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MINISTRY OF HEALTH - ETHIOPIA

HMIS INDICATORS REFERENCE GUIDE

POLICY, PLANNING, MONITORING & EVALUATION
DIRECTORATE

2021



FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
MINISTRY OF HEALTH

**POLICY, PLANNING AND MONITORING &
EVALUATION DIRECTORATE**

**HMIS INDICATORS
REFERENCE GUIDE**

2021

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Foreword

Ethiopia has successfully implemented the first Health Sector Transformation Plan (HSTP I) and learning from its successes and challenges has developed the successive plan that will govern the sector from 2013 – 2018 EFY (2020/21-24/25). The HSTP II aims at improving the health of our population through further accelerating progress towards universal health coverage (UHC), protecting people from emergencies, achieving woreda transformation and making the health system more responsive to people's needs and expectations.

Again, measuring the progress of the massive implementation of this plan is given extra emphasis and a separate monitoring and evaluation (M&E) plan is developed to guide this process. The M&E plan includes a wide range of components such as indicators, targets, data sources, roles and responsibilities and addresses both routine and non-routine data sources.

This year, the Federal Ministry of Health (MoH), led by the Policy Planning and Monitoring and Evaluation Directorate (PPMED), has revised the current indicator recording and reporting tools because of the unique data demand that the HSTP II brings, programmatic modifications, epidemiologic shifts and in light of its own protocol for revision. I strongly believe that this revision process, which was participatory and inclusive, resulted in an updated indicators, recording and reporting tools and systems to effectively monitor the health system and the health status of the population.

Implementing the revised HMIS indicators and tools in the Ethiopian health care system requires huge investment and concerted effort of all stakeholders - the Government, donors, development partners, the academia, associations and other important actors. Reaching health care worker and HMIS personnel in this vast country with training, coaching, printed HMIS tools, and implementing the DHIS-2 based on the revised content can only be realized through systematic and collaborative engagement and thoughtful planning among all stakeholders.

Therefore, I would like to seize this opportunity to urge all stakeholders in the health information systems (HIS) horizon to fully abide by MoH's zero-tolerance policy for parallel systems, strive to improve the quality of our data and maximally utilize the enormous data that our system generates for decision making at all levels of the system.

Looking forward to working with you all towards the successful implementation of HSTP II and the revised HMIS indicators and tools.

Acknowledgments

This revision process and the development of this HMIS indicators reference guide has passed through a series of consultations and deliberations with different directorates of MOH, agencies, Regional Health Bureaus, Universities and partner organizations. The Ministry extends its warmest gratitude to all individuals who contributed in this document development. The ministry also expresses special thanks to those implementing partners that provided technical and financial support for realizing this reference guide.

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Acronyms

ANC	Antenatal Care
ART	Antiretroviral therapy
BPR	Business Process reengineering
CAC	Comprehensive Abortion Care
CBNC	community based newborn care
CDC	Center for Disease Control
CHX	chlorhexidine digluconate
CINuS	Comprehensive Integrated Nutrition Service
CSA	Central Statistics agency
CVD	Cardio Vascular Disease
DM	Diabetes Mellitus
DR-TB	Drug resistant TB
EDHS	Ethiopian demographic and health survey
EPI	Expanded Program on Immunization
EPTB	Extra Pulmonary Tuberculosis
FF	Family Folder
FIC	Fully Immunized Child
FP	Family Planning
GMP	Growth Monitoring and promotion
HBV	Hepatitis B vaccine
HEP	Health extension program
HEW	Health extension Workers
HMIS	Health Management system
HP	Health Post
HPV	Human papilloma virus
HR	Human resource
HSTP	Health sector transformation plan
HTN	Hypertension
iCCM	Integrated community based case management of childhood illnesses
ICU	Intensive care Unit
IFA	Iron Folic Acid
IMNCI	Integrated management of newborn and childhood illnesses
IPD	Inpatient department
IRS	Indoor residual spraying
IUCD	Intra Uterine Contraceptive device
KMC	Kangaroo Mother Care
LBW	Low birth weight
MAM	Moderate acute malnutrition
MDA	Mass Drug Administration
MOH	Ministry of Health
MTCT	Mother to Child transmission
MUAC	Mid Upper ARM Circumference

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NCD	NON-Communicable diseases
NICU	Neonatal intensive care Unit
NNT	neonatal tetanus
NTD	Neglected Tropical diseases
ODF	Open defecation free
OPD	Outpatient department
OPV	Oral Polio Vaccine
ORS	Oral rehydration Solution
OTP	Outpatient Therapeutic feeding Program
PAB	Protection at Birth
PAC	Post abortion Care
PHCU	Primary Health care Unit
PLHIV	People living with HIV
PNC	Postnatal care
PoP	Progestogen Only Contraceptive Pills
PrEP	pre-exposure prophylaxis
RHB	Regional Health Bureau
RHB	Reproductive Health
SAM	Severe acute malnutrition
SARA	Service availability and readiness assessment
SC	Stabilization center
SDG	Sustainable development goals
SFP	Supplementary feeding program
TB	Tuberculosis
TPT	TB Preventive Treatment
TT	Tetanus Toxoid
VSD	Very sever disease
WFH	weight for height
WHO	World Health Organization
WoHO	Woreda Health Office
ZHD	Zonal Health department

Background

Health Management Information System (HMIS) is the routine collection, aggregation, analysis, presentation and utilization of health and health related data for evidence based decisions by health workers, managers, policy makers and others. The design and implementation of an appropriate information system that generates quality data and fosters evidence-based decision-making to inform health programs have been a challenge to resource-limited countries [2-4].

In Ethiopia, HIS has been rife with multifaceted challenges that include fragmentation of M&E systems demonstrated by various vertical parallel reporting channels, lack of standards, a huge burden of reporting, limited funding, poor design of tools and processes. The fragmentation created redundancies in data collection and reporting which has overburdened health workers as they had to fill the same information on several different forms and as they have to report same content in different reporting channels.

To address these challenges, the health sector started a business process re-engineering (BPR) in 2006 with the focus of strengthening the system to generate quality data and improve the use of information starting from point of data generation.

The HMIS redesign and its development considered the following major principles, namely standardization, simplification, integration and institutionalization.

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.

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

Integration: A single HMIS/M&E plan, shared by all partners, is a cornerstone of health sector strategic plans. Implementation of this principle requires integrating data from different programs into a shared channel from which all derive their information.

Institutionalization: proper data collection, analysis, interpretation, and reporting in accordance with the given HMIS standards and norms and use of information for evidence-based decision making should be a norm or culture of the health sector at all levels.

Indicator revision process

In line with the indicator revision protocol and to enable the health system to measure its performance based on the contemporary strategic plans, the list of indicators and their associated recording and reporting tools were revised periodically since the HMIS redesigning. The driving factors for revision included but were not limited to change in program implementation, emergence, maturity and saturation of programs and mainly due to new strategic plans. three revisions were conducted since 2008, and figure 2 shows the number of HMIS indicators selected during each of the revision periods.



This HMIS indicators reference guide represents a summary of key health and health systems data that are routinely collected and analyzed on a monthly, quarterly or annually basis at different levels of the health system (health posts, public health centers, public hospitals, private health facilities, WoHOs, ZHDs, RHBs and MOH). The sources for the HMIS indicators are primarily data collected from routine health and administrative services. The indicators from the routine HMIS can further be triangulated with other sources such as household surveys, facility surveys, surveillances, research studies and other sources.

The current indicator revision process was guided by a ToR and passed through a series of consultations with all relevant stakeholders including representatives from MOH directorates and agencies, regional health bureaus, partners, and universities.

The purpose of this reference guide is to:

Serve as a standard reference and guidance for health indicators in the health sector of Ethiopia

- Enhance the availability and quality of data on performance and results
- Avoid duplicative reporting requirements so that data burden on health workers can be reduced
- Standardize data collection tools and procedures based on the selected core indicators at all levels of the health system

Scope

This HMIS indicators reference guide contains a standard set of core HMIS indicators that were developed and prioritized through a consultative approach spearheaded by the MOH and RHBs and their implementing partners. The process of participatory process and was meant to provide adequate deliberations and consultations on the implementation of the current HSTP. It has indicators that are relevant to measure the status and performance of health programs implemented in Ethiopia. It is intended for use at different levels of the health system. The intended users of this document are a range of stakeholders including health workers at different levels of the health system, program managers, policy makers and other stakeholders such as non-governmental organizations.

Organization of the guide

The guide presents the current 177 HMIS indicators under 14 programmatic areas categorized (table 1). Each of the indicators are presented with short names, codes, definitions, formula, interpretations with their limitations, disaggregation, source, reporting level and frequency.

Table 1, Distribution of 2021 HMIS indicators by their thematic areas

Thematic area	Code	Number of indicators
1. Reproductive, Maternal, Neonatal, Child, Adolescent and Youth Health-Nutrition	RMNCH	51
1.1. Reproductive & Maternal Health	RMH	15
1.2. PMTCT	MTCT	6
1.3. Expanded program on Immunization	EPI	12
1.4. Child Health	CH	10
1.5. Nutrition	NUT	8
2. Prevention and Control of Communicable Diseases	PCCD	45
2.1. HIV Prevention and Control	HIV	15
2.2. Tuberculosis and Leprosy	TB LEP	22
2.3. Malaria Prevention and Control	MAL	8
3. Prevention and Control of Neglected Tropical Diseases	NTD	8
4. Prevention & Control of Non-Communicable Diseases & Mental Health	NCD MH	10
5. Hygiene and Environmental Health	HEH	10
6. Health Extension and Primary Health Care	HEP	4
7. Medical services	MS	21
8. Pharmaceuticals & medical devices & their rational & proper use	PMS	7
9. Regulatory systems	RS	2
10. Human resource development and management	HRDM	3
11. Informed decision making and innovations	EIDM	6
12. Health financing	HCF	4
13. Governance and leadership	GL	4
14. Health infrastructure	HI	2
Total		177

