



TOOLKIT FOR ANALYSIS AND USE OF ROUTINE HEALTH FACILITY DATA

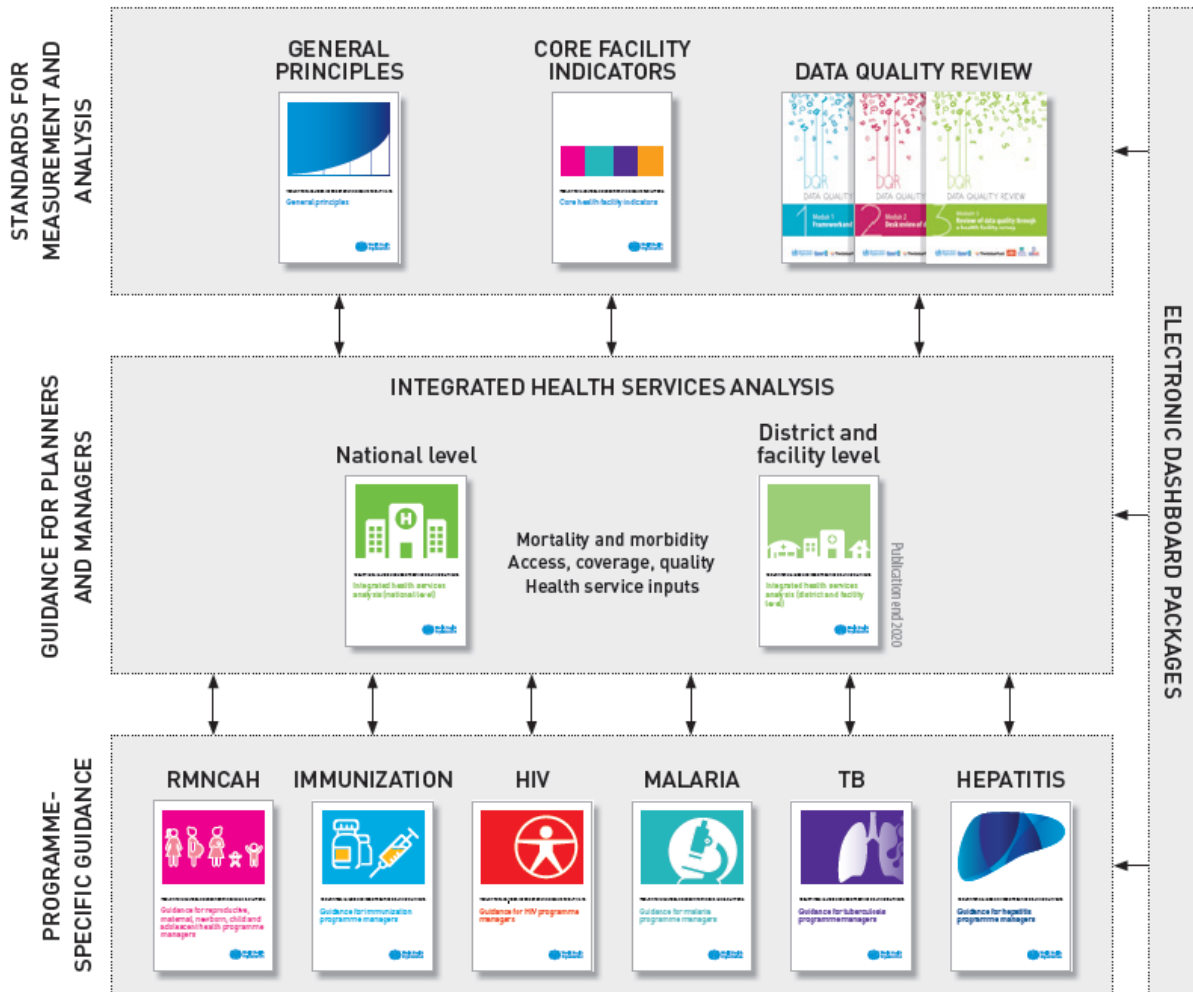
Core health facility indicators

WORKING DOCUMENT JANUARY 2021



WHO TOOLKIT FOR ANALYSIS AND USE OF ROUTINE HEALTH FACILITY DATA

This document is part of the WHO Toolkit for analysis and use of routine health facility data – a set of capacity-building resources to optimize the analysis and use of data collected from health facilities through routine health information systems (RHIS). The Toolkit is a collaborative effort by multiple WHO technical programmes and partners. It promotes an integrated, standards-based approach to facility data analysis, using a limited set of standardized core indicators with recommended analyses, visualizations and dashboards.



The Toolkit consists of a series of modules that can be used individually or together:

- *General principles* introduces key concepts in routine facility data analysis that are applicable to all modules.
- *Core facility indicators* is a compendium of the indicators from the various modules.
- The Data quality review (DQR) toolkit includes guidance and tools for systematic review of the quality of routine facility data.
- *Integrated health services analysis* targets general health service managers, providing a comprehensive, integrated analysis of tracer indicators across multiple health service components and programmes.
- The *programme-specific guidance modules* are customized according to the needs of the programme. Each module contains a guidance document, training materials and an electronic configuration package for automated dashboard production.

The materials within the Toolkit will be periodically updated and expanded.

Further details: https://www.who.int/healthinfo/tools_data_analysis_routine_facility/en

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Abbreviations

ABER	annual blood examination rate
ACT	artemisinin-based combination therapy
ANC	antenatal care
ART	antiretroviral therapy
BCG	bacille Calmette–Guérin (vaccine)
DTP	diphtheria–tetanus–pertussis (vaccine)
HIV	human immunodeficiency virus
IPTp	intermittent preventive treatment for malaria during pregnancy
MCV	measles-containing vaccine
MR	measles-rubella (vaccine)
PLHIV	persons living with HIV
RHIS	routine health information system
RMNCAH	reproductive, maternal, newborn, child and adolescent health
RDT	rapid diagnostic test (malaria)
SDGs	Sustainable Development Goals
TB	tuberculosis
UHC	Universal Health Coverage
WHO	World Health Organization

Core health facility indicators overview

Routine health facility data are collected at primary care facilities, hospitals and other health service points at the time that services are provided. These data are processed and used at the health facility. Summary aggregate reports are also sent at regular intervals to successive levels of the health system, with further aggregation, analysis and use at each level, e.g. district, provincial and national level.

The system of regular recording, reporting, analysis and presentation of this health facility data is known as the **routine health information system (RHIS)**.¹

RHIS data provide a picture of the services delivered in health facilities and the health status of the people using the services. The data can be used to assess the performance of individual facilities and to assess service utilization and coverage of interventions in defined populations.

Health facility services make important contributions toward achieving the universal health coverage (UHC) targets and the health-related sustainable development goals (SDGs). It is therefore essential for countries to monitor the performance of their health services using facility-based data across the spectrum of services.

Analysis and use of RHIS data can be strengthened by focusing on a limited, standardized set of core indicators.

The *Core health facility indicators* document provides a core list of indicators that can be calculated using RHIS data. It includes all the indicators in the various guidance manuals of the WHO *Toolkit for Analysis and use of routine health facility data*.

Each programme-specific guidance manual in the *Toolkit* contains a list of recommended core indicators relevant to the programme. The *Integrated health services analysis* modules include general health service indicators as well as a selection of tracer indicators from the various programme-specific lists.

