Infant Testing coverage	Percentage of HIV exposed infants born within the last 12 months who received an HIV test within 2 months of birth		3, 36, 37
Co-trimoxazole (CTX) prophylaxis for infants born to HIV-infected women	Percentage of infants born to HIV-infected women started on CTX prophylaxis within two months of birth, in a specified time period		3, 4,36, 37
Co-trimoxazole prophylaxis among HIV positives who are eligible	Percentage HIV positive individuals who receive trimethoprim-sulfamethoxazole (cotrimoxazole) prophylaxis according to national guidelines		2, 36, 37
Opioid substitution therapy (OST) coverage	Percentage of people on opioid substitution therapy (OST) among those who need it		3, 36, 37
Coverage of prevention programs among key populations	Percentage sex workers / MSM / IDU exposed to HIV prevention programmes (yes to two specific exposure questions in surveys)	Sex Age	3, 36, 37
Male circumcision	Percentage of men 15-49 who are circumcised	Age sex Sociocultural variables Socioeconomic variables Place of residence	3, 36, 37
HIV/TB			
TB status assessment among HIV positive people	Percentage of adults and children enrolled in HIV care who had TB status assessed and recorded during their last visit		3, 31, 36, 37
Malaria			
Household ownership of ITN	Percentage of households with at least one ITN	Place of residence Socioeconomic status	2, 17,20,21, 36
Treatment seeking behaviour for children with fever	Percentage of children under 5 years old with fever in the previous two weeks for whom advice or treatment was sought	Place of care seeking (public, private)	17, 20, 21, 36
Treatment of confirmed malaria cases	Percentage of confirmed malaria cases that receive first line antimalarial treatment		36
Appropriate treatment among those treated for malaria	Percentage receiving first line antimalarial treatment among those children with fever in the last two weeks who received any antimalarial		36
Annual blood examination rate	Annual blood examination rate		
Malaria diagnostic testing rate	Percentage of suspected malaria cases that had a diagnostic test	Register review	17,21, 36
Malaria test positivity rate	Percentage of confirmed malaria cases (by microscopy or RDT) among all tested cases		1,2,16,17,21, 36
NTD			
NTD treatment coverage		Buruli ulcer cases Cutaneous leishmaniasis Trachoma	2, 12, 16, 35
NTD preventive chemotherapy coverage		Schistosomiasis Lymphatic leishmaniasis Soil transmitted helminthiasis	2, 12, 16, 35
Foodborne trematode infections preventive therapy coverage	Percentage of the population at risk of foodborne trematode infections reached by preventive chemotherapy		2, 12,35
School-aged children dewormed (in target countries)	Percentage of targeted school children who received deworming treatment in a given time period		2, 12, 35
NCDs			

Indicator name	Definition	Disaggregation/ Additional dimensions	References
Drug therapy and counselling to prevent heart attacks and stroke	Percentage of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular disease (CVD) risk* $\geq 30\%$, including those with existing CVD) receiving drug therapy** and counselling*** (including glycaemic control) to prevent heart attacks and strokes.	Age, sex	2, 7
Cataract surgical rate and coverage	Percentage of people who received cataract surgery among those in need in a specified time period	Age, sex	2, 19
Use of assistive devices among people with disabilities	Percentage of people with disabilities who have and use the appropriate assistive devices		2
Health systems			
Quality and safety of care			
Cause-specific case fatality rates for major causes	Cause specific deaths per 100 admissions for major causes and overall in health facilities	Age (under 5, 5+) Overall and cause-specific; facility-specific	32
Antenatal care: blood pressure measured	Percentage of women who had blood pressure measured at the last antenatal visit	Age Socio economic status Place of residence Type of facility	1
Antenatal care: tested for syphilis	Percentage of women attending antenatal care (ANC) services who were tested for syphilis	Age Socio economic status Place of residence Type of facility	3, 36
Antenatal care: treated for syphilis	Percentage of women attending antenatal care (ANC) services who tested positive for syphilis and received treatment	Age; first / any visit Socio economic status Place of residence Also: add whose sexual contacts were traced	3
Antenatal corticosteroid use	Percentage of new-borns with confirmed ultrasound gestational age of less than 34 weeks whose mothers received antenatal corticosteroids		5
Prevention of postpartum haemorrhage in health facilities	Percentage of women receiving oxytocin immediately after birth of the baby (within 1 minute of delivery), before the birth of the placenta, irrespective of mode of delivery		32, 35