Indicators section

1. Reproductive, Maternal, Neonatal, Child, Adolescent and Youth Health-Nutrition

1.1. Reproductive and maternal health

1.1.1 MAT_CAR: Contraceptive Acceptance Rate (CAR)

Definition	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 years) who are not pregnant	
Interpretation	<p>This indicator is directly related to operations and measures the number of new and repeat contraceptive acceptors in one fiscal year. To increase contraceptive utilization (and hence prevalence), the numbers of both new and repeat acceptors should increase. Each acceptor is counted only once, during the first visit when s/he receives contraceptive services in the specified Ethiopian fiscal year. "New acceptors" refers to the number of modern contraceptive method acceptors who receive family planning services from a recognized family planning providing facility for the first time irrespective of the method used. This does not include the number of consultations and emergency contraceptive. Each acceptor is counted once in the year, at the time a woman receives a modern contraceptive for the first time in her life during the fiscal year. The number of new acceptors measures the ability of the program to attract new clients to its services. "Repeat acceptors" refers to the number of acceptors who have had received family planning services from a recognized family planning providing facility previously irrespective of the method used. Each repeat acceptor is counted once during the fiscal year, irrespective of number of times family planning services were received during that fiscal year. 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 Implants, IUCD, TL and Vasectomy. New and repeat contraceptive acceptors are reported as two separate counts, so that it will be possible to calculate each rate separately as needed. Contraceptive acceptors data is reported from NGOs, Private-for-Profit health facilities and other community-based non MOH sources should also be included in this calculation.</p> <p>Note: Recognized family planning providing facilities are those that are approved to provide family planning service by Ethiopian EFDA (Ethiopian Food and Drug Authority).</p>	
Disaggregation	By type of acceptors: New, repeat; By Age: 10-14, 15 - 19, 20-24, 25-29 , 30-49 years By Methods: OCP, Injectable, Implants, IUCD, Vasectomy , Tubal ligation (TL) and Others	
Source	Family planning register; Service delivery tally (for HP), RH register (clinics). Data should also be collected from abortion and integrated adolescent registers.	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.2. MAT_IPPCAR: Immediate postpartum contraceptive acceptance rate (IPPCAR)

Definition	<i>The proportion of women of reproductive age (15-49 years) who are accepting a modern contraceptive method immediately (0- 48 hrs.) after delivery</i>	
Formula	<i>Number of women who accepted a modern contraceptive method immediately after delivery (0-48hours)</i>	X 100
	<i>Total Number of women who delivered in a facility</i>	
Interpretation	<p>This indicator measures family planning (FP) services for women who have been provided contraceptives in the immediate post-partum period (0-48 hours after delivery). Women in the post-partum period are groups with the greatest unmet needs to FP. The post-partum Period, especially the immediate postpartum period, is an opportunity to reach this group and hence increase the access to the FP service. Providing contraception during this time is cost-effective and efficient because it does not require significant increases in staff, supervision or infrastructure. Moreover, where there are taboos that prevents mothers from going out or visiting the health facilities before 45 days after delivery, providing FP services during post-partum period has additional benefits. Immediate Post-Partum Contraception (IPPC) can result in dramatic reductions of high risk and unwanted pregnancies, increase in meeting the need for FP, and improvements in the health and survival of mothers and children. For the definitions of new and repeat acceptors, refer to the indicator above (i.e, Contraceptive Acceptance Rate).</p> <p>The denominator may exclude women who delivered at home and came for PNC in the first 48 hours and received family planning methods</p>	
Disaggregation	<p>By Age: 10-14, 15 - 19, 20–24, 25–29, 30-49 years and</p> <p>By Methods: POP, Implants, IUCD, Tuba Ligation, Others</p>	
Source	Delivery registers, PNC register, Service delivery tally (for HP), RH register (or primary private clinics)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.3. MAT_ANC1: Antenatal Care (ANC) coverage – First contact

Definition	<i>Proportion of pregnant women who received antenatal care first contact during the current pregnancy</i>	
Formula	<i>Number of pregnant women that received antenatal care – First contact</i>	X 100
	<i>Total number of expected pregnancies</i>	
Interpretation	<p>Antenatal Care (ANC) coverage is an indicator of access and use of health care services during pregnancy. The antenatal period presents opportunities for reaching pregnant women with interventions that may be vital to their health and wellbeing and that of their fetuses. ANC first contact coverage is categorized into two as: - early ANC (<=12 weeks so that all the necessary services are provided on time and late first ANC (After 12 weeks). Early ANC is often detected if the woman exactly knows her last normal menstrual period (LNMP), and/or using Ultrasound detection. Pregnant women who begin ANC contact before 12 weeks of pregnancy play a crucial role in early detection of complications that may affect the outcome of the pregnancy. Besides, early antenatal care first contact also increases the likelihood of a pregnant woman receiving continued care throughout her pregnancy by having four or more ANC contact for effective maternal health interventions and outcomes. Note: Referral linkage should be strengthened between health posts and health centers to avoid double reporting. If a mother received ANC 1st contact in a health post and referred to a health center, it should be sent via a referral form so that the health center can avoid double reporting.</p> <p>Note: The first ANC contact is supposed to be provided and reported from comprehensive health posts, health centers and hospitals</p>	
Disaggregation	By Gestational Period: (<=12 weeks), (>12 and <=16 weeks), & (>16 weeks), Age: 10-14,15-19, >=20	
Source	ANC register, Service delivery tally (for HP), Integrated RH register (clinics)	
Reporting level	Health post/ Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.4. MAT_ANC4+: Antenatal Care (ANC) coverage – Four contact

Definition	<i>Proportion of pregnant women who received antenatal care four or more times during the current pregnancy.</i>	
Formula	<i>Number of pregnant women that received four or more antenatal care contacts</i>	X 100
	<i>Total number of expected pregnancies</i>	
Interpretation	<p>The fourth antenatal care contact is an indicator of quality and continued 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 or more antenatal care visits increases the likelihood of receiving effective maternal health interventions during antenatal contact. Pregnant women who have had visit for medical illness is not reported as ANC report.</p> <p>Also, women who have received four or more ANC contact will be counted only once as having completed four or more ANC contact.</p> <p>Note: Ideally all of the first four ANC contacts are supposed to happen before 30 weeks of gestation.</p>	
Disaggregation	By Age: 10-14,15-19, >=20 By Gestational week: <30 weeks, >= 30 weeks	
Source	ANC register, Integrated RH register (clinics)/Service delivery tally (for HP)	
Reporting level	Health post/ Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.5. MAT_ANC8+: Antenatal Care (ANC) coverage – Eight or more contact

Definition	<i>Proportion of pregnant women who received antenatal care 8 contacts and more during the current pregnancy</i>																													
Formula	<i>Number of pregnant women that received antenatal care –8 Contacts and more</i>	X 100																												
	<i>Total number of expected pregnancies</i>																													
Interpretation	<p>Ideally the eight contacts should be at 12, 20, 26, 30, 34, 36, 38 and 40 weeks of Gestational ages.</p> <p>Accordingly, the first contact is recommended to be in the first trimester, two contacts in the second trimester (at 20 and 26 weeks of gestation) and five contacts in the third trimester (at 30, 34, 36, 38, and 40 weeks). The appointments are first after 8 weeks, the second after 6 weeks, third and fourth after 4 weeks, and then after every 2 weeks. The reason for increasing the number of contacts in the third trimester is considering the increased risk of complications to the mother and the fetus during this period of gestation.</p> <table border="1"> <thead> <tr> <th>Contacts</th> <th>Gestational age of contact in weeks</th> <th>Appointment schedule</th> <th rowspan="8">For example: If a woman comes at 24th gestational week for the first time, it is recorded as 1st contact and she will be appointed for 28th week (after four weeks as the first contact is closer to 26 weeks)</th> </tr> </thead> <tbody> <tr> <td>1st</td> <td>Up to 12 weeks</td> <td>After 8 weeks</td> </tr> <tr> <td>2nd</td> <td>20</td> <td>After 6 weeks</td> </tr> <tr> <td>3rd</td> <td>26</td> <td>After 4 weeks</td> </tr> <tr> <td>4th</td> <td>30</td> <td>After 4 weeks</td> </tr> <tr> <td>5th</td> <td>34</td> <td>After 2 weeks</td> </tr> <tr> <td>6th</td> <td>36</td> <td>After 2 weeks</td> </tr> <tr> <td>7th</td> <td>38</td> <td>After 2 weeks</td> </tr> <tr> <td>8th</td> <td>40</td> <td></td> </tr> </tbody> </table> <p>Limitation the numerator excludes women who delivers before 40 weeks.</p> <p>Note: The 8th ANC contact is supposed to be provided and reported from comprehensive HPs, health centers and hospitals.</p>		Contacts	Gestational age of contact in weeks	Appointment schedule	For example: If a woman comes at 24 th gestational week for the first time, it is recorded as 1 st contact and she will be appointed for 28 th week (after four weeks as the first contact is closer to 26 weeks)	1 st	Up to 12 weeks	After 8 weeks	2 nd	20	After 6 weeks	3 rd	26	After 4 weeks	4 th	30	After 4 weeks	5 th	34	After 2 weeks	6 th	36	After 2 weeks	7 th	38	After 2 weeks	8 th	40	
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Disaggregation	None																													
Source	ANC register, Service delivery tally (for HP), Integrated RH register (for clinics)																													
Reporting level	Health post/ Heath center /Clinic/ Hospital																													
Reporting Frequency	Monthly																													

1.1.6. MAT_SYPH: Proportion of pregnant women tested for syphilis

Definition	<i>Proportion of pregnant women attending antenatal care tested for syphilis</i>	
Formula	<i>Number of pregnant women tested for syphilis</i>	X 100
	<i>Total number of pregnant women who attended first ANC contact</i>	
Interpretation	<p>Syphilis affects the health of pregnant mothers and their fetus. It may cause abortion, still birth, premature birth and congenital anomalies like saddle nose. Performing syphilis screening test for all pregnant mothers helps to detect the disease early so that appropriate treatment can be provided to protect the mother and the fetus from complications. Nowadays syphilis can be detected during routine blood test (whole blood, plasma or serum) using rapid antibody test kits like syphilis-check. The tests are very sensitive and specific and the test can be performed even in areas with no electric power. For pregnant women, syphilis testing is expected to be done during the first ANC contact</p>	
Disaggregation	By test Result:- Reactive and Non-reactive	
Source	ANC Register	
Reporting level	Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.7. MAT_SBA: Skilled delivery attendance

Definition	<i>Proportion of births attended by skilled health personnel at a health facility</i>	
Formula	<i>The number of births attended by skilled health personnel at a health facility</i>	X 100
	<i>Total number of expected deliveries</i>	
Interpretation	<p>All women should have access to skilled care during pregnancy and childbirth to ensure prevention, early detection and management of complications of child birth. Assistance by properly trained health personnel with adequate equipment is key to reducing maternal deaths. It is one of the most important proved intervention that plays a great role in reducing the maternal mortality rate and is one of the Sustainable Development Goals (SDGs) 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. 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 at the time of child birth and immediately thereafter.</p> <p>Note: For this indicator, the birth should be attended by the skilled health personnel at a health facility and service provided for a retained placenta after home deliveries should not be counted as a delivery service report.</p>	
Disaggregation	None	
Source	Delivery Register, Integrated RH register for clinics)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.8. MAT_SBR: Stillbirth Rate

Definition	<i>The number of stillbirths per 1000 total births attended.</i>	
Formula	<i>Number of stillbirths</i>	X 1000
	<i>Total number of births (still and live) attended</i>	
Interpretation	<p>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. Stillbirth is birth of a baby born with no signs of life at or after 28 weeks of gestation. Stillbirth includes Intra Uterine Fetal Death (IUFD)</p>	
Disaggregation	None	
Source	Delivery register, Service delivery tally (for HP)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.9. MAT_EPNC: Early Postnatal care (PNC) coverage

