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**HMIS Indicator Definitions (Ethiopia)**



**HMIS INDICATOR DEFINITIONS**

Technical Standards: Area 1

March, 2014

# Executive summary

The key role played by indicators in program implementation, management, and monitoring and evaluation (M&E) is clearly laid out in the Health Sector Development Program’s (HSDPIV) strategic plan.

“Monitoring and evaluation (M&E) is an action-oriented and preplanned management tool that operates on adequate, relevant, reliable and timely collected, compiled and analyzed information on Program/project objectives, targets and activities. The objectives of M&E are to improve the management and optimum use of the resources of a Program and to make timely decisions to resolve constraints and/or problems of implementation.

The key elements for successful Program management and implementation are the designing of a Program built on a hierarchy of objectives, targets, activities and measurable indicators. The agreed indicators are the most important management tools for monitoring, review and evaluation purposes. Indicators are always directly linked to the objective setting of a Program.”[[1]](#footnote-1)

The Health Management Information System (HMIS), which draws its data from routine service and administrative records, provides an ideal source for indicators that are reviewed frequently to monitor and refine program implementation. Reform of M&E and reform of HMIS are closely linked.[[2]](#footnote-2)

In order to improve M&E, the monitoring and evaluation system is designed as part of the Policy, Planning and M&E Process and will be implemented at all levels of the health system. A single results-based framework with a small number of indicators to make the monitoring and evaluation process effective and efficient will be agreed for the national level M&E system. [[3]](#footnote-3)

This document on indicator definitions covers Technical Area 1 as described in the Introduction to HMIS/M&E Technical Documentation. This document contains 2 sections: a brief introduction to the role of HMIS indicators in the broader context of indicators used to monitor and evaluate health sector performance, and definitions and guidelines for interpretation of HMIS indicators. Two annexes are also included: one is a table of indicators, showing their frequency and level of collection; the second is a table with supplementary and alternative indicators.

The 122 HMIS indicators are divided into eight major categories based on the HSDP IV Strategic objectives.

C1: Improve Access to Health Services (97 indicators)

C.1.1. Maternal and Child Health (35 indicators)

C.1.1.1. Maternal Health (13 indicators)

C.1.1.2.PMTCT (7 indicators)

C.1.1.3.Child Health including Expanded Program on Immunization (15 indicators)

C1.2. Nutrition (6 indicators)

C1.3 Hygiene and Environmental (3 indicators)

C1.4. Prevention and Control of Diseases (53 indicators)

C1.4.1 All diseases (3 indicators)

C1.4.2 Communicable diseases (45 indicators)

C1.4.2.1 HIV/AIDS (14 indicators)

C1.4.2.2 Tuberculosis (16 indicators)

C1.4.2.3 Leprosy (3 indicators)

C1.4.2.4 TB/HIV (5 indicators)

C1.4.2.5 Malaria (5 indicators)

C1.2.4.6 Neglected tropical diseases (2 indicators)

C1.4.3. Non Communicable diseases (5 indicators)

C2. Community Ownership (2 indicators)

F1. Resource Mobilization and Utilization (4 indicators)

P1. Quality of health Services (6 indicators)

P3. Pharmaceutical Supply and Services (1 indicators)

P5. Evidence Based Decision Making (4 indicators)

CB1. Health Infrastructure (4 indicators)

CB2. Human Capital and leadership (4 indicators)

# Introduction to HMIS/M&E Technical Documentation

Monitoring and Evaluation (M&E) is an action-oriented management tool that uses indicators to improve performance and remove bottlenecks.[[4]](#footnote-4) These core indicators for action-oriented M&E come from routine service and administrative records through HMIS.[[5]](#footnote-5) HMIS and M&E are complementary processes; reforming one means reforming the other.

Four technical areas have been identified for documentation of standards for the reformed HMIS/M&E. These four areas are developed with several consultations with managers and program officers at different levels. Reliable and timely supply of these indicators requires consistent information collection instruments and procedures. Use of the information to improve performance requires the effective application of M&E principles and guidelines. Standards, guidelines, and implementation procedures have been laid out for each of these areas in a series of documents on *HMIS / M&E Technical Standards*.

1. Indicator definitions: *HMIS / M&E Redesign Technical Standards: Area 1*Includes indicator definition, interpretation, method of calculation, and data source.
2. Disease classification and case definitions: *HMIS / M&E Redesign Technical Standards: Area 2*Includes classification of diseases to be reported through HMIS using the International Disease classification 10 (ICD 10).
3. HMIS Data Recording and Reporting Procedures: *HMIS / M&E Redesign Technical Standards: Area 3*Includes procedures and formats for recording medical information during client/patient encounters and for reporting and transmitting HMIS data. These tools are based on the indicator definitions and disease classification established in the first two technical documents.
4. HMIS / M&E information use guidelines and display tools: *HMIS / M&E Redesign Technical Standards: Area 4*Includes guidelines for self-assessment by individuals and health institutions, as well as externally assisted performance monitoring such as supervision, participatory review, and dissemination. Guidelines for visual presentation of information are also included.

Three overarching principles have guided the redesign of these technical standards.

**Standardization.** Common definitions of indicators, data collection instruments, and data processing and analysis procedures form the foundation for effective HMIS/M&E. Without consistent principles and definitions performance cannot be systematically measured and improved across locations or over time.

**Integration.** A single HMIS/M&E plan, shared by all partners, is a cornerstone of HSDP III & IV. Implementation of this principle requires integrating data from different programs into a shared channel from which all derive their information.

**Simplification.** Collecting, analyzing, and interpreting only the information that is immediately relevant to performance improvement makes best use of scarce resources, especially human resources.

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# Acronyms

|  |  |
| --- | --- |
| AFB | Acid Fast Bacilli |
| AIDS | Acquired Immune Deficiency Syndrome |
| ALOS | Average length of stay |
| ANC | Antenatal Care |
| ART | Antiretroviral Therapy |
| ARV | Antiretroviral |
| BEOC | Basic Emergency Obstetric Care |
| BoFED | Bureau of Finance and Economic Development (Regional) |
| BOR | Bed occupancy rate |
| CAR | Contraceptive Acceptance Rate |
| CD4 | Cluster of Differentaition 4 |
| CEOC | Comprehensive Emergency Obstetric Care |
| CLTS | Community Led Total Sanitation |
| CPR | Contraceptive Prevalence Rate |
| CPT | co-trimoxazole prophylactic Therapy |
| CR | Cure rate |
| CSA | Central Statistical Authority |
| CTX | Co-trimoxazole |
| CYP | Couple Years of Protection |
| DNA | Deoxyribonucleic |
| DOTS | Directly Observed Treatment with Short Course |
| DST | Drug susceptibility test |
| DTP | diphtheria, tetanus toxoid, pertussis |
| EDHS | Ethiopia Demographic and Health Survey |
| EPC | Epidemic Prevention and Control |
| EPI | Expanded Program on Immunization |
| EPTB | extra-pulmonary tuberculosis |
| EQA | External Quality Assurance |
| ESO | Emergency Surgical Officer |
| FIC | Fully immunized child |
| FMOH | Federal Ministry of Health |
| HAPCO | HIV/AIDS Prevention and Control Office |
| HC | Health Center |
| HDA | Health Development Army |
| HEP | Health Extension Program |
| HepB | Hepatitis B |
| HEW | Health Extension Worker |
| HF | Health Facility |
| HH | Household |
| Hib | Haemophilus influenzae type B |
| HIV | Human Immunodeficiency Virus |
| HMIS | Health Management Information System |
| HP | Health Post |
| HSDP | Health Sector Development Program |
| ICCM | Integrated Community Case Management of Common Childhood Illnesse |
| IMNCI | Integrated Management of Newborn and Childhood Illness |
| IPD | Inpatient Department |
| IPT | INH Preventive therapy |
| *IRS* | Indoor residual spray |
| L&D | Labor and Delivery |
| LBW | Low birth weight |
| LLITN | Long lasting Insecticide-treated nets |
| LQAS | Lot Quality Assurance Sampling |
| LTFU | Lost to Follow Up |
| M&E | Monitoring and Evaluation |
| MB | Multibacillary |
| MDA | Mass Drug Adminstration |
| MDG | Millenium Development Goals |
| *MDR* | Multi Drug Resistant |
| MoFED | Ministry of Finance and Economic Development |
| MUAC | Middle Upper Arm Circumference |
| NBTS | National Blood Transfusion Service |
| NGO | Non Governmental Organization |
| NNT | Neonatal Tetanus |
| *NVP* | Nevarapine |
| ODF | Open Defecation Free |
| OI | Opportunistic Infection |
| OPD | Outpatient Department |
| PAB | Protection at birth (from neonatal tetanus) |
| PAP | Papanicolau smear |
| PB | Paucibacillary |
| PCP | Pneumocystis Caroni pneumonia |
| PCR | Polymerase Chain Reaction |
| PCT | preventive chemotherapy |
| PCV | Pneumococcal conjugated vaccine |
| PEP | Post-exposure prophylaxis |
| PICT | Provider Initiated Testing and Counseling for HIV |
| PLHIV | People Living with HIV |
| PMTCT | Prevention of Mother to Child Transmission of HIV |
| PNC | Postnatal care |
| PPD | Planning and Programming Department |
| PTB | Pulmonary tuberculosis |
| *RDT* | Rapid Diagnostic Test |
| *RHB* | Regional Health Bureau |
| RH | Reproductive Health |
| RR | Rifampcin Resistant |
| SLDs | Second Line Drugs |
| STH | Soil transmitting helminthes |
| TB | Tuberculosis |
| TSR | Treatment Success Rate |
| TT | Tetanus toxoid |
| VCT | Voluntary Counseling and Testing |
| VIA | visual inspection with acetic acid |
| WFA | Weight-for-age |
| WFH | weight for height |
| WHO | World Health Organization |
| WoFEDO | Woreda Finance and Economic Development Office |
| WorHO | Woreda Health Office |
| XDRTB | Extensive Drug Resistant Tuberculosis |
| ZHD | Zonal Health Department |

# Introduction to health sector indicators

The key role played by indicators in Monitoring and Evaluation (M&E) is clearly laid out in the Health Sector Development Program’s (HSDP) strategic plan.

“Monitoring and evaluation (M&E) is an action-oriented and preplanned management tool that operates on adequate, relevant, reliable, and timely collected, compiled and analyzed information on program/project objectives, targets and activities. The objectives of M&E are to improve the management and optimum use of the resources of a program and to make timely decisions to resolve constraints and/or problems of implementation.

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Health indicators are summary measures that are designed to describe particular aspects of health or health system performance with the aim of guiding the health sector policy and strategy.

The selection of indicators for the Health Management Information System (HMIS) indicators has been guided by national monitoring requirements of the HSDP IV, international agreements such as the MDGs, UNGASS, WHO, Global Fund, and local needs.

During 2006-2007, the FMOH had reformed the HMIS based on business process reengineering (BPR). A total of 108 indicators were defined and developed to monitor the performance of the health sector in the context of HSDP III and these have been used in the country since 2008.

The following are among the major reasons for revision of the HMIS:

* Ethiopia is currently implementing HSDP IV which has been developed based on the country’s current health conditions and priorities. It is difficult to monitor the progress of HSDP IV using indicators bases on the HSDP III context..
* There are several new initiatives and programs (MDR TB, community based services, Pneumococcal and Rota vaccine, Nutrition services, etc) and program modifications (TB, HIV/AIDS, PMTCT, etc ).
* Emergence of Hospital Key Performance Indicators

Due to these factors, the FMOH needed to undertake an indicator revision to: make the HMIS indicators more comprehensive; to ease program monitoring; and to strengthen the standardization process through incorporating the new initiatives, lining up it with HSDP IV, aligning it with hospital KPIs, and considering program modifications accordingly.

Accordingly, a total of 122 HMIS indicators are included in this revision and are divided into the following eight major categories based on the HSDP IV strategic objectives.

C1: Improve Access to Health Services (97 indicators)

C.1.1. Maternal and Child Health (35 indicators)

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C.1.1.2. PMTCT (7 indicators)

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C1.4.2.3 Leprosy (3 indicators)

C1.4.2.4 TB/HIV (5 indicators)

C1.4.2.5 Malaria (5 indicators)

C1.2.4.6 Neglected tropical diseases (2 indicators)

C1.4.3. Non Communicable diseases (5 indicators)

C2. Community Ownership (2 indicators)

F1. Resource Mobilization and Utilization (4 indicators)

P1. Quality of health Services (6 indicators)

P3. Pharmaceutical Supply and Services (1 indicators)

P5. Evidence Based Decision Making (4 indicators)

CB1. Health Infrastructure (4 indicators)

CB2. Human Capital and leaders (4 indicators)

The HMIS, which draws its data from routine service and administrative records, provides an ideal source for indicators that are reviewed frequently to monitor and refine program implementation. However, the HMIS does not provide all indicators needed to monitor the health sector and alternative data sources such as facility based or population surveys should be used when possible.[[7]](#footnote-7)

## I.A Impact Indicators

Impact indicators look at changes in the health status of the population as reflected in mortality and fertility rates. The health sector impact indicators are not planned for routine collection as an HMIS indicator. The impact indicators are collected through the vital events registration system and periodic population based surveys and national based estimates (e.g., Ethiopia Demographic and Health Survey (EDHS), census, etc.)

## I.B Alternative sources for indicators.

In addition to the population-based sources of health indicators outlined in the preceding section, medical records and registers kept at the facility provide a rich source of information, particularly on the quality indicators that can be assessed in supportive supervision and register review.

An essential part of HMIS reform is improving the quality of data and its use in improving service delivery. The method recommended by FMOH/PPD to achieve these objectives is the method recognized as an international best practice – reduce the amount of data collected at each health facility by agreeing on which indicators are most relevant to signal the need for direct action and use the HMIS to collect only the data that are required to calculate those indicators. The HMIS indicators are warning signals. If an indicator warns of a performance problem, then the problem should be investigated; this investigation may require further data collection, from existing records or from a special study.

This process is not intended to deprive program officers of information that is essential for improving the quality of services and monitoring its effects on the health status of the population. On the contrary this process leads to a rationalization of information collection, so that the most effective and efficient method can be selected, depending on the focus of the information and its use.

Annex 1 shows the frequency of reporting the HMIS indicators at each level. Annex 2 includes most of the indicators discussed during the course of selecting the indicators to be included in the HMIS. This table also shows the information that will be available from the electronic HMIS application. It also shows how additional information can be collected using alternative sources.

* **Health facility registers.** Each facility keeps records of each patient / client interaction. These are a rich source of information that can be reviewed through special studies or operations research to look at specific issues in service delivery or disease conditions. These records can also form the basis for sentinel surveillance for ongoing monitoring.
* **Surveys.** A number of indicators are already collected at regular intervals by Ethiopia Demographic and Health Services (EDHS), Welfare Monitoring Survey (WMS), and census. Still others are available through special purpose population-based or health facility surveys.
* **Supervision.** Routine supportive supervision is an indispensable method for improving the quality of services as well as for determining whether the system is functioning as intended to provide appropriate services of good quality.

These alternative sources of information are important during all stages of Monitoring and Evaluation (M&E). Implementation problems detected during routine performance monitoring may require use of these alternative sources to identify the root cause of the problem.

# Indicator Definitions

# C1. Access to Health Service

## C1.1. Maternal and Child Health

The Maternal and Child Health indicators are classified into three categories: Maternal Health, PMTCT, and Child Health including the Expanded Program on Immunization (EPI).

### C1.1.1 Maternal Health

There are 13 indicators for maternal health all of which are analyzed monthly.

##### C1.1.1.1. Contraceptive acceptance rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of women of reproductive age (15-49 years) who are not pregnant and are accepting a modern contraceptive method (new and repeat acceptors). | | | | | | | |
| Formula | *Number of new and repeat acceptors* | | | | | | *X 100* | |
| *Total number of women of reproductive age (15-49) who are not pregnant* | | | | | |
| Interpretation | This indicator is directly related to operations: for contraception utilization (and prevalence) to increase, the numbers of both new and repeat acceptors should increase. Each acceptor is counted only once, the first time s/he receives contraceptive services in the fiscal year.  **“*New acceptors*”** refers to the number of acceptors who receive family planning services from a recognized program for the first time irrespective of the method used. This is not the number of consultations. Each acceptor is enumerated once in the year, at the first consultation for contraception in the calendar year.  **“*Repeat acceptors*”** refers to the number of acceptors who receive family planning services from a family planning program previously irrespective of the method used. Long acting FP method users will also be counted as repeat every year including routine checkup for ongoing use of a long term method such as Norplant, IUD, etc.  New and repeat contraceptive acceptors are reported as two separate counts, so it is possible to calculate each rate separately as needed. Acceptor data reported from NGOs and other community-based non MOH sources can also be included in this calculation. | | | | | | | |
| Disaggregation | By acceptors: New, repeat  Age: 15 - 19, 20–24, 25–49 years  By Methods: Pills, Injectables, Implants, IUD and Others | | | | | | | |
| Sources | Family planning register; Service delivery tally (for HP), RH register (for primary private clinics), Pre-ART, ART registers | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.1.2 Antenatal care coverage – First visit

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The percentage of women that received antenatal care at least once during the current pregnancy. | | | | | | | |
| Formula | *Number of pregnant women that received antenatal care at least once* | | | | | | | *X 100* |
| *Total number of expected pregnancies* | | | | | | |
| Interpretation | Antenatal care coverage is an indicator of access and use of health care during pregnancy. The antenatal period presents opportunities for reaching pregnant women with interventions that may be vital to their health and wellbeing and to their infants. Receiving antenatal care at least four times increases the likelihood of receiving effective maternal health interventions during antenatal visits. This is an MDG indicator. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | ANC register , Service delivery tally (for HP), RH register (for primary private clinics) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.1.1.3 Antenatal care coverage – four visits

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The percentage of women that received antenatal care four or more times during the current pregnancy. | | | | | | | |
| Formula | *The number of pregnant women that received antenatal care at least four visits* | | | | | | *X 100* | |
| *Total number of expected pregnancies* | | | | | |
| Interpretation | The fourth antenatal care visit is an indicator of quality and use of health care during pregnancy. The antenatal period presents opportunities for reaching pregnant women with interventions that may be vital to their health and wellbeing and to their infants. Receiving four focused antenatal care visits increases the likelihood of receiving effective maternal health interventions during antenatal visits. This is an MDG indicator. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | ANC register, RH register (for primary private clinics)/Service delivery tally (for HP) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.1.4 Percentage of pregnant women attending antenatal care clinics tested for syphilis

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of pregnant women attending antenatal care clinics tested for syphilis. | | | | | | | |
| Formula | *Number of pregnant women tested for syphilis* | | | | | | *X 100* | |
| *Total number of pregnant mothers attended at least one ANC visit* | | | | | |
| Interpretation | Syphilis affects the health of pregnant mothers and their fetus. It may cause abortion, still birth, premature birth and congenital anomalies. Performing syphilis screening test on all pregnant mothers who attend antenatal care helps to detect the disease early so that appropriate treatment can be provided to protect the mother and the fetus from complications. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | ANC Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.1.5 Proportion of births attended by skilled health personnel

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of births attended by skilled health personnel. | | | | | | | |
| Formula | *The number of births attended by skilled health personnel* | | | | | *X 100* | | |
| *Total number of expected Deliveries* | | | | |
| Interpretation | All women should have access to skilled care during pregnancy and childbirth to ensure prevention, early detection and management of complications. Assistance by properly trained health personnel with adequate equipment is key to reducing maternal deaths. It is the single most important proved intervention that plays a great role in reducing the maternal mortality rate and is one of the MDG indicators to track national effort towards safe motherhood. In addition, the proportion of births attended by skilled personnel at the given facility is a measure of the health system’s function, accessibility, and quality of care. “Skilled attendant at birth” has been proposed as an intermediary, process or proxy indicator for monitoring progress towards the reduction of maternal mortality, which is highly correlated with maternal mortality levels.  A *skilled personnel* is defined as a health professional (such as a midwife, nurse, health officer or doctor) who has been trained in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns. This definition excludes health extension workers and traditional birth attendants, whether trained or not. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Delivery Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | | Monthly | Monthly |

##### C1.1.1.6 Proportion of births attended by health extension workers at Health Post

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of births attended by health extension workers at health post (clean and safe delivery). | | | | | | | |
| Formula | *The number of births attended by health extension workers at Health Post* | | | | | *X 100* | | |
| *Total number of expected Deliveries* | | | | |
| Interpretation | This indicator singles out the activities of the national HEP, in which clean and safe delivery services by HEWs is included as one of the activities. This indicator reflects the proportion of delivery services provided by HEWs. Besides reflecting the extent of implementation of the HEP, it can be used to determine and plan for additional training or facility capacity building needs to provide delivery service. This indicator counts only those deliveries which were assisted by HEWs at health post level. Deliveries assisted at home are not included here. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | | RHB | FMOH |
| Monthly | Monthly\* |  | Monthly | Monthly | | Monthly | Monthly |