Core health facility indicators contains indicators defined in the following modules of the *Toolkit*:

- Integrated health services analysis: national level
- Integrated health services analysis: district and facility levels
- Guidance for HIV programme managers
- Guidance for malaria programme managers
- Guidance for tuberculosis programme managers
- Guidance for immunization programme managers
- Guidance for RMNCAH programme managers

The core indicators document will be updated periodically as the core indicator lists of the programme-specific modules are revised and as new programme modules are included in the *Toolkit*.

¹ The RHIS is also called the health management information system (HMIS).

1 The core indicator concept

STANDARDS FOR RHIS INDICATORS

- **Core indicator list**

A core indicator list consists of a limited set of key indicators. The core RHIS indicator list focuses data analysis on the most important indicators needed on a regular basis to monitor health services and inform decisions at various levels of the health system. Establishment of the core indicator list should be a collaborative process involving multiple programmes and stakeholders. The list should be reassessed periodically to ensure that it reflects current global standards and country priorities.

- **Consistency with international standards**

The core facility indicator list should include a balanced set of both general and programme-specific indicators that are consistent with international health service and programmatic standards and reporting requirements.

- **Standardization of indicators and data elements**

Well-defined, standardized indicators, data elements and metadata are essential. This avoids the creation of multiple similar but incompatible indicators and data elements and enables consistent analysis of data across programmes and partners and over time. A standard core indicator set also provides the basis for a set of standardized core analyses, visualizations and dashboards.

THE CORE HEALTHY FACILITY INDICATOR LIST

The recommended core indicators in this document are consistent with global programmatic and health services standards. The list includes relevant indicators from WHO's *Global reference list of 100 core health indicators*² as well as other key RHIS indicators required for planning and managing health services and programmes, and for reporting to national- and global-level stakeholders.

Countries can expand or modify this recommended core list based on local priorities and epidemiological profiles. A country can also use the list as a reference to assess whether their RHIS includes these recommended indicators and whether their existing indicators, terminologies and metadata correspond to international technical standards.

² <https://www.who.int/healthinfo/indicators/2018/en/>

2 Integrated health services analysis

Core Indicators	Definition	Calculation	Disaggregation
MORTALITY (institutional)			
Mortality levels			
1. Institutional mortality rate	Deaths in health facilities (all causes) per 1000 discharges	N: Number of deaths in health facilities x 1000 D: Number of discharges Discharges include deaths	Age (minimum: 0-4 and 5+ years) Sex; Cause of death Facility type Managing authority
2. Stillbirths in health facilities	Stillbirths* as a percentage of all births in health facilities *baby born with no sign of life and weighing at least 1000g or born after 28 weeks of gestation	N: Number of stillbirths in health facilities x 100 D: Number of live births + still births in health facilities	Fresh, macerated
3. Neonatal deaths in health facilities	Number of newborns who die in the health facility in the first 28 days This includes any neonatal death in a facility that occurred in the first 28 days: pre-discharge after birth or upon re-admission for an illness	N: Number of neonatal deaths in health facilities	Cause of death (classified by ICD-PM) Facility type Managing authority
4. Maternal deaths in health facilities	Number of women who die in a health facility while pregnant or within the first 42 days of the end of pregnancy This includes women who gave birth outside a facility but who die in the health facility.	Number of maternal deaths in health facilities	Age (10-14, 15-19, 20+) Cause of death (classified by ICD-MM) Facility type
Leading causes of mortality			
5. Leading causes of inpatient deaths (percentage distribution)	Percentage distribution of the leading causes of death in health facilities (Proportional mortality)	N: Number of inpatient deaths by cause x 100 D: Total number of inpatient deaths	Age (0-4, 5+) Sex
Mortality due to specific causes			
6. Case fatality rates (CRF) for major causes	Cause-specific inpatient deaths per 100 discharges for major causes	N: Number of inpatient deaths due to cause "X" x 100 D: Number of discharges due to cause "X"	Age (0-4, 5+) Sex
7. Population incidence of inpatient deaths (e.g. malaria)	Number of inpatient malaria deaths per 100,000 population at risk of malaria	N: Number of inpatient deaths due to malaria x 100,000 D: Estimated total population of areas at risk of malaria	Age (0-4 vs 5+)
8. Perioperative mortality rate	All-cause death rate prior to discharge among patients that had one or more procedures in an operating theatre during the relevant admission	N: Number of deaths prior to discharge among inpatients that had a surgical procedure x 1000 D: Number of inpatients that had a surgical procedure	Emergency vs elective Procedure Age

Notes: Facility type: provincial hospital, district hospital, health center, etc.

Managing authority/facility ownership: public, private, NGO, etc.

Geographic location is not presented as a disaggregation type in the indicator tables as all data are expected to be analyzed by geographic location.

Core Indicators	Definition	Calculation	Disaggregation
MORBIDITY (inpatient and outpatient)			
Leading causes of morbidity			
1. Leading inpatient discharge diagnoses (percentage distribution)	Percentage distribution of the leading inpatient discharge diagnoses (Inpatient proportional morbidity)	N: Number of discharges by diagnosis x 100 D: Total number of discharges Discharges include deaths	Age (minimum: 0-4, 5+ years) Sex Facility type
2. Leading outpatient diagnoses (percentage distribution)	Percentage distribution of the leading new outpatient visits (Outpatient proportional morbidity) Includes only new visits for a specific diagnosis	N: Number of new visits by diagnosis X 100 D: Total number of new outpatient visits	Age (0-4, 5+) Sex Facility type
Morbidity due to specific conditions			
3. Inpatient incidence rate	The number of discharges per inpatient diagnosis per 1,000 population	N: Number of discharges by diagnosis X 1000 D: Total population	Age (0-4, 5+) Sex Facility type
4. Outpatient incidence rate	The number of new visits per outpatient diagnosis per 1000 population Includes only new visits for a specific diagnosis	N: Number of new outpatient visits by diagnosis X 1000 D: Total population	Age (0-4, 5+) Sex Facility type Disease-specific disaggregations
UTILIZATION and ACCESS			
1. Outpatient attendance per capita (Outpatient service utilization)	Number of outpatient department (OPD) visits per person per year (Includes only visits for curative care; preventive care visits, e.g. antenatal care, immunizations, are excluded)	N: Number of new visits + re-visits for to OPD in a year D: Total population	Age (<5, >5) Sex New visits vs re-visits
2. Hospital ³ discharge rate (Inpatient service utilization)	Number of inpatient discharges* per 100 population per year (Includes authorized discharges, absconsions, transfers out and deaths; excludes discharges for delivery)	N: Number of inpatient discharges in a year X 100 D: Total population	Age (<5, >5) Sex Facility type
3. Caesarean section rate at population level	Percentage of deliveries by caesarean section among estimated live births in the population	N: Number of caesarean sections in a facility X 100 D: Estimated number of live births in the population	Age (10-14;15-19; 20+) Facility type
4. Surgical volume	Number of surgical procedures undertaken in an operating theatre per 100 000 population per year (A surgical procedure is defined as the incision, excision or manipulation of tissue that needs regional or general anaesthesia, or profound sedation to control pain.)	N: Number of surgical procedures in a year X 100 000 D: Total population	Procedure type Emergency vs Elective Facility type

³ The term “hospital discharge rate” is conventionally used to express the inpatient discharge rate and is preferred to the admission rate. The term “hospital discharge” includes discharges from health centers, polyclinics and other health facilities which retain patients overnight for health services other than labour and delivery.