Definition	<i>Proportion of women who received post-natal care at least once during the early post-partum period (within 7 days after delivery).</i>	
Formula	<i>Number of women who received post-natal care visits at least once within 7 days of delivery</i>	X 100
	<i>Total number of expected deliveries</i>	
Interpretation	<p>Early Postnatal care (PNC) coverage is the proportion of women and newborns that 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 held at 24 hours or later after stay at facility and the woman is checked for bleeding, uterine contraction, fundal height, temperature and pulse. Those mothers who are discharged before 24 hour stay at facility are not recorded as PNC service. For home deliveries the first postnatal care contact should be within 0-24 hours. The second post-natal care visit is held within 25-48 hours followed by 49-72 hours and 73hours-7 days. During this periods mothers are checked for urinary incontinence, bowl functioning, healing of perineal wound, fatigue, back pain, breast pain and lochia. In each PNC visit, the neonate should also be evaluated for any ill health conditions. Ideally the PNC visit should be given for both the neonate and the mother at a time. 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 two days after delivery because it is considered as critical period. This indicator shows the utilization (accessibility and acceptability) of early postnatal care services. Women who delivered at home and came to a health facility within the first day for PNC service should be counted as an early PNC.</p> <p>Note: A woman who received Postnatal Care services should be counted only once even though she may have a PNC care service more than once in the first seven days after delivery. The first postnatal visit that the woman had is the one that should be reported.</p>	
Disaggregation	0-24 hours for HPs and 1st day (HC and above), 25-48 hours 49 – 72hours 73hrs-7 days	
Source	Postnatal care register, Service delivery tally (for HP), Integrated RH register (for primary private clinics)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.10. MAT_CS: Caesarean Section (C/S) Rate

Definition	<i>Percentage of births delivered by caesarean section among all births in a given time period</i>	
Formula	<i>Number of women having given birth by caesarean section</i>	X 100
	<i>Total number of expected deliveries</i>	
Interpretation	<p>The percentage of births by caesarean section from the total expected deliveries is an indicator of access to and use of health care during childbirth. Caesarean section rate is one of the process indicators that tells us about the availability and quality of Comprehensive Emergency Obstetric Care (CEmONC) in the country. Five to fifteen percent of all pregnancies are expected to end up in complications and may require a caesarean section intervention during delivery. Therefore, C/S rate is expected to be between 5% and 15%. If C/s Rate is below 5% or more than 15%, further investigation should be done. If the C/S rate is below 5%, it may show less coverage of caesarean section service and if it is more than 15%, it may show unnecessary caesarean sections are performed for women who can deliver normally without a caesarean intervention. Nevertheless, even if C-section rate is within 5-15 %, it could be that those who need might not be receiving the services, while C-sections are performed unnecessarily on others. Corroboration of the data may be necessary to establish that C-sections are performed rationally and with due diligence.</p>	
Disaggregation	None	
Source	Delivery register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.11. MAT_ABOR: Women receiving comprehensive abortion care services

Definition	<i>Number of women receiving comprehensive abortion care. It includes women who received safe abortion and emergency post abortion care services.</i>	
Formula	<i>Number of women receiving comprehensive abortion care services, including safe abortion and emergency post abortion care services</i>	
Interpretation	<p>In Ethiopia, complications resulting from abortions account for one third of all maternal deaths. The Government of Ethiopia has enacted legislation that requires health care providers to provide services for safe abortion termination of pregnancy service including women who receive post-abortion care in exceptional circumstances when the women asks for, and/or consents to the service.</p> <p>This indicator measures the burden of unplanned pregnancy and access to abortion care services.</p>	
Disaggregation	<p>Type: Safe and PAC</p> <p>Age: 10-14, 15-19, 20- 24, 25-29 and 30+</p> <p>Trimester: First Trimester (<12 weeks) and Second Trimester (≥12 -28 weeks)</p>	
Source	Abortion care register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.12. MAT_IMD: Institutional maternal deaths

Definition	<i>The proportion of maternal deaths from any cause related to or aggravated by pregnancy or its management in a health facility.</i>	
Formula	<i>Number of maternal deaths in health facility</i>	X 100
	<i>Total number of deliveries in health facility</i>	
Interpretation	<p>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, pregnancy induced hypertension, obstructed labor or sepsis; or could be indirect like heart disease aggravated by pregnancy, malaria in pregnancy, anemia, etc.. 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 included 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 improvement measures should be taken. Since the mortality is calculated from the total births in the facility, it is like a case fatality rate and be computed as a percentage.</p> <p>Note: To capture all institutional maternal deaths, it is essential to review deaths from different registers where deaths are recorded, that includes all in patient registers from surgical, medical, obstetric, and gynecological wards; from delivery, PNC, OPD, emergency and ICU registers.</p> <p>Limitation: Mothers who did not deliver in the health facility but later came to the health facility for postpartum complication may die at the health facility and get counted as an institutional maternal death even though the denominator does not include these mothers.</p>	
Disaggregation	None	
Source	Admission/Discharge register; Delivery register; PNC register; OPD register; Emergency register, abortion register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.13. MAT_CMD: Number of maternal deaths in the community

Definition	<i>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)</i>
Formula	<i>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)</i>
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	Place of death: at home, on the way to health facility, at HP
Source	Service delivery tally (for HP), Administrative record
Reporting level	Heath Post
Reporting Frequency	Monthly

1.1.14. MAT_PPH: Women who developed Post-partum Hemorrhage (PPH)

Definition	<i>Percentage of women who developed PPH after facility or home delivery</i>	
Formula	<i>Number of women who developed PPH after home delivery or Institution delivery</i>	X 100
	<i>Total number of expected deliveries</i>	
Interpretation	<p>PPH is one of the major cause of maternal mortality. This indicator should be disaggregated to PPH from Home delivery and PPH from Institution delivery. The indicator can be analyzed at all levels particularly at the health facility level for post postpartum hemorrhage that happened among deliveries within the health facility. This indicates the quality of delivery care.</p> <p>Mothers who delivered outside of the health facility (Example: on the way to a health facility) and developed PPH are included under home delivery for this indicator.</p> <p>Limitation: Home delivered women may die before coming to the facility</p>	
Disaggregation	By Place of delivery : Home delivery and facility delivery	
Source	Delivery register and PNC register	
Reporting level	Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.1.15. MAT_UTER: Delivered women who received Uterotonics

Definition	<i>Percentage of women who received uterotonics in the first one minute after delivery</i>	
Formula	<i>Number of women who delivered in a health facility that received uterotonics in the first one minute after delivery</i>	X 100
	<i>Total number of deliveries in a health facility</i>	
Interpretation	<p>Administration of uterotonic agents after delivery of the baby is an effective strategy to reduce maternal mortality and morbidity by preventing excessive bleeding after birth (postpartum hemorrhage) which contributes for more than half of maternal death in Ethiopia. Routine administration of uterotonics with in one minute of delivery to contract the uterus is a standard practice. Different drugs given routinely at birth have been used for reducing excessive bleeding. They include oxytocin (IM/IV), misoprostol (PO), ergometrine (IM/IV), carbetocin (IV), and fixed combination of oxytocin and ergometrine (IM). Currently, oxytocin is recommended as the standard drug of choice to reduce excessive bleeding. However, any of the drugs can be given if oxytocin is not available.</p> <p>The indicator shows the proportion of women delivered at health center and hospital who received uterotonics with in one minute after delivery from the total birth attended. It is one of the indicators to measure quality of delivery care and helps to monitor the use of uterotonics after birth for the prevention of postpartum hemorrhage.</p>	
Disaggregation	By: Uterotonic types(Oxytocin, Mesoprostol Ergometrin and other)	
Source	Delivery register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.2 Prevention of mother to Child transmission of HIV (PMTCT)

1.2.1. MTCT_TST: Percentage of pregnant, laboring and lactating women who were tested for HIV and who know their results

Definition	<i>Percentage of women who were tested and know their HIV status during pregnancy, labor or delivery and post-partum period</i>	
Formula	<i>Number of women who were tested and know their HIV status during pregnancy, labor or delivery and post-partum period</i>	X 100
	<i>Estimated number of pregnant women</i>	
Interpretation	<p>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 therapy (ART) 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. This indicator is used to track progress towards ensuring that all pregnant and lactating women attending ANC, labor and delivery and PNC know their HIV status and are initiated on ART.</p> <p>The numerator is the sum of the following: a) Pregnant women with an unknown HIV status who received an HIV test and result during antenatal care; b) 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; c) Women with unknown HIV status attending postpartum services who were tested for HIV and received their result; and` d) Pregnant women with known HIV positive status attending antenatal care, labor and delivery and postpartum for a new pregnancy linked from ART through formal Transfer out format (TO) provided from ART unit.</p> <p>Note:- These women who are listed on a), b) and C) should be reported under PITC report (HIV testing and counseling section)</p>	
Disaggregation	By Service area: ANC, L&D and PNC	
Source	ANC, L&D and PNC Register	
Reporting level	Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.2.2. MTCT_ART: Percentage of HIV-positive pregnant women who received ART to reduce the risk of mother-to child-transmission during pregnancy, labor & delivery (L&D) and postpartum

Definition	Percentage of HIV-positive pregnant women who received ART to reduce the risk of mother-to child-transmission (MTCT) during pregnancy, L&D and postnatal.	
Formula	Number of HIV positive pregnant and lactating women who received ART at ANC, L&D and PNC for the first time and those women who get pregnant while on ART & linked to ANC	X 100
	Estimated HIV positive pregnant women in the year	
Interpretation	<p>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. This indicator measures the provision and coverage of antiretroviral treatment, by regimen type, for HIV-positive pregnant women in order to reduce the risk of mother to child transmission of HIV.</p> <p>The numerator includes the number of HIV positive pregnant and lactating women who received ART to reduce the risk of mother to child transmission at ANC, L&D and PNC for the first time and HIV positive pregnant, laboring and lactating women who get pregnant while on ART and linked to ANC to reduce the risk of mother-to child transmission. This linkage has to be functional for the purpose of counseling the mothers on birth preparedness plan, awareness on danger sign during pregnancy and during laboring, Provision of vaccination on Tetanus toxoid, maternal nutrition and improves counseling on the 1000 days practices for the mother and the family.</p>	
Disaggregation	Newly started at: ANC, L&D, PNC and those already on ART Linked from ART	
Source	PMTCT Register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.2.3. MTCT_HEI_EID: Proportion of HIV exposed infants with virological test