\****N.B.HC aggregates reports received from HPs & sends to WorHO.***

##### C1.1.1.7 Early postnatal care coverage

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of women who attended post natal care at least once during the early post-partum period (within 7 days after delivery). | | | | | | | |
| Formula | *Number of postnatal visits within 7 days of delivery* | | | | | *X 100* | | |
| *Total number of expected Deliveries* | | | | |
| Interpretation | Early Postnatal care (PNC) coverage is the proportion of women and newborns who get care, at least once during the first 7 days after delivery for reasons relating to post-partum services. For mothers who delivered in a health facility, the first post-partum visit is a visit after discharge. Prolonged stay after delivery in a health facility doesn’t count as a postpartum visit**.** Even though the post-partum period is 6 weeks (42 days) after delivery, the reproductive health program especially encourages a visit within the first 7 days, and specifically the first 2 days, after delivery. It is considered critical. This indicator shows the utilization (accessibility and acceptability) of postnatal care. | | | | | | | |
| Disaggregation | 0-48 hours (0-2days)  49 – 72hours ( 2-3days)  73hrs-7 days (4-7days) | | | | | | | |
| Sources | Service delivery tally (for HP), postnatal care register; RH register (for primary private clinics) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | | RHB | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly | Monthly |

##### C1.1.1.8 Caesarean section rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of births by caesarean section among all live births in a given time period. | | | | | | | |
| Formula | *Number of women having given birth by caesarean section* | | | | | | *X 100* | |
| *Total number of expected Deliveries* | | | | | |
| Interpretation | The percentage of births by caesarean section is an indicator of access to and use of health care during childbirth. Caesarean section rate is one of the process indicators that tells about the availability and quality of Comprehensive Emergency Obstetric Care (CEmONC) in the country. Five-fifteen percent of all pregnancies are expected to end up in complications and may require a caesarean section intervention. Therefore, C/S rate is expected to be between 5 and 15%. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Delivery register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.1.9 Number of women receiving comprehensive abortion care services

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of women receiving comprehensive abortion care. It includes women who get safe abortion and emergency post abortion care. | | | | | | |
| Formula | Number of women receiving comprehensive abortion care services (safe abortion and post abortion care) | | | | | | |
| Interpretation | In Ethiopia, complications resulting from abortions account for one third of all maternal deaths. The Government of Ethiopia has enacted legislation that asks health care providers to provide safe abortion service for exceptional circumstances when the woman asks for, and consents to, the service.  This indicator measures the burden of unplanned pregnancy, access to services, and tracks the implementation of the law. | | | | | | |
| Disaggregation | Age: <18 yrs, 18+: Safe abortion, Post abortion care | | | | | | |
| Sources | Abortion care register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

##### C1.1.1.10 Institutional maternal deaths

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of maternal deaths from any cause related to or aggravated by pregnancy or its management in a health facility | | | | | | | |
| Formula | *Number of maternal deaths in health facility* | | | | | | *X 100* | |
| *Total number of deliveries in health facility* | | | | | |
| Interpretation | Maternal death is the death of a woman from conditions caused or aggravated by pregnancy, which occurs from time of conception to six weeks postpartum, but not from incidental or accidental causes. The cause of death could be direct – abortion, hemorrhage, hypertension, obstructed labor or sepsis; or could be indirect like heart disease aggravated by pregnancy, or malaria in pregnancy. Ideally, the institutional proportion of maternal deaths should be less than 1%. Five major obstetric complications are known to be the major cause of maternal mortality: hemorrhage (post-partum, ante-partum), ruptured uterus, eclampsia, obstructed labor, infection. These conditions are in the HMIS disease classification list for inpatient morbidity and mortality. The fatality rate for all five conditions taken together should be less than 1% of all deliveries. The reasons for every maternal death in a health institution should be investigated and appropriate quality/service improvements measures taken. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Inpatient department registers. To capture all maternal deaths it is essential to review death registers from surgical, medical, obstetric, and gynecological wards, from OPD (for deaths before admission), and from the delivery register. | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.1.11 Number of maternal deaths in the community

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of maternal deaths from any cause related to or aggravated by pregnancy or its management in the community ( at home, on the way to HF and in the HP) | | | | | | |
| Formula | Number of maternal deaths from any cause related to or aggravated by pregnancy or its management in the community ( at home, on the way to HF and in the HP) | | | | | | |
| Interpretation | Maternal death is the death of a woman from conditions caused or aggravated by pregnancy, which occurs from time of conception to six weeks postpartum, but not from incidental or accidental causes. The cause of death could be direct – abortion, hemorrhage, hypertension, obstructed labor or sepsis; or could be indirect like heart disease aggravated by pregnancy, or malaria in pregnancy. Five major obstetric complications are known to be the major cause of maternal mortality: hemorrhage (post-partum, ante-partum), ruptured uterus, eclampsia, obstructed labor, infection. The reasons for every maternal death in the community should be investigated and appropriate improvements measures taken. | | | | | | |
| Disaggregation | *Facility type: at home, on the way to health facility, at HP* | | | | | | |
| Sources | Service delivery tally (for HP), Administrative report | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Monthly | Monthly\* |  | Monthly | Monthly | Monthly | Monthly |

\*N.B.HC aggregates reports received from HPs & sends to WorHO .

##### C1.1.1.12 Stillbirth rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of stillbirths from total births attended | | | | | | | |
| Formula | *Number of stillbirths* | | | | | | *X 100* | |
| *Total number of births (still and live) attended* | | | | | |
| Interpretation | The stillbirth rate mainly defines the access, availability and quality of obstetric care and the result of neglected obstructed labor in the Ethiopian set up, but could also be due to major congenital malformation, RH incompatibility, or many other causes. | | | | | | | |
| Disaggregation | *None* | | | | | | | |
| Sources | Service delivery tally (for HP),Delivery register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

### 

##### C1.1.1.13 Proportion of kebeles declared ‘home delivery free’

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of kebeles declared home delivery free | | | | | | | |
| Formula | Number of kebeles that have been declared home delivery free | | | | | | *X 100* | |
| Total number of kebeles | | | | | |
| Interpretation | This indicator intends to further strengthen implementation of community level integrated maternal and child health services .It gives an opportunity to further explore the existence and functionality of HDA network. It also creates positive competition among the neighboring kebeles. Network leader on monthly basis declares “home delivery free kebele” using the network structure that documents zero home delivery. | | | | | | | |
| Disaggregation | *None* | | | | | | | |
| Sources | Administrative report | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly\* |  | Monthly | Monthly | Monthly | | Monthly |

\**N.B.HC aggregates reports received from HPs & sends to worHO .*

### C1.1.2. PMTCT

There are 7 indicators for PMTCT including for mothers and infants born (7 indicators)

##### C1.1.2.1 Percentage of pregnant and lactating women who were tested for HIV and who know their results

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of pregnant women who were tested for HIV and who know their results during pregnancy, labor and delivery and post-partum period | | | | | | | |
| Formula | Number of pregnant women tested and know their result during pregnancy, labor and delivery and post-partum period | | | | | | *X 100* | |
| Estimated number of pregnant women | | | | | |
| Interpretation | Mother-to-child transmission of HIV infection can occur during pregnancy, labor and delivery or during breastfeeding. The risk of mother-to-child transmission can be reduced by a range of interventions, including providing antiretroviral prophylaxis to women during pregnancy and labor and to the infant in the first weeks of life; obstetrical interventions, including elective caesarean delivery. Receiving HIV testing and counseling services as early as possible during pregnancy enables pregnant women living with HIV to benefit from HIV services and to access interventions for reducing HIV transmission to their infants.  The numerator is the sum of the following:   1. Pregnant women who received an HIV test and result during antenatal care; 2. Pregnant women attending labor and delivery with unknown HIV status who were tested for HIV in the labor and delivery facility and received their result; 3. Women with unknown HIV status attending postpartum services within 72 hours of delivery who were tested for HIV and received their result; and 4. Pregnant women with known HIV infection attending antenatal care for a new pregnancy. | | | | | | | |
| Disaggregation | HIV sero status ( HIV +ve)  Service area: ANC, L&D and PNC (within 72 hrs) | | | | | | | |
| Sources | ANC, L&D. and PNC Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.2.2 Number of HIV positive pregnant and lactating women who received ART at ANC+L&D+PNC for the first time based on option B+.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of HIV positive pregnant and lactating women who received ART (antiretroviral therapy) at ANC+L&D+PNC for the first time to reduce the risk of mother-to-child transmission | | | | | | |
| Formula | *Number of HIV positive pregnant and lactating women who received ART to reduce the risk of mother to child transmission at ANC+ L&D + PNC for the first time* | | | | | | |
| Interpretation | In the absence of any preventive interventions, infants born to and breastfed by women living with HIV have roughly a one in three chance of acquiring infection. This can happen during pregnancy, during labor and delivery or after delivery through breastfeeding. The risk of mother to child transmission can be significantly reduced through the complementary approaches of providing antiretroviral therapy for the mother and with prophylaxis to the infant, implementing safe delivery practices and using safe breastfeeding practices. Antiretroviral prophylaxis followed by exclusive breastfeeding for the first 6 months reduces the risk of vertical transmission. According to option B+, HIV positive pregnant and lactating women will be started on ART irrespective of their CD4 count and WHO clinical staging. She will be put on TDF +3TC +EFV. This indicator measures the provision and coverage of antiretroviral treatment and prophylaxis, by regimen type, for HIV-positive pregnant women in order to reduce the risk of mother to child transmission of HIV. | | | | | | |
| Disaggregation | ANC, L&D, PNC  Maternal prophylaxis (Single dose AZT, Triple ARVs) | | | | | | |
| Sources | PMTCT Register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

##### C1.1.2.3 Number of HIV-positive women who get pregnant while on ART and linked to ANC

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of HIV positive women who get pregnant while on ART and linked to ANC in the past 12 months. | | | | | | |
| Formula | Number of HIV-positive women who get pregnant while on ART and linked to ANC | | | | | | |
| Interpretation | Significant number of women get pregnant while on ART. The pregnancy might be planned or unintended. In the absence of any preventive interventions, infants born to and breastfed by women living with HIV have roughly a one in three chance of acquiring infection. This can happen during pregnancy, during labor and delivery or after delivery through breastfeeding. The risk of mother to child transmission can be significantly reduced through the complementary approaches of providing antiretroviral therapy for the mother and with prophylaxis to the infant, implementing safe delivery practices, and using safe breastfeeding practices. | | | | | | |
| Disaggregation | None | | | | | | |
| Sources | PMTCT Register/ART register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

##### C1.1.2.4 Percentage of infants born to HIV infected women receiving a virological test for HIV within 12 months of birth

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of infants born to HIV-positive women who received a virological (DNA/PCR) HIV test within 12 months of birth | | | | | | | |
| Formula | Number of HIV exposed infants who received an HIV test within 12 months of birth, during the reporting period | | | | | | | X100 |
| Total number of expected Live births from HIV positive mothers | | | | | | |
| Interpretation | Infants infected with HIV during pregnancy, delivery or early postpartum period often die before they are recognized as having HIV infection. Early diagnosis of infants who acquired HIV during pregnancy, delivery or in the early postpartum period is critical as infants have an increased risk of mortality if they go undiagnosed and untreated.  This indicator measures the extent to which infants born to HIV-positive women are tested to determine their HIV status within the first 12 months of life. It is recommended to establish the capacity to provide early virological testing of infants for HIV at 6 weeks, or as soon as possible thereafter to guide clinical decision-making at the earliest possible stage. Data from this indicator will be used to determine the rate of scale up and progress with Early Infant Diagnosis, to strategize scale-up programs and inform how the PMTCT program is successful in averting infection. The numerator is calculated from the PMTCT Register. The number of infants who received an HIV test within 12 months of birth should only be counted once. The numerator should only include the initial test and not any subsequent tests. | | | | | | | |
| Disaggregation | Infants who received a virological test: within 2 months, between 2 and 12 months, | | | | | | | |
| Source | PMTCT Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.1.2.5 Percentage of infants born to HIV-infected women who were started on co-trimoxazole prophylaxis within two months of birth

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of infants born to HIV-positive women who started on co-trimoxazole prophylaxis within two months of birth | | | | | | | |
| Formula | Number of infants born to HIV infected women started on co-trimoxazole prophylaxis within two months of birth during the reporting period | | | | | | | X100 |
| Estimated number of HIV- infected pregnant women who gave birth | | | | | | |
| Interpretation | This indicator permits monitoring trends in the numbers and proportion of HIV exposed infants who started CTX prophylaxis.  Co-trimoxazole prophylaxis is a simple and cost-effective intervention to prevent Pneumocystis Caroni pneumonia (PCP) among HIV-exposed and -infected infants. PCP is the leading cause of serious respiratory disease among young HIV-infected infants and often occurs before HIV infection can be diagnosed. Because diagnosing HIV infection among young infants is difficult, all infants born to women living with HIV should receive Co-trimoxazole (CTX) prophylaxis starting at 4–6 weeks after birth and continuing until HIV infection has been excluded and the infant is no longer at risk of acquiring HIV through breastfeeding.  Individuals should be considered to be “receiving” CTX prophylaxis if CTX has been prescribed and obtained by the patient (provided by a program or procured by the patient). The indicator does not attempt to capture interruptions in drug availability or patient adherence to prescribed therapy. The reports will need to be interpreted in the context of national policies. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | PMTCT Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.1.2.6 Percentage of infants born to HIV-infected women receiving antiretroviral (ARV) prophylaxis for prevention of mother-to-child transmission (PMTCT)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of infants born to HIV positive women who received ARV prophylaxis to reduce risk of mother-to-child transmission. | | | | | | | |
| Formula | *Number of HIV exposed infants who received ARV prophylaxis* | | | | | | | *X 100* |
| *Total number of expected live births from HIV positive mothers* | | | | | | |
| Interpretation | In the absence of any preventive interventions, infants born to and breastfed by women living with HIV have roughly a one in three chance of acquiring infection. This can happen during pregnancy, during labor and delivery, or after delivery through breastfeeding. The risk of mother to child transmission can be significantly reduced through the complementary approaches of providing antiretroviral therapy for the mother and with prophylaxis to the infant, implementing safe delivery practices and using safe breastfeeding for the first 6 months.  According to option B+, HIV positive pregnant women will be started on ART irrespective of its CD4 count and WHO clinical staging. She will be put on TDF+3TC+EFV. Infants born to HIV positive women should receive NVP prophylaxis as per the national guideline. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | PMTCT Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.1.2.7 Percentage of HIV exposed infants receiving HIV confirmatory (antibody test) test by 18 months

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of HIV exposed infants tested and confirmed HIV status at 18 months by rapid antibody test. | | | | | | | |
| Formula | Number of HIV exposed infants receiving HIV confirmatory (antibody test) by 18 months | | | | | | X100 | |
| Estimated number of exposed infants | | | | | |
| Interpretation | HIV exposed infants will acquire risk of HIV transmission from their mothers during pregnancy, L&D, and during breast-feeding period. The risk of acquiring HIV infection during breast feeding period ranges from 10-25%. Appropriate breast feeding practices can reduce the risk of transmission during breast feeding. The national guideline for HIV exposed infants feeding practice recommends exclusive breast feeding for the first 6 months and continuing breast feeding with complementary feeding up to 18-24 months. Mixing in complementary foods in the first 6 months will increase the transmission of HIV. An HIV exposed infant will have DNA/PCR HIV test in the first 12 months of life, preferably within 2 months. At this time if the infant is positive he/she will be automatically put on ART and those negative infants will continue their follow up with their mothers up to 18-24 months in PMTCT services. For those HIV exposed infants with a DNA/PCR negative result confirmatory HIV antibody test at 18 months of age is mandatory to declare the final HIV status. | | | | | | | |
| Disaggregation | Positive, Negative | | | | | | | |
| Source | PMTCT Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

### C1.1.3 Child Health

There are 15 indicators for Child Health including Expanded Program on Immunization (10 indicators), 2 indicators for institutional and community neonatal death rates, 2 for neonates treated for sepsis and asphyxia, and 1 for children treated for pneumonia.

##### C1.1.3.1 DPT1-HepB1-Hib1 (pentavalent First dose) immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received first (one) dose of the combined diphtheria, tetanus toxoid, pertussis, Hepatitis B and *Haemophilus influenzae* type B vaccine | | | | | | | |
| Formula | *Number of children under one year of age who have* *received first dose of pentavalent vaccine* | | | | | | *X 100* | |
| *Estimated number of surviving infants* | | | | | |
| Interpretation | DTP-HepB1-Hib1 coverage indicates availability of access to and initial use of immunization services by children. Pentavalent first dose (DPT1-HepB1-Hib1) immunization coverage has a strong inverse correlation with the prevalence of these diseases, especially amongst children under 5. It is an essential component for reducing under-five mortality. Increasing coverage should be accompanied by decreasing cases of disease. It is a good indicator of health system performance. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.2 DPT3-HepB3-Hib3 (Pentavalent third dose) immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received three doses of the combined diphtheria, tetanus toxoid, pertussis, Hepatitis B and *Haemophilus influenzae* type B vaccine | | | | | | | |
| Formula | *Number of children under one year of age who have* *received third dose of pentavalent vaccine* | | | | | | *X 100* | |
| *Estimated number of surviving infants* | | | | | |
| Interpretation | DTP-HepB3-Hib3 coverage indicates continuity of use by parents, client satisfaction with services, and capability of the system to deliver a series of vaccinations.  Pentavalent third dose (DPT3-HepB3-Hib3) immunization coverage has a strong inverse correlation with the prevalence of these diseases, especially amongst children under 5. It is an essential component for reducing under-five mortality. Increasing coverage should be accompanied by decreasing cases of disease. It is a good indicator of health system performance. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.3 Pneumococcal conjugated vaccine first dose (PCV1) immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received one dose of the pneumococcal conjugated vaccine | | | | | | | |
| Formula | Number of children under one year of age who have received first dose of pneumococcal vaccine | | | | | | | X 100 |
| Estimated number of surviving infants | | | | | | |
| Interpretation | Pneumococcal conjugate vaccines (PCVs) are safe and effective for reducing illnesses and deaths caused by Streptococcus pneumonia. Pneumococcal conjugated vaccine first dose (PCV1) immunization coverage is an indicator of program access. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.1.3.4 Pneumococcal conjugated vaccine (PCV3) immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received three doses of the pneumococcal conjugated vaccine | | | | | | |
| Formula | Number of children under one year of age who have received third dose of pneumococcal vaccine | | | | | | *X 100* |
| Estimated number of surviving infants | | | | | |
| Interpretation | Pneumococcal conjugated vaccine 3 immunization coverage has a strong inverse correlation with the prevalence of pneumococcal disease, it has direct effect in under five mortality rate (it can reduce by 10%), and it also indirectly significantly decreases adult pneumococcal morbidity and mortality through the herd effect. It is a good indicator of health system performance and will indicate the impact of this life-saving vaccine. | | | | | | |
| Disaggregation | None | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

##### C1.1.3.5 Rotavirus vaccine first dose (Rota1) immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received one dose of Rotavirus vaccine | | | | | | | |
| Formula | Number of children under one year of age who have received first dose of Rotavirus vaccine | | | | | | *X 100* | |
| Estimated number of surviving infants | | | | | |
| Interpretation | The first dose of Rotavirus vaccine (Rota1) immunization coverage indicates ability of the program to deliver the Rota vaccine and caregiver willingness to accept it. Its schedule is different from Penta and PCV vaccine. The vaccine is delivered in a narrow time period. The first dose is given between 6-14 week age and the 2nd dose is given four weeks after the first dose and before the 24th week. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

#### 

##### C1.1.3.6 Rotavirus vaccine 2nd dose (Rota2) immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received two doses of the Rotavirus vaccine | | | | | | | |
| Formula | Number of children under one year of age who have received 2nd dose of Rotavirus vaccine | | | | | | *X 100* | |
| Estimated number of surviving infants | | | | | |
| Interpretation | The second dose of the Rotavirus vaccine (Rota2) immunization coverage has a strong inverse correlation with the prevalence of Rotavirus diseases; it can reduce under five mortality by 5%. It is a good indicator of the ability of the program to deliver the vaccine series, ensuring that the vaccinated child is protected.  Its schedule is different from Penta and PCV vaccine, and it is delivered in a narrow time period. The first dose is given between 6-14 week age and the 2nd dose is given four weeks after the first dose and before the 24 week. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.7 Measles immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who have received a dose of measles vaccine before their first birthday. | | | | | | | |
| Formula | Number of children under one year of age who have received measles vaccine | | | | | | | *X 100* |
| Total number of surviving infants | | | | | | |
| Interpretation | Measles immunization coverage has a strong inverse correlation with the prevalence of the disease, especially amongst children under 5. It is an essential component for reducing under-five mortality. Increasing coverage should be accompanied by decreasing cases of the disease. It is a good indicator of health system performance. Measles is usually the last of the infant immunizations given, as per the EPI schedule. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.1.3.8 Full immunization coverage (< 1 year)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of surviving infants who receive all doses of vaccines before their first birthday. | | | | | | | |
| Formula | Number of children received all vaccine doses before 1st birthday | | | | | | *X 100* | |
| Total number of surviving infants | | | | | |
| Interpretation | Fully immunized child (FIC): The indicator measures the capability of the system to provide all vaccines in the childhood schedule at the appropriate age and the appropriate interval between doses in the first year of life; also measures public demand and perceived quality of services.[[8]](#footnote-8)  Different surveys and routine reports consider all the antigens included in the routine EPI program to determine the FIC coverage (EDHS 2011, EPI coverage survey, 2006 &2011). Therefore, by definition all the antigens including the newly introduced PCV and Rota vaccines should be included in the definition of a fully vaccinated child in the context of Ethiopia.  Though the definition of FIC varies from country to country, the definition in Ethiopia should consider a child as fully immunized when he/she received BCG vaccine, 3 doses of DPT-Hib-HepB , 3 doses of Polio , 3 doses of PCV ,2 doses of Rota and 1 dose of measles before the age of 1 year.  *Surviving infants* refers to infants who survive to their first birthday. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.9 Proportion of infants protected at birth against neonatal tetanus