Core Indicators	Definition	Calculation	Disaggregation
5. Service-specific availability	a) Number of health facilities offering specific services per 10 000 population	N: Number of facilities offering the service X 10 000 D: Total population	Facility type Facility ownership
	b) Percentage of facilities offering the specific service	N: Number of facilities offering the service X 100 D: Total number of facilities	
COVERAGE			
1. Contraception first time users	Clients who for the first time in their life accept a contraceptive method	N: No. of clients who accept a family planning method for the 1st time	Age (10-14,15-19,20+) Sex; Unit of contraceptive method
2. Antenatal client 1st visit before 12 weeks gestation	Percentage of antenatal care clients with 1st visit before 12 weeks gestation	N: No. of ANC 1st visits before 12 weeks x 100 D: No. of ANC 1st visits	Age (10-14, 15-19, 20+)
3. Antenatal care 1st visit coverage	Percentage of estimated pregnant women in the population who had a 1st ANC visit	N: No. of ANC clients with 1st ANC visit x 100 D: Estimated no. of pregnant women	Age (10-14, 15-19, 20+)
4. Antenatal care 4th visit coverage	Percentage of estimated pregnant women in the population who had a 4th ANC visit	N: No. of ANC clients with 4th ANC visit x 100 D: Estimated no. of pregnant women	Age (10-14, 15-19, 20+)
5. Institutional delivery coverage	Percentage of women (in the population) who gave birth in a health facility	N: No. of deliveries in facilities X 100 D: Estimated no. of live births in the population	Age (10-14, 15-19, 20+)
6. DTP3 coverage Also coverage of other vaccines in the national schedule	Percentage of the target population that received the third dose of diphtheria-tetanus-pertussis containing vaccine (DTP3)	N: No. of children receiving DTP3 x 100 D: Estimated no. of target population	By vaccine/dose of vaccine Age (0-11m, 12-23m for infant immunization; 1-2 years, 2+ years for toddler immunizations; Status for tetanus toxoid (pregnant women, other)
7. ART coverage (current)	Percentage of the estimated number of people living with HIV that are currently receiving antiretroviral therapy (ART)	N: No. persons living with HIV currently receiving ART x 100 D: Estimated no. of persons living with HIV	Age (< 15, 15+) Sex (M, F, TG) Special populations (KPs)
8. TB case notification rate	TB cases notified per 100,000 population	N: No. of TB cases notified x 100,000 D: Estimated population	By case type By treatment history Age (refer to TB module) Sex
9. Hypertension new cases	Number of people newly diagnosed with hypertension	N: No. of hypertension new cases	Age Sex
10. Diabetes new cases	Number of people newly diagnosed with diabetes	N: No. of diabetes new cases	Age Sex

Core Indicators	Definition	Calculation	Disaggregation
QUALITY			
1. Antenatal client syphilis screening	Percentage of antenatal care clients screened for syphilis	N: No. of ANC clients screened for syphilis X 100 D: No. of ANC client 1st visits	
2. Prevention of mother-to-child transmission (PMTCT) testing	Percentage of antenatal clients and/or women delivering in a facility who were tested for HIV (or who already know they are HIV positive), for prevention of mother-to-child transmission (PMTCT)	N: No. of pregnant women attending ANC and/or who had a facility-based delivery, who were tested for HIV during pregnancy or already knew they were HIV-positive D: No. of ANC 1st visits or No. of deliveries in facility	HIV status/test results: 1) Known HIV infection at ANC entry; 2) Tested HIV positive at ANC during current pregnancy; 3) Tested HIV negative at ANC during current pregnancy Total identified HIV positive women = 1 + 2
3. Intermittent preventive treatment for malaria during pregnancy (IPTp)	a. Percentage of antenatal clients that received sulfadoxine/ pyrimethamine (SP) course for IPTp3 (3rd dose)	N: No. of pregnant women given 3 doses of SP for IPT D: No. of ANC 1st visits	
4. Caesarean section rate at facility level	Percentage of deliveries in health facilities by caesarean section	N: No. of caesarean sections X 100 D: No. of deliveries in facilities	Age (10-14;15-19; 20+) Facility type
5. Immunization dropout rates: DTP1 to DTP3	Percentage of infants who received a 1st dose of of DPT but did not receive a 3rd dose	N: (DPT1 doses – DPT3 doses) x 100 D: DPT1 doses	
BCG to MCV1	Percentage of infants who received BCG but did not receive a 1st dose MCV	N: (BCG doses – MCV1 doses) x 100 D: BCG doses	
MCV1 to MCV2	Percentage of children who received a 1st dose of MCV but did not receive a 2nd dose	N: (MCV1 doses - MCV2 doses) x 100 D: MCV1 doses	
6. HIV care cascade	No. of persons newly diagnosed with HIV No. of persons newly diagnosed with HIV that initiated ART No. of persons retained on ART after a specified time period among those that initiated ART		Age (<1, >1); Sex (M,F, TG) Special populations (KPs) Specified duration: (current /ever, 12m, 24m, 36m, 48m, 60m)
7. HIV tested new and relapse TB cases with a documented HIV status	Percentage of new and relapse TB cases who had a HIV test result recorded in the TB register among all TB cases notified during a specified time period, usually 1 year	N: No. of new and relapse TB cases notified in a specified time period who had a HIV test result recorded in the TB register D: No. of new and relapse TB cases notified in the same time period	
8. Drug susceptibility test (DST) for TB cases	Percentage of TB cases with DST results for at least rifampicin resistance, during a specified time period, usually 1 year	N: No. of TB cases notified with DST results for at least rifampicin resistance in a specified time period x 100 D: No. of TB cases notified in the same time period	By treatment history: new, previously treated, unknown history

Core Indicators		Definition	Calculation	Disaggregation
9. TB treatment success rate		Percentage of TB cases successfully treated (cured or treatment completed) among TB cases notified to national health authorities during a specified time period, usually one year.	N: No. of TB cases notified in a specified period time period that were successfully treated X 100 D: No. of TB cases notified in same period	Treatment outcome; Case type; Treatment history HIV status; Drug sensitivity (Refer to TB module for details)
10. Malaria diagnostic testing ratio		Percentage of suspected malaria cases that had a diagnostic test for malaria Malaria tests = No. of RDT + No. of microscopies Suspected cases = No. of malaria tests performed + No. of presumed cases of malaria reported Presumed cases = No. of cases diagnosed with malaria without any laboratory confirmation	N: No. of malaria tests performed x 100 D: No. of suspected malaria cases	Microscopy , RDT Age (<5, 5-14, 15+)
11. Confirmed malaria cases treated with ACT		Percentage of confirmed cases of malaria that receive first-line antimalarial treatment: artemisinin-based combination therapy (ACT)	N: No. of confirmed cases of malaria treated with ACT x 100 D: No. of confirmed cases of malaria Confirmed cases = RDT positive + microscopy positive	Age (<5, 5-14, 15+);
HEALTH SERVICE RESOURCES				
Infrastructure				
Availability	1. Health facility density and distribution	Total number of health facilities per 10 000 population OR: Population per facility	N: no. of health facilities x 10,000 D: total population	Facility type Managing authority Specific services offered
	2. Hospital bed density	Number of hospital beds per 10 000 population	N: no. of hospital beds reported as available x 10,000 D: total population	Type of bed Managing authority
Efficiency	3. Bed occupancy rate (BOR)	Percentage of available beds that were occupied over a specified period	N: no. of occupied bed-days X 100 D: no. of available bed-days	Facility type and level
	4. Average length of stay (ALOS)	Average number of days that an inpatient spends in hospital over a specified period	N: no. of occupied bed-days D: no. of discharges	Facility type
Health workforce				
Availability	5. Health worker density and distribution	Number of health workers per 10 000 population	N: no. of skilled* health workers x 1,000 D: total population *only health workers with documentation (degree, diploma, certificate) should be included	Occupation Distribution: place of employment: (urban/rural; PHC / specialist clinic / hospital)
	6. Vacancy rate	Percentage of funded full-time posts not filled for at least 6 months and which employers are actively trying to fill	N: no. of full-time posts not filled for at least six months x 100 D: no. of full-time posts.	Occupation Facility type PHC vs hospital
Efficiency	7. Health worker productivity ⁴	Average number of service units provided by a given health worker in a specified period (e.g. working day, year)	N: no. of service units provided in a specified period D: no. of workers providing the service x no. of available working days in same period)	Service type Occupation Facility