Definition	<i>Percentage of infants born to HIV-positive women who received a virological (DNA/ PCR) HIV test within 12 months of birth</i>	
Formula	<i>Number of HIV exposed infants who received a virologic HIV test within 12 months of birth</i>	X 100
	<i>Total number of expected live births from HIV positive mothers</i>	
Interpretation	<p>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. Additionally, the yield of HIV testing at 2 months of age may be a useful proxy of early mother-to-child transmission rates if coverage of testing is > 80%. 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. Only the first test for each HIV exposed infant should be counted in this indicator. Even though there is ongoing exposure of infants to HIV (through breastfeeding), this indicator is only measures early access to testing, and not repeat testing of exposed infants.</p> <p>The numerator should only include the initial test and not any subsequent tests. 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.</p>	
Disaggregation	Disaggregated by testing period and test result Negative: within 2 Months , between 2-12 Months Positive: within 2 Months , between 2-12 Months	
Source	PMTCT Register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.2.4. MTCT_HEI_COTR: Percentage of exposed infants born to HIV-infected women who were started on co-trimoxazole prophylaxis within two months of birth

Definition	<i>Percentage of exposed infants born to HIV-positive women who started on co-trimoxazole prophylaxis within two months of birth</i>	
Formula	<i>Number of infants born to HIV infected women started on co-trimoxazole prophylaxis within two months of birth during the reporting period</i>	X 100
	<i>Estimated number of HIV- infected pregnant women who gave live birth</i>	
Interpretation	<p>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.</p>	
Disaggregation	None	
Source	PMTCT Register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.2.5. MTCT_HEI_ARV: Percentage of infants born to HIV-infected women receiving antiretroviral (ARV) prophylaxis for prevention of mother-to-child transmission (PMTCT)

Definition	<i>Percentage of infants born to HIV positive women who received ARV prophylaxis to reduce risk of mother-to-child transmission</i>	
Formula	<i>Number of HIV exposed infants who received ARV prophylaxis</i>	X 100
	<i>Total number of expected live births from HIV positive mothers</i>	
Interpretation	<p>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. HIV positive pregnant women will be started on ART irrespective of its CD4 count and WHO clinical staging. Infants born to HIV positive women should receive Dual (NVP+AZT) prophylaxis as per the national guideline.</p> <p>All HIV exposed infant (HEI) born to HIV positive mothers should receive dual prophylaxis (NVP+AZT) for six weeks which is followed NVP only for additional six weeks.</p> <p>The numerator is the number of HIV exposed infants (HEI) who took ARV prophylaxis for a total of 12 weeks.</p>	
Disaggregation	No disaggregation	
Source	PMTCT Register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.2.6. MTCT_HEI_ABTST: 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	X 100
	Total number of expected live births from HIV positive mothers	
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.	
Disaggregation	By test Result: Positive, Negative	
Source	PMTCT Register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3. Expanded program on Immunization (EPI)

1.3.1. EPI_HePB-BD: Hepatitis B -Birth dose(BD) immunization coverage

Definition	Proportion of live births who receive a HepB-Birth dose(BD) within 24 hours after birth	
Formula	Number of live births who received a HepB-BD within 24 hours after birth	X 100
	Estimated number of live births	
Interpretation	HepBD coverage has a strong inverse correlation with the prevalence of the hepatitis disease. The first dose of hepatitis B vaccine should be given as soon as possible after birth, ideally within 24 hours, followed by at least 2 additional doses with a minimum interval of 4 weeks between doses. Administration of the birth dose is particularly important in areas with high and intermediate HBV prevalence where mother-to-infant spread of HBV is common. Since Ethiopia is thought to have intermediate to high HBV prevalence and thus a likely high proportion of MTCT HBV transmission, CDC and WHO strongly recommend the provision of the monovalent HBV vaccine at birth to help prevent infants from developing chronic HBV infections. Additionally, the national hepatitis strategic action plan strongly recommends the introduction and scale up of hepatitis B vaccine birth dose (within 24 hours). The existing Previously 3 doses of HepB combined with other antigens (In the form of DPT1-HepB1-Hib1) will continue as per the schedule.	
Disaggregation	By time of vaccination: Within 24hr after birth, 24 hours to 14 days after birth	
Source	Service delivery tally (for HP), Immunization register and Immunization Tally	
Reporting level	Health post/ Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.2. EPI_DPT3: DPT3-HepB3-Hib3 (Pentavalent third dose) immunization coverage (< 1 year)

Definition	<i>Proportion of surviving infants who have received third dose of the combined diphtheria, tetanus toxoid, pertussis, Hepatitis B and Homophiles influenza type b vaccine</i>	
Formula	<i>Number of children under one year of age who have received third dose of pentavalent vaccine</i>	X 100
	<i>Estimated number of surviving infants</i>	
Interpretation	DTP-HepB3-Hib3 coverage indicates continuity of use by parents or care takers, 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 and utilization by the beneficiary.	
Disaggregation	None	
Source	Immunization register; Service delivery tally (for HP),	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.3. EPI_OPV3: OPV 3 (Oral Polio Vaccine third dose) Immunization Coverage (< 1 year)

Definition	<i>Proportion of surviving infants less than 1 year who have received three doses of the oral polio vaccine (OPV3)</i>	
Formula	<i>Number of surviving infants who have received third dose of oral polio vaccine</i>	X 100
	<i>Estimated number of surviving infants</i>	
Interpretation	It is an essential component for the global polio eradication initiative where the OPV use hastens and maintains the interruption of poliovirus transmission. OPV3 coverage indicates continuity of the antigen use for infants irrespective of the birth dose of OPV (OPV0) they get. Increasing coverage should be accompanied by maintaining polio free status. As with other sequential scheduled vaccinations, it is a good indicator of health system performance and service utilization by the community	
Disaggregation	None	
Source	Immunization register; Service delivery tally (for HP)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.4. EPI_PCV3: Pneumococcal conjugated vaccine (PCV3) immunization coverage (< 1 year)

Definition	<i>Proportion of surviving infants who have received the third dose of the pneumococcal conjugated vaccine</i>	
Formula	<i>Number of children under one year of age who have received third dose of pneumococcal vaccine</i>	X 100
	<i>Estimated number of surviving infants</i>	
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	
Source	Service delivery tally (for HP), Immunization register	
Reporting level	Health post/ Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.5. EPI_ROT2: Rotavirus vaccine 2nd dose (Rota2) immunization coverage (< 1 year)

Definition	<i>Proportion of surviving infants who have received second dose of the Rotavirus vaccine</i>	
Formula	<i>Number of surviving infants who have received 2nd dose of Rotavirus vaccine</i>	X 100
	<i>Estimated number of surviving infants</i>	
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 child will complete its Rotavirus vaccine series by the 2nd dose (Rota2) which is given four weeks after the first dose; ideally at 10 weeks of age.	
Disaggregation	None	
Source	Service delivery tally (for HP), Immunization register	
Reporting level	Health post/ Health center /Clinic/ Hospital)	
Reporting Frequency	Monthly	

1.3.6. EPI_IPV: IPV (Inactivated Polio Vaccine) Immunization Coverage (< 1 year)

Definition	<i>Proportion of surviving infants who have received one dose of the inactivated polio vaccine (IPV)</i>	
Formula	<i>Number of surviving infants who have received one dose of inactivated polio vaccine</i>	X 100
	<i>Estimated number of surviving infants</i>	
Interpretation	As per global guidelines, Ethiopia introduced this new vaccine in late 2015 (G.C.). It is an essential component for the global polio end game strategy where the IPV hasten the interruption of all poliovirus transmissions and helps strengthen immunization systems. IPV is administered for children in a single dose after 14 weeks of age, irrespective of their OPV vaccination status. Increasing coverage should be accompanied by maintaining polio free status along with and beyond withdrawal of OPV from the immunization schedule.	
Disaggregation	None	
Source	Service delivery tally (for HP), Immunization register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.7. EPI_MCV1: Measles (MCV1) immunization coverage (< 1year)

Definition	<i>Proportion of surviving infants who have received first dose measles (MCV1) vaccine before their first birthday</i>	
Formula	<i>Number of surviving infants who have received first dose of measles vaccine</i>	X 100
	<i>Total number of surviving infants</i>	
Interpretation	Measles immunization coverage has a strong inverse correlation with the prevalence of the disease, especially amongst children under 5 years of age. 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. Effect of the vaccine will be maximal after 9 months of age and that makes the vaccine dose as valid.	
Disaggregation	None	
Source1.7.	Service delivery tally (for HP), Immunization register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.8. EPI_MCV2: Measles second dose (MCV2) immunization coverage (15-24 months)

Definition	<i>Proportion of children from 15-23 months who have received a second dose of measles vaccine before their second birthday.</i>	
Formula	<i>Number of children aged 15 to 23 months of age who have received measles second dose vaccine</i>	X 100
	<i>Total surviving infant of the previous year</i>	
Interpretation	Measles immunization coverage has a strong inverse correlation with the prevalence of the disease, especially amongst children under 5 years of age. It is an essential component for reducing under-five mortality. Increasing coverage should be accompanied by decreasing cases of the disease. Having the first dose of measles vaccine by the first year of life alone will not guarantee that a child would be fully protected from measles disease. Giving a second dose chance of measles containing vaccine to a child in the second year of life (preferably by 15-23 months of age) would maximize the chance of sero-conversion and development of measles antigen closer to 100%. Aiming for the elimination of the measles disease, this indicator will provide closer and timely information for programs for action	
Disaggregation	None	
Source	Service delivery tally (for HP), Immunization register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.9. EPI_FULLY: Full immunization coverage (< 1 year)

Definition	<i>Proportion of surviving infants who receive all doses of vaccines before their first birthday.</i>	
Formula	<i>Number of children who received all vaccine doses before their first birthday</i>	X 100
	<i>Total number of surviving infants</i>	
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. Different surveys and routine reports consider all the antigens included in the routine EPI program to determine the FIC coverage (EDHS 2016, EPI coverage survey, 2006 & 2011). Therefore, by definition all the antigens including the newly introduced PCV, 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 Oral Polio, 3 doses of PCV, 2 doses of Rota , a dose of IPV and 1 dose of measles before the age of 1 year. Surviving infants refers to infants who survive to their first birthday	
Disaggregation	None	
Source	Service delivery tally (for HP), Immunization register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.10. EPI_PAB: Proportion of infants protected at birth against neonatal tetanus

Definition	<i>Proportion of infants who were protected from neonatal tetanus (NNT) by the immunization of their mothers with tetanus toxoid.</i>	
Formula	<i>Number of Infants whose mothers had protective doses of TT</i>	X 100
	<i>Estimated number of live births</i>	
Interpretation	<p>A case of maternal or neonatal tetanus represents a triple failure of public health system in terms of routine immunization, antenatal care and clean and safe delivery. TT immunization for pregnant and child bearing age women is a proven strategy for achieving the goal of eliminating neonatal tetanus.</p> <p>A child is considered as protected at birth against NNT if the child is born within the period of protection provided by the last valid dose of TT vaccine given to the mother. In Ethiopia PAB is considered as 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 (or reviewing TT record card, if available) when they bring an infant for Pentavalent-1 immunization. One 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.</p>	
Disaggregation	None	
Source	Service delivery tally (for HP), Immunization register and Growth Monitoring register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.11 EPI_HP2: HPV 2 (Human Papilloma Virus vaccine (2nd dose) Immunization coverage (14 years old girls)