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of infants who were protected from neonatal tetanus (NNT) by the immunization of their mothers with tetanus toxoid. | | | | | | | |
| Formula | *Number of Infants whose mothers had protective doses of TT* | | | | | | *X 100* | |
| *Estimated number of live births* | | | | | |
| Interpretation | TT immunization for pregnant women is a proven strategy for achieving the goal of eliminating neonatal tetanus. In the past, coverage of TT2+ doses for pregnant women was used to monitor implementation of this strategy. In keeping with global EPI standards and recommendations, the Ethiopian EPI uses PAB as its NNT prevention indicator. This indicator measures the percentage of infants who were protected from NNT at birth by the immunization of their mothers with TT before birth. Protection at birth is estimated by asking mothers about their TT immunization history when they bring an infant for pentavalent 1 immunization. The best way to measure this indicator is during the first visit of the infant for its penta 1 dose. Ask the mother accompanying the infant if she has had a TT record card. If she has not, ask if she can remember receiving doses of TT during pregnancy. You can consider that the infant was protected from NNT at its birth (PAB) if the mother has received: Two doses of TT during the recent pregnancy or at least three doses of TT in the past. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register and Growth Monitoring register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.10 Vaccine wastage rate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of vaccine doses opened but not consumed during the delivery of immunization service to children. | | | | | | | | |
| Formula | Vaccine Wastage Rate = 100 – Vaccine usage Rate | | | | | | | | |
| *Vaccine Usage Rate =* | | | *Number of Doses Given* | | | | *X 100* | |
| *Doses Opened* | | | |
| Doses opened = Sum of all doses in all vials opened. ( Note: the same vaccine may be packaged in different size vials)  NOTE: Vaccine wastage rate for each specific vaccine should be calculated separately. | | | | | | | | |
| Interpretation | Vaccines and their management form a major component of the national immunization Program. Regular supply of vaccines and their efficient management is paramount to the success and effectiveness of all immunization Programs. The vaccine wastage rate is influenced by several factors that can be controlled by policy. These include the policy on when to open vials and vial size to be procured.  The wastage rate should be monitored for each vaccine, and particularly for the more expensive ones. The policy in Ethiopia is to provide immunization on demand; this means that vaccine wastage rates may increase and may be difficult to control. | | | | | | | | |
| Disaggregation | None | | | | | | | | |
| Sources | Service delivery tally (for HP), Immunization register and EPI logistics records. | | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.11 Early institutional neonatal death rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of deaths within the first 7 days of life from total births attended by skilled health attendants in the facility. | | | | | | | |
| Formula | *Number of deaths in the first 7 days of life* | | | | | *X 100* | | |
| *Total number of live births attended by skilled health attendants* | | | | |
| Interpretation | The early neonatal death rate mainly defines the quality of obstetric care in the facility in Ethiopian context. Among other potential causes, the three main causes are prematurity, birth asphyxia, and neonatal sepsis. (The three main causes, along with other neonatal conditions, are included in the HMIS inpatient morbidity and mortality report.) Deaths of children delivered in a facility, but who die outside the facility in the first 7 days of life, are not captured. The magnitude of these deaths is not known. | | | | | | | |
| Disaggregation | Time of death: 0-24hrs; 1-6 days | | | | | | | |
| Sources | Delivery, PNC, and IPD registers | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | | Monthly | Monthly |

##### C1.1.3.12 Early Neonatal death rate at community

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of deaths within the first seven days of life from total births in the kebele | | | | | | |
| Formula | *Number of deaths in the first seven days of life* | | | | *X 100* | | |
| *Total number of live births in the same kebele* | | | |
| Interpretation | The neonatal death rate mainly defines the quality of care provided for neonates in the Ethiopian context. Among other potential causes, the three main causes are prematurity, birth asphyxia, and neonatal sepsis. (The three main causes, along with other neonatal conditions, are included in the HMIS inpatient morbidity and mortality report.) Neonatal community death in the first month of life, are not captured. The magnitude of these deaths is not known. | | | | | | |
| Disaggregation | Time of death: 0-24hrs; 1-6 days | | | | | | |
| Sources | Family folder | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | | ZHD/ ScHO | RHB |
| Monthly | Monthly\* |  | Monthly | | Monthly | Monthly |

\****N.B. HC aggregates reports received from HPs & sends to WorHO .***

##### C1.1.3.13 Proportion of children treated for pneumonia

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of children treated for pneumonia at health facility and community (HP) | | | | | | | |
| Formula | *Number of under 5 children treated for pneumonia* | | | | | | *X 100* | |
| *estimated number of under 5 children with pneumonia\** | | | | | |
| Interpretation | Pneumonia is one of the leading causes of death among children under 5 years of age. Therefore, pneumonia prevention and treatment is essential to the achievement of MDG 4. A key intervention for controlling pneumonia in children is prompt treatment with a full course of appropriate antibiotics. Effective case management at health post and health facility levels is needed to ensure that sick children receive appropriate treatment.  This indicator shows the proportion of under 5 children treated for pneumonia at health post and health facility levels.  \*During the calculation of this indicator, the estimated prevalence should be updated based on recent research findings. | | | | | | | |
| Disaggregation | Sex: Male, Female | | | | | | | |
| Sources | HF Registers( OPD/IMNCI/ICCM ,IPD), Disease information tally (for HP) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

##### C1.1.3.14 Proportion of neonates treated for sepsis

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of newborns treated for sepsis within a given period | | | | | | | |
| Formula | *Number of neonates treated for sepsis* | | | | | | *X 100* | |
| *Estimated number of neonates with sepsis\** | | | | | |
| Interpretation | This indicator shows the proportion of neonatal sepsis in the catchment population and proportion of newborn treated for this very severe disease at all level of intervention areas.  \*During the calculation of this indicator, the estimated prevalence should be updated based on recent research findings. | | | | | | | |
| Disaggregation | Age: 0-23hours 1-6 days, 7-28 days  Sex: Male, Female | | | | | | | |
| Sources | IPD register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

### 

##### C1.1.3.15 Proportion of neonates treated for asphyxia at health facility

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of neonates treated for birth asphyxia | | | | | | | |
| Formula | *Number of neonates treated for birth asphyxia* | | | | | | *X 100* | |
| *Estimated number of neonates with birth asphyxia \** | | | | | |
| Interpretation | This indicator shows the proportion of birth asphyxia for health facility deliveries and proportion of newborns treated for birth asphyxia. In Ethiopia 10% of newborn faces problem related to breathing at birth.  \*During the calculation of this indicator, the estimated prevalence should be updated based on recent research findings. | | | | | | | |
| Disaggregation | Age: 0-23hours 1-6 days, 7-28 days  Sex: Male, Female | | | | | | | |
| Sources | HF Registers( Delivery , IPD) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

## C1.2. Nutrition

There are 6 indicators for nutrition all of which are related to nutritional conditions of children. All the 6 indicators are collected and analyzed monthly.

### C1.2.1 Percentage of low birth weight (LBW) newborns

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of live births that weigh less than 2,500 g out of the total live births during the same time period | | | | | | | |
| Formula | *Number of live-born babies with birth weight less than 2,500 g* | | | | | | | X100 |
| *Total number of live births weighed* | | | | | | |
| Interpretation | The LBW proportion is a rough summary measure of many factors, including maternal nutrition (during childhood, adolescence, pre-pregnancy and pregnancy), lifestyle (e.g. alcohol, tobacco and drug use), and other exposures in pregnancy. LBW is strongly associated with a range of adverse health outcomes, such as peri-natal mortality and morbidity, infant mortality, disability and disease in later life, but is not necessarily part of the cause. The main strength of LBW data is that they are relatively easy to measure. LBW is a strong predictor of an individual baby’s survival. The lower the birth weight, the higher the risk of death. Groups with lower mean birth weights show higher infant mortality rates. Examples are twins and infants of mothers with lower socioeconomic status. Efforts should focus on measuring birth weight immediately after delivery, on its accuracy and on appropriate care after birth, including growth monitoring. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Service delivery tally for (HP), Delivery Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

### C1.2.2 Percentage of underweight Children aged <5 years

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of underweight (weight-for-age less than -2 standard deviations of the WHO Child Growth Standards median) among children aged 0-5 years. | | | | | | |
| Formula | *Number of weights reflecting underweight amongst children under 5 years of age* | | | | | | X100 |
| *Total number of weights-for-age (WFAs) recorded amongst children under 5 years of age whose growth was monitored during a given time period in the catchment area* | | | | | |
| Interpretation | In Ethiopia, this indicator is used as an early warning for potential famine. This indicator is most sensitive to changes in the nutritional status of under fives when weights are recorded in well-child clinics. Ill children typically suffer from weight loss, so their weights do not reflect the overall population; hence, this indicator is not collected in sick baby clinics. It should be noted that this is *not a population-based indicator*. This fact has two important consequences. First, those weighed at facilities reflect a self-selected population. Second, the indicator is calculated from weights recorded, not from persons weighed; weights from the same child may be included several times, especially when weights are aggregated over several months. | | | | | | |
| Disaggregation | Age; 0-24 months and 25-59 months old  Severity: Moderate (-2 to -3 Z-score) and severe (below -3 Z-score) | | | | | | |
| Source | Service delivery tally for (HP), Immunization and Growth Monitoring registers | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

### C1.2.3 Proportion of children 6 - 59 months with severe acute malnutrition

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of children 6-59 months with severe acute malnutrition | | | | | | | |
| Formula | The total number of children screened and have severe acute malnutrition | | | | | | X100 | |
| Total number of children screened | | | | | |
| Interpretation | This is an indicator for facility level prevalence of acute malnutrition. Increasing or decreasing proportion of acute malnutrition is proxy indicator of the nutritional status of the catchment population. Sharply increasing proportion of acute malnutrition may suggest the need for additional support to the health facility and nutritional intervention in the catchment community.  ***Severe acute malnutrition:***MUAC <11cm or WFH (weight for height) <70% median (Used in health centers and hospitals) *and/or* bilateral pitting edema (used in all health facilities) | | | | | | | |
| Disaggregation | *None* | | | | | | | |
| Source | Service delivery tally for (HP)/ICCM/IMNCI Registers | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

### C1.2.4 Treatment outcome for management of severe acute malnutrition in children 6-59 months

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of children 6-59 months with severe acute malnutrition that exit, defaulted, died, transferred or recovered. | | | | | | | |
| Formula | Number of children 6–59 months with severe acute malnutrition that recovered | | | | | | | X100 |
| The total number of children exiting from treatment for acute malnutrition | | | | | | |
| Number of children 6–59 months with severe acute malnutrition that defaulted from treatment | | | | | | | X100 |
| The total number of children exiting from treatment for acute malnutrition | | | | | | |
| Number of children 6–59 months with severe acute malnutrition that died during treatment | | | | | | | X100 |
| The total number of children exiting from treatment for acute malnutrition | | | | | | |
| Number of children 6–59 months with severe acute malnutrition that are transferred out | | | | | | | X100 |
| The total number of children exiting from treatment for acute malnutrition | | | | | | |
| Interpretation | The time needed to achieve the exit indicators for a therapeutic feeding program is 1-2 months and for targeted supplementation is 2-3 months. Exits from a feeding program are those no longer registered. The population of exited individuals is made up those who have defaulted, recovered (including those who are referred) and died. Mortality rates should be interpreted in the light of coverage rates and the severity of malnutrition treated.  Recovery rates: a discharged individual must be free from medical complications and have achieved and maintained sufficient weight gain (e.g. for two consecutive weigh-ins). Malnourished children admitted to feeding Programs are discharged with the following criteria: MUAC ≥11.0 cm AND ≥15% weight gain from admission weight with no edema for 2 consecutive visits (at hospital level WFH ≥85 %.) The expected cure rate is >75%.  Defaulter rates can be high when the program is not accessible to the population. Accessibility may be affected by the distance of the treatment point from the community, an ongoing armed conflict, a lack of security, the level of support offered to the care giver of the individual treated, the number of care givers who are left at home to look after other dependents (this may be very few in situations of high HIV/AIDS prevalence), and the quality of the care provided. A defaulter from a feeding program is an individual who has not attended 3 consecutive visits and it is confirmed that the child is alive for out-patient services. Expected default rate is <15%.  Died: Mortality rates should be interpreted in the light of coverage rates and the severity of malnutrition treated. Expected death rate is <5%. | | | | | | | |
| Disaggregation | Exit status: defaulted, died, recovered, transferred | | | | | | | |
| Source | IPD | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

### C1.2.5 Proportion of children aged 6-59 months who received vitamin A supplementation

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of children aged 6–59 months who received a dose of vitamin A supplement | | | | | | |
| Formula | Total number of children aged 6-59 months who received a dose of vitamin A supplementation in the reporting period | | | | | | X100 |
| Estimated number of children aged 6-59 months | | | | | |
| Interpretation | Supplementation with vitamin A is considered to be a critically important intervention for child survival owing to the strong evidence that exists for its impact on reducing child mortality. Therefore, measuring the number of children who have received vitamin A is crucial for monitoring coverage of interventions towards the child survival-related Millennium Development Goals and Strategies. Vitamin A doses given for treatment purpose should not be counted as supplementation. | | | | | | |
| Disaggregation | None | | | | | | |
| Source | Service delivery tally (for HP), Growth monitoring register, Immunization register; ICCM/IMNCI Register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Monthly | monthly | monthly | Monthly | Monthly | Monthly | Monthly |

### C1.2.6 Proportion of children aged 2-5 years de-wormed

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of children aged 2-5 years de-wormed. | | | | | | | |
| Formula | The number of children aged 2-5yrs who received two doses of albendazole/ mebendazole | | | | | | X 100 | |
| Estimated number of children aged 2-5 years | | | | | |
| Interpretation | Supplementation with albendazole/ mebendazole (de-worming) is considered to be a critically important intervention for prevention of anemia in children that has an impact on reducing child mortality. Therefore, measuring the proportion of children who have received two doses of albendazole/ mebendazole (de-wormed) is crucial for monitoring coverage of interventions. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Service delivery tally (for HP), Growth monitoring Register, ICCM/IMNCI Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Annual | Annual | Annual | Annual | Annual | Annual | | Annual |

#### 

## C1.3 Hygiene and Environmental Health

There are 3 indicators in the hygiene and environmental health category; both are analyzed quarterly.

### C1.3.1 Proportion of households’ access to latrine facilities

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of households’ access to any type of latrine facilities | | | | | | | |
| Formula | *Number of households with any type of latrine facilities (both unimproved and improved)* | | | | | | X 100 | |
| *Total number of households* | | | | | |
| Interpretation | Use of latrines is known to reduce the morbidity of communicable diseases, particularly those transmitted by the fecal oral route, such as diarrhea, hepatitis, etc. Access to a latrine must be accompanied by appropriate utilization and availability of hand washing facilities after use. This is usually assessed by survey; in Ethiopia, routine visits to each household by Health Extension Workers (HEWs) offer an alternative method to surveys.  Improved latrine = Hand washing facility + Slab + Ventilation pipe (superstructure)  Unimproved: = simple pit latrine without ventilation | | | | | | | |
| Disaggregation | * Improved latrine * Unimproved latrine | | | | | | | |
| Source | Service delivery tally (for HP), | | | | | | | |
| Frequency of reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Quarterly | Quarterly\* |  | Quarterly | Quarterly | Quarterly | | Quarterly |

\****N.B. HC aggregates reports received from HPs & sends to WorHO .***

### C1.3.2 Proportion of HHs using latrine

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of households that use latrine for defecation purpose properly | | | | | | | |
| Formula | Number of households utilizing latrines properly | | | | | | X100 | |
| Total number of HHs with latrine in the catchment area | | | | | |
| Interpretation | Use of latrines is known to reduce the morbidity of communicable diseases. This is particularly true of diseases transmitted by fecal oral route such as diarrhea and evidenced when there is feces in pit, visible access, absence of spider webs, absence of feces around household or pit latrine, and a well maintained superstructure. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Administrative record | | | | | | | |
| Frequency of report | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Quarterly | Quarterly\* |  | Quarterly | Quarterly | Quarterly | | Quarterly |

\****N.B. HC aggregates reports received from HPs & sends to WorHO .***

### C1.3.3 Kebele declared ‘Open Defecation Free’

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of kebeles declared open defecation free | | | | | | |
| Formula | *Number of kebeles that have been declared open defecation free* | | | | | | x100 |
| *Total number of kebeles* | | | | | |
| Interpretation | Open defecation free(ODF) indicates the entire community (households, schools, religious institutions, etc.) stopped the practice of open defecation and continues to maintain this status for at least three months showing almost no indication of reverting to this practice. For this purpose, the rigorous verification and certification procedures are followed before kebeles are declared ODF.  Village coordination committee requests kebele for verification of ODF status, proper practice of hand washing and household water handling at their respective villages. Similarly, kebele CLTS Coordination Committee requests woredas for verification of ODF status, proper practice of hand washing and household water handling at home in their respective kebele (HH and institution). | | | | | | |
| Disaggregation | None | | | | | | |
| Source | Administrative Record | | | | | | |
| Frequency of reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Quarterly |  | Quarterly | Quarterly | Quarterly | Quarterly |

## C1.4. Prevention and Control of Diseases

The Disease Prevention and Control indicators are classified into three categories: All diseases, communicable diseases, and non-communicable diseases. There are 53 Disease Prevention and Control indicators; 23 are analyzed monthly, and 27 analyzed quarterly, and 3 are analyzed annually.

Facility based morbidity and mortality rates for specific diseases are available as needed from disease reports compiled monthly at facilities and forwarded to woredas/subcities, zones, regions, and FMOH. Case counts for morbidity are the sum of outpatient department (OPD) diagnoses and inpatient department (IPD) discharge diagnoses. To avoid double counting, OPD diagnoses are reported only if the patient is not admitted.

### C1.4.1 All diseases

There are 3 indicators in the “all” diseases category; all are analyzed monthly.

##### C1.4.1.1Top 10 causes of morbidity

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The ten leading causes of morbidity per 1,000 population | | | | | | |
| Formula | Number of new OPD + IPD Cases from specific diseases | | | | | X 1,000 | |
| Total population in the catchment area | | | | |
| Interpretation | Provides evidence regarding priorities for planning and resource allocation. The top ten causes should be listed, from highest to lowest. The total number of cases seen at OPD and IPD and the cases per 1,000 should also be included for comparison. | | | | | | |
| Disaggregation | Age: 0-4, 5-14, >=15  Sex: Male, Female | | | | | | |
| Source | Outpatient (OPD) registers, Inpatient register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

##### C1.4.1.2 Top 10 causes of institutional mortality

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The ten leading causes of mortality | | | | | | | |
| Formula | *Number of IPD deaths from specific disease* | | | | | X100 | | |
| *Total number of admissions* | | | | |
| Interpretation | The top ten causes can be derived from the annual totals of monthly IPD deaths reported. This provides evidence regarding priorities for planning and resource allocation. The top ten causes should be listed, from highest to lowest. The total number of IPD deaths and the case fatality rate should also be included for comparison with other locations. While deaths are reported monthly, the top ten are calculated annually, based on the sum of monthly totals. | | | | | | | |
| Disaggregation | Age: 0-4, 5-14, >=15  Sex: Male, Female | | | | | | | |
| Source | In-patient registers. | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | | Monthly | Monthly |

##### C1.4.1.3 Inpatient mortality rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Patient deaths before discharge per 100 patients admitted. | | | | | | | |
| Formula | *Number of inpatient deaths* | | | | X100 | | | |
| *Total number of Discharges* | | | |
| Interpretation | Provides rough evidence regarding quality of care when compared with other facilities. Caution should be exercised, however. The level and location of a facility may affect its case mix. The inpatient mortality rate is calculated as the number of IPD deaths divided by the number of IPD admissions in the facility during a given time period. The number of deaths can be known from the monthly totals of IPD deaths reported. The inpatient mortality rate can be estimated at all levels except at the Health Post. | | | | | | | |
| Disaggregation | Age: 0-4, 5-14, >=15  Sex: Male, Female | | | | | | | |
| Source | In-patient registers. | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | | Monthly | Monthly | Monthly |

### C1.4.2 Communicable diseases

There are 45 routine HMIS indicators in the communicable diseases category; 16 are analyzed monthly, 27 quarterly, and 2 annually. The communicable disease category is further divided into five categories: HIV/AIDS, TB, Leprosy, TB/HIV co-infection, Malaria, and Neglected Tropical Diseases (NTDS).