⁴ Adapted from: "Provider productivity", page 29. (in: Handbook on monitoring and evaluation of human resources for health. World Health Organization. 2009 http://whqlibdoc.who.int/publications/2009/9789241547703_eng.pdf)

Essential medicines and medical products				
Availability	8. Health facilities with no stockout	Percentage of health facilities with no stockout of selected tracer medicines and medical products	N: no. of health facilities reporting no stockout in a specified period D: no. of health facilities reporting through the RHIS in the same period	Facility type Managing authority Type of medicine or product
	9. Medicines expenditure per capita	Availability of medicines and medical products expressed as their monetary value per capita	N: expenditure on medicines and medical products in a specified period D: total population	Medicine group (in Essential Medicine List); Funding source
Financial resources				
Availability	10. Health services expenditure per capita	Public health system expenditure per capita on health facility services	N: expenditure D: total population	Funding source Budget line
Efficiency	11. Budget execution	Percentage of allocated health service budget that was spent over a specified period	N: expenditure x 100 D: allocated budget	Budget line Funding source Service

3 Human immunodeficiency virus

Core Indicators ¹	Definition	Disaggregation
HIV tests performed	Number of HIV tests	<ul style="list-style-type: none"> Sex (Male, female, TG) Special pops (KPs, pregnant women)
PLHIV newly diagnosed	Number of confirmed HIV positive tests	<ul style="list-style-type: none"> Age (<1, >1) Sex (Male, female, TG) Special pops (KPs, pregnant women)
HIV test positivity	N: Number of confirmed HIV positive tests D: Number of HIV tests	<ul style="list-style-type: none"> Sex (Male, female, TG) Special pops (KPs, pregnant women)
Newly on ART	Number of PLHIV who initiate ART	<ul style="list-style-type: none"> Age (<1, >1) Sex (Male, female, TG) Special pops (KPs, pregnant women)
Currently on ART	Number PLHIV currently receiving ART	<ul style="list-style-type: none"> Age (<15, 15+) Sex (Male, female, TG) Special pops (KPs)
ART coverage rate (current)	N: Number PLHIV currently receiving ART D: Estimated number of PLHIV	<ul style="list-style-type: none"> Age (<15, 15+) Sex (Male, female, TG) Special pops (KPs)
ART retention rate	N: Number of PLHIV retained on ART – for specified duration D: Number of PLHIV who initiated ART prior to (and during) the specified duration	<ul style="list-style-type: none"> Age (<1, >1) Sex (Male, female, TG) Special pops (KPs) Specified duration (currently/ever, 12, 24, 36, 48, 60 months)*
VL testing coverage rate (annualized)**	N: Number of PLHIV tested for viral load x 12 D: Number of PLHIV currently receiving ART	<ul style="list-style-type: none"> Age (<15, 15+) Sex (Male, female, TG) Special pops (KPs)
HIV viral load suppression rate	N: Number of PLHIV who are on ART who have suppressed viral load (<1000 copies/mL) D: Number of people receiving a viral load test during reporting period	<ul style="list-style-type: none"> Age (define groups) Sex (Male, female, TG) Special pops (KPs) Time of initiation (currently/ever, 12 m)*
PLHIV on newly enrolled in HIV care started on TB preventive therapy	N: Total number of PLHIV newly enrolled in HIV care who are started on treatment for latent TB infection D: Total number of persons newly enrolled in HIV care, that is, registered in the pre-ART or ART register	<ul style="list-style-type: none"> Age (define groups) Sex (Male, female, TG) Special pops (KPs)
PMTCT testing coverage rate	N: Number of pregnant women attending ANC and/or who had a facility-based delivery who were tested for HIV during pregnancy or already knew they were HIV- positive. D: Number of pregnant women who attended ANC or had a facility- based delivery	HIV status/test results: <ol style="list-style-type: none"> known HIV infection at ANC entry tested HIV-positive at ANC during current pregnancy tested HIV-negative at ANC during current pregnancy Total identified HIV-positive women = 1+2. Optional disaggregation: Pregnant women who inject drugs.

1. Several TB/HIV and PMTCT indicators are also included in the core HMIS list, but are integrated into the analyses of other programme areas.

*Note: Specified duration refers to both numerator and denominator, e.g. # retained on ART at 12 months/# initiated on ART 12 months prior to the reporting period; # currently retained on ART / # ever initiated on ART.

**Note: The VL testing coverage rate is not part of the 100 Core indicators, but is included in the dashboards as a critical indicator for interpretability of the VL suppression rate.

4 Malaria

Core Indicators	Definition	Disaggregation
Surveillance in burden reduction settings		
Monitoring malaria morbidity and mortality		
Number of patients tested for malaria	Number of outpatient malaria tests	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence • Method of confirmation (microscopy; RDT) • Detected by facility versus community • Detected by public versus private • Detected passively versus actively
Confirmed outpatient malaria diagnoses	Number of confirmed outpatient diagnoses of malaria	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence • Method of confirmation (microscopy; RDT) • Detected by facility versus community • Detected by public versus private • Detected passively versus actively
% of positive tests with <i>P. falciparum</i>	$(\text{Number of malaria positive slides and RDTs with } P. \text{ falciparum}) \times 100 / \text{Number of malaria positive slides+RDTs}$	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • By health facility • Geographic area
Incidence of outpatient malaria	$(\text{Annual number of confirmed outpatient diagnoses of malaria}) \times 1,000 / (\text{Estimated total population of areas at risk of malaria})$	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence • Method of confirmation (microscopy; RDT)
Presumed outpatient malaria diagnoses	Number of suspected outpatients diagnosed as having malaria without any laboratory confirmation	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area • Detected by facility versus community
Outpatient proportional morbidity <ul style="list-style-type: none"> • Confirmed malaria • Presumed malaria • Non-malaria [Excluding actively detected cases] 	<ul style="list-style-type: none"> • $(\text{Number of confirmed outpatient diagnoses of malaria}) \times 100 / \text{Total outpatient diagnoses}$ • $(\text{Number of presumed outpatient diagnoses of malaria}) \times 100 / \text{Total outpatient diagnoses}$ • $(\text{Number of non-malaria outpatient diagnoses}) \times 100 / \text{Total outpatient diagnoses}$ 	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence • Method of confirmation (microscopy; RDT) • Detected by facility versus community • Detected by public versus private
Malaria test positivity rate	$(\text{Number of positive malaria tests}) \times 100 / \text{Number of malaria tests}$	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence • Method of confirmation (microscopy; RDT)
Inpatient malaria diagnoses	Number of inpatients with a discharge diagnosis of malaria	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area
Incidence of malaria admissions	$(\text{Annual number of patients hospitalized with malaria}) \times 10,000 / (\text{Estimated total population of areas at risk of malaria})$	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence • Method of confirmation (microscopy; RDT)
Inpatient proportional morbidity <ul style="list-style-type: none"> • Malaria • Non-malaria 	<ul style="list-style-type: none"> • $(\text{Number of discharge diagnoses of malaria}) \times 100 / \text{Total discharge diagnoses}$ • $(\text{Number of discharge diagnoses other than malaria}) \times 100 / \text{Total discharge diagnoses}$ 	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence
Inpatient malaria deaths	Number of inpatient deaths due to malaria	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence

Core Indicators	Definition	Disaggregation
Incidence of inpatient malaria mortality	$(\text{Annual number of inpatient deaths due to malaria}) \times 100,000 / (\text{Estimated total population of areas at risk of malaria})$	<ul style="list-style-type: none"> Age (<5, 5-14, 15+)/residence Geographic area
Inpatient proportional mortality <ul style="list-style-type: none"> Malaria Non-malaria 	$(\text{Number of inpatient deaths due to malaria}) \times 100 / \text{Total inpatient deaths}$ $(\text{Number of inpatient deaths due to causes other than malaria}) \times 100 / \text{Total inpatient deaths}$	<ul style="list-style-type: none"> Age (<5, 5-14, 15+) Geographic area/residence
Monitoring the completeness and quality of passive malaria surveillance		
Completeness of facility reporting	$(\text{Number of reports received}) \times 100 / \text{number of reports expected}$ *Note –Typically 12 monthly reports are expected from each health facility. Where weekly reporting is the norm, this number of reports expected are same as the number of weeks in a calendar year	<ul style="list-style-type: none"> Reports of outpatient diagnoses versus inpatient diagnoses versus inpatient deaths Type of facility Geography
Malaria diagnostic testing ratio	$(\text{Number of malaria tests performed}) \times 100 / (\text{Number of suspected malaria cases})$ [Note: suspected malaria cases = Number of malaria tests performed + Number of presumed cases of malaria reported]	<ul style="list-style-type: none"> By microscopy versus RDT Age (<5, 5-14, 15+) Geographic area/residence
Annual blood examination rate	$(\text{Number of malaria tests performed}) \times 100 / \text{Estimated total population of areas at risk of malaria}$	<ul style="list-style-type: none"> Age (<5, 5-14, 15+)/residence Geographic area/residence
Monitoring malaria interventions		
Monitoring prevention of malaria		
Intermittent preventive treatment of malaria during pregnancy (IPTp) coverage	$(\text{Number of pregnant women given sulfadoxine/pyrimethamine for IPT}) \times 100 / \text{Estimated pregnancies in areas at risk}$ [Note: first ANC visits is sometimes used as the denominator]	<ul style="list-style-type: none"> By dose of SP (1, 2, 3, 4) Geographic area By type of facility
Facility distribution of mosquito nets	$(\text{Number of nets distributed at health facilities}) \times 100 / \text{Number of target contacts}$ [i.e. first ANC visits, first doses of DTP]	<ul style="list-style-type: none"> By target group (pregnant women, infants) Geographic area By type of facility
Monitoring treatment of malaria		
Malaria cases given ACT	$(\text{Number of malaria cases treated with ACT}) \times 100 / \text{Number of malaria cases diagnosed}$	<ul style="list-style-type: none"> Confirmed malaria versus presumed malaria Age (<5, 5-14, 15+) Geographic area/residence/focus Facility versus community
Inpatient case fatality rate: <ul style="list-style-type: none"> Due to malaria All cause 	<ul style="list-style-type: none"> $(\text{Number of inpatients deaths due to malaria}) \times 100 / (\text{Number of inpatient diagnoses of malaria})$ $(\text{Number of inpatient deaths from all causes}) \times 100 / (\text{Number of inpatients})$ 	<ul style="list-style-type: none"> Age (<5, 5-14, 15+) Geographic area/residence/focus
Monitoring the supply of malaria control commodities		
Full availability of malaria control commodities	$(\text{Number of health facilities with no stock out during the period of any tracer malaria control commodity}) \times 100 / (\text{Number of reporting health facilities in areas at risk of malaria})$	<ul style="list-style-type: none"> Commodity (vaccine or injection supply) Geographic region Type of facility (hospital versus health center versus health post versus community level)

Core Indicators	Definition	Disaggregation
Surveillance for elimination settings (in addition to the indicators for the burden reduction settings)		
Proportion of cases with symptoms diagnosed within 24 hours	Number of malaria cases with symptoms diagnosed within 24 hours / Total malaria confirmed cases	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence or focus • Public (health facility, community) versus private • Detected passively versus actively
Proportion of cases notified within 1 day of diagnosis	Number of malaria cases notified within 24 hours / Number of confirmed malaria cases	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area • Public versus private
Proportion of cases investigated	Number of malaria cases investigated / Number of confirmed malaria cases detected passively and actively	<ul style="list-style-type: none"> • By delay between diagnosis and investigation (≤ 4 days, more) • Age (<5, 5-14, 15+) • Geographic area/residence/focus • Public versus private • Detected passively versus actively
Proportion of cases classified	Number of malaria cases classified / Number of confirmed malaria cases detected passively and actively	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence/focus • Public versus private • Detected passively versus actively
Proportion of cases which are indigenous or versus imported	<ul style="list-style-type: none"> • Number of cases classified as indigenous / Number of confirmed malaria cases that have been classified • Number of cases classified as imported / Number of confirmed malaria cases that have been classified <p>Note: a 100% classification of cases is expected in elimination settings</p>	<ul style="list-style-type: none"> • Age (<5, 5-14, 15+) • Geographic area/residence/focus • Public versus private
Number of foci identified	Number of malaria foci identified (list of foci)	<ul style="list-style-type: none"> • Type of foci (active, residual non-active, cleared) • Geographic area/residence/focus
Proportion of foci investigated	Number of malaria foci investigated within the time limit specified by national guidelines / Number of malaria foci identified	<ul style="list-style-type: none"> • By delay between diagnosis and investigation ($\leq N3$ days, more) • Type of foci (active, residual non-active, cleared) • Geographic area/residence/focus
Proportion of foci classified	Number of foci classified / Number of malaria foci identified	<ul style="list-style-type: none"> • Type of foci (active, residual non-active, cleared) • Geographic area/residence/focus
Proportion of foci with zero local cases	(Number of foci classified as cleared up + number classified as residual non-active) / Number of malaria foci identified	<ul style="list-style-type: none"> • Type of foci (residual non-active, cleared) • Geographic area/residence/focus
Proportion of foci classified as active	(Number of foci classified as active) / Number of malaria foci identified	<ul style="list-style-type: none"> • Geographic area/residence/focus