Definition	<i>Proportion of girls 14 years old who have received second dose of human papilloma virus vaccine.</i>	
Formula	<i>Number of girls 14 years of age who have received second dose of human papilloma virus vaccine in 6 months interval from the first dose</i>	X 100
	<i>Estimated number of girls (14 years old)</i>	
Interpretation	<p>Human papilloma virus (HPV) vaccine for girls in early adolescence (before their first sexual contact) addresses the common Human papilloma viruses which are associated with the development of cervical cancer in later ages. Globally it is estimated to avert about 70% of cervical cancer in women by fully vaccinating a girl against HPV. As the impact of the vaccine takes many years, routine disease surveillance and cancer registry need to be strengthened. The second dose of the vaccine (HPV2) is administered to fully vaccinate the girl with 6 months interval from time of HPV1 vaccination. HPV2 is a good indicator of the service utilization and ability of the program to deliver the vaccine using the school platform as well.</p>	
Disaggregation	None	
Source	Service delivery tally (for HP), HPV Immunization register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.3.12. EPI_VWR: Vaccine wastage rate

Definition	<i>Proportion of vaccine doses opened but not consumed during the delivery of immunization service to children.</i>		
Formula	<i>Vaccine Wastage Rate = 100% – Vaccine usage Rate</i>		
	<i>Vaccine Usage Rate =</i>	<i>Number of Doses Given</i>	X 100
		<i>Sum of Doses Opened, damaged & expired</i>	
	Doses opened = Sum of all doses in all vials opened. (Note: the same vaccine may be packaged in different size vials)		
Interpretation	<p>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 acceptable vaccine wastage rate for a specific antigen is influenced by several factors that can be controlled by policy and vial size available. 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. Vaccine wastage includes wastage due to non-use after opening the vial or due to breakage or expiration or other factors. This wastage rate traces only facility level wastage.</p> <p>NOTE: Vaccine wastage rate for each specific vaccine should be calculated separately</p>		
Disaggregation	<p>Doses opened, Damaged, Expired</p> <p>By vaccine type: HepB-Birth dose, BCG, Pentavalent (DPT-HepB-Hib), Pneumococcal conjugated, Rota, Polio, Measles, TT, IPV, HPV</p>		
Source	Service delivery tally (for HP), Immunization register and EPI logistics records		
Reporting level	Health post/ Heath center /Clinic/ Hospital		
Reporting Frequency	Monthly		

1.4 Child health

1.4.1. CH_IND: Institutional Neonatal Death Rate

Definition	<i>The proportion of neonatal deaths at the facility within the first 28 days of life among the total live births attended by skilled birth attendants at health centers, clinics and hospitals.</i>	
Formula	<i>Number of facility neonatal deaths in the first 28 days of life</i>	X 1000
	<i>Total number of live births attended by skilled health attendants</i>	
Interpretation	<p>The early neonatal death rate mainly defines the quality of obstetric care in the facility in the Ethiopian context. Among other potential causes of early neonatal death, 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).</p> <p>Neonatal death delivered in a facility, but who die outside the facility in the first 28 days of life is not captured and not included in the calculation of this indicator.</p> <p>In real set-up, neonates born at a health facility could die either in the facility where they were born or outside the health facility after discharge. Thus, estimating this indicator from facility records (service statistics) introduces huge bias as it excludes neonatal deaths that happen in the community after they were born in the facility and were discharged.</p> <p>In some instances, there is a chance for deaths to be omitted with intention to avoid blames and hence data quality checks are of paramount importance to ensure quality of this and death related data elements.</p>	
Disaggregation	Time of death: 0-24hrs; 1-7 days and 7-28 days	
Source	Delivery, PNC, IPD & NICU registers	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.2. CH_CND: Number of Neonatal death at community

Definition	<i>The number of deaths that happen in the community within 28 days of life from total births.</i>	
Formula	<i>Number of deaths in the first 28 days of life in the community</i>	
Interpretation	<p>The Community neonatal death is used to measures the impact of the community based newborn care that relays on the continuum of care in the Ethiopian context. In order to have a full data for this indicator it is mandatory to introduce a pregnant women identification register which captures the place of delivery and outcomes of the newborn for all deliveries in each kebele whether it is in facility or home. 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 captures death of neonates within 28 days of life only.</p> <p>This indicator measures the death of Newborn death at home, before arrival of the Health posts, and at health post.</p>	
Disaggregation	Time of death: 0-24hrs; 1-7 days ; 7-28days & By Place of Death: At home, on the way to HP and at HP	
Source	Family folder & pregnant women registration, Integrated Maternal Child Health Card	
Reporting level	Health post	
Reporting Frequency	Monthly	

1.4.3. CH_TX_PNEU: Proportion of under-five children with pneumonia received antibiotic treatment

Definition	<i>Proportion of children treated for pneumonia at health facility and community (HP)</i>	
Formula	<i>Number of under 5 children treated for pneumonia</i>	X 100
	<i>Estimated number of under 5 children with pneumonia*</i>	
Interpretation	<p>Pneumonia is one of the leading causes of death among children younger than five years of age. In Ethiopia, several interventions have been in place to reduce child mortality due to pneumonia to realize the achievement of SDGs 3.2.1 and 3.2.2 (reducing under-five mortality and neonatal mortality rates respectively). Integrated management of newborn and childhood illnesses (IMNCI) has been implemented at health center and hospital levels for over a decade and Integrated community based case management of childhood illnesses (iCCM) has been implemented at health post level since 2010. With the intention to bolster the newborn component of iCCM, community based newborn care (CBNC) has been implemented since 2013. The key activities in all these interventions for controlling pneumonia in children are prompt diagnosis and treatment of cases 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.</p> <p>This indicator shows the proportion of under-five children treated for pneumonia at health post and higher level health facilities from among the estimated cases. It measures the effectiveness of the above mentioned interventions in increasing care-seeking of communities and utilization of curative services for childhood pneumonia. As it is one of the HSTP indicators, it can help track the progress towards HSTP target.</p> <p>*During the calculation of this indicator, the estimated prevalence should be updated based on recent research findings.</p>	
Disaggregation	No disaggregation	
Source	ICMNCI, IMNCI, Service delivery tally sheets (for HPs)	
Reporting level	Health post/ Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.4. CH_TX_SYI: Proportion of Sick Young infant treated for Newborn infection

Definition	<i>Proportion of sick Young infants treated for Newborn infection within a given period</i>	
Formula	<i>Number of sick young infants 0-2 months treated for Newborn infection</i>	X 100
	<i>Estimated number of Sick young infant 0-2 months with Newborn infection*</i>	
Interpretation	<p>The implementation of community based newborn care (CBNC) has brought the identification of sick young infants with PSBI at community level. Health extension workers trained in CBNC are supposed to provide antibiotic treatment for possible severe bacterial infection among neonates when referral is not possible & can treat newborns with local bacterial infection (LBI) at health post level. At health centers, health care providers are supposed to treat neonates with very severe disease & local bacterial infection according to the IMNCI guideline.</p> <p>This indicator shows the proportion of neonatal sepsis (very severe disease & LBI) cases who received treatment at all levels of the health system. It measures the demand for neonatal sepsis (very severe disease) and utilization of health services in a given catchment population. In addition, the trend and comparative analysis of this indicator shows the effectiveness of demand generation activities.</p> <p>In situations when health facilities face stock of essential drugs required for the management of neonatal sepsis (very severe disease), the indicator may not actually indicate the care seeking in the catchment area for the period essential supplies were out of stock.</p> <p>*Newborn Infection refers to very severe diseases and LBI</p> <p>Note: During the calculation of this indicator, the estimated prevalence should be determined based on recent research findings or estimates.</p>	
Disaggregation	Classification type :- Critical illness; Very sever disease (VSD), Local bacterial infection (LBI) and pneumonia	
Source	ICMNCI, IMNCI, and Health post service delivery tally	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.5. CH_TX_DIAR: Proportion of children with diarrhea who are treated by both ORS and Zinc at community and facility level

Definition	<i>Proportion of children treated by Zinc and ORS for Diarrhea at health facility and community (HP)</i>	
Formula	<i>Number of under 5 children treated for Diarrhea by ORS & Zinc</i>	X 100
	<i>Estimated number of under 5 children with Diarrhea*</i>	
Interpretation	<p>Diarrhea is one of the leading causes of death among children younger than five years of age. Along with increasing demand for and improving awareness of communities on prevention and management of diarrhea at home and generating demand for care at health facility level, prompt treatment of cases with a full course of Zinc & ORS is a key intervention to reduce morbidities and mortalities among children younger than five years of age. Accessing effective diarrheal cases management at health post and higher level health facilities is needed to ensure that sick children receive appropriate treatment. Therefore, prevention of diarrhea and treatment of cases are essential to the achievement of SDG 3.2.1 and 3.2.2.</p> <p>As such, this indicator shows the proportion of under-five children treated for diarrhea at health post and higher level health facilities. It measures the utilization of services for diarrheal cases and indicates the effectiveness of interventions to increase care seeking for childhood diarrhea. In addition, as it is one of the HSTP indicators, it can help track the progress towards HSTP target.</p> <p>*During the calculation of this indicator, the estimated prevalence should be updated based on recent research findings.</p>	
Disaggregation	Treated by zinc and ORS; Treated by ORS only	
Source	ICMNCI, IMNCI, service delivery tally(HP)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.6. CH_KMC: Proportion of low birth weight or premature newborns for whom Kangaroo Mother Care (KMC) was initiated after delivery

Definition	<i>Proportion of Newborn weighing <2,000gm and premature newborns for whom thermal care in the form of KMC was initiated after delivery.</i>	
Formula	<i>Number of Newborn weighing <2000gm and premature newborns for which KMC initiated</i>	X 100
	<i>Estimated number of Newborn weighing <2000gm and premature delivery*</i>	
Interpretation	<p>Kangaroo Mother Care (KMC) has proven effect on mortality for babies <2,000 g. This indicator shows the proportion of low birth weight or premature newborns for which KMC was initiated after delivery. It measures the practice of initiation of KMC for low birth weight or premature babies with advices from health care workers at the facilities.</p> <p>*During the calculation of this indicator, the estimated prevalence of low birth weight or prematurity should be updated based on recent research findings.</p>	
Disaggregation	None	
Source	Delivery, PNC & NICU	
Reporting level	Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.7. CH_ASPH: Proportion of asphyxiated neonates who were resuscitated

Definition	<i>Proportion of newborns who were resuscitated (with bag & mask) and survived</i>	
Formula	<i>Number of neonates treated for birth asphyxia & survived</i>	X 100
	<i>Estimated number of neonates with birth asphyxia</i>	
Interpretation	<p>This indicator shows the proportion of asphyxiated newborns that were resuscitated and have survived. It measures the readiness of facilities (i.e. availability of trained health care provider and equipment) and the quality of neonatal resuscitation services (i.e. mainly related to the competency and skills of health care providers) at the health facilities. In addition, as it is one of the HSTP indicators, it can help track the progress towards HSTP target.</p> <p>*During the calculation of this indicator, the estimated prevalence should be updated based on recent research findings.</p>	
Disaggregation	Total number of neonate resuscitated (with bag and mask) and survived, Total number of neonate resuscitated	
Source	Delivery , PNC & NICU	
Reporting level	Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.8. CH_TX_NICU: Treatment outcome of neonates admitted to NICU