##### C1.4.2.1 HIV/AIDS

There are 14 indicators related to HIV/AIDS; 13 indicators are reported on monthly basis and 1 annually.

**C1.4.2.1.1 Number of individuals tested and counseled for HIV and who received their test results**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of individuals who have been tested for HIV and who received their test results | | | | | | | |
| Formula | Number of individuals who have been tested for HIV and who received their results | | | | | | |  |
| Interpretation | This indicator is intended to monitor trends in the uptake of HIV testing and counseling services over time, regardless of how testing and counseling services are delivered. Data should be generated by counting the total number of individuals who received HIV testing and counseling from any service delivery point. Service delivery points could include fixed health care facilities such as, hospitals, public and private clinics, OPD, VCT, ANC, L&D, PMTCT, or TB sites; standalone sites such as free standing sites not associated with medical institutions; and, mobile testing such as, HIV T&C services offered in a specific location for a limited period of time, e.g. outreach, door-to-door services, and workplace testing events. All individuals receiving T&C should be counted in this indicator regardless of where the service is provided. These individuals will include TB patients, pregnant women, and infants. Adequately collecting data for this indicator requires a minimum provision of the following services: counseling, testing, returns, and receipt of test results | | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+;  HIV test result: Positive  Test modalities (VCT, PICT)  Sex: Male, Female | | | | | | | |
| Source | VCT register, PITC tally | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.2 . Number of PLHIV newly enrolled in pre-ART care**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of adults and children with HIV infection newly enrolled and receiving pre-ART care | | | | | | | |
| Formula | Number of adults and children with HIV infection newly enrolled in pre-ART care | | | | | | |  |
| Interpretation | This indicator suggests the progress in providing pre-ART care to all people with HIV infection. Adults and children living with HIV should receive a comprehensive package of services to improve the quality of life, extend life and delay the need for antiretroviral therapy. Care and support programs in a facility can include a broad range of services related to the specific clinical needs of HIV-positive persons and may include both assessment of the need for interventions (for example assessing pain, clinical staging, and eligibility for Co-trimoxazole, or screening for tuberculosis) or food by prescription etc. Data for this indicator can be generated by counting the number of adults and children who received at least one of the following services: Clinical assessment (WHO staging) or CD4 count or viral load (regardless of the number of service provision episodes) in a health facility during the reporting period. Provision of ART is not counted in this indicator. | | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+  Sex: Male; Female | | | | | | | |
| Source | Pre ART Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.3 HIV positive persons receiving co-trimoxazole prophylaxis**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of adults and children enrolled in HIV care and eligible for co-trimoxazole (CTX) prophylaxis (according to national guidelines) who are currently receiving CTX prophylaxis | | | | | | |
| Formula | Number of HIV positive persons receiving CTX prophylaxis | | | | | | X 100 |
| Estimated number of HIV positive patients enrolled to care and eligible to CTX according to national guideline | | | | | |
| Interpretation | This indicator permits monitoring trends in the numbers and proportion of HIV positive persons receiving CTX prophylaxis. This indicator attempts to track progress in scale-up of CTX to HIV-positive individuals in a country. Individuals should be considered to be “receiving” CTX prophylaxis if CTX has been prescribed and obtained by the patient (provided by a program or procured by the patient). The indicator does not attempt to capture interruptions in drug availability or patient adherence to prescribed therapy. The reports will need to be interpreted in the context of national policies. | | | | | | |
| Disaggregation | None | | | | | | |
| Source | Pre ART and ART register, PMTCT register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

**C1.4.2.1.4 Number of PLHIV ever started on ART**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Cumulative number of adults and children with advanced HIV infection started on antiretroviral therapy | | | | | | | |
| Formula | Number of adults and children with advanced HIV infection ever started on ART | | | | | | |  |
| Interpretation | The indicator measures scale-up of the ART program. The number is generated by counting the number of adults and children who are started on ART including those patients that are transferred out. It refers to the number of patients ever started on ART as NEW at the reporting facility, and does not include patients who transfer in. Patients who transfer out, or are categorized as DROP, DEAD, LOST or STOP, are not subtracted | | | | | | | |
| Disaggregation | Age: .<1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+  Sex: Male, Female  Pregnancy: Non pregnant and Pregnant | | | | | | | |
| Source | ART Register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.5 . Number of**  **adults and children receiving Anti-Retroviral Therapy (ART) (CURRENT)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of adults and children with HIV infection receiving antiretroviral therapy | | | | | | | |
| Formula | Number of adults and children with HIV infection who are currently receiving ART in accordance with the nationally approved treatment protocol at the end of the reporting period | | | | | | |  |
| Interpretation | The current on ART count should equal the number of adults and children with HIV infection who ever started ART minus those patients who are not currently on treatment at the end of the reporting period. Data for this indicator is generated by counting the number of adults and children who are currently receiving ART in accordance with the nationally approved treatment protocol at the end of the reporting period. Patients who have died, stopped treatment, transferred out or are lost to follow-up (patient not seen for 3 months from last visit) are NOT counted. Patients on ART who initiated or transferred in during the reporting period should be counted. ART taken only for the purpose of prevention of mother-to-child transmission (provided with the intention to stop at the end of the breastfeeding period) and post-exposure prophylaxis are not included in this indicator. | | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-14, 15+  Sex: Male; Female  Regimen: 1st line, 2nd line | | | | | | | |
| Source | ART Register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

#### 

**C1.4.2.1.6 Number of adults and children with HIV infection newly started on ART**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of adults and children with HIV infection newly started on antiretroviral therapy during the reporting period | | | | | | | |
| Formula | Number of adults and children with HIV infection newly started on ART during the reporting period | | | | | | |  |
| Interpretation | The indicator measures the ongoing scale-up and up-take of ART programs. This measure is critical to monitor, along with number of patients currently on ART in relation to the number of PLHA that are estimated to be eligible for treatment, to assess progress in the program’s response to the epidemic in specific geographic areas and population as well as at the national level.  This indicator permits the monitoring of trends in initiation but does not attempt to distinguish between different lines or regimens of ART or to measure the cost, quality or effectiveness of treatment provided. These will each vary within and between countries and are liable to change over time.  Since age and pregnancy status change over time, the comparison of NEW, CUMULATIVE, and CURRENT clients by age and pregnancy status is challenging. CURRENT is a state defined by vital/treatment status when last seen, so it is expected that characteristics of these clients would be updated each time they are seen by a program. On the contrary, NEW and CUMULATIVE are states defined by beginning in a program, and it is expected that the characteristics of new and cumulative clients are recorded at the time they newly initiate or transfer into a program and will remain at that same status over time. | | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+  Sex: Male, Female  Pregnancy: Non pregnant and Pregnant | | | | | | | |
| Source | ART Register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.7 Survival on ART**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percent of adults and children with HIV known to be alive and on treatment 12 months after initiation of antiretroviral therapy (survival at 12 months) | | | | | | | |
| Formula | *Number of adults and children still alive and on ART at 12 months after initiating treatment* | | | | | | | X100 |
| *Total number of adults and children who initiated ART in the 12 months prior to the beginning of the reporting period, ,* including those who have died, those who have stopped ART, and those lost to follow-up [NET CURRENT COHORT] | | | | | | |
| Interpretation | High proportion of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy is one important measure of program success and is a proxy for overall quality of the program.  *The Numerator: Number of adults and children still alive and on ART at 12 months after initiating treatment*. A 12-month outcome is defined as the outcome (i.e. whether the patient is still alive and on ART, dead or lost to follow-up) 12 months after starting. The numerator does not require patients to have been on ART continuously for the 12-month period. Patients may be included in the numerator (and denominator) if they have missed an appointment or drug pick-up or temporarily stopped treatment during the 12 months since initiating treatment, as long as they are recorded as still being on treatment at month 12. On the contrary, those patients who have died, stopped treatment, or been lost to follow-up as of 12 months since starting treatment are not included in the numerator. The number of adults and children on ART at 12 months includes patients who have transferred in (and their initiation date is known) at any point from initiation of treatment to the end of the 12-month period and excludes patients who have transferred out during this same period to reflect the net current cohort at each facility.  *The denominator: Number of adults and children in the ART start-up groups initiating ART at 12 months prior to the end of the reporting period. .*The denominator is the total number of adults and children in the (monthly) ART start-up groups who initiated ART at a point 12 months prior to the beginning of the reporting period, regardless of their 12-month outcome. This includes all patients, both those on ART as well as those who are dead, have stopped treatment or are lost to follow-up at month 12. Again the denominator includes patients that have transferred in (and their initiation date is known) and excludes patients that transferred out during the time period. Only sites that have been operational for at least 24 months prior to the end of the reporting period should report, so that all sites report on the same 12 ART start-up groups. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | ART Register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.8 Percentage of ART patients with an undetectable viral load at 12 month after initiation of ART**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of adult and pediatric patients on ART with an undetectable viral load <1,000 copies/ml at 12 months. | | | | | | | |
| Formula | Number of adult and pediatric patients with an undetectable viral load <1,000 copies/ml at 12 months | | | | | | | X 100 |
| Number of adults and children who initiated ART in the 12 months prior to the beginning of the reporting period with a viral load count at 12 month visit. | | | | | | |
| Interpretation | This indicator could provide information that can contribute to quality improvement activities designed to maximize rates of viral suppression in patients on ART and therefore prevent the acquisition of HIV drug resistance. The increasing ART coverage in resource-limited settings in the absence of routine viral load monitoring is raising concerns about the development of resistance to first-line ART regimens, long-term individual patient outcomes, and increased risk of transmission of HIV, including drug-resistant HIV. To sustain the progress made in reducing morbidity and mortality from HIV through ART, it is important that HIV-infected patients continue to have access to safe, tolerable, and potent ARVs. To accomplish this, the use of viral load testing to monitor HIV treatment will need to be expanded. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | ART and PMTCT registers | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.9 Proportion of clinically undernourished People Living with HIV (PLHIV) who received therapeutic or supplementary food**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of individuals receiving therapeutic or supplementary food among those whose nutritional status was assessed and found to be clinically undernourished | | | | | | | |
| Formula | Number of clinically undernourished PLHIV that received therapeutic or supplementary food | | | | | | | X 100 |
| Number of PLHIV that were nutritionally assessed and found to be clinically undernourished. | | | | | | |
| Interpretation | The purpose of this indicator is to assess progress toward providing therapeutic and supplementary food to clinically undernourished PLHIV that receive therapeutic or supplementary food. Provision of therapeutic and supplementary food to undernourished PLHIV is a key component of treatment, care, and support for PLHIV. Undernutrition significantly increases mortality risk for HIV-infected individuals regardless of treatment status. Therapeutic and supplementary foods are essential and proven interventions to manage and treat undernutrition. Programs in several countries provide food support to clinically undernourished clients, including therapeutic food products for severely undernourished PLHIV and supplementary food products for moderately and mildly undernourished PLHIV.  The indicator enables the scale and coverage of these services to be tracked and monitors the extent to which these services are reaching those that need them. Provision of therapeutic and supplementary food is generally accompanied by other nutrition services, such as nutrition assessment & counseling;measuring coverage of therapeutic and supplementary food is a strong indicator of the extent to which the larger package of nutrition care services is reaching PLHIV. | | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-14, 15-19, 20+  Sex: Male/Female  Pregnancy status: Non pregnant and Pregnant  ART status: ART/No ART | | | | | | | |
| Sources | Pre-ART register, ART register and PMTCT registers | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.1.10 Number of HIV-positive adults and children currently receiving clinical care**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of HIV positive adults and children who received at least one of the following during the reporting period: clinical assessment (WHO staging) OR CD4 count OR viral load | | | | | | |
| Formula | Number of HIV positive adults and children who received at least one of the following during the reporting period: clinical assessment (WHO staging) OR CD4 count OR viral load | | | | | | |
| Interpretation | This indicator is designed to monitor receipt of perhaps the most basic clinical service for PLHIV – i.e. a basic assessment of clinical and immune status. The services defined above – WHO staging, CD4 count, and viral load – represent “proxy” measures for such an assessment; these were selected because many programs routinely track these services in existing systems (e.g. pre-ART or ART registers). All HIV-positive individuals should receive a regular, periodic assessment of clinical and immune status, in addition to other essential services such as assessment for symptoms of tuberculosis or need for OI prophylaxis or ART. This indicator applies to all PLHIV receiving clinical care, including those who have not yet started ART (in pre-ART phase), as well as those on ART; it also applies to PLHIV receiving PMTCT services. | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+  Sex: Male; Female | | | | | | |
| Sources | Pre-ART register, ART register and PMTCT registers | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

**C1.4.2.1.11 Number of HIV-positive adults and children newly enrolled in clinical care**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of HIV-positive adults and children newly enrolled in clinical care during the reporting period who received at least one of the following at enrollment: clinical assessment (WHO staging) OR CD4 count OR viral load | | | | | | |
| Formula | Number of HIV-positive adults and children newly enrolled in clinical care during the reporting period who received at least one of the following at enrollment: clinical assessment (WHO staging) OR CD4 count OR viral load | | | | | | |
| Interpretation | This indicator is intended to monitor the linkage between HIV testing and counseling and clinical care programs. It can be used in comparison with other program indicators to evaluate the quality of care and determine the linkage to care within HIV programs. This can be accomplished by comparing the overall number of those ‘**newly’** testing HIV positive and the number **newly** enrolled in clinical care within a specified time period.  On a program level, it may be possible to track the linkage of individual patients, if appropriate linkage & referral tools exist within the system. | | | | | | |
| Disaggregation | Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+  Sex: Male; Female | | | | | | |
| Sources | Pre-ART register, ART register and PMTCT registers | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

**C1.4.2.1.12 Number of persons provided with Post-exposure prophylaxis (PEP)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of persons provided with post-exposure prophylaxis (PEP) for risk of HIV infection through occupational and/or non-occupational exposure to HIV. | | | | | | |
| Formula | *Number of persons provided with post-exposure prophylaxis (PEP) for risk of HIV infection as per the national guideline.* | | | | | | |
| Interpretation | Individuals should be counted only if they have received PEP drugs (in accordance with national protocols).This indicator does not intend to capture the type and quality of PEP services provided. PEP services include first aid, counseling, testing, provision of ARVs, medical care, trauma counseling, linkages with police, and other follow-up and support. Simple monitoring of PEP availability through program records does not ensure that all PEP-related services are adequately provided to those who need them. The indicator can be generated by counting the number of individuals receiving PEP for occupational and non-occupational purposes. Individuals should be counted only one (1) time, not incidence.  *PEP services for occupational exposure include* a comprehensive package of services for occupationally exposed health care workers and patients. Individuals should be counted only if they have received PEP drugs.  *PEP services for non-occupational exposure include* for sexual violence and should be counted only if they have received PEP drugs. | | | | | | |
| Disaggregation | Exposure type: Occupational, Non occupational | | | | | | |
| Source | Post exposure prophylaxis register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

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**C1.4.2.1.13 Health Facilities Providing ART that Experienced Stock-Outs of at least one required ARV**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of health facilities dispensing ARVs that experienced a stock-out of at least one required ARV in the last 12 months | | | | | | | |
| Formula | Number of health facilities dispensing ARVs that experienced one or more stock-outs of at least one required ARV drug in the last 12 months | | | | | | | X100 |
| Total number of health facilities dispensing ARVs | | | | | | |
| Interpretation | This indicator captures a crucial component of the ART program: whether or not there is a continuous, uninterrupted supply of ARV drugs at the health facility level. This indicator does not, however, provide information on why stock-out problems occur; which ARV drug(s) are/were out of stock; or how long the stock-out lasted for a particular ARV drug. It also does not provide information on the quality of ARV drug storage, delivery, and distribution. Simply monitoring stock-outs could be misleading because a facility may keep reserve stock, but may have a policy of not issuing the reserve stock. These facilities would not be counted as having experienced a stock-out using this indicator definition, though from a patient perspective, a required ARV drug would not be available for treatment. In settings where reserve stock is not issued during ARV stock-outs, it is preferable to collect information on a functional stock-out (i.e., the inability to access or make use of a required ARV drug). | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Program records; Logistics Management Information System (LMIS) | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Annually | Annually | Annually | Annually | Annually | Annually | |

**C1.4.2.1.14 Percentage of HIV infected women on HIV care and using a modern family planning method**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of HIV infected women using a modern family planning method | | | | | | | |
| Formula | Number of HIV infected women on HIV care andaged 15-49 reporting the use of any method of modern family planning | | | | | | | X 100 |
| Total number of HIV infected non-pregnant women on HIV careaged 15-49 | | | | | | |
| Interpretation | This indicator is a subset of contraceptive prevalence rate, but focuses specifically on HIV-infected women to measure progress in prong 2 (“prevent unwanted pregnancies among women living with HIV”) of the four prongs of PMTCT. Contraceptive prevalence rate serves as a proxy measure of access to reproductive health services that are essential for meeting many of the Millennium Development Goals, especially those related to child mortality, maternal health, HIV/AIDS, and gender equality.  All women, irrespective of HIV status, need services that can help them make informed reproductive decisions and provide them with contraceptive options, if and when they are desired. By enabling women living with HIV to prevent or delay pregnancy, access to these services could avert HIV infection in infants, reduce unintended exposure to maternal mortality risk and improve child survival.  Preventing unintended pregnancies in women living with HIV is a critical step towards reducing mother-to-child transmission and is a core component of the international standards for a comprehensive approach to PMTCT. | | | | | | | |
| Disaggregation | Age:15 - 19, 20–24, 25–49 years | | | | | | | |
| Sources | ART register, Pre-ART register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.4.2.2 Tuberculosis

There are 16 indicators for TB including MDR TB; all of which are analyzed quarterly.

**C1.4.2.2.1Tuberculosis case detection rate (all forms)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of all forms of TB *(New and relapse)* cases detected during a specified time period. | | | | | | | |
| Formula | Number of all forms of TB (New and Relapse cases detected during reporting period) | | | | | | | X100 |
| Estimated number of all forms of TB cases in the population during the same period\* | | | | | | |
| Interpretation | TB case detection rate is one of the key indicators in evaluating the effectiveness of TB control. The highest priority in TB control is the identification of the infectious cases, i.e. patients with sputum smear-positive pulmonary tuberculosis (PTB+). However, identification and treatment of all forms of TB cases, i.e. patients with sputum smear-positive and smear negative pulmonary tuberculosis (PTB-) and extra-pulmonary tuberculosis (EPTB) and other previously treated TB cases with unknown and undocumented treatment outcome is important to measure the burden of the disease and to monitor the effectiveness of the treatment program. TB case detection rate is calculated as the number of newly detected all forms of TB cases (including relapses) divided by the total number of TB cases estimated to occur in the area during a given time period. The denominator is provided by annual WHO-Estimates . | | | | | | | |
| Disaggregation | Age: 0-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65+ ,Unknown  Sex: Male, Female  Types of TB : New and Relapse bacteriologically Confirmed (Smear microscopy, Culture, or WRD such as Xpert MTB/RIF)  : New clinically diagnosed( Pulmonary TB negative, Extra Pulmonary TB), | | | | | | | |
| Source | Unit TB Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.2 Tuberculosis re-treatment rate**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The Proportion of re-treatment TB Cases (Relapse, Treatment –after -failures Treatment –after -lost to follow up & other previous treated with unknown or undocumented treatment outcome) among all forms of TB cases detected in the reporting period | | | | | | | |
| Formula | Total number of retreatment TB cases | | | | | | | X100 |
| Total number of all forms of TB cases registered during reporting period | | | | | | |
| Interpretation | This indicator represents the percentage of TB patients who require more extensive treatment and should be suspected of having acquired drug resistance. Ineffective treatment or incorrect administration of medication may result in a large proportion of retreatment cases, which points to deficiencies in the medication used and/or non adherence to DOTS on the part of patients and providers. This indicator indirectly reveals the effectiveness of the National TB Program, since under a well-functioning TB control program, retreatment cases should make up a smaller proportion than new cases. Additionally, relapse is more likely in patients with HIV, so the indicator should be interpreted in light of HIV prevalence. | | | | | | | |
| Disaggregation | Sex: Male, Female  Type: Treatment after Relapse, treatment after Failure, treatment after lost to follow up cases, other previously treated cases | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.3 Cure rate for bacteriologically confirmed new PTB cases (CR)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The percentage of a cohort of new bacteriologically confirmed PTB cases that were cured as demonstrated by bacteriologic evidence in the reporting period. | | | | | | | |
| Formula | number of cohort of new bacteriologically confirmed TB cases registered during specified cohort period and cured | | | | | | | X100 |
| total number of new bacteriologically confirmed PTB cases registered in the same cohort period | | | | | | |
| Interpretation | TB cases recorded as cured must have a negative sputum smear result recorded during the last month of treatment and on at least on one previous occasion during treatment. This indicator measures the program’s capacity to retain patients through a complete course of chemotherapy with a favorable clinical result. TB cure rate is the key indicator in evaluating the effectiveness of TB control. TB treatment cure rates can be calculated at all Health Centers and hospitals that provide DOTS services. Cure rate at woredas, regions, and FMOH can also be calculated by aggregating the reported data from health facilities that provide DOTS. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.4 Treatment Success Rate (TSR) among bacteriologically confirmed NEW PTB cases**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of new bacteriologically confirmed PTB cases registered during specific cohort period that successfully completed treatment (cured plus completed treatment). | | | | | | | |
| Formula | Number of cohort of new bacteriologically confirmed PTB cases registered during the same period of the previous year that were cured plus the number completed treatment | | | | | | | X100 |
| Total number of New bacteriologically confirmed PTB cases registered during the same cohort period | | | | | | |
| Interpretation | Successful completion entails clinical success with or without bacteriological evidence of cure. This indicator measures the program’s capacity to retain patients through a complete course of chemotherapy with a favorable clinical result. Treatment success rate measures the effectiveness of the program in settings where it may not be possible to perform a sputum test at the completion of treatment. The TB treatment success can be estimated and monitored at Health Centers and hospitals that provide DOTS services, Woredas, regions, and FMOH. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Unit TB Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.5 Treatment success rate among clinically diagnosed new TB cases**