5 Tuberculosis

Core indicators	Definition	Disaggregation
Notifications (numbers and rates)		
TB notifications	Number of TB cases notified in a specified time period, usually one year	<ul style="list-style-type: none"> • By case type: pulmonary bacteriologically confirmed or pulmonary clinically diagnosed • By treatment history: new and relapse (incident cases) or previously treated, excluding relapse • Age group (0-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65+, other/unknown) • Sex (male, female, other/unknown)
TB notification rate (per 100,000 population)	TB cases notified in a specified time period, usually one year, per 100,000 population <i>Numerator:</i> Number of TB cases notified in a specified time period <i>Denominator:</i> Estimated population in <i>the same</i> time period <i>Calculation:</i> (Numerator/Denominator) x 100, 000	<ul style="list-style-type: none"> • By case type: pulmonary bacteriologically confirmed or pulmonary clinically diagnosed • By treatment history: new and relapse (incident cases) or previously treated, excluding relapse
Notifications (% and ratios)		
New extrapulmonary TB (%)	<i>Numerator:</i> Number of new extrapulmonary TB cases notified in a specified time period, usually one year <i>Denominator:</i> All new TB cases notified in <i>the same</i> time period <i>Calculation:</i> (Numerator/Denominator) x 100	
Previously treated including relapse (all forms TB) (%)	<i>Numerator:</i> Number of previously treated TB cases notified in a specified time period, usually one year <i>Denominator:</i> All TB cases notified in the same time period <i>Calculation:</i> (Numerator/Denominator) x 100	
Ratio male : female (new and relapse, all forms TB)	<i>Numerator:</i> Number of male new and relapse TB cases notified in a specified time period, usually one year <i>Denominator:</i> Number of female new and relapse TB cases notified in <i>the same</i> time period <i>Calculation:</i> Numerator/Denominator	
0-14 year olds (new and relapse, all forms TB) (%)	<i>Numerator:</i> Number of 0-14 year old new and relapse TB cases notified in a specified time period, usually one year <i>Denominator:</i> All new and relapse TB cases notified in the same time period <i>Calculation:</i> (Numerator/Denominator) x 100	
Ratio 0-4 : 5-14 year olds (new and relapse, all forms TB)	<i>Numerator:</i> Number of 0-4 year old new and relapse TB cases notified in a specified time period, usually one year <i>Denominator:</i> Number of 5-14 year old new and relapse TB cases notified in the same time period <i>Calculation:</i> Numerator/Denominator	
New pulmonary bacteriologically confirmed TB (%)	<i>Numerator:</i> Number of new pulmonary bacteriologically confirmed TB cases notified in a specified time period, usually one year <i>Denominator:</i> Number of new TB cases notified in the same time period <i>Calculation:</i> (Numerator/Denominator) x 100	

Core indicators	Definition	Disaggregation
Previously treated (including relapses) pulmonary bacteriologically confirmed TB (%)	<p><i>Numerator:</i> Number of previously treated (including relapses) pulmonary bacteriologically confirmed TB cases notified in a specified time period, usually one year</p> <p><i>Denominator:</i> Number of previously treated TB cases notified in <i>the same</i> time period</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	
Outcomes		
TB treatment success rate (%)	<p>Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified to national health authorities during in a specified time period, usually one year</p> <p><i>Numerator:</i> Number of TB cases notified in a specified time period that were successfully treated⁵</p> <p><i>Denominator:</i> Number of TB cases notified in <i>the same</i> time period⁶</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	<ul style="list-style-type: none"> • By treatment outcome: cured, completed, died, failed, lost to follow-up, not evaluated • By case type: bacteriologically confirmed or clinically diagnosed • By treatment history: new and relapse (incident cases) or previously treated, excluding relapse • For TB/HIV positive cases • By drug sensitivity: All (DS +DR), DS-TB and DR-TB
TB treatment success rate in new and relapse HIV positive cases (%)	<p>Percentage of HIV positive TB cases successfully treated (cured plus treatment completed) among TB/HIV positive cases notified to national health authorities during a specified time period, usually one year</p> <p><i>Numerator:</i> Number of new and relapse HIV positive TB cases notified in a specified time period that were successfully treated⁷</p> <p><i>Denominator:</i> Number of new and relapse HIV positive TB cases notified in <i>the same</i> time period</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	<ul style="list-style-type: none"> • By treatment outcome: cured, completed, died, failed, lost to follow-up, not evaluated
TB treatment success rate in RR-/MDR-TB cases (%)	<p>Percentage of RR-/MDR-TB cases started on second line treatment and successfully treated (cured plus treatment completed) among laboratory confirmed RR-/MDR-TB cases notified to national health authorities during a specified time period, usually one year</p> <p><i>Numerator:</i> Number of laboratory confirmed RR-/MDR-TB cases notified in a specified time period that started on second line treatment and were successfully treated (cured plus treatment completed)⁸</p> <p><i>Denominator:</i> Number of laboratory confirmed RR-/MDR-TB cases notified in <i>the same</i> time period that started on second line treatment</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	<ul style="list-style-type: none"> • By treatment outcome: cured, completed, died, failed, lost to follow-up, not evaluated • For HIV positive TB cases • For XDR-TB cases
Notifications vs treatment outcome cohort for DS-TB	<p>Number of drug sensitive TB (DS-TB) cases notified during a specified time period whose treatment outcomes were reported (registered with a treatment outcome) vs Number of TB cases (DS and DR-TB) notified during <i>the same</i> time period</p>	

⁵ Treatment outcomes are defined by the time period of notification, e.g. "2015 cases successfully treated" reflects those for which notifications were reported in 2015, even though treatment may have extended into 2016. For this reason, treatment outcome data follows at a lag of one year.

⁶ The number of cases registered with a treatment outcome should equal the number of cases notified for the same time period.

⁷ Definitions and reporting framework for tuberculosis- 2013 revision. WHO, Geneva, 2013.

<http://www.who.int/tb/publications/definitions/en/>

⁸ Treatment outcomes are defined by the time period of notification, e.g. "2015 cases successfully treated" reflects those for which notifications were reported in 2015, even though treatment may have extended into 2017. For this reason, treatment outcome data for DR-TB cases follows at a lag of two years.

Core indicators	Definition	Disaggregation
Notifications vs treatment outcome cohort for DS-TB	Number of drug sensitive TB (DS-TB) cases notified during a specified time period whose treatment outcomes were reported (registered with a treatment outcome) vs Number of TB cases (DS and DR-TB) notified during <i>the same</i> time period	
Drug Resistant TB (DR-TB)		
Drug susceptibility test (DST) coverage for TB cases (%)	Percentage of TB cases with drug susceptibility test results for at least rifampicin resistance, during a specified time period, usually one year ⁹ <i>Numerator:</i> Number of TB cases notified with drug susceptibility test results for at least rifampicin resistance in a specified time period <i>Denominator:</i> Number of TB cases notified in <i>the same</i> time period <i>Calculation:</i> (Numerator/Denominator) x 100	<ul style="list-style-type: none"> By treatment history: new, previously treated, unknown history
TB cases with laboratory confirmed RR-/MDR-TB (%)	Percentage of TB cases with laboratory confirmed rifampicin /multidrug resistant (RR-/MDR) TB among cases with drug susceptibility test results in a specified time period, usually one year <i>Numerator:</i> Number of laboratory confirmed RR-/MDR-TB cases notified in a specified time period <i>Denominator:</i> Number of TB cases notified with drug susceptibility test results for at least rifampicin resistance in <i>the same</i> time period <i>Calculation:</i> (Numerator/Denominator) x 100	<ul style="list-style-type: none"> For laboratory confirmed MDR-TB cases separately
Laboratory-confirmed RR-/MDR-TB cases started on a second line MDR-TB treatment regimen (%)	Percentage of laboratory confirmed rifampicin/multidrug resistant (RR-/MDR) TB cases notified and started on a second line MDR-TB treatment regimen, among all cases with confirmed RR-/MDR-TB notified in a specified time period, usually one year <i>Numerator:</i> Number of laboratory confirmed RR-/MDR-TB cases notified and started on a second line MDR-TB treatment regimen in a specified time period <i>Denominator:</i> Number of laboratory confirmed RR-/MDR-TB cases notified in <i>the same</i> time period <i>Calculation:</i> (Numerator/Denominator) x 100	
TB/HIV¹⁰		
HIV tested new and relapse TB cases with a documented HIV status (%)	Percentage of new and relapse TB cases who had a HIV test result recorded in the TB register among all TB cases notified during a specified time period, usually one year <i>Numerator:</i> Number of new and relapse TB cases notified in a specified time period who had a HIV test result recorded in the TB register ¹¹ <i>Denominator:</i> Number of new and relapse TB cases notified in <i>the same</i> time period <i>Calculation:</i> (Numerator/Denominator) x 100	