Definition	<i>Proportion of Neonates admitted with problems that were treated and discharged as cured, improved, died, and others from the NICU among total discharges.</i>	
Formula	<i>The number of admitted neonate that were recovered/cured, transferred out, died , and others from NICU treatment centers</i>	X 100
	<i>The total number of admitted neonates discharged from NICU</i>	
Interpretation	<p>Neonatal intensive care unit (NICU) is a unit where intensive treatment and care is provided for babies who have problems such as prematurity, who have problems during delivery, or who develop problems while still in the hospital. The service is only provided in Hospitals with NICU standard, with a trained manpower, adequate space as per the standard and with basic equipment.</p> <p>This indicator measures the quality of NICU service in hospitals. The total number of neonates discharged from NICU is the sum of those who are cured, transferred out, died and other treatment outcomes.</p> <p>Treatment outcomes:</p> <p>Cured: When the admitted neonates were cleared clinically or confirmed by laboratory investigation. It is decided by health professionals to go to home with good health condition and the expected cure rate is more than 85%.</p> <p>Transferred out: When the admitted neonate is transferred to other facility for further investigation or treatment.</p> <p>Dead: When the neonate is dead while he/she is on follow up in the NICU and the expected death rate is less than 15%.</p> <p>Others: - When the neonate is discharged from the NICU neither cured, transferred out nor died, but may be discharged against medical advice or absconded</p> <p>Definition of terms:</p>	
Disaggregation	Total Admitted , Total discharged, By treatment outcome: cured/recovered, Dead, transferred out & others	
Source	NICU registers	
Reporting level	Hospital	
Reporting Frequency	Monthly	

1.4.9. CH_CHX: Proportion of newborns that received at least one dose of Chlorhexidine Digluconate (CHX) to the cord on the first day after birth

Definition	Proportion of newborns that received at least one dose of CHX to the cord on the first day after birth	
Formula	<i>Newborns that received at least one dose of CHX to the cord on the first day after birth</i>	X100
	<i>Total number of expected live births</i>	
Interpretation	<p>Among the most common causes of death in newborns is infection, contributing to 20% of neonatal deaths. The umbilicus is an important source of infection in the first few days of life due to unhygienic cord care practices including cord cutting & tying and application of potentially harmful substances on the cord. Umbilical cord hygiene prevents sepsis, a leading cause of neonatal mortality. In high neonatal mortality settings, 7.1% chlorhexidine digluconate (CHX) application to the umbilicus after both home and health facility birth is recommended. Application of chlorhexidine gel on the umbilical cord immediately after cord cutting helps reduce neonatal mortality by 23% and prevent infection (Omphalitis) by 68%. As a result, Ethiopia contextualized WHO's recommendation of daily application chlorhexidine gel to the umbilical cord stump during the first week of life to be implemented at all levels of delivery.</p> <p>It is an essential component of newborn care immediately after delivery for reducing neonatal mortality. Use of Chlorhexidine for umbilical cord care is integrated into different training manuals.</p> <p>When analyzed only for facility level delivery, this indicator shows the proportion of newborns delivered at health centers and hospitals who received first dose of chlorhexidine application for umbilical cord care at delivery units from the total live births attended. It measures the readiness of facilities (i.e., availability of trained health care provider and chlorhexidine Gel) and the quality of essential newborn care services (i.e., mainly related to the competency and practice of health care providers) at the health facilities.</p>	
Disaggregation	None	
Source	Delivery, PNC, Service delivery tall sheet (HP)	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.4.10. CH_CHDM: Proportion of under-five children monitored for child development

Definition	<i>Proportion of under-five children monitored for child development</i>	
Formula	<i>Number of under 5 children monitored/assessed for child development</i>	X 100
	<i>Estimated number children aged 0 to 59 months</i>	
Interpretation	<p>One important way to promote child development is to monitor all children for any developmental delays [3]. Developmental monitoring allows detecting and addressing many problems in child development early on. The earlier developmental problems are addressed, the greater are the chances to reduce or even to overcome them. Ethiopia is now introducing developmental monitoring to be part of Growth Monitoring/EPI and Sick Child /Under 5 consultation. Usually children are expected to be monitored for developmental milestone together with growth monitoring, routine vaccination, Vitamin A supplementation etc.</p> <p>With regard to the newborns development we need to monitor certain aspects such as reflexes, posture, hearing, should be checked immediately after birth and during the first month (in Maternity ward and in PNC consultation), to ensure timely intervention.</p> <p>After conducting the child development monitoring and classifying the child as No delay (ND), Suspected Delay (SD), and Delay in Child Development (DD), the service provider counsel caregiver/deliver key message on how to play and talk with the child in responsive manner to improve development, and ask the caregiver to come back in 30 days for follow-up or refer the child to the next level of care for assessment and intervention. The introduction of child developmental monitoring and interventions will eventually contribute to the holistic child development in addition to reduction of child mortality and morbidity.</p> <p>This indicator measures the effectiveness of the above-mentioned interventions in increasing responsive care-giving of caregivers and utilization of child development monitoring.</p> <p>Limitation: A child may be assessed for developmental milestone multiple times a reporting year. This will result in duplication of counts.</p>	
Disaggregation	<p>Classification: No Developmental Delay (ND); Suspected Developmental Delay (SD); Developmental Delay (DD)</p> <p>Age: 0-2years and 2yrs to 5 years</p>	
Source	EPI, CINUs, ICMNCI , IMNCI, service delivery tally sheet of HP	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5. Nutrition

1.5.1. NUT_LBW: Percentage of live births that weigh less than 2,500gm out of the total live births weighed

Definition	<i>Percentage of live births that weigh less than 2,500 gm out of the total live births during the same time period</i>	
Formula	$\frac{\text{Number of live-born babies with birth weight less than 2,500 gm}}{\text{Total number of live births weighed}} \times 100$	X 100
Interpretation	<p>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</p>	
Disaggregation	None	
Source	Delivery Register; Service delivery tally (HPs)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.2. NUT_GMP: Proportion of children under two years who participated in Growth Monitoring and Promotion

Definition	<i>Proportion of children under two years who participated in Growth Monitoring and promotion monthly</i>	
Formula	$\frac{\text{Number of Children less than 2 year weighted during GMP session}}{\text{Estimated children under 2 years}} \times 100$	X 100
Interpretation	<p>Growth Monitoring (GM) is one of the key components of community nutrition programs. Evidences showed that Growth monitoring and promotion (GMP), as part of a package of nutrition and health programs, brought positive impacts on child growth outcomes. GMP is a prevention activity and is based on growth monitoring of children, especially children under 2 years of age. It primary focuses on monthly measurement of weight on children under 2 because early identification of malnutrition in children under 2 years of age can be reversible with appropriate nutritional interventions.</p> <p>GMP deals with the total environment of the growing child, encompassing not only food but health, physical environment, psychosocial development, and intellectual stimulation. In the health post level the HEWs can follow each child with chart and can calculate drop out for each child each child expect to visit the health facility 12 times in a given year.</p> <p>These conditions can best be met in the community setting, and have the best opportunity for producing results on a public health level if all children 0-24 months are reached in a defined catchment area.</p> <p>Based on weight measurement, the child's nutritional status can be classified as follows:</p> <ul style="list-style-type: none"> ▪ Severe Underweight : WFA Z Score less than -3 standard deviations of the WHO Child Growth Standards ▪ Moderate Underweight: WFA Z Score between -2 and -3 (-3 < Z Score < -2) less than -3 standard deviations of the WHO Child Growth Standards ▪ Normal: WFA Z Score greater or equal to -2 standard deviations of the WHO Child Growth Standards 	
Disaggregation	Age: 0-5, 6-24 months Normal , Moderate underweight and Severe underweight	
Source	CINuS register, IMNCI register, Nutrition Card(HP), ICMNCI registers(HP), Service delivery tally(HP)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.3. NUT_VITA: Proportion of children aged 6–59 months who received two doses of vitamin A supplement

Definition	<i>Proportion of children aged 6–59 months who received the second doses of vitamin A supplement according to the schedule.</i>	
Formula	<i>Total number of children aged 6-59 months who received two doses of vitamin A supplementation</i>	X 100
	<i>Estimated number of children aged 6-59 month</i>	
Interpretation	<p>Supplementation with vitamin A is a critically important intervention for child survival owing to the strong evidence that exists for its impact on reducing child mortality by 23 %. Therefore, monitoring the number of children who have received vitamin A every 6 month/twice per a year is crucial for monitoring coverage of interventions towards the child survival-related Sustainable development Goals. Children are expected to receive vitamin-A twice in last 12 months.</p> <p>However, this indicator measures the number of children who received the second dose of vitamin A in a year. For example, if a child received vitamin A dose 1 in Ginbot 2013EFY, S/he will be reported as dose 2 if appears within in Hidar, 2014 to Yektit 2014 EFY. The minimum gap between two doses of vitamin A should be 6 months. Any dose later than 9 months after the first dose should not be counted as dose 2.</p> <p>Note: Vitamin A doses given for treatment purpose should not be counted as supplementation</p>	
Disaggregation	Age: 6-11 and 12-59 months By dose: First and second dose	
Source	Service delivery tally sheet (HPs), CINuS register, Immunization register,	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.4. NUT_DeW: Proportion of children 24-59 months de-wormed

Definition	<i>Proportion of children aged 24-59 months who received the second dose of de-worming drugs according to the schedule.</i>	
Formula	<i>Total number of children aged 24-59 months de-wormed twice per year</i>	X 100
	<i>Estimated number of children aged 24-59 months</i>	
Interpretation	<p>Supplementation with Albendazole (de-worming) is a critically important intervention for prevention of anemia in children and it has an impact on reducing child mortality. Therefore, measuring the proportion of children who have received of Albendazole (de-wormed) every 6 months /twice per year is crucial for monitoring coverage of interventions. This indicator shows the coverage of de-worming in children aged 2 to 5 years of age in the fiscal year.</p> <p>This indicator measures the number of children who received the second dose of Albendazole (de-worming) in the year. For example, if a child received Albendazole dose 1 in Ginbot 2013EFY, S/he will be reported as dose 2 if appears within in Hidar, 2014 to Yektit 2014 EFY, later than stated time will not be counted as dose 2.</p>	
Disaggregation	By dose: Dose1, Dose 2	
Source	Service delivery tally sheet (HPs), CINuS register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.5. NUT_IFA: Proportion of pregnant women received IFA 90 plus