#### 

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of clinically diagnosed (EPTB and P/ Negative TB) cases who completed treatment | | | | | | | |
| Formula | Number of clinically diagnosed cohort of TB cases registered during the same period of the previous year that completed the treatment | | | | | | | X100 |
| The total number of new clinically diagnosed TB cases registered during the same cohort period | | | | | | |
| Interpretation | As this group of TB patients accounts for about 60-70% of all TB cases notified annually, the status of their treatment outcome should be assessed. The only favorable treatment outcome for this group of patients is completing the whole course of anti TB treatment. Thus, this indicator measures the program’s capacity to retain all patients through a complete course of chemotherapy with a favorable clinical result. High treatment completion rate indicates the effectiveness of the program as well as completion of TB treatment with favorable clinical result. TB treatment completion rate for EP and P/Negative TB cases can be estimated at all Health Centers and hospitals that provide DOTS services. Treatment success rate at woredas, regions, and FMOH can also be calculated by aggregating the reported data from health facilities that provide DOTS. New clinically diagnosed TB cases refer to EPTB and P/negative TB cases | | | | | | | |
| Disaggregation | EPTB and PTB Negative | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.6 Death rate among all forms of TB cases**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The percentage of a cohort of new all forms of TB cases registered in a specified period that died during treatment, irrespective of the cause. | | | | | | | |
| Formula | The number of new all forms of TB cases registered in the same period of the previous year that died during treatment, irrespective of the cause | | | | | | | X100 |
| The total number of new all forms of TB cases registered during the same cohort period | | | | | | |
| Interpretation | This indicator indicates the quality and effectiveness of the treatment. This indicator is significant in the context of HIV prevalence, since a high proportion of HIV-associated TB will result in greater number of deaths. This is one of the important indicators used to evaluate the progress of the country towards achieving the MDGs. The target in the MDG is to reduce TB deaths by half by 2015 compared to the 1990 level. TB death rates can be estimated at all Health Centers and hospitals that provide DOTS services, woredas, regions, and FMOH. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.7 Lost to follow up rate among all forms of TB cases**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The percentage of a cohort of new all form of TB cases (Bacteriologically confirmed, clinically diagnosed) registered in a specified period that interrupted treatment for more than 2 consecutive months | | | | | | | |
| Formula | The number of all forms of TB cases registered in the specific cohort period that interrupted treatment for more than two consecutive months | | | | | | | X100 |
| The total number of new all forms of TB cases registered during the same cohort period | | | | | | |
| Interpretation | This indicator measures the capacity of the program to retain patients through a complete course of chemotherapy. The TB lost to follow up rate can be estimated at all Health Centers and hospitals that provide DOTS services, woredas, regions, and FMOH. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Unit TB Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.8 TB case detection through community TB care**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Total TB cases (all forms) referred by the community as proportion of all TB cases notified during reporting period | | | | | | | |
| Formula | Number of notified TB cases (all forms) referred by the community to a health facility for TB diagnosis during the reporting period | | | | | | | X100 |
| Total number of TB cases (all forms) diagnosed during the same period | | | | | | |
| Interpretation | The indicator is intended to measure the extent of community involvement in TB-related issues. Efficient community involvement translates into early detection of cases, one of the main and most effective strategies for reducing the transmission of TB. The community in the context of community TB care refers to trained community volunteers, Health Development Army, health extension workers or, community members supporting patients(treatment supporter) | | | | | | | |
| Disaggregation | Sex: Male, Female | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.9 Proportion of TB cases (all forms) provided treatment observation (DOT) by community among all TB cases.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of TB cases (all forms) provided treatment observation (DOT) by the  Community among all TB cases. | | | | | | | |
| Formula | Number of Cohort TB cases (all forms) given DOT by the community during a specified period | | | | | | | X100 |
| The total number of cohort TB cases(all forms) registered during the same cohort period | | | | | | |
| Interpretation | Evidence has shown that community-based treatment results in treatment success rates comparable to or higher than those of hospital- or facility-based treatment. In settings with high-quality implementation, the vast majority of patients choose community-based treatment. The indicator therefore is intended to measure the scope and quality of implementation of community involvement as well as the acceptability of the initiative to patients with TB. The data for calculating this indicator should be reported along with treatment outcome report for the same cohort | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.10 Proportion of AFB Microscopy centers (HF) with adequate EQA performance**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of facilities participating in EQA that showed concordance of 95% on EQA blind rechecking results | | | | | | | |
| Formula | Number of AFB Microscopy Centers (HC and Hospitals) with 95% concordance result on EQA blind rechecking during the previous quarter | | | | | | | X100 |
| Total number of laboratory with AFB Microscopy service (Hospital and HCs) that are participated on EQA during the same quarter | | | | | | |
| Interpretation | This indicator is a measure of adequacy of performance on EQA for AFB microscopy services. The numerator is the number of AFB microscopy centers (health facilities) with concordance results of 95% and above on EQA blinded rechecking during the previous quarter. The denominator is the total number of AFB microscopy centers that participated in EQA blind rechecking and received written EQA feedback from respective EQA center during the previous quarter.  This indicator should be collected in quarterly basis. This indicator will be compiled at the woreda health office by counting the number of HF that participated in EQA for TB microscopy and that have documented feedback report in the previous quarter. The woreda health office should keep copy of EQA feedback.  Laboratories are expected to achieve and maintain AFB microcopy services to a high quality level of >=95% concordance result on blind rechecking (percentage of AFB slides with same result with second reader i.e. >=95%).  The woreda health office should retain a copy of the EQA feedback report of each health facility and this can be used as a source of information for the indicators. The second option to compile this indicator is by checking the copy of the feedback report documented at each laboratory unit. | | | | | | | |
| Disaggregation | Ownership: pubic, private | | | | | | | |
| Source | Administrative record with facilities self reporting | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.2.11 Proportion of TB cases (all forms) contributed by private sector**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | TB cases (all forms) contributed through referral and / or diagnosis by private sector (all types of private and nongovernmental) | | | | | | | |
| Formula | Number of TB cases (all forms) referred &/or diagnosed through private health facilities during the reporting period | | | | | | X100 | |
| Total number of TB cases (all forms) registered during reporting period. | | | | | |
| Interpretation | This indicator measures the contribution of the private sector in detecting all forms of TB cases. A patient diagnosed at a private facility and referred to a public facility for diagnosis and/or initiation of anti TB treatment should be considered as a private contribution and be included in the numerator.  Private health facilities include hospitals and clinics run by nongovernmental organizations and faith-based organizations. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | TB Unit Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | | Quarterly |

**C1.4.2.2.12 Proportion of presumptive MDR TB cases with result for drug susceptibility testing (DST)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of presumptive MDR TB for whom DST is performed during the specified period | | | | | | |
| Formula | *Number of presumptive MDR TB for whom DST is performed for at least rifampicin during previous reporting Quarter* | | | | | | |
| *Total number presumptive TB cases eligible for DST during previous reporting quarter* | | | | | | |
| Interpretation | Culture and drug susceptibility tests (DST) for rifampicin and isoniazid are indicated for patients suspected to harbor drug-resistant TB strains. The group of patients eligible for DST are new TB cases who are smear *positive at end of 3 months*, *all retreatment TB cases* (*Relapse, after lost to follow up, after failure of new regimen, after failure of re treatment regimen)* and presumptive TB who have contact with confirmed MDR-TB cases.  This indicator measures the availability and access to diagnostic drug susceptibility testing for at least rifampicin. Early detection of resistance is intended to ensure an appropriate drug regimen from the start and presumably increase likelihood of success and alleviate amplification of resistance patterns. Limited resources usually mean that DST is reserved for patients considered at increased risk of drug resistance.  This indicator can be estimated on a quarterly basis at the hospital and health center level only if they have eligible cases during reporting period. Since DST eligible group of patients are very few in number at the lower levels (Health center, Hospital and WoHOs), it is better to monitor the indicator using the absolute number. At ZoHO, RHBs and national level proportion can be used to estimate these indicators. | | | | | | |
| Disaggregation | Sex: Male, Female  Age: < 15, >=15yrs | | | | | | |
| Source | Unit TB register | | | | | | |
| Frequency of  Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |

**C1.4.2.2.13** **Number of MDR TB cases detected**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The Number of MDR/RR-TB cases detected during the reporting period | | | | | | |
| Formula | Number of MDR/RR-TB cases detected during reporting period | | | | | | |
| Interpretation | Culture and Drug susceptibility tests (DST) for rifampicin and isoniazid are indicated in patients suspected to harbor drug-resistant TB strains. This indicator is useful to estimate the burden of MDR-TB in the country. Furthermore, it helps national TB control program for planning of MDR-TB treatment expansion, forecasting, quantification and procurement of SLDs and reagents. This group of patients are all eligible for second-line drugs TB treatment and ideally should be number enrolled to SLDs | | | | | | |
| Disaggregation | Sex: Male ,Female  Type: RR, MDR  Age: <15, >= 15 | | | | | | |
| Source | Unit TB register | | | | | | |
| Frequency of  Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |

**C1.4.2.2.14 MDR-TB cases enrolled on Second Line Drugs (SLDs)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of MDR/RR-TB cases started on second-line anti-TB treatment regimen during the reporting period | | | | | | |
| Formula/ | Number of MDR/RR-TB cases registered and started on a prescribed MDR-TB treatment regimen during reporting period | | | | | | |
| Interpretation | This indicator measures the capacity of programs to enroll MDR/RR-TB cases on appropriate treatment. The program manager is responsible for ensuring that all cases in which MDR/RR-TB is detected are placed on appropriate treatment in the shortest time possible. Early detection of resistance is intended to ensure a correct drug regimen from the start and lower risks of further amplification of drug resistance.  A comparison of the number of enrolled MDR-TB cases to those detected gives an indication of access to care. It is a crude indicator given that patients started on treatment during a given period may have been detected prior to the period of assessment. The number of confirmed MDR/RR-TB cases detected will be collected through MDR-TB surveillance system. | | | | | | |
| Disaggregation | Sex: Male, Female  HIV status: Positive, Negative , Unknown HIV Status  Registration group: New, Previously Treated, Unknown Treatment History | | | | | | |
| Source | DR TB Register | | | | | | |
| Frequency of  Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |

### 

**C1.4.2.2.15** **MDR TB Treatment six month interim result**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | A cohort of MDR-TB cases for whom six month interim result has been determined ( negative, positive, died, LTFU, and not evaluated) among those enrolled on second-line anti-TB treatment during the year of assessment | | | | | | |
| Formula | Number of cohort of MDR-TB cases enrolled on second-line anti-TB treatment for whom six month Interim result ( negative, died, LTFU and not evaluated) has been determined during reporting period | | | | | | X 100 |
| Number of MDR-TB cases initiated on second-line anti-TB treatment regimen during a same cohort period. | | | | | |
| Interpretation | Treatment for MDR-TB typically takes two years or more. The Program manager often needs an indication of how patients are managing well before final outcomes can be assessed, typically two to three years after the start of enrolment. This is particularly important when a drug-resistant TB treatment Program starts. Assessing culture conversion (for confirmed pulmonary cases) and death by six months is widely used as a proxy of final outcomes. Information on lost to follow up cases by 6 months is helpful. It is also useful to know how many patients started on second-line drugs for MDR that turned out not to be MDR. And likewise for XDR.  All patients registered and starting treatment during the period of assessment are included in the calculation. Indicators are measured nine months after the end of the quarter of assessment. This gives sufficient time for culture results at month 6 to be issued and retrieved. | | | | | | |
| Disaggregation | Interim outcome: Negative culture result, Positive culture result ,Died, Lost to follow up, Not evaluated | | | | | | |
| Source | MDR-TB Register. | | | | | | |
| Frequency of  Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | quarterly | quarterly |

**C1.4.2.2.16** **Final outcome MDR-TB cases**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | A cohort of MDR-TB cases for whom final outcome (cured, completed, failed, died, lost to follow up, not evaluated) has been determined among those  enrolled on second-line anti-TB treatment during the year of assessment | | | | | | |
| Formula | Number of cohort of MDR-TB cases enrolled on second-line anti-TB treatment during reporting period for whom final outcome has been determined | | | | | | X100 |
| Total number of MDR-TB cases enrolled on second-line anti-TB  treatment during the same cohort period | | | | | |
| Interpretation | This report shows the final treatment outcomes for patients enrolled in the MDR-TB Program showing overall success of the program over a full treatment regimen cycle. The annual report should be completed 24 and 36 months after the last patient in the cohort starts treatment. Most of the patients will have finished treatment by 24 months and this allows preliminary assessment for one of six outcomes: cured; treatment completed; failed; lost follow up; died; and not evaluated. Since a few patients may be on treatment for longer than 24 months, the form is completed again at 36 months after the last patient in the cohort starts treatment. The 36-month evaluation will then considered the final result. The final report is prepared by using data from the MDR-TB register kept at the TICs | | | | | | |
| Disaggregation | By outcome: Cured, Completed, Failed, Died, Lost to follow up, Not evaluated | | | | | | |
| Source | MDR-TB Registers. | | | | | | |
| Frequency of  Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly |

## 

##### C1.4.2.3 Leprosy

There are 3 indicators related with Leprosy all of which are analyzed quarterly.

**C1.4.2.3.1 Leprosy case notification**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of new leprosy cases detected among eligible population | | | | | | | |
| Formula | Total number of leprosy cases detected during reporting period | | | | | | X10,000 | |
| Estimated number of population in the catchment area | | | | | |
| Interpretation | The number of leprosy cases reflects on the performance of the leprosy control program. Active case-finding campaigns, whether directed towards the total population of an area or towards specific groups (such as school children), will lead to the detection of more cases than if a program depends upon self-reporting by people who suspect they may have the disease. It has also been shown that the number of cases detected increases with the frequency of examinations: very frequent examinations will identify a number of self-healing cases that would otherwise never have come forward. | | | | | | | |
| Disaggregation | Age: 0-14, >=15  Sex: Male, Female  Type: Paucibacillary, Multibacillary | | | | | | | |
| Source | Leprosy register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | | Quarterly |

**C1.4.2.3.2 Grade II disability rate among new cases of leprosy**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of new cases of leprosy with disability grade II at the time of diagnosis. | | | | | | | |
| Formula | Total number of new leprosy cases having disability grade II at time of diagnosis during reporting period | | | | | | X100 | |
| Total number of new leprosy cases detected during the same period | | | | | |
| Interpretation | This indicator measures the quality and effectiveness of the case-finding activities. A high disability rate among new cases signals that cases are detected late during the course of the disease. If the rate is high, it is essential to strengthen case-finding activities and develop health education in order to encourage the population to seek treatment before disabilities appear. | | | | | | | |
| Disaggregation | Age :<15 ;>=15  Sex: Male, Female | | | | | | | |
| Source | Leprosy register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | | Quarterly |

**C1.4.2.3.3 Leprosy treatment completion rate**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of a cohort of leprosy cases registered in a specified period that successfully completed the treatment. | | | | | | | |
| Formula | The number of leprosy cases registered for treatment and completed treatment successfully during specified cohort period | | | | | | | X100 |
| The total number of leprosy cases registered during the same *cohort period* | | | | | | |
| Interpretation | Treatment completion rate (both for PB and MB types of leprosy) measures the program’s capacity to retain patients through a complete course of chemotherapy with a favorable clinical result. | | | | | | | |
| Disaggregation | Type: PB, MB | | | | | | | |
| Source | Leprosy register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

##### C1.4.2.4 TB/HIV

There are 5 HMIS indicators related to TB/HIV co-infection; all are analyzed quarterly.

**C1.4.2.4.1 HIV screening for TB patients**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of TB patients enrolled in DOTS who are tested for HIV | | | | | | | |
| Formula | The number of TB patients enrolled in DOTS who are tested for HIV in the quarter | | | | | | X100 | |
| The total number of TB patients enrolled in DOTS during the same period | | | | | |
| Interpretation | This indicator measures the HIV status among TB patients. TB is the leading cause of morbidity and mortality among people living with HIV. Ensuring that TB patients receive HIV testing and counseling services should be a high priority. Knowledge of HIV status enables HIV-positive TB patients to access the most appropriate HIV prevention, treatment, care and support services. Ideally, all TB patients with unknown HIV status should be offered an HIV test, and preferably within the context of the TB service provider, in which case the HIV test can be recorded in the patient record and the TB register. Patient confidentiality must be maintained.   1. Where HIV counseling and testing is carried out in a different part of the same facility or even at a distant site, the TB program needs to record when a TB patient is referred for an HIV test and receives the result. 2. TB patients should preferably be tested at the start of TB treatment so that they can benefit from appropriate care throughout TB treatment. 3. The numerator should include all TB patients who were previously known to be HIV-positive (documented evidence of enrolment in HIV care) or their negative HIV result from previous testing acceptable to the health care provider (such as performed in the past 3–6 months in a reliable laboratory).   This indicator measures the combined services’ ability to ensure that TB patients know their HIV status under program conditions. | | | | | | | |
| Disaggregation | Sex: male , female,  HIV status: HIV positive, Negative , Unknown | | | | | | | |
| Source | Unit TB Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | | Quarterly |

**C1.4.2.4.2 TB Screening for HIV positive Clients**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of clients enrolled in HIV care whose TB status was assessed and recorded during their last visit | | | | | | | |
| Formula | *Number of clients enrolled in HIV care whose TB status was assessed and recorded in their last visit during the reporting period* | | | | | | | X100 |
| *Total number of adults and children enrolled in HIV care and seen for care in the reporting period.* | | | | | | |
| Interpretation | This indicator is intended to provide information on the proportion of HIV positive patients in HIV care and treatment who are screened for TB at last visit. This indicator measures the burden of known TB co-morbidity among people in HIV care. It may be used in drug supply planning for ART drug substitution in people treated for TB.  An increase in this indicator suggests that a higher proportion of HIV patients are being screened for TB and other increased efforts such as: developing a standard screening algorithm, training HIV staff, revising cards/registers, etc. A decrease in this indicator suggests that a lower proportion of PLWH are being screened for TB and change in policy or program. For example, a turnover in trained staff, decreased supervision visits, shortage of screening tools, etc.  Enrolled in care includes all those continuing in care and those newly enrolled during the reporting period. The numerator is taken from the pre-ART and ART registers by counting the number of patients whose TB status was assessed during the reporting period. Any patients who started on ART during the reporting period should be counted in the ART register, not in the pre-ART register.  For pre-ART patients, the denominator is those seen for care during the reporting period; For ART patients, the denominator is those current on ART during the reporting period.  The denominator is taken from the pre-ART and ART registers by counting the number of patients with a visit during the reporting period. | | | | | | | |
| Disaggregation | Sex: Male, Female | | | | | | | |
| Source | Pre-ART and ART register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.4.3 Anti-Retroviral Therapy (ART) for HIV positive TB patients**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of HIV-positive TB patients who are started on or continue previously initiated ART during their TB treatment, expressed as a proportion of all HIV-positive TB patients. | | | | | | | |
| Formula | *All HIV-positive TB patients, registered over the reporting period, who*  *Received ART (are started on or continue previously initiated ART).* | | | | | | | X100 |
| *Total number of HIV-positive TB patients registered during the reporting Period.* | | | | | | |
| Interpretation | This is an outcome indicator to measure commitment and capacity of TB services to ensure that HIV-positive TB patients are able to access ART, measure the degree to which health-care providers encourage ART as a part of routine care, and the success of TB and ART health services in referring, managing and tracking registered TB patients eligible for ART (i.e. the strength of the referral process).    In settings where TB patients are referred to chronic HIV care unit or other care services to be assessed and started on ART, a system must be established to ensure that the TB Program is informed of the outcome of the referral, i.e. whether or not TB patients are started on ART or not. The information on outcome of the referral should be recorded in the TB register (TB/HIV columns). This is important not only for Program management but also for individual patient care. TB Program personnel need to be aware of a TB patient starting on ART so that they can manage drug reactions and interactions appropriately.  ART significantly improves the quality of life, reduces morbidity, and enhances the survival of people with advanced HIV infection or AIDS. HIV-positive TB patients are one of the largest groups who are likely to benefit from ART, and efforts should be made to identify and treat those who are eligible. | | | | | | | |
| Disaggregation | Sex: male , female  Age: 0-4, 5-14, 15+  Previously known HIV Positive; newly tested HIV-positive | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.4.4 INH Preventive therapy (IPT) for HIV positive clients**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of the total number of newly enrolled HIV-positive people started on IPT during the reporting period | | | | | | | |
| Formula | Total number of HIV positive individual newly enrolled in HIV care who started on (are given at least one dose of) IPT during reporting period | | | | | | | X100 |
| Total number of IPT eligible HIV positive clients newly enrolled in to HIV care during the reporting period. | | | | | | |
| Interpretation | IPT is provided to ensure eligible HIV-positive individuals are given treatment for latent TB infection and thus to reduce the incidence of TB in people living with HIV.  People living with HIV should have their TB status assessed at each scheduled visit. Those found not to have evidence of active TB will be offered TB preventive therapy according to nationally guidelines. All those accepting TB preventive therapy and receiving at least the first dose of treatment should be recorded. This information is recorded in a column in pre-ART and ART registers. The proportion of clients likely to start IPT depends on the health care providers’ capacity to rollout active TB using standard screening algorithm and the type of facility at which HIV diagnosis is made.  **N.B**. Number of clients who will not meet the eligibility criteria for IPT should be excluded from denominator counting. For example, patients with active TB or on TB treatment at time of enrollment to HIV care should be excluded from the denominator. This indicator can be estimated and monitored at HC and Hospital level, woreda, zone, region and national level on a quarterly basis.  The program should aim to achieve more than 60% in starting isoniazid *preventive* therapy for the eligible group as this indicator does not capture some group of patients may be started on IPT lately after reporting period | | | | | | | |
| Disaggregation | Age : <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-49, 50+  Sex: Male, Female | | | | | | | |
| Source | Pre-ART register, ART register, PMTCT register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