⁹ This indicator includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results.

¹⁰ All of these indicators should be a sum of information collected at notification and at treatment outcome in order to capture those who are tested, found to be HIV positive and started on ART or CPT treatment during TB treatment. Currently information displayed in DHIS2 is based on information collected at notification and information collected at treatment outcome is displayed separately for monitoring and evaluation purposes.

Core indicators	Definition	Disaggregation
HIV-positive new and relapse TB cases (%)	<p>Percentage of HIV-positive new and relapse TB cases among TB cases notified in a specified time period, usually one year, with an HIV test result recorded in the TB register</p> <p><i>Numerator:</i> Number of new and relapse TB cases notified in a specified time period that are documented as HIV-positive</p> <p><i>Denominator:</i> Number of new and relapse TB cases notified in <i>the same</i> time period with a documented HIV status</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	
HIV-positive new and relapse TB cases on ART during TB treatment (%)	<p>Percentage of HIV-positive new and relapse TB cases who received antiretroviral therapy (ART) during TB treatment, among all HIV-positive new and relapse TB cases notified in a specified time period, usually one year</p> <p><i>Numerator:</i> Number of HIV-positive new and relapse TB cases notified and started on TB treatment in a specified time period who are already on ART or started ART during TB treatment</p> <p><i>Denominator:</i> Number of HIV-positive new and relapse TB cases notified in the same time period</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	
HIV-positive new and relapse TB cases on CPT during TB treatment (%)	<p>Percentage of HIV-positive new and relapse TB cases on cotrimoxazole preventive therapy (CPT) during TB treatment among all HIV-positive new and relapse TB cases notified in a specified time period, usually one year</p> <p><i>Numerator:</i> Number of HIV-positive new and relapse TB cases notified and started on TB treatment in a specified time period who are already on CPT or started CPT during TB treatment</p> <p><i>Denominator:</i> Number of HIV-positive new and relapse TB cases notified in <i>the same</i> time period</p> <p><i>Calculation:</i> (Numerator/Denominator) x 100</p>	

¹¹ Results from TB cases newly tested for HIV and those with a known HIV status at the time of TB diagnosis should be included

6 Immunization

Core indicators	Definition	Disaggregation
Immunization coverage rate by vaccine for each vaccine in the national schedule	$N: 100 \times \text{Number of children receiving the vaccine}$ $D: \text{Estimated number of target population (e.g. infants less than one year)}$	<ul style="list-style-type: none"> • By vaccine / dose of vaccine • Age (<1 year, ≥ 1 year for infant immunizations; ≤ 2 years, ≥ 2 years for toddler immunizations) • Status for TT (pregnant women, others)
Dropout rate for: <ul style="list-style-type: none"> • first to third dose of DPT containing vaccine • BCG to first dose of measles containing vaccine • first to second dose of measles containing vaccine 	$\text{DPT 1 to DPT3 dropout} = 100 \times (\text{DPT 1 doses} - \text{DPT 3 doses}) / \text{DPT 1 doses}$ $\text{BCG to MCV1 dropout} = 100 \times (\text{BCG doses} - \text{MCV1 doses}) / \text{BCG doses}$ $\text{MCV1 to MCV2 dropout} = 100 \times (\text{MCV1} - \text{MCV2}) / \text{MCV1}$	
Vial wastage rate (closed and open) by vaccine for each vaccine in the national schedule	Closed vial wastage = percentage of doses that were spoiled due to expiry, heat exposure, freezing or breakage. Open vial wastage = percentage of doses that were discarded after vials were opened.	<ul style="list-style-type: none"> • By vaccine • Type of spoilage
Full availability of vaccines and supplies	Percentage of health facilities with no stock-outs of any tracer vaccine or injection supply when vaccination is demanded	
Functional Status of Cold Chain Equipment	Number of functional refrigerators	
Temperature Alarms	Number of times the temperature inside cold chain equipment exceeds or drops below a reference range.	
Serious Adverse Events Following Immunization (AEFI)	AEFI cases	<ul style="list-style-type: none"> • Non-serious, serious
Immunization session completion rate	$100 \times \text{Number of completed immunization sessions} / \text{number of planned sessions}$	<ul style="list-style-type: none"> • Outreach versus fixed

7 Reproductive, maternal, newborn, child & adolescent health

Core indicators	Definition	Computation (e.g. numerator/denominator, number)	Disaggregation
Sexual and reproductive health			
Contraception first-time user	Clients who accept for the first time in their life contraceptive method	Number of clients who accept a family planning method for the first time	Age (10–14, 15–19, 20+); Sex; Unit of contraceptive method
Postpartum family planning acceptor	Percentage of postpartum women delivering in facility initiating a contraceptive method before discharge “Initiated” refers to women who either leave with a family planning method or intend to begin a method that day (e.g. fertility awareness method). It combines both those women who “leave with” a method and those who “accept” a method prior to discharge or leaving the facility	N: Number of postpartum women who delivered in facility initiating contraceptive method before discharge D: Number of deliveries in facility	Age (10–14, 15–19, 20+)
Maternal health			
Antenatal client first visit before 12 weeks gestation	Percentage of antenatal clients with first visit before 12 weeks	N: Number of antenatal clients first visit before 12 weeks D: Number of antenatal clients first visit	Age (10–14, 15–19, 20+)
Antenatal client syphilis screening	Percentage of antenatal clients screened for syphilis	N: Number of antenatal clients screened for syphilis D: Number of antenatal clients first visit	
Antenatal client haemoglobin measured	Percentage of antenatal clients with haemoglobin level measured	N: Number of antenatal clients with haemoglobin level measured D: Number of antenatal clients first visit	
Antenatal client blood pressure measurement	Percentage of antenatal clients with blood pressure measured	N: Number of antenatal clients with blood pressure measured D: Number of antenatal clients first visit	
Prevention of mother-to-child transmission (PMTCT) testing coverage rate	See <i>HIV: guidance for programme managers</i> for more details on PMTCT (numerator and denominator taken from this document)	N: Number of pregnant women attending ANC and/or who had a facility-based delivery who were tested for HIV during pregnancy or already knew they were HIV positive D: Number of ANC attendees or number of facility-based deliveries	
Intermittent preventive therapy for malaria during pregnancy (IPTp)	See <i>Malaria: guidance for programme managers</i> for more details on coverage of IPTp (numerator and denominator taken from this document)	N: Number of pregnant women given at least three doses of sulfadoxine/pyrimethamine for IPTp D: Number of antenatal clients first visit	
Iron supplementation for pregnant women	See <i>Collection, analysis and use of health facility and community data: guidance for nutrition programme managers^a</i> for more details	See <i>Nutrition: guidance for programme managers</i> and indicator definitions	
Caesarean section	Percentage of deliveries in health facilities by caesarean section	N: Number of caesarean sections in a facility D: Number of deliveries in facility	Age (10–14, 15–19, 20+) Facility type
Uterotonic for prevention of postpartum haemorrhage	Percentage of women who gave birth in a facility who received a prophylactic uterotonic (e.g. oxytocin) immediately (ideally within 1 minute) after birth for prevention of postpartum haemorrhage	N: Number of women who gave birth in a facility who received a prophylactic uterotonic immediately after birth D: Number of deliveries in facility	