Definition	<i>Proportion of pregnant women who received iron and folic acid (IFA) supplements for at least 3 months during their pregnancy</i>	
Formula	<i>Total number of Pregnant women received IFA at least 90 plus</i>	X 100
	<i>Estimated number of pregnant women</i>	
Interpretation	Pregnant women should take daily oral Iron and Folic Acid supplements for 180 days/ or at least 90 days during pregnancy as part of the antenatal care service, in order to reduce the risk of low birth weight, maternal anemia and Iron deficiency (WHO). If she didn't finish the full dose during pregnancy, she can finish the dose after delivery to the maximum of 180 tabs (for 6 months). A formulation containing 30-60 mg elemental Iron and 400µg Folic Acid is recommended. In addition to Iron and folic acid supplementation, pregnant women should receive de-worming during the second or third trimesters of pregnancy.	
Disaggregation	Age group: 10-14 years; 15-19 years; >=20 years	
Source	Service delivery tally sheet (HPs), ANC Register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.6. NUT_PreSMN: Proportion of Pregnant and lactating women screened for malnutrition

Definition	<i>Proportion of Pregnant and lactating women screened for malnutrition</i>	
Formula	<i>Total number Pregnant and lactating women screened for acute malnutrition</i>	X 100
	<i>Estimated number of Pregnant and lactating women</i>	
Interpretation	<p>A mother's nutritional status, diet and lifestyle influence pregnancy & lactation outcomes and can have lasting effects on her offspring's health. Inadequate intake of certain micronutrients during pregnancy, such as folic acid & iodine, can contribute to birth defects and/or the inability of the child to develop to his/her full cognitive potential.</p> <p>Screening pregnant and lactating women for malnutrition and providing the appropriate nutrition counseling and services greatly reduces adverse malnutrition related health effects on the mother and the infant. This should be provided in a program that is designed for a nutritional screening service in health facilities and at community levels. Additionally, antenatal care offers an opportunity for assessment/screening of the nutritional status of a pregnant woman, as well as the assessment of essential nutritional actions and continuous monitoring throughout pregnancy and also after delivery till 6 months.</p> <p>Note: Pregnant and lactating women are supposed to be nutritionally assessed every month. In calculating this indicator for aggregated number of months, the numerator should be the average of the months under calculation.</p>	
Disaggregation	By status: MUAC <23cms and >= 23cms By maternal status: Pregnant and lactating	
Source	Service delivery tally (HPs); PLW screening Register	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.7. NUT_U5SMN:Proportion of children under five years screened for malnutrition

Definition	<i>Proportion of children under five years screened for malnutrition</i>	
Formula	<i>Total number of children under five years screened for acute malnutrition</i>	X 100
	<i>Total number of children under five years</i>	
Interpretation	<p>This is an indicator used for monitoring/identification of nutritional status of children under five years of age, complement early warning system through provision of nutrition data and prevents acute severe malnutrition through linkages with supplementary feeding and prevents deaths from acute severe malnutrition.</p> <p>Severe acute malnutrition(SAM): MUAC <11.5cm or WFH (weight for height) <-3 Z score (Used in health centers and hospitals) and/or any bilateral pitting edema (used in all health facilities)</p> <ul style="list-style-type: none"> ▪ Moderate acute malnutrition(MAM): MUAC 11.5cm to <12.5cm or WFH (weight for height/length) Z score between -2 and -3 (Z score ≥ -3Z to < -2Z), (Used in health centers and hospitals) and No edema of both feet ▪ Normal: MUAC ≥ 12.5 cm ≥-2Z score and No edema of both feet. <p>Infants and children who are 6–59 months of age and have a mid-upper arm Circumference <11.5 cm or a weight-for-height/length <-3 Z-scores of the WHO growth standards, or have bilateral edema, should be immediately admitted to OTP or SC program for the management of severe acute malnutrition.</p> <p>If the infant 0-6 months WFL<-3Z score or any grade of bilateral pitting edema should be admitted to SC.</p>	
Disaggregation	Age: 0-5, 6-59 months By Severity: SAM, MAM	
Source	Service delivery tally (HPs), Nutrition card, CINuS register/ IMNCI/ICMNCI registers	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

1.5.8. NUT_TX_U5MN:Treatment outcomes for management of complicated severe acute malnutrition in children 0-59 months

Definition	<i>Treatment outcomes for management of complicated severe acute malnutrition in children 0-59months</i>	
Formula	<i>Number of children 0-59 months that are Cured, died, defaulter, non-responder, stabilized ,Transfer out</i>	X 100
	<i>The total number of children exiting from treatment for acute malnutrition</i>	
Interpretation	The time needed to achieve the outcome indicators for a therapeutic feeding program (TFP) is 1-2 months and for targeted supplementary feeding program (SFP) is 2-3 months. The total number of exited individuals is the sum of those who have recovered, referred, defaulted, died, medically transferred, non-respondents and others with unknown treatment outcomes.	
Disaggregation	By treatment center: <ul style="list-style-type: none"> - OTP <ul style="list-style-type: none"> By age: 0-6 month,6month-59month By Outcome: Recovered/Cured, died, defaulted, non-respondent, medical transfer, transfer out, Unknown) - SC <ul style="list-style-type: none"> By age: 0-6 month,6month-59month By Outcome: Recovered/Cured, died, defaulted, non-respondent, medical transfer, transfer out, Unknown) 	
Source	TFP Register, Service delivery tally (HPs)	
Reporting level	Health post/ Heath center /Clinic/ Hospital	
Reporting Frequency	Monthly	

2. Prevention and Control of Communicable Diseases

2.1. HIV Prevention and Control Indicators

2.1.1. HIV_HTS_TST: Percentage of people living with HIV who know their status

Definition	Percentage of adult and children living with HIV who know their status	
Formula	Number of adult and children living with HIV who know their status	X 100
	Estimated number of people living with HIV	
Interpretation	<p>This indicator can be used as a proxy measure for the first 95 target of the 95-95-95 HIV prevention and control program targets. It is an important measure to determine the proportion of people living with HIV (PLHIV) who know their HIV sero-status, as this knowledge is the entry point to the continuum of care for PLHIV. The three 95s are:</p> <ul style="list-style-type: none"> • 1st 95 = 95% of all people living with HIV will know their HIV status • 2nd 95 = 95% of all people with diagnosed HIV infection will receive ART • 3rd 95= 95% of all people receiving antiretroviral therapy (ART) will have viral suppression <p>The numerator should be the sum of: 1) PLHIV who were reported as currently on ART in the previous reporting month 2) Total new HIV positives identified through HCT program in the reporting period 3) Total number of PLHIVs who were lost/interrupted from ART in the previous reporting period.</p> <p>Limitation: This indicator may miss those previously identified positives and those who are alive and not started on ART. Moreover, it is difficult to identify repeat HIV-positive tests. At Zonal, Woreda and facility levels, it is difficult to get estimates of PLHIV to compute the first 95. Therefore, these levels should monitor HCT uptake (Number of people tested for HIV) and its yield (Number of people tested positive for HIV).</p>	
Disaggregation	<p>HTC Testing disaggregation:</p> <p>Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+</p> <p>Sex: Male, Female</p> <p>HIV test Result: Positive</p> <p>Population groups: Female commercial sex workers (FCSW), Long-distance drivers, mobile or daily laborers, prisoners, OVC, children of PLHIV, Partners of PLHIV, Other MARPs, General population</p>	
Sources	VCT register and PITC tally, PMTCT Register, ART register	
Reporting level	Health center /Hospital/Clinic	
Reporting Frequency	Monthly	

2.1.2. HIV_TX_CURR: Number of people living with HIV currently receiving ART

Definition	<i>Number of adults and children living with HIV currently receiving ART</i>
Formula	<i>Number of adults & children receiving ART at the end of the reporting period</i>
Interpretation	<p>This indicator measures the ongoing scale-up and uptake of ART service and retention of PLHIV in ART programs as a critical step in HIV service provision and assesses progress towards coverage of ART service. It also measures the extent to which the need for ART is met. Provision of ART has been shown to reduce HIV-related morbidity and mortality among PLHIV and onward HIV transmission. This indicator measures the 2nd 95 targets.</p> <p>Data for this indicator is generated by counting the number of adults and children who are currently receiving ART at the end of the reporting period. Patients who have died, stopped treatment, transferred out, lost to follow-up, and interrupted treatment are NOT counted. PLHIV currently on ART who initiated or transferred in during the reporting period should be counted. Some people pick up several months of antiretroviral medicines (ARVs) at one visit, and efforts should be made to include these people in the numerator as receiving antiretroviral even if they do not attend the clinic in the last month of the reporting period. Besides, it includes PLHIV currently receiving clients at ART clinic and those currently receiving ART at PMTCT clinic based on option B+ regimen. All option B+ implementing PMTCT only sites are expected to report ART currently receiving clients on monthly basis.</p> <p>As it will be difficult to get the PLHIV estimate or the expected number of individuals who know their status at the zone, woreda, and lower levels, this indicator will be calculated at these levels based on the target allocation made during the planning phase.</p>
Disaggregation	<p>Currently on ART disaggregated by age, sex and regimen category</p> <p>Pediatric: Age : <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+ Sex: Male, Female; By Pregnancy Status: pregnant, non-pregnant By regimen category: 1st line, 2nd line and 3rd line By specific regimen: For ages <19 years</p>
Sources	ART Register, PMTCT register, Currently on ART and regimen tally, EMR-ART Software
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

2.1.3. HIV_TX_NEW: Number of adults and children with HIV infection newly started on ART

Definition	Number of adults and children with HIV infection newly started on ART
Formula	Number of clients newly started ART in the reporting period
Interpretation	<p>The indicator measures the ongoing scale-up and uptake of ART programs. This measure is critical to monitor the HIV services cascade, specifically the successful linkage between HIV diagnosis and initiating ART.</p> <p>This indicator includes newly initiated clients at ART clinic and those newly started ART at PMTCT clinic based on option B+.</p> <p>All option B+ implementing PMTCT only sites are expected to report ART new initiation on monthly basis. The indicator permits monitoring 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.</p>
Disaggregation	<p>Age: <1, 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+</p> <p>Sex: Male, Female;</p> <p>By Pregnancy Status: pregnant, non-pregnant</p>
Sources	ART Register, PMTCT register, Currently on ART and regimen tally, EMR-ART Software
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

2.1.4. HIV_ART_RET: ART retention rate

Definition	Percentage of adults and children known to be on treatment 12 months after initiation of ART	
Formula	$\frac{\text{Number of adults and children who are still on treatment at 12 months after initiating ART}}{\text{Net Current Cohort}} \times 100$	X 100
Interpretation	<p>This indicator measures the proportion of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy and it is one important measure of program success and is a proxy for overall quality of ART program.</p> <p>The Numerator: Number of adults and children still alive and on ART at 12 months after initiating ART 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 treatment. 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 (not more than 30 days) 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.</p> <p>The denominator: Number of adults and children in the ART start-up groups initiating ART 12 months prior to the end of the reporting period. (The denominator is the total number of adults and children in the 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. It includes patients that have transferred in (and their initiation date is known) and excludes patients that transferred out during the time. The net current cohort is the number of patients in the start-up group plus any transfers in, minus any transfers out.</p>	