**C1.4.2.4.5 Co-trimoxazole preventive therapy during TB treatment for PLHIV**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of HIV-positive TB patients who are started on or continue previously initiated CPT during reporting period expressed as a proportion of all HIV-positive TB patients registered over the same period. | | | | | | | |
| Formula | Number of HIV-positive TB patients, registered over the reporting  period, starting or continuing CPT treatment during reporting period | | | | | | | X100 |
| Total number of HIV-positive TB patients registered during the reporting period. | | | | | | |
| Interpretation | To monitor commitment and capacity of programs to provide CPT to HIV-positive TB patients, It is important for programs to know the proportion of HIV-positive TB patients who receive this potentially lifesaving therapy. The numerator should include TB patients who may have been identified as HIV-positive and who were started on CPT before being diagnosed with TB. These data are reported along with the quarterly case finding data. The use in the definition of the clarifying statement – that patients be given at least one dose of CPT – is intended to capture all patients who have been assessed and started on treatment. It does not imply that one dose of CPT is sufficient.  CPT reduces morbidity and mortality among HIV-positive TB patients. This indicator measures the degree to which TB services are able to ensure that HIV-positive TB patients receive CPT. | | | | | | | |
| Disaggregation | Sex: Male, Female | | | | | | | |
| Source | Unit TB register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | |

##### C1.4.2.5 Malaria

There are 5 indicators related to malaria; 3 indicators are analyzed monthly and 2 are analyzed annually.

**C1.4.2.5.1 Morbidity attributed to malaria**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Malaria cases per 1,000 population | | | | | | | |
| Formula | Number of new malaria OPD + IPD cases (All malaria cases, of any species, should be included – whether clinical or laboratory diagnosis.) | | | | | | X1,000 | |
| Total population in the catchment area | | | | | |
| Interpretation | Malaria case counts are quite sensitive and are specific indicators for probability of an epidemic. According to EPC guidelines, malaria cases should be plotted and reviewed weekly. When the epidemic threshold is reached, the higher level should be notified and more frequent monitoring may be required. Followed over years, the trends in morbidity should show the effects of improved prevention and control efforts. Compared across geographic locations, malaria morbidity can help identify priority areas for intervention. Disaggregated by species, the morbidity patterns can suggest the emergence of increasing drug resistance. | | | | | | | |
| Disaggregation | Age: 0-4, 5-14 >=15;  Sex: Male, Female;  Diagnosis: clinical, confirmed (*P. falciparum* /*P. vivax/Mixed*) | | | | | | | |
| Source | Family folder. Outpatient/ inpatient registers | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | monthly |

**C1.4.2.5.2 Facility-based malaria deaths**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of all deaths due to malaria (according to confirmed malaria diagnosis) | | | | | | | |
| Formula | *The total number of all inpatient deaths with laboratory-confirmed (RDT/Microscopy) malaria* | | | | | | | X100 |
| *Total number of deaths reported at health facilities during*  *the reporting period* | | | | | | |
| Interpretation | This indicator indicates the contribution of malaria to the total deaths in the facility. Further investigation should be done if the percentage of malaria deaths among the total deaths is increasing. | | | | | | | |
| Disaggregation | Age: 0-4, 5-14 >=15  Sex: Male, Female | | | | | | | |
| Source | Inpatient register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

**C1.4.2.5.3 Malaria positivity rate**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Percentage of slides or rapid diagnostic tests (RDT) found positive among all slides and rapid diagnostic tests performed. | | | | | | | |
| Formula | *Number of slides or RDT positive for malaria* | | | | | | X100 | |
| *Total number of slides or RDT performed for malaria diagnosis* | | | | | |
| Interpretation | The slides or RDT positivity rate assesses the proportion of slides/RDT positive for malaria among slides or RDT from patients with fever. The slide or RDT positivity rate is usually computed for a specified period of case detection activities. In areas with unstable malaria, an increasing slide or RDT positivity rate by 50% is one of the warning signs of a possible epidemic. | | | | | | | |
| Disaggregation | Age:0-4,5-14,15+  Sex: Male, Female | | | | | | | |
| Source | Laboratory register, service delivery tally at HP | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

**C1.4.2.5.4 Proportion of targeted HH covered with LLIN in the last 12 months**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of targeted HHs covered with LLINs in the last 12 months | | | | | | | |
| Formula | Number of targeted HHs that received at least one ITN in the last 12 months in targeted districts | | | | | | | X100 |
| Total number of HHs that need ITN in the last 12 months in targeted districts | | | | | | |
| Interpretation | Insecticide-treated nets are one of the principal strategies for preventing malaria. Insecticide-treated nets have been shown to reduce malaria-related morbidity and mortality in areas with high and moderate endemicity. Although this indicator is meant to be the one, among the service delivery indicators, closest to predicting bed net ownership and usage within households, it should not be equated with indicators which are to be measured through household surveys. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Service delivery tally | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Annually | Annually\* |  | Annually | Annually | Annually | Annually | |

\*N.B. HC aggregates reports received from HPs & sends to WorHO.

**C1.4.2.5.5 Proportion of unit structures covered by indoor residual spraying (IRS)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of unit structures in IRS targeted areas that were sprayed in the last 12 months. | | | | | | | |
| Formula | *Number of* unit structures *sprayed* | | | | | | | X100 |
| *Total number of unit structures in the target area for IRS* | | | | | | |
| Interpretation | This indicator is directly related to operations: It indicates the proportion of houses sprayed with insecticide among targeted houses and is useful to measure the increase in the level of prevention of malaria in the entire population. This indicator requires program-level data to be collected about each house sprayed during each spraying event in the target area. Careful attention should be given to identify houses not considered as part of the target area so that they can be excluded from the calculation. Ideally, (1) all dwellings and relevant structures in the target areas should be sprayed; (2) all sprayable surfaces in the dwelling or structure should be covered; (3) insecticide application should be uniform across surfaces; and (4) spraying should be done at intervals consistent with the manufacturer’s guidelines for specific insecticides.  N.B on average one HH is equivalent to 1.5 unit structures | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | Administrative report | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Annually |  |  | Annually | Annually | Annually | Annually | |

##### C1.4.2.6 Neglected tropical diseases

There are 2 indicators for the neglected tropical diseases; both are analyzed quarterly.

**C1.4.2.6.1 Therapeutic Coverage for preventive chemotherapy diseases (PCT)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of individuals, expressed as a percentage, in a targeted population who swallowed a drug or a combination of drugs. | | | | | | | |
| Formula | Number of individuals who swallowed MDA drug for trachoma | | | | | | X 100 | |
| Total eligible population of the catchment area  Number of individuals who swallowed MDA drug for Onchocerciasis  Total eligible population of the catchment area  Number of individuals who swallowed MDA drug for lymphatic filariasis  Total eligible population of the catchment area  Number of individuals who swallowed MDA drug for schistosomiasis  Total eligible population of the catchment area  Number of individuals who swallowed MDA drug for STH  Total eligible population of the catchment area | | | | | |
| Interpretation | This indicator counts the number of persons who swallowed MDA drugs at the community level. The indicator is used to evaluate the number of persons who ingested MDA drugs among the total population who are eligible to take the drugs. The indicator can be used at all levels to report therapeutic coverage quarterly and annually. It evaluates MDA drug coverage of five diseases which can be prevented by chemotherapy (Trachoma/with either azithromycin or tetracycline eye ointment/, onchocerciasis, lymphatic filariasis, schistosomiasis and STH with …?), which can lead to the elimination these targeted diseases. | | | | | | | |
| Disaggregation | Disease type: trachoma, onchocerciasis, lymphatic filariasis, schistosomiasis and Soil transmitting helminthes (STH) | | | | | | | |
| Source | Administrative report | | | | | | | |
| Frequency of reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Quarterly | Quarterly\* |  | Quarterly | Quarterly | Quarterly | | Quarterly |

\*N.B. HC aggregates reports received from HPs & sends to WorHO.

**C1.4.2.6.2 Number of lymph edema cases treated**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of lymph edema cases treated | | | | | | |
| Formula | Number of lymph edema cases treated | | | | | | |
| Interpretation | This includes Lymph edema cases that are treated at all categories of health facilities as it can be screened and simply managed even by health extension workers. It includes lymph edema cases coming from both lymphatic filariasis and podoconiosis. | | | | | | |
| Disaggregation | Type: Lymphatic Filariasis , podoconiosis | | | | | | |
| Source | Family health card, OPD register | | | | | | |
| Frequency of reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Frequency of reporting | quarterly | quarterly | quarterly | quarterly | quarterly | quarterly | quarterly |

### C1.4.3. Non Communicable diseases

There are 5 indicators in the non-communicable disease category; 4 are analyzed monthly and 1 annually.

##### C1.4.3.1 Morbidity attributed to hypertension

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of adults 15+ years *newly diagnosed* with hypertension | | | | | | |
| Formula | *Number of adults 15 years and above newly diagnosed with hypertension (OPD+IPD)* | | | | | | X 100 |
| *Estimated number of adults in the catchment area* | | | | | |
| Interpretation | Hypertension is defined in a clinical setting when the mean blood pressure is equal to or above 140/90 on two or more measurements on each of two or more visits in separate days. Raised blood pressure is a major risk factor for coronary heart disease and ischemic as well as hemorrhagic stroke. It also results in heart failure, peripheral vascular disease, renal impairment, retinal hemorrhage, and visual impairment. The global strategy on the prevention and control of NCDs suggests a 25% reduction in the prevalence of hypertension. However, in many countries like ours significant proportions of individuals are unaware of their blood pressure. This indicator permits monitoring trends in the number and proportion of patients with hypertension. Following morbidity due to hypertension at health facilities will show health seeking behavior of the community. Further, it indicates prevention, counseling and treatment services at health facilities which further contribute to avoiding cardiovascular complications. Treating systolic blood pressure and diastolic blood pressure to targets that are greater than 140/90 is associated with a decrease in cardiovascular complications. The prevalence of hypertension in Ethiopia is estimated to be between 8-31%. Cardiovascular diseases are among the top 10 causes of mortality based on Health and Health Related Indicators 2004. WHO recommends drug therapy for prevention and control of heart attacks and strokes because it is feasible, high impact and affordable, even in low- and middle-income countries. | | | | | | |
| Disaggregation | Sex: Male Female | | | | | | |
| Source | OPD register, IPD register | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | Monthly | Monthly | monthly | monthly | monthly | monthly |

##### C1.4.3.2 Morbidity attributed to diabetes mellitus

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | *Newly diagnosed* Diabetes mellitus cases per 1,000 population | | | | | | | |
| Formula | *Number of newly diagnosed diabetes mellitus cases(OPD+IPD)* | | | | | | | X 1,000 |
| *Total population in the catchment area* | | | | | | |
| Interpretation | Diabetes is defined as fasting plasma glucose ≥7.0 mmol/L (126, mg/dl). The chronic hyperglycemia of diabetes mellitus is associated with significant long term sequelae, particularly damage, dysfunction and failure of various organs – the kidneys, eyes, nerves, heart and blood vessels. Lowering of plasma glucose towards normal values relieves symptoms of hyperglycemia and has a beneficial effect on macro vascular and micro vascular complications. Diabetes, impaired glucose tolerance and impaired fasting glycaemia are risk categories for future development of diabetes and cardiovascular disease. WHO recommends drug therapy for prevention and control of heart attacks and strokes because it is feasible, high impact and affordable, even in low- and middle-income countries. IDF estimates that the prevalence of diabetes in Ethiopia is 1.9%. One of the targets of HSDP IV is to halt the incremental change in prevalence of type 2 diabetes mellitus. More than 50% of patients with type2 diabetes are unaware of their blood glucose level. This indicator permits monitoring trends in the number and proportion of patients with diabetes. Following morbidity due to diabetes at health facilities will show health seeking behavior of the community. Further it indicates prevention, counseling and treatment efforts which further contribute to avoid macro vascular and micro vascular complications. | | | | | | | |
| Disaggregation | Age 0-4 years, 5-14 yrs, 15 +  Sex Male Female | | | | | | | |
| Source | OPD register, IPD register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

### 

##### C1.4.3.3 Morbidity attributed to asthma

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | *Newly* Asthma cases per 1,000 population | | | | | | | |
| Formula | *Number of patients newly diagnosed with asthma* | | | | | | | X 1,000 |
| *Total population within the catchment area* | | | | | | |
| Interpretation | Asthma comprised one of the major chronic respiratory diseases. Its effects include reduced quality of life, lost productivity, missed school days, increased health care costs, and increased risk of hospitalization and even death. Data show that there is progressive increase in incidence and prevalence of asthma. This indicator permits monitoring trends in the number and proportion of patients with asthma. Following morbidity due to asthma at health facilities will show health seeking behavior of the community. Further it indicates health promotion, prevention, care and treatment efforts in the country. | | | | | | | |
| Disaggregation | Age 0-4 years, 5-14 yrs, 15 +  Sex Male Female | | | | | | | |
| Source | OPD register, IPD register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.4.3.4 Cervical cancer screening in women age 30 – 49 using VIA/PAP smear

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of women between ages 30 – 49 screened with VIA for cervical cancer | | | | | | | |
| Formula | *Number of women age 30 – 49 screened with VIA for cervical cancer* | | | | | | | X 100 |
| *Total number of women age 30 – 49 within the catchment area* | | | | | | |
| Interpretation | Cervical cancer screening aims to detect precancerous changes, which, if not treated, may lead to cancer. In resource limited settings, 30 to 49 year old women comprise the target groups because cervical cancer is rare in women under 30. Screening younger women will detect many lesions that are not likely to develop into cancer, which will lead to considerable overtreatment, which is not cost-effective. New Programs should start by screening women aged 30 years or more. Thus, this indicator is intended to monitor trends in provision of counseling and screening services for cervical cancer. Data should be generated by counting the total number of individuals who received screening service at service delivery points (family planning clinics) from health facilities providing the service. There is sufficient evidence that cervical cancer screening can reduce cervical cancer mortality by 80%or more among screened women. Recent developments in technologies adapted to low-resource settings make screening and treatment of cervical pre-cancer lesions feasible and highly cost-effective for all countries. Early detection and treatment of precancerous lesions can result in massive improvements of survival, and are especially important in developing countries where access to expensive cancer treatment is limited. | | | | | | | |
| Disaggregation | By outcome: Normal cervix  Precancerous lesion  Cancerous lesion | | | | | | | |
| Source | FP Register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | |

##### C1.4.3.5 Cataract surgical rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Annual number of cataract operations performed per million population | | | | | | | |
| Formula | *Number of cataract surgeries performed* | | | | | X1,000,000 | | |
| *Total population in the catchment area* | | | | |
| Interpretation | The CSR is a performance indicator: it indicates the extent of the effort to control cataract blindness and allows easy comparison between countries and regions. It is also an indicator for the availability, accessibility and affordability of cataract services. The CSR does not address the quality of surgery nor the proportion of the cataract problem covered. This indicator should help improve training and influence policy. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Source | OR register | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | | RHB | FMOH |
|  | Annually | Annually | Annually | Annually | | Annually | Annually |

### 

# C2. Community Ownership

There are two indicators in this category, 1 analyzed monthly and 1 quarterly.

## C2.1 Proportion of Model households graduated / Households Currently Model

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of current model households graduated by health extension program. | | | | | | | |
| Formula | Number of current model households in the catchment | | | | | | *X100* | |
| Total number of households in the catchment area | | | | | |
| Interpretation | Measures the extent of the households improving their health by implementing the health extension program components. Households graduate after completion of HEP training and implementing all the HEP components in a given catchments area. *Current Model House Holds = (Previously graduated + Newly graduated) – Drop out* | | | | | | | |
| Disaggregation | Previously graduated  Newly graduated  Urban and rural | | | | | | | |
| Sources | Administration report | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Quarterly | Quarterly\* |  | Quarterly | Quarterly | Quarterly | | Quarterly |

\****N.B. HC aggregates reports received from HPs & sends to WorHO .***

## C2.2 Proportion of functional 1 to 5 networks

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of functional 1 to 5 networks in the kebele | | | | | | | |
| Formula | functional 1to 5 networks | | | | | | *X100* | |
| total expected number of 1to 5 networks | | | | | |
| Interpretation | This indicator measures the number of functional 1 to 5 networks out of expected number of 1 to 5 networks in the catchment area. A 1 to 5 network is said to be functional if the following minimum criteria are fulfilled: Received training from HEWs based on the family health guide, has individual and team plan, meets regularly as per the guideline (at least once a week), reports regularly to development team, and actively discuss the health issues. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | *Administration report* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Monthly | Monthly\* |  | Monthly | Monthly | Monthly | | Monthly |

\****N.B. HC aggregates reports received from HPs & sends to WorHO .***

# F1. Resource Mobilization and Utilization

There are 4 indicators for Resource Mobilization and Utilization all of which are analyzed annually.

## F1.1 General Government expenditure on health

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | General government expenditure on health as a percentage of total expenditure on health | | | | | | | |
| Formula | *Total budget allocated to health* | | | | | | *X100* | |
| *Total government budget* | | | | | |
| Interpretation | This indicates the share of the health budget as a proportion of total budget as it is indicated in the government’s budget proclamations (note that in the calculation it is important to take the adjusted budget figure as that is the final figure known by finance offices at all levels of administration).This indicator shows the relative share of health sector budget to the total budget. It illustrates the commitment of the government to the health sector. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | The financial data from MOFED/BOFED/WoFED | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  |  |  | Annually | Annually | Annually | | Annually |

### 

## F1.2 Health budget utilization

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of health budget utilization to allocation. | | | | | | | |
| Formula | *Health budget utilized* | | | | | | *X100* | |
| *Health budget allocated* | | | | | |
| Interpretation | It indicates the capacity to utilize the budget allocated (including internal revenue) in a fiscal year. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | *Health institution financial data and Administrative reports* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Annually | Annually | Annually | Annually | Annually | | Annually |

## F1.3 Share of internal revenue generated

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of the total revenue generated by health facility to the total allocated health budget | | | | | | | |
| Formula | Amount of locally generated revenue | | | | | | *X100* | |
| Total health budget allocated for the respective health facility | | | | | |
| Interpretation | This indicator suggests the availability of locally generated revenue that can be used to supplement government resources for quality improvement. Locally generated revenue is not intended to replace government funds, but to supplement them. (Note that in the interpretation of the ratio one should look into the trend of government budget allocation by way of block grants.) | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | The revenue generated in the respective health facilities are collected monthly from financial records at health centers and hospitals. Information on health budget can also be found at each level. Administrative reports. | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Annually | Annually | Annually | Annually | Annually | | Annually |

## F1.4 Proportion of reimbursed amount out of total patient fees waived

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of patient fees waived that were reimbursed | | | | | | | |
| Formula | Amount of waived fee reimbursed | | | | | | *X100* | |
| Amount of fees waived | | | | | |
| Interpretation | This indicator suggests whether local authorities reimburse health facilities for services provided to poor and vulnerable people. The total fees waived and reimbursed are collected quarterly from financial records at health centers and hospitals. It is reviewed quarterly at the facility, woreda, region, and federal levels. (Note that in the reporting of this indicator there will be a time lag of a quarter, *i.e*. results reported in quarter 2 will reflect quarter 1). | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | *Financial records at health centers and hospitals and Administrative reports* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Annually | Annually | Annually | Annually | Annually | | Annually |

# P1. Quality of health Services

There are 6 indicators for quality of health services all are analyzed monthly.