Core indicators	Definition	Calculation	Disaggregation
Postnatal			
Notification for birth registration	See <i>Collection, analysis and use of health facility and community data: guidance for health programme managers on vital events data^b</i> for more details on notification for birth registration <i>Note:</i> In many countries the health system has the mandate to notify births to the civil registry or to provide documentation to parents for registration.	N: Number of babies/children for whom notifications are issued for birth registration within specified number of days after birth D: Number of live births in facility <i>Note:</i> The specified number of days after birth should be aligned with national policy/guidelines	Sex
Babies with documented birth weight	Percentage of babies born in a facility with documented birth weight before discharge	N: Number of babies born in a facility with documented birth weight before discharge D: Number of live births in facility	
Low birth weight	See <i>Collection, analysis and use of health facility and community data: guidance for nutrition programme managers^a</i> for more details on low birth weight	See <i>Nutrition: guidance for programme managers</i> and indicator definitions	
Newborns breastfed within 1 hour of birth	See <i>Collection, analysis and use of health facility and community data: guidance for nutrition programme managers^a</i> for more details on immediate breastfeeding	See <i>Nutrition: guidance for programme managers</i> and indicator definitions	
Postnatal care (PNC) for women	Percentage of women with PNC <i>Note:</i> The numerator includes both women who gave birth in the health facility and those who gave birth outside the health facility	N: Number of women with PNC D: Number of deliveries in facility	Timing of PNC in accordance with national policy
Postnatal care for newborns	Percentage of newborns with PNC <i>Note:</i> The numerator includes both newborns who were born in the health facility and those who were born outside the health facility	N: Number of newborns with PNC D: Number of live births in facility	Timing of PNC in accordance with national policy
<p>Note on timing of PNC for women and newborns (WHO recommendations on postnatal care of the mother and newborn, WHO, 2013)</p> <p>If birth is in a health facility, women and newborns should receive PNC in the facility for at least 24 hours after birth. If birth is at home, the first postnatal contact should be as early as possible within 24 hours of birth. At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48–72 hours), between days 7–14 after birth, and 6 weeks after birth.</p>			
Childhood			
Pneumonia diagnosis	Percentage of children with acute respiratory illness (ARI) diagnosed as pneumonia	N: Number of cases of children diagnosed with pneumonia D: Number of children presenting with symptoms of ARI	Age (0–4, 5–9)
Amoxicillin treatment for pneumonia	Percentage of children with pneumonia treated with amoxicillin	N: Number of children with pneumonia who received amoxicillin D: Number of children with pneumonia	Age (0–4, 5–9) Treatment type (dispersed tablet, oral syrup)
Diarrhoea treatment	Percentage of children with diarrhoea treated	N: Number of children who received treatment for diarrhoea D: Number of children with diarrhoea	Age (0–4, 5–9) Treatment type (oral rehydration salts & zinc/oral rehydration salts/zinc)

Core indicators	Definition	Calculation	Disaggregation
Malaria treatment with ACT	See <i>Malaria: guidance for programme managers</i> for more details on malaria testing and treatment (numerator and denominator taken from this document)	N: Number of malaria cases among children treated with ACT D: Number of malaria cases among children diagnosed	Age (0–4, 5–9)
Vitamin A coverage	See <i>Collection, analysis and use of health facility and community data: guidance for nutrition programme managers^a</i> for more details on vitamin A coverage	<i>See Nutrition: guidance for programme managers</i> and indicator definitions	
Tuberculosis notification	See <i>Tuberculosis: guidance for programme managers</i> for more details on TB indicators	Number of TB cases among children notified in a specified time period, usually 1 year	Age (0–4, 5–9) Treatment history: new and relapse (incident cases) or previously treated, (excluding relapse)
Malnutrition	See <i>Collection, analysis and use of health facility and community data: guidance for nutrition programme managers^a</i> for more details on childhood malnutrition	<i>See Nutrition: guidance for programme managers</i> and indicator definitions	
Mortality			
Maternal deaths in health facility	Number of women who die in the health facility either while pregnant or within the first 42 days of the end of pregnancy <i>Note:</i> This can include women who gave birth outside a facility but who died in the health facility	Number of maternal deaths in facility	By cause of death (classified by ICD-MM) Age (10–14, 15–19, 20+) Facility type
Neonatal deaths in health facility	Number of newborns who die in the health facility in the first 28 days <i>Note:</i> Includes any neonatal death in a facility that occurred in the first 28 days: pre-discharge after birth or upon re-admission for an illness	Number of neonatal deaths in facility	By cause of death (classified by ICD-PM) Facility type
Child deaths in health facility	Number of children who die in the health facility <i>Note:</i> This includes deaths that occur between the ages of 1 month up to 9 years of age.	Number of child deaths in facility	By cause of death (classified by ICD-10 or ICD-11 in accordance with what is used in the country) Age (1 month to 59 months, 5–9 years) Facility type

Core indicators	Definition	Calculation	Disaggregation
Adolescent deaths in health facility	Number of adolescents who die in the health facility <i>Note:</i> This includes deaths that occur between the ages of 10 to 19 years of age	Number of adolescent deaths in facility	By cause of death (classified by ICD-10 or ICD-11 in accordance with what is used in the country) Age (10–14, 15–19) Sex Facility type
Stillbirths in health facility	Stillbirth as a percentage of all births in health facilities (Baby born with no sign of life and weighing at least 1000 g or after 28 weeks' gestation)	N: Number of stillbirths in facility D: Number of live births and stillbirths in facility	Fresh, macerated Facility type
Maternal deaths reviewed	Percentage of maternal deaths reviewed	N: Number of maternal deaths in facility that were reviewed D: Number of maternal deaths in facility	Facility type
Perinatal deaths reviewed	Percentage of perinatal deaths reviewed <i>Note:</i> Perinatal deaths include stillbirths and newborn deaths up to 7 days after birth	N: Number of perinatal deaths in facility that were reviewed D: Number of perinatal deaths in facility	Facility type

Notes: ^a *Collection, analysis and use of health facility and community data: guidance for nutrition programme managers* will be available in 2020.

^b *Collection, analysis and use of health facility and community data: guidance for health programme managers on vital events data* will be available in 2020.

ACT – artemisinin-based combination therapy; ANC – antenatal care; ICD-MM – International Classification of Diseases maternal mortality; ICD-PM – International Classification of Diseases perinatal mortality; IPTp – intermittent preventive treatment for malaria during pregnancy; PMTCT – prevention of mother-to-child transmission; PNC – postnatal care.

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