Severe systemic infection/sepsis in the postnatal period	Percentage of women in health facilities with severe systemic infection/sepsis in the postnatal period, including readmissions (after birth in a facility)		32
New-borns receiving essential newborn care	Percentage of new-borns who received all four elements of essential newborn care: -immediate and thorough drying -immediate skin-to-skin contact -delayed cord clamping -initiation of breastfeeding in the first hour		5, 20, 32
Neonatal sepsis	New-borns with suspected severe bacterial infection who receive appropriate antibiotic therapy (infant reportedly stopped feeding well and/or stopped moving on its own)		5
Feeding of children born to HIV positive mothers	Percentage of children born to HIV-positive women who are feeding in line with national guidelines on HIV and infant feeding		20
Pneumonia treatment (children)	Percentage of children who are correctly prescribed an antibiotic for pneumonia		4, 20, 35
Male partner testing for HIV among women attending ANC	Percentage of pregnant women attending antenatal care (ANC) whose male partner was tested for HIV in the last 12 months		3
Knowledge of HIV transmission among young women and men	Percentage of young women and men (15-24) who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Age ((15-19, 20-24) Sex Socio economic status Place of residence	1, 3, 16, 36, 37
Cancer survival rates	Percentage of persons with cancer who survive at least 5 years after diagnosis, after correction for background mortality in a given time period (cohort)	By cancer site	7

Indicator name	Definition	Disaggregation/ Additional dimensions	References
30 day hospital case fatality rate - acute myocardial infarction (stroke)	Percentage of hospital in-patients with primary diagnosis acute myocardial infarction (stroke) who died within 30 day after the admission		19, 26
Postoperative sepsis	Postoperative sepsis as a percentage of all surgeries	Age, sex	19
Postoperative pulmonary embolism/ thrombosis rate	Percentage of cases of postoperative pulmonary embolus or deep vein thrombosis among all major surgeries		19
Hospitals with systems for adverse event reporting and learning for patient safety			
Hospital re admission rates	Percentage of unplanned and unexpected hospital readmissions for tracer conditions (AMI, pneumonia, asthma, diabetes).		26
Waiting time to elective surgery	Average inpatient waiting time for elective (i.e. non urgent) surgeries - cataract, coronary angioplasty, hip replacement, knee replacement)		19
Patient satisfaction	Percentage of survey respondents who report to be satisfied or very satisfied with the health services	Age, sex Place of residence Socioeconomic status	19
Neonatal death reviews	Percentage of neonatal deaths occurring in the facility that were audited	Also Perinatal death reviews	2, 5, 32
General service readiness	Percentage of health facilities that have a basic set of equipment and amenities present on the day of visit	Facility type, managing authority Also: average N of items per facility	15, 36, 46
Access			
Hospital admission rates	N of Hospital admissions per 100 population per year	Age sex	15, 19
Bed occupancy rate	Percentage of available beds which have been occupied over a given period	Also: Average length of stay (for selected interventions)	19,26
Surgery rate	Number of surgeries by type (minor / major; specifics)	Age Sex Socioeconomic status Place of residence	26
Caesarean section rate	Percentage of deliveries by Caesarean section	Age Place of residence Socioeconomic status	19, 26
Medical devices/essential technologies	Density of medical equipment per million population	By type (MRI, CT scanners)	16, 19
Access to palliative care	Consumption of morphine-equivalent strong opioid analgesics (excluding methadone) per death from cancer in a given time period		7
Health workforce			
Turnover rate	Percentage of health workers leaving public sector employment (dentists, midwifery personnel, nursing personnel, pharmacists, physicians, physician associates), in the last year	By cadre Also: place of employment, age (<30, 30-49, 50+), sex, geography (urban/rural)	36
National HRH self-sufficiency	Percentage of foreign trained, non-national health workers (dentists, midwifery personnel, nursing personnel, pharmacists, physician- generalists, physician-specialists, physician associates)	By cadre Also: place of employment, age(<30, 30-49, 50+), sex, geography (urban/rural), sector (public/private/other)	43
Health policy			
Policy index	Existence of up to date national health strategy and national health plans linked to health needs and priorities.		7,15