## P1.1 Outpatient attendance per capita

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Total number of new and repeat outpatient attendances at all types of health facilities (including clinics, specialized clinics, etc). Patients who attend the following services should be INCLUDED in the outpatient count:   * General outpatient clinics * Specialty outpatient clinics (including Dental, Ophthalmic and Psychiatry) * TB clinics * ART clinics * VCT clinics * MCH clinics (EPI, IMCI, well baby clinics, ANC, PNC, family planning etc) * Private wing clinics * Patients attending the emergency department * Patients who attended services at dressing and injection room | | | | | | |
| Formula | *Number of outpatient visits* | | | | | | |
| *Population of the catchment area* | | | | | | |
| Interpretation | Health service utilization reflects the interaction between demand and supply of outpatient care. The use of outpatient services is inversely related to certain barriers that may be physical (distance), economic (cost to patient), cultural (low awareness and health care seeking behavior) or technical (poor quality of health care). | | | | | | |
| Disaggregation | None | | | | | | |
| Source | Service delivery tally (for HP)/OPD register From all General outpatient clinics including Dental, Ophthalmic and Psychiatry, TB clinics, ART clinics, VCT clinics, MNCH clinics [EPI, IMCI, well baby clinics, ANC, PNC, family planning etc], the emergency department, Private wing clinics, injection and dressing tally sheets | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Monthly | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

## P1.2 Admission rate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | | The number of patients admitted (including those transferred from another health facility) during the reporting period per 1,000 population.  INCLUDE all patients admitted to:   * Wards (all patients under the care of the inpatient case team should be included, even if they are admitted to a trolley or stretcher, i.e. do not have a bed) * Clinical facilities (e.g. intensive care units, ophthalmic units) * Neonatal units * Private wing beds   The following should be EXCLUDED:   * Patients in day units/day surgery * Labouring and delivering mothers who are discharged directly from the delivery room (i.e. who are NOT admitted to an inpatient bed) * Healthy babies who are born in the hospital or who accompany their mother | | | | | | | |
| Formula | | *Number of inpatient admissions* | | | | | | X1,000 | |
| *Population in the catchment area* | | | | | |
| Interpretation | | Admission rate reflects the interaction between demand and supply of inpatient care. Like outpatient service utilization, admission rate is inversely related to certain barriers that may be physical (distance), economic (cost to patient), cultural (low awareness and health care seeking behavior) or technical (poor quality of health care). | | | | | | | |
| Disaggregation | | None | | | | | | | |
| Source | | Inpatient register  Private wing registration/admission and discharge book | | | | | | | |
| Frequency of Reporting | HP | | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

## P1.3 Bed occupancy rate

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | | Percentage of occupied beds during the period under review | | | | | | | |
| Formula | | *Total length of stay (in days)* | | | | | | X100 | |
| *(Number of beds available) x (Number of days in period)* | | | | | |
| Interpretation | | BOR reflects the level of utilization of inpatient services. Inpatient services incur a high overhead. In Ethiopia hospitals consume more than 40% of public sector health funds. Inpatient capacity that is greater than demand wastes resources. A low BOR requires investigation. A low BOR may also reflect low quality of service. | | | | | | | |
| Disaggregation | | Facility type: hospital and health center | | | | | | | |
| Source | | Inpatient admission / discharge register. | | | | | | | |
| Frequency of Reporting | HP | | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

## P1.4 Average length of stay

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | | The average length of stay (in days) of patients in an inpatient facility during a given period of time | | | | | | |
| Formula | | *Total length of stay (in days)* | | | | | | |
| *Number of inpatient discharges* | | | | | | |
| Interpretation | | ALOS reflects the appropriate utilization of inpatient services. By monitoring length of stay, hospitals can assess if patients remain in hospital for longer than is necessary, perhaps due to non-clinical reasons, and investigate further if required. | | | | | | |
| Disaggregation | | By Facility type (Hospital and health center) | | | | | | |
| Source | | Inpatient admission / discharge register. | | | | | | |
| Frequency of Reporting | HP | | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  | | Monthly | Monthly | Monthly | Monthly | Monthly | Monthly |

## P1.5 Proportion of blood units utilized from blood bank service

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of blood units utilized by transfusing hospital received from blood bank service | | | | | | | |
| Formula | Total number of units of blood transfused | | | | | | | X 100 |
| Total units of blood received from NBTS & regional blood banks | | | | | | |
| Interpretation | This indicator is a measure of the quality of health care service delivery and also a measure of the capacity of blood banks to supply safe and adequate blood and its products for transfusing facilities in their catchment area. | | | | | | | |
| Disaggregation | By source of blood : Direct family replacement, and blood bank | | | | | | | |
| Sources | Registration books & Hospital transfusion feedback formats | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  |  | Monthly |  |  | Monthly | Monthly | |

### 

## P1.6 Serious adverse transfusion incidents and reactions

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The proportion of serious adverse transfusion incidents and reactions occurred due to blood transfusion | | | | | | | |
| Formula | Number of serious adverse transfusion incidents and reactions occurred | | | | | | X 100 | |
| Total number of transfusion given | | | | | |
| Interpretation | This indicator is a measure of the percentage of safe transfusions in hospitals.  **Serious adverse incident:** A case where the patient is transfused with a blood component that did not meet all the requirements for a suitable transfusion for that patient, or was intended for another patient and that might lead to death or a life-threatening, disabling or incapacitating condition or which results in, or prolongs, hospitalization or morbidity.  A serious adverse incident may be due to transfusion errors or to deviations from standard operating procedures or hospital policies that have led to mistransfusion. It may or may not lead to a serious adverse reaction.  **Serious adverse reaction:** An undesirable response or effect in a patient associated with the administration of blood or blood components that is fatal, life-threatening, disabling or incapacitating or which results in, or prolongs,  Hospitalization or morbidity.  Types of serious adverse reactions are:   * Immunological hemolysis due to ABO incompatibility * Non-immunological hemolysis * Anaphylaxis/hypersensitivity * Transfusion-related acute lung injury (TRALI) * Graft versus host disease * Transfusion-associated HIV-1/2 , HBV , HCV infections * Transfusion-associated circulatory overload * Other serious adverse transfusion reactions | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | Transfusing facilities report | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  |  | Monthly |  |  | Monthly | | Monthly |

# P3. Pharmaceutical Supply and Services

There is 1 indicator in the pharmaceutical supply and is analyzed monthly.

## P3.1 Essential drugs availability

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The number of months in which tracer drug was available averaged over all tracer drugs during the month | | | | | | | | |
| Formula | *∑ (tracer drugs x months available)* | | | | | | | X100 | |
| *∑ tracer drugs x ∑ total number of months in time period* | | | | | | |
| Interpretation | Essential drugs should always be available. Essential drug availability is the proportion of months in the time period under consideration for which given tracer drug was available when needed. The availability can be averaged over several tracer drugs to give a general picture of availability.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Tracer Drugs by Facility** | **H. Center** | **1ry Hosp.** | **Gen. Hosp.** | **3ry Hosp.** | | Amoxicillin 500mg/250 mg Caps/suspension | X | X | X |  | | Arthmeter + Lumfanthrine 20mg+120mg tab | X | X | X |  | | Ciprofloxacin 500mg tablet | X | X | X | X | | Co-trimoxazole tablet/suspension | X | X | X |  | | Ceftriaxone 1gm injection |  | X | X | X | | Mebendazole /Albendazole tab/susp. | X |  |  |  | | Fluconazole capsule/tablate |  |  | X | X | | Metronidazole capsule/suspension | X | X |  |  | | Metronidazole injection |  |  | X | X | | Quinine injection |  |  | X | X | | RHZE-150mg+75mg+400mg+275mg-tablet | X | X | X | X | | E-Z-Km(Am)-Lfx-Eto-Cs |  |  |  | X | | TDF/ZDV+3TC+EFV/NVP adult | X | X | X | X | | Ferrous sulphate + folic acid | X | X |  |  | | Tetracycline eye ointment | X | X |  |  | | Tetanus toxoid vaccine (TT) | X | X |  |  | | Pentavalent vaccine (DTP+HepB+Hib) | X |  |  |  | | Magnesium Sulphate injection | X | X | X | X | | Oxytocin 10units/ml injection | X | X | X | X | | ORS±Zinc sulphate tablet/syrup | X | X |  |  | | Isophen insulin N/R suspension /solution |  | X | X | X | | Hydralazine injection | X | X | X | X | | Nifedipine tablet |  |  | X | X | | Adrenaline (Epinephrine) injection | X | X | X | X | | Aminiphyllin injection | X | X | X | X | | Propranolol tablet |  |  | X | X | | Furosemide injection |  |  | X | X | | Glucose 40% | X | X | X | X | | Dextrose in normal saline/Ringer lactate | X | X | X | X | | Dexamethasone/Hydrocortisone injection |  | X | X | X | | Dopamin/Dobutamin |  |  |  | X | | Atropine (injectable) |  | X | X | X | | Lidocaine (1% or 2% injectable) | X | X |  |  | | Ketamin injection |  | X | X | X | | Morphine injection |  |  | X | X | | Paracetamol 125mg syrup/500mg tablet | X |  |  |  | | Doxorubicin Powder for injection |  |  |  | X | | Cyclophosphamide powder for inj./tab |  |  |  | X | | | | | | | | | |
| Disaggregation | Facility: Health center, Primary Hospital, General Hospital, Tertiary Hospital | | | | | | | | |
| Source | Any month in which a drug unavailability is experienced, even for only 1 day, is reported as a month in which the drug was unavailable when needed. This information is available from records kept at the facility dispensary. | | | | | | | | |
| Frequency of Reporting | | HP | HC/Clinic | Hospitals | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly | Monthly | Monthly | Monthly | Monthly | | Monthly |

# P5. Evidence Based Decision Making

There are 4 indicators in this category; 3 are analyzed monthly and 1 quarterly.

## P5.1 Integrated Supportive supervision

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of supportive supervision visits received, with written feedback provided at the time of supervision | | | | | | | |
| Formula | Number of supervisory visits with written feedback received | | | | | | *X100* | |
| Number of supervisory visits expected per specified time period | | | | | |
| Interpretation | An integrated supportive supervision performed by a team that looks into all aspects of health institutions operations, both clinical and administrative-includes HMIS recording reporting and data quality status. Supervision is one of the tools for performance review and improvement, The number of received supervisory visits is to be reported by the receiving, not the providing, institution. | | | | | | | |
| Disaggregation | Facility type: health post, health center, hospital WorHo, ZHD, RHB | | | | | | | |
| Sources | *Administrative records: supervisory visit log book/HMIS minute book /* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | | Quarterly |

#### 

## P5.2Reporting completeness

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of routine health and administrative reports that were received by the health institution & health administrative level | | | | | | | |
| Formula | *Total number of reports received during a given time period* | | | | | | *X100* | |
| *Total number of reports expected* | | | | | |
| Interpretation | The more complete the data, the better it reflects the services provided in the catchment area. Ideally, 100% completeness is the standard. This standard is not impossible and has been achieved by several regions. The minimum acceptable level of report completeness is 90%. A lower level of completeness compromises the reliability of data. This indicator shows representative completeness (reports received from the total number of reports expected), it does not show content completeness. | | | | | | | |
| Disaggregation | Facility type: health post, health center, hospital,  WoHo, ZHD, RHB | | | | | | | |
| Sources | *HMIS minute book / e-HMIS Report tracker, routine reports submission check sheet* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly |  | Monthly | Monthly | Monthly | | Monthly |

## P5.3Reporting timeliness

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of routine health and administrative reports that were received within the specified time. | | | | | | | |
| Formula | *Number of reports received according to schedule* | | | | | | *X100* | |
| *The number of reports expected.* | | | | | |
| Interpretation | Timeliness refers to the reports received within a defined schedule of a given reporting period. As with completeness, 90% is a minimum level of acceptable timeliness. Late data is of little value in making prompt decisions that really affect performance | | | | | | | |
| Disaggregation | Facility type: health center,  WorHo, ZHD, RHB | | | | | | | |
| Sources | HMIS minute book / e-HMIS Report tracker, routine reports submission check sheet | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  | Monthly |  | Monthly | Monthly | Monthly | | Monthly |

## P5.4 Data quality assurance (LQAS at HF)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Correspondence between data reported and data recorded in registers and patient / client records, as measured by a Lot Quality Assurance Sample (LQAS). | | | | | | |
| Formula | The quality of HMIS data can be estimated using a sample of 12 data elements and comparing the results with a standard LQAS table. Selected elements from the report submitted to the woreda are compared with the tallies and register sums that are the sources these data elements. | | | | | | |
| Interpretation | Discrepancies between data compiled, reported and events recorded in patient / client records are a major source of error and contribute to the poor quality of data.  LQAS provides a quick and reliable method for comparing compiled, recorded and reported data. LQAS is the standard methodology of taking 12 samples from registers/records for comparison with reports. Compiled, recorded and reported data should correspond above 85%with LQAS results. LQAS is relevant to facilities only, where it is used for self-assessment. It is repeated by the supervising institution to corroborate the results.  If a high proportion of the numbers are the same, then the quality of the data can be assumed to be high; if a low proportion is the same, then the quality of the data is low. | | | | | | |
| Disaggregation | None | | | | | | |
| Sources | *Family Folder, Tally sheet, Registers HMIS monthly report* | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| LQAS | Monthly | Monthly | Monthly |  |  |  |  |

# CB1. Health Infrastructure

There are 4 indicators in the Health infrastructure category; all are analyzed annually.

## CB1.1 Functional facility to population ratio

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | The ratio of functional facility to total population . | | | | | | |
| Formula |  | | | | | | |
| Interpretation | Functional facility to population ratio is calculated as the total population in the catchment area divided by the total number of facilities (by type during a given time period) (usually one year). Functional facility to population ratio is an important indicator of equity; it can highlight priority areas. | | | | | | |
| Disaggregation | Facility type: health post, health center, hospital  Ownership: Public, Private | | | | | | |
| Sources | *Administrative report* | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
|  |  |  | Annually | Annually | Annually | Annually |

## CB1.2 Health institutions newly constructed and upgraded

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Number of facilities newly constructed and upgraded/renovated. | | | | | | | |
| Formula | *Number of facilities newly constructed and upgraded* | | | | | |  | |
| Interpretation | Number of facilities newly constructed considers new construction of health facilities within the respective woreda or higher level at a given period of time. Upgrading refers to some level of expanding existing health facility to upgrade the level of service. It indicates upgrading previously existing clinics to health center status and health centers to hospital level by adding required number of blocks etc. Both new construction and upgrading indicates the level of investment in health physical infrastructure. | | | | | | | |
| Disaggregation | Facility type: health post, health center, hospital  Newly constructed, upgraded/renovated | | | | | | | |
| Sources | *Administrative report* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
|  |  |  | Annually | Annually | Annually | | Annually |

### 

## CB1.3 Health institutions with functional infrastructure

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of health institutions with electricity, water supply and functional sanitation facilities. | | | | | | | |
| Formula | *Number of health facilities with electricity, water and sanitation facilities* | | | | | | *x100* | |
| *Total number of health facilities*   1. *Number of health facilities with electricity*   *Total number of health facilities*   1. *Number of health facilities with water supply*   *Total number of health facilities*   1. *Number of health facilities with sanitation facilities*   *Total number of health facilities* | | | | | |
| Interpretation | Health institutions need electricity, water supply and functional sanitation facilities to optimally carry out service. Absence of any of electricity, water and sanitation limits the facility’s scope for diagnosis and treatment. Functional sanitation facilities = placenta pit, incinerator, drainage, latrine. | | | | | | | |
| Disaggregation | Facility type: health post, health center, hospital | | | | | | | |
| Sources | *Administrative report* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Annually | Annually | Annually | Annually | Annually | Annually | | Annually |

## CB1.4 Primary health care coverage

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of population who have access to primary health care | | | | | | | |
| Formula | *(∑HC with 5 satellite HP\*25,000) + (additional HP\*5000)* | | | | | | | *X100* |
|  | *Total population* | | | | | | |
| Interpretation | In the past, primary health coverage has been estimated through facilities’ expected catchment populations. This is a bit theoretical and does not take account of geographic barriers. In addition, care must be taken not to double count the catchment areas of HC and HP. However, taking account of geographical factors to estimate the proximity of villages to the facility requires a complex investigation. It will likely take some time before these geographic considerations can be taken into account. It is a proxy indicator of equity in service access, it provides primary health care coverage estimates: geographical access within 2 hours walking distance and population based, as primary coverage may also be estimated by the theoretical formula that has been used in the past. This formula assumes that a HP covers 5,000 persons and HC 25,000 persons, minus the population covered by HP. One PHCU is for 25,000 people. This helps health coverage planning in both rural and urban contexts. In terms of time needed to reach the health facility, 10 km can be equated to two hours of traveling time. | | | | | | | |
| Disaggregation | None | | | | | | | |
| Sources | *Administrative report* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
|  |  |  | Annually | Annually | Annually | Annually | |

# CB2. Human Capital and leadership

There are 4 indicators in the Human Resources category; all are analyzed annually.

## CB2.1 Health staff to population ratio by category

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Health Staff to population ratio by category (doctor, health officer, nurse, midwife, pharmacist, laboratory, ESO, anesthesia and health extension worker). | | | | | | | |
| Formula | *1:* | *Total population* | | | | | | |
| *Total number of health workers at the end of the year (by category)* | | | | | | |
| Interpretation | Adequate staffing indicates appropriateness and regularity in service provision and also suggests access to services. It can suggest priority areas for increasing staff according to equity standards. However, care should be used in its interpretation; population densities and geographic conditions are also powerful influences on staffing needs. Staffs who left for trainingshould be counted | | | | | | | |
| Disaggregation | Health worker: Doctor, Health Officer, Nurse, Midwife, Pharmacist, Laboratory , ESO, anesthesia and health extension worker  Disaggregation by sex: Male/Female | | | | | | | |
| Sources | *Facility personnel records, Administrative reports* | | | | | | | |
| Frequency of Reporting | HP | | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Annually | | Annually | Annually | Annually | Annually | Annually | Annually |

## CB2.2 Health staff skills mix

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Distribution of HRH by occupation, specialization or other skill related characteristics | | | | | | |
| Formula | *Number of physicians, nurses , and midwives(or other categories of health service providers)* | | | | | | |
| *Total number of health workers* | | | | | | |
| Interpretation | Adequate staffing indicates appropriateness and regularity in service provision and also suggests access to services. It can suggest priority areas for increasing staff according to equity standards. However, care should be used in its interpretation; population densities and geographic conditions are also powerful influences on staffing needs. | | | | | | |
| Disaggregation | Health worker: doctor, health officer, nurse, midwife, pharmacy, laboratory , ESO and Anesthesia and health extension worker | | | | | | |
| Sources | *Facility personnel records, Administrative reports \*\** | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH |
| Annually | Annually | Annually | Annually | Annually | Annually | Annually |

## CB2.3 Health professional attrition rate

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of health professional staff leaving a health institution in a given period of time | | | | | | | |
| Formula | *Number of staff leaving (by category)* | | | | | | *X100* | |
| *Total number of staff at the beginning of the year* By category | | | | | |
| Interpretation | Attrition rate is measured annually, by category *(doctor, midwife, health extension worker)*. It is the difference between the staff at the beginning of the year and at the end of the year. This indicator suggests potential priority locations for staff deployment and strengthening. High attrition rate affects smooth flow of service provision and it can also affect the quality of service delivery. Attrition rate is calculated as the total number of staff leaving divided by the total number of staff at the beginning of the period in the catchment area during a given time period (usually one year). | | | | | | | |
| Disaggregation | Health workers: doctor, health officer, nurse, midwife, and health extension workers | | | | | | | |
| Sources | *Facility personnel records, Administrative reports \*\** | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | | FMOH |
| Annually | Annually | annually | Annually | Annually | Annually | | Annually |

### 

## CB2.4 Facilities staffed as per the standard

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Definition | Proportion of health facilities (Hospital, Health Center & Health post) staffed as per the standards | | | | | | | |
| Formula | *Number of health institutions meeting staffing standard for particular category* | | | | | | | *X100* |
| *Total number of Facilities* | | | | | | |
| Interpretation | Monitoring the recruitment of newly trained health workers into the national health labor market is critical in order to reduce inefficiencies in the hiring system, identify potential gaps between supply and demand for health workers, and monitor achievements in health workforce planning. | | | | | | | |
| Disaggregation | Health workers: doctor, ESO, health officer, nurse, midwife, HEWs | | | | | | | |
| Sources | *Administrative report* | | | | | | | |
| Frequency of Reporting | HP | HC/Clinic | Hospital | WorHO | ZHD/ ScHO | RHB | FMOH | |
| Annually | Annually | Annually | Annually | Annually | Annually | Annually | |

## Annex 1: HMIS Indicators by Level and Frequency of Collection

|  | | **Monthly** | | | | | | | **Quarterly** | | | | | | | **Annually** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **HF** | | | **Admin** | | | | **HF** | | | **Admin** | | | | **HF** | | | **Admin** | | | |
|  | | **HP** | **HC/Clinic** | **Hosp** | **WorHO** | **ZHD/ScHO** | **RHB** | **FMOH** | **HP** | **HC/Clinic** | **Hosp** | **WorHO** | **ZHD/ScHO** | **RHB** | **FMOH** | **HP** | **HC/Clinic** | **Hosp** | **WorHO** | **ZHD/ScHO** | **RHB** | **FMOH** |
| **Total Indicators: 122** | | | | | | | | | | | | | | | | | | | | | | |
| **C1 Access to health service : Total indicators: 97** | | | | | | | | | | | | | | | | | | | | | | |
| **C1.1 Maternal and Child health : Total indicators: 35** | | | | | | | | | | | | | | | | | | | | | | |
| **C1.1.1 Maternal Health ; Total indicators: 13** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Contraceptive Acceptance Rate | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Antenatal Care Coverage – First Visit | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Antenatal Care Coverage – Four Visit | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Percentage of pregnant women attending antenatal care clinics tested for Syphilis |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Proportion of births Attended by Skilled Health Personnel |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Proportion of births Attended by health extension workers at health posts | X | X |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Early Postnatal Care Coverage | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Caesarean Section Rate |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Number of women receiving comprehensive abortion care services |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Institutional Maternal Death Rate |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Number of maternal death in the community | x | x |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Stillbirth Rate | x | x | x | x | x | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Proportion of kebeles declared "home delivery free" | x | x |  | x | x | x | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C1.1.2 PMTCT ; Total indicators: 7** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Percentage of pregnant and lactating women who were tested for HIV and who know their results |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Number of HIV Positive pregnant and lactating women who received ART at ANC+L&D+PNC for the first time based on option B+. |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Number of HIV-positive pregnant women who were on ART and linked to ANC |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Percentage of infants born to HIV infected women receiving a virological test for HIV within 12 months of birth |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Percentage of Infants born to HIV-infected women started on co-trimoxazole prophylaxis within two months of birth |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Percentage of infants born to HIV-infected women receiving antiretroviral (ARV) prophylaxis for prevention of mother-to-child transmission (PMTCT |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Percentage of HIV exposed infants receiving HIV confirmatory (antibody test) test by 18 months |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C1.1.3 Child Health: Total Indicators: 15** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | DPT1-HepB1-Hib1 (pentavalent First dose) immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | DPT3-HepB3-Hib3 (Pentavalent third dose) immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Pneumococcal conjugated vaccine first dose (PCV1) immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Pneumococcal conjugated vaccine third dose (PCV3) immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Rotavirus vaccine first dose (Rota1) immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Rotavirus vaccine second dose (Rota2) immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Measles immunization coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Full Immunization Coverage (< 1 year) | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Proportion of infants protected at birth against neonatal tetanus | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Vaccine Wastage Rate | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Early institutional neonatal death rate |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Neonatal death rate at community | x | x |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Proportion of children treated for pneumonia | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Proportion of newborns treated for Sepsis |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | Proportion of newborns treated for asphyxia at health facility |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C1.2 Nutrition: Total Indicators: 6** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Percentage of Low birth weight newborns | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Percentage of underweight Children aged <5 years | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Proportion of children 6 - 59 months with severe acute malnutrition | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Treatment outcome for management of severe acute malnutrition in children 6-59 months |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Proportion of children aged 6-59 months who received vitamin A supplementation | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Proportion of children aged 2-5 years de-wormed | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C1.3 Hygiene and Environmental Health - Total indicators: 3** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Proportion of households’ access to latrine facilities |  |  |  |  |  |  |  | X | X |  | X | X | X | X |  |  |  |  |  |  |  |
| 2 | Proportion of HHs using latrine |  |  |  |  |  |  |  | X | X |  | X | X | X | X |  |  |  |  |  |  |  |
| 3 | Kebele declared "Open Defecation Free' |  |  |  |  |  |  |  | X | X |  | X | X | X | X |  |  |  |  |  |  |  |
| **C1.4 Prevention and Control of Diseases: Total indicators: 53** | | | | | | | | | | | | | | | | | | | | | | |
| **C1.4.1 All Diseases: Total Indicators: 3** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Top 10 Causes of Morbidity | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Top 10 Causes of Institutional Mortality |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | In patient mortality rate |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C1.4.2 Communicable Diseases: Total indicators: 45** | | | | | | | | | | | | | | | | | | | | | | |
| **C1.4.2.1 HIV/AIDS: Total indicators: 14** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Number of individuals Tested and counseled for HIV and who received their test results |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Number of PLHIV newly enrolled in Pre-ART care |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | HIV positive persons receiving co-trimoxazole prophylaxis |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Number of ever started on ART |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Number of adults and children receiving antiretroviral therapy (Currently on ART) |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Number of adults and children with HIV infection newly started on ART |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Survival on ART |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Percentage of ART patients with an undetectable viral load at 12 month after initiation of ART |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Proportion of clinically undernourished People Living with HIV (PLHIV) who received therapeutic or supplementary food |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Number of HIV-positive adults and children Currently receiving clinical care |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | Number of HIV-positive adults and children newly enrolled in clinical care |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Number of persons provided with Post-exposure prophylaxis (PEP) |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Health Facilities Providing ART that Experienced Stock-out of at least one required ARV |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 14 | Percentage of HIV infected women using a modern family planning method |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C1.4.2.2 Tuberculosis: Total indicators: 16** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Tuberculosis case detection rate (All forms) |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 2 | Tuberculosis re-treatment rate |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 3 | Cure rate for bacteriologically confirmed new PTB cases (CR) |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 4 | Treatment Success Rate (TSR) among bacteriologically confirmed PTB cases |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 5 | Treatment success among of clinically diagnosed new TB cases |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 6 | Death rate among all forms of TB cases |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 7 | Lost to follow up rate among all forms of TB |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 8 | TB case Detection through community TB care |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 9 | Proportion of TB cases (all forms) provided treatment observation (DOT) by the community among all TB cases |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 10 | Proportion of AFB Microscopy centers (HF) with adequate EQA performance |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 11 | Proportion of TB cases (all forms) contributed by private sector |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 12 | Proportion of presumptive MDR TB cases with result for drug susceptibility testing (DST) |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 13 | Number of MDR TB cases detected |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 14 | MDR-TB cases enrolled on Second Line Drugs (SLDs) |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 15 | MDR TB Treatment Six month Interim result |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 16 | Final outcome MDR-TB cases |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| **C1.4.2.3 Leprosy: Total indicators: 3** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Leprosy case notification |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 2 | Grade II disability rate among new cases of leprosy |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 3 | Leprosy treatment completion rate |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| **C1.4.2.4 TB/HIV Co-infection: Total indicators: 5** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | HIV screening for TB patients |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 2 | TB Screening for HIV positive Clients |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 3 | Ant-Retroviral Therapy (ART) for HIV positive TB patient |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 4 | INH Preventive therapy (IPT) for HIV positive clients |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 5 | Co-trimoxazole preventive therapy during TB treatment |  |  |  |  |  |  |  |  | X | X | X | X | X | X |  |  |  |  |  |  |  |
| **C1.4.2.5 Malaria: Total indicators: 5** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Morbidity attributed to malaria | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Facility based Malaria deaths |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Malaria positivity rate | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Proportion of targeted HH covered with LLIN in the last 12 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  | X | X | X | X |
| 5 | Proportion of unit structure covered by Indoor residual spraying |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |
| **C1.2.4.6 Neglected Tropical Diseases (NTDS) : 2** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Therapeutic Coverage for preventive chemotherapy diseases (PCT) |  |  |  |  |  |  |  | X | X |  | X | X | X | X |  |  |  |  |  |  |  |
| 2 | Number of lymph edema cases treated |  |  |  |  |  |  |  | X | X | X | X | X | X | X |  |  |  |  |  |  |  |
| **C1.4.3 Non-communicable diseases: 5** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Morbidity attributed to hypertension |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Morbidity attributed to diabetes mellitus |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Morbidity attributed to asthma |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Cervical cancer screening in women age 30 – 49 using VIA/PAP smear |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Cataract surgical rate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |
| **C2 Community Ownership: 2** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Proportion of Model households graduated / Households Currently Model/ |  |  |  |  |  |  |  | X | X |  | X | X | X | X |  |  |  |  |  |  |  |
| 2 | Proportion of functional 1 to 5 networks | X | X |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **F1 Resource Mobilization and Utilization: 4** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | General government expenditure on health |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |
| 2 | Health budget utilization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |
| 3 | Share of internal revenue generated |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |
| 4 | Proportion of reimbursed amount out of total patient fees waived |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X |
| **P1 Quality of health Services: 6** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Outpatient attendance per capita | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Admission rate |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Bed occupancy rate |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Average length of stay |  | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Proportion of blood units utilized from blood bank service |  |  | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Serious adverse transfusion incidents and reactions |  |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **P3 Pharmaceutical Supply and Services: 1** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Essential drugs availability | X | X | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **P5 Evidence Based Decision Making: 4** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Integrated Supportive Supervision |  |  |  |  |  |  |  | X | X | X | X | X | X | X |  |  |  |  |  |  |  |
| 2 | Report Completeness |  | X |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Report Timeliness |  | X |  | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Data quality (LQAS at HF) | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **CB1 Health Infrastructure: 4** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Functional Facility to population ratio |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |
| 2 | Health institutions newly constructed and upgraded |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |
| 3 | Health institutions with functional infrastructure |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |
| 4 | Primary health care coverage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |
| **CB2 Human Capital and leadership: 4** | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Health Staff to population ratio by category |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |
| 2 | Health staff skill mix |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |
| 3 | health professional attrition rate |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |
| 4 | Facilities staffed as per the standard |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X | X | X | X |

## Annex 2: Alternative Sources of Health sector indicators other than HMIS

| **No** | **Indicator List** | **Source** | **Periodicity** | **Comment** |
| --- | --- | --- | --- | --- |
| **C1** | **Access to Health Services** |  |  |  |
| **C1.1** | **Maternal and Child Health** | |  |  |
| **C1.1.1** | **Maternal Health** |  |  |  |
| **1** | Maternal Mortality Ratio | EDHS | 5 years |  |
| **2** | Total Fertility Rate | EDHS | 5 years |  |
| **3** | Teenage/adolescent Pregnancy Rate | EDHS | 5 years |  |
| **4** | Contraceptive Prevalence Rate | EDHS | 5 years |  |
| **5** | Unmet need for Family Planning | EDHS | 5 years |  |
| **6** | Antenatal care coverage - at least one visit | EDHS | 5 years |  |
| **7** | Antenatal care coverage - at least four visit | EDHS | 5 years |  |
| **8** | Births attended by skilled health personnel | EDHS | 5 years |  |
| **9** | Births attended by HEW (Clean and safe delivery | EDHS | 5 years |  |
| **10** | Met need for emergency obstetric care | HF Survey | 2-3 years |  |
| **11** | Early postnatal care coverage | EDHS | 5 years |  |
| **12** | Number of Health facilities that provide MNCH/PMTCT services | Admin report | Annual |  |
| **13** | Number of Health facilities that provide Safe abortion services | Admin report | Annual |  |
| **14** | Number of Health facilities that provide BEOC services | Admin report | Annual |  |
| **15** | Number Health facilities that provide CEOC services | Admin report | Annual |  |
| **C1.1.2** | **Child Health** |  |  |  |
| **1** | Under-5 Mortality Rate | EDHS | 5 years |  |
| **2** | Infant Mortality Rate | EDHS | 5 years |  |
| **3** | Neonatal Mortality Rate | EDHS | 5 years |  |
| **4** | Proportion of newborns who received 2 home visits in the first one week of birth | HHS | 2-3 years |  |
| **5** | Pentavalent (DPT3-HepB3-Hib3) immunization coverage (<1 year) | EDHS | 5years |  |
| **6** | Pneumococcal conjugated vaccine first dose (PCV 1) immunization coverage (<1 year) | EDHS | 5 years |  |
| **7** | Pneumococcal conjugated vaccine third dose (PCV 3) immunization coverage (<1 year) | EDHS | 5years |  |
| **8** | Rotavirus vaccine first dose (Rota 1) immunization coverage (<1 year) | EDHS | 5years |  |
| **9** | Rotavirus vaccine second dose (Rota 2) immunization coverage (<1 year) | EDHS | 5years |  |
| **10** | Measles immunization coverage (<1 year) | EDHS | 5years |  |
| **11** | Full immunization coverage (< 1 year) | EDHS | 5years |  |
| **12** | Neonates protected at birth against neonatal tetanus (PAB) | EDHS | 5years |  |
| **13** | Proportion of newborn with neonatal sepsis who received treatment | HF Survey | 2-3 years |  |
| **14** | Proportion of asphyxiated newborns who are resuscitated | HF Survey | 2-3 years |  |
| **15** | Proportion of under five children with pneumonia who received antibiotics at facility level | EDHS | 5years |  |
| **16** | Proportion of under five children with pneumonia who received antibiotics at community level by HEWs | EDHS | 5years |  |
| **17** | Proportion of children who seek treatment in the first 24 hrs of onset of fever among children who reported fever in the last two weeks | EDHS/MIS | 5years/ 2-3 years |  |
| **18** | Proportion of under five children with diarrhea who received ORT | EDHS | 5years |  |
| **19** | Proportion of under five children diagnosed & treated for malaria | HF Survey | 2-3 years |  |
| **20** | Number of Health facilities that provide ICCM/IMNCI services | Admin report | Annual |  |
| **21** | Number of Kebeles currently implementing C-MNCH | Admin report | Annual |  |
| **22** | Number of Health facilities that provide basic package of adolescent friendly services | Admin report | Annual |  |
| **C 1.2** | **Improve nutritional status** | |  |  |
| **1** | Prevalence of anemia in women of childbearing age(15-49 ) | EDHS | 5 years |  |
| **2** | Underweight prevalence in Children aged <5 years | EDHS | 5 years |  |
| **3** | Stunting prevalence in Children aged <5 years | EDHS | 5 years |  |
| **4** | Wasting prevalence in Children aged <5 years | EDHS | 5 years |  |
| **5** | Proportion of newborns breastfed within one hour of birth | EDHS | 5 years |  |
| **6** | Proportion of exclusive breast feeding 0-6 months | EDHS | 5 years |  |
| **7** | Proportion of children 6-9 months receiving complementary food and continued breastfeeding | EDHS | 5 years |  |
| **8** | Proportion of households using iodized salt | EDHS | 5 years |  |
| **9** | Pregnant women supplemented with iron during pregnancy | EDHS | 5 years |  |
| **10** | Number of Health facilities that provide nutrition services | Admin report | Annual |  |
| **C 1.3** | **Improve hygiene & environmental health** | |  |  |
| **1** | Proportion of HHs using improved sanitation facility (latrine utilization) | EDHS/WMS | 5 years /2-3 years |  |
| **2** | Proportion of HHs using HH water treatment and safe storage practices | Survey | 2-3 years |  |
| **3** | Proportion of villages (Kebeles) free of open defecation | Survey | 2-3 years |  |
| **C 1.4** | **Prevention and Control of Major Communicable Diseases** | |  |  |
| **C 1.4.1 Reduce incidence & prevalence of HIV/AIDS** | | |  |  |
| **1** | HIV mortality | Special Survey | 2-3 years |  |
| **2** | Prevalence of HIV infection | Surveillance | 2-3 years |  |
| **3** | Incidence of HIV | Special Survey | 2-3 years |  |
| **4** | Condom use in young people aged 15-24 | EDHS/BSS | 5 years/2-3 years |  |
| **5** | Comprehensive knowledge of HIV/AIDS | EDHS/BSS | 5 years/2-3 years |  |
| **6** | Treatment of Sexually Transmitted Infections | Survey | 5 years |  |
| **7** | Number of Health facilities that provides ART services | Admin report | Annual |  |
| **8** | Number of ART sites that integrated FP into HIV care services | Admin report | Annual |  |
| **9** | Health facilities providing ART using CD4 monitoring | Admin report | Annual |  |
| **C 1.4.2 Reduce incidence & prevalence of TB** | | |  |  |
| **1** | Number of Health facilities with capacity to perform sputum smear examination for Tuberculosis | Admin report | Annual |  |
| **C 1.4.3 Reduce incidence & prevalence of Malaria** | | |  |  |
| **1** | Lab confirmed (RDT/ Microscopy) malaria case fatality ratio | Survey | 2-3 years |  |
| **2** | lab confirmed (RDT/ Microscopy) malaria incidence per year | MIS | 2-3 years |  |
| **3** | Prevalence of parasitemia | Survey | 2-3 years |  |
| **4** | Possession of insecticide treated nets | EDHS/MIS | 5 years/2-3 years |  |
| **5** | Malaria during pregnancy (pregnant women who slept under LLIN the previous night) | EDHS/MIS | 5 years/2-3 years |  |
| **6** | Use of insecticide-treated nets in U5 children (children under 5 sleeping under LLIN the previous night) | EDHS/MIS | 5 years/2-3 years |  |
| **7** | Number of Health facilities with capacity to perform malaria parasite diagnosis (lab. Testing or RDT) | Admin report | Annual |  |
| **C 1.4.4 Reduce incidence & prevalence of other communicable diseases** | | |  |  |
| **1** | Prevalence Leishmaniasis in endemic areas | Special survey | 5 years |  |
| **2** | Prevalence of lymphatic filariasis | Special survey | 5 years |  |
| **3** | Prevalence of Trachomatous trichiasis | Special survey | 5 years |  |
| **C 1.4.5 Reduce incidence & prevalence of major non-communicable diseases** | | |  |  |
| **1** | Prevalence of Diabetes mellitus among adults | Special survey | 2-3 years |  |
| **2** | Prevalence of high blood pressure among adults | Special survey | 2-3 years |  |
| **3** | Blindness prevalence | Special survey | 5 years |  |
| **4** | Number of Health facility providing early detection and integrated management of major NCDs | Admin report | Annual |  |
| **5** | Number of Health facility providing integrated mental health services | Admin report | Annual |  |
| **F 1: Improve resource mobilization and utilization** | | |  |  |
| **1** | Proportion of out of pocket Health Expenditure from total health spending | NHA Survey | 5 years |  |
| **P1: Improve Quality Health Services** | | |  |  |
| **1** | Customer satisfaction index | HF Survey | 2-3 years |  |
| **2** | Proportion of emergency patient getting emergency care in less than 5 minutes | HF Survey | 2-3 years |  |
| **3** | Proportion of standardized laboratories for integrated diseases at different levels | HF Survey | Annual |  |
| **P2: Improve Public Health Emergency preparedness and Response** | | |  |  |
| **1** | Proportion of epidemics controlled with zero mortality | Surveillance | Weekly |  |
| **P3: Improve Pharmaceutical Supply & Service** | | |  |  |
| **1** | Health facilities with stock out for essential drugs | Survey | 2-3 years |  |
| **2** | Percentage of dispensed drugs adequately labeled | Survey | 2-3 years |  |
| **3** | Percentage of prescriptions containing antibiotics | Survey | 2-3 years |  |
| **4** | Proportion of patients with adequate information on dispensed drugs | Survey | 2-3 years |  |
| **P5: Improve evidenced-based decision-making through enhanced harmonization and alignment** | | |  |  |
| **1** | Proportion of woredas implementing based on woreda based plan | Survey | Annual |  |
| **2** | Proportion of partners using the national M&E framework (alignment and harmonization) | Survey | Annual |  |

1. *HSDP-III Strategic Plan*, Section 3.12.5, p. 114. [↑](#footnote-ref-1)
2. HSDP IV Strategic objectives & map for Ethiopian health sector, Section 3.5.1, p. 49. [↑](#footnote-ref-2)
3. HSDP IV Strategic objectives & map for Ethiopian health sector, Section 3.5.1, p. 49. [↑](#footnote-ref-3)
4. *HSDP-III Strategic Plan*, Section 3.12.5, p. 114. [↑](#footnote-ref-4)
5. The service and administrative records are readily available, and information can be derived from them at relatively small cost. Therefore, they are uniquely suited to provide indicators for timely and reliable decision making. *Health Metrics Network: A Framework and Standards for Country Health Information System Development, Second Edition*, WHO, 2007, describes the various sources of health information and their comparative advantages on pp. 28 *et. seq*. [↑](#footnote-ref-5)
6. *HSDP-III Strategic Plan*, Section 3.12.5, p. 114. [↑](#footnote-ref-6)
7. *Health Metrics Network: A Framework and Standards for Country Health Information System Development, Second Edition*, WHO, 2007. describes the various sources of health information and their comparative advantages on pp. 28 *et. seq*. [↑](#footnote-ref-7)
8. Immunization Essentials: a practical field guide.2003 [↑](#footnote-ref-8)