Disaggregation	Age: 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+ Sex: Male, Female; By Pregnancy Status: pregnant, non-pregnant
Sources	ART Register, PMTCT register, Currently on ART and regimen tally, EMR-ART Software
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

2.1.5. HIV_ART_INTR: Number of ART Clients that interrupted Treatment

Definition	<i>Number of ART clients (who were on ART in the previous reporting month) and then had no clinical contact since their drug refill</i>
Formula	<i>Number of ART patients with no clinical contact or ARV pick-up for greater than 28 days since their last expected clinical contact or ARV pick-up</i>
Interpretation	This indicator is intended to: <ol style="list-style-type: none"> (1) help better understand fluctuations or steady growth in “PLHIV currently on ART” over time, (2) Encourage tracing of patients when a patient has had no clinical contact for greater than 28 days since their last expected contact and (3) Promote timely identification of patient outcomes among patients known to have missed clinical visits or drug pickups. Serious and repeated attempts should be made to re-engage any such patients and return them to treatment. In case of death, mortality data should be analyzed and investigated to determine the causes of death, where possible.
Disaggregation	Disaggregated by age, sex and outcome Age and sex: <15 M/F, 15+ M/F By Outcome Lost/ interrupted treatment (<3 months; > 3months) Transferred Out: Refused (Stopped) Treatment: Died
Sources	ART Register, PMTCT register, ART regimen tally, EMR-ART Software
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

2.1.6. HIV_TX_PVLS: Viral load Suppression

Definition	Percentage of patients on ART with a suppressed viral load in the past 12 months	
Formula	Number of ART patients with suppressed Viral load results documented within the past 12 months	X 100
	Number of ART patients with a viral load test result documented within the past 12 months	
Interpretation	<p>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 emergence of HIV drug resistance. The viral load of patients receiving antiretroviral therapy provides an indication of adherence to treatment, patient compliance with disease monitoring and the quality of care delivered. To sustain the progress made in reducing morbidity and mortality from HIV through ART, HIV-infected patients must continue to have access to safe, tolerable, and potent ARVs. To accomplish this, the use of viral load test to monitor HIV treatment will need to be expanded.</p> <p>Measuring viral suppression is a key programmatic indicator related to effective treatment. It helps as a proxy indicator to monitor the third 95 of 95-95-95 HIV targets, that 95% of people receiving antiretroviral therapy will have viral suppression.</p> <p>For the numerator: It is the actual number of people that have suppressed viral loads at the end of the reporting period. In either case, viral load testing should be routine rather than episodic: for example, when treatment failure is suspected. If a viral load test is done repeatedly, it should be reported only once.</p> <p>For the denominator: Estimation models such as Spectrum are the preferred source for the number of people living with HIV. As it will be difficult to get the PLHIV estimate or the expected number of individuals who know their status at the Zone/woreda and lower levels level, this indicator can be monitored by calculating from the total viral load tested. Note: Viral load tests for PMTCT clients should also be included in this indicator.</p>	
Disaggregation	<p>Age: 1-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+</p> <p>Sex: Male, Female;</p> <p>Pregnant/Breastfeeding: Non-pregnant, Pregnant, Breastfeeding</p>	
Sources	ART Register, PMTCT register, Currently on ART and regimen tally, EMR-ART Software	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.7. HIV_PrEP: Number of individuals receiving Pre-Exposure Prophylaxis

Definition	<i>Number of individuals, inclusive of those newly enrolled, that received oral antiretroviral pre-exposure prophylaxis (PrEP) to prevent HIV during the reporting period</i>
Formula	<i>Number of clients that received Pre-exposure Prophylaxis</i>
Interpretation	<p>This indicator intends to measure client demand and access for PrEP at any point within the reporting period.</p> <p>It counts the number of individuals that received PrEP at any point during the reporting period. It includes those who have been enrolled in the previous period and receiving PrEP and those who are newly enrolled in the reporting period. It excludes those who have been enrolled to PrEP but stopped taking it due to different reasons.</p> <p>Use of PrEP may stop once an individual is no longer at risk for HIV. Once they stop taking PrEP, they will not be counted.</p>
Disaggregation	<p>Disaggregated as PrEP New And PrEP Current by age, sex and client category</p> <p>Type: PrEP_Curr, PrEP_New</p> <p>Age: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50+</p> <p>Sex: Male, Female</p> <p>Client Category: Female sex workers (FSW); Discordant Couples</p>
Sources	PrEP Register
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

2.1.8. HIV_PEP: Number of persons provided with Post-Exposure prophylaxis

Definition	<i>Number of persons provided with post-exposure prophylaxis (PEP) for risk of HIV infection through occupational and/or non-occupational exposure to HIV</i>
Formula	<i>Number of persons provided with post-exposure prophylaxis (PEP) for risk of HIV infection as per the national guideline</i>
Interpretation	<p>This indicator measures the demand for and access to the PEP services. The indicator can be generated by counting the number of individuals receiving PEP for occupational and non-occupational purposes. PEP services for occupational exposure include a comprehensive package of services for occupationally exposed health care workers and patients. PEP services for non-occupational exposure include sexual violence.</p> <p>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.</p>
Disaggregation	<p>Exposure type:</p> <ul style="list-style-type: none"> - Occupational, - Sexual Violence <p>Other non-occupational</p>
Sources	Post Exposure Prophylaxis Register
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

2.1.9. HIV_PLHIV_TSP: 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 undernourished	
Formula	No. of clinically undernourished PLHIV on ART who received therapeutic or supplementary food	X100
	No. of PLHIV on ART who were nutritionally assessed & found to be clinically undernourished	
Interpretation	<p>Provision of nutritional treatment, care and support for those undernourished PLHIVs is important to prevent morbidity and mortality. Under nutrition significantly increases mortality risk for HIV-infected individuals regardless of treatment status among the clinically undernourished PLHIVs, those with severely undernourished (SAM) cases will receive the Ready -To-Use Therapeutic food (RUTF) and those with moderately undernourished (MAM) cases receive Supplementary food(RUSF) based on availability of supplies.</p> <p>Severe acute malnutrition (SAM):</p> <ul style="list-style-type: none"> - Adult: -BMI less than 16 kg/m²; - Pregnant and lactating: -MUAC less than 19 cm - Children; under 5: MUAC <11cm or WFH (weight for height) <70% median or <-3 Z score, - 5-18 years of age: BMI -for-Age <-3 z-score <p>Moderate acute malnutrition(MAM):</p> <ul style="list-style-type: none"> - Adult: BMI 16-18.49 kg/m² ; - Pregnant and lactating: MUAC 19-23 cm Children - Under 5: MUAC 11cm to <12cm or WFH (weight for height/ length) <-3 Z or ≥ 70% to < 80% median or ≥ -3Z to < -2Z score; - 5-18 years of age: BMI-for-Age between -2 and -3 z-score 	
Disaggregation	<p>Age: <15 and 15+ years</p> <p>Sex: Male/Female</p> <p>Nutritional Status: Normal, MAM, SAM</p> <p>Pregnancy status: Pregnant, Non-Pregnant</p>	
Sources	ART Register, PMTCT register, Clinical care tally, EMR-ART Software	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.10. HIV_STI_SCRN: Proportion of STI cases tested for HIV

Definition	<i>Proportion of STI cases tested for HIV in the reporting period</i>	
Formula	<i>Number of STI cases tested for HIV in the reporting period</i>	X 100
	<i>Total number of STI cases in the reporting period</i>	
Interpretation	<p>This indicator is intended to provide information on the proportion of STI cases that are tested for HIV. It is helpful to measure the magnitude of the HIV and STI co-infection and to intensify the HIV prevention interventions. It also helps to track the number of STI cases. Additionally, the proportion of STI cases detected can be tracked by dividing the number of detected STI cases by the estimated number of STI cases in the catchment area.</p> <p>Note: Total number of STI cases can be obtained from the monthly OPD and IPD disease reports and STI cases tested for HIV is reported from monthly service delivery report.</p>	
Disaggregation	<p>HIV test result: Positive, Negative</p> <p>Sex: Male, Female</p> <p>STI case by syndrome</p>	
Sources	PICT Tally, OPD and IPD registers	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.11. HIV_ART_FP: Percentage of non-pregnant women in the reproductive age living with HIV on ART using a modern family planning method

Definition	<i>Percentage of non-pregnant women living with HIV and on ART using a modern family planning method</i>	
Formula	<i>Number of non-pregnant women living with HIV on ART aged 15-49 reporting the use of any method of modern family planning</i>	X100
	<i>Total number of non-pregnant women living with HIV on ART aged 15-49</i>	
Interpretation	<p>This indicator will be used to monitor HIV/FP integration at ART sites. This indicator is a subset of contraceptive prevalence rate, but focuses specifically on women living with HIV to measure progress in prong 2 (“prevent unwanted pregnancies among women living with HIV”) of the four prongs of PMTCT.</p> <p>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. Inherent within this indicator is the principle that integrated HIV/FP program activities must respect a client’s right to make informed decisions about his or her reproductive life. This means that clients should have access to an appropriate and comprehensive range of contraceptive options; and/or to safer conception/pregnancy counseling depending upon their fertility desire and intentions. All non-pregnant PLHIV women on ART reporting the use of modern contraceptive irrespective of where the service provided will be reported as using modern family planning method.</p>	
Disaggregation	<p>Age: 10-14 F, 15-19 F, 20-24 F, 25-29 F, 30-49 F</p> <p>Method: OCP, Injectable, Implant, IUCD, Other methods</p>	
Sources	ART Registers and EMR-ART software	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.12. HIV_TB_SCRN: Proportion of patients enrolled in HIV care who were screened for TB

Definition	<i>The proportion of patients on ART who were screened for TB during the reporting period</i>	
Formula	<i>Number of patients on ART whose TB status was assessed during the reporting period</i>	X100
	<i>Total number of patients on ART during the reporting period</i>	
Interpretation	<p>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 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. For ART patients, the denominator is those current on ART during the reporting period. The denominator is taken from ART registers by counting the number of patients with a visit during the reporting period.</p>	
Disaggregation	Start of ART by Screen Result and by Age/Sex: <ul style="list-style-type: none"> • New on ART/Screen Positive: <15 F/M, 15+ F/M, • Previously on ART/Screen Positive: <15 F/M, 15+ F/M 	
Sources	ART Register, PMTCT register, HIV clinical care tally sheet and EMR-ART	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.13. HIV_CXCA_SCRN: Proportion of HIV positive women (15+) on ART screened for Cervical Ca

Definition	<i>The proportion of HIV-positive clients (aged 15+) who received cervical ca screening in the reporting period</i>	
Formula	<i>Number of HIV-positive clients that received cervical cancer screening during the reporting period</i>	X 100
	<i>Total 15+ women on ART</i>	
Interpretation	<p>Cervical cancer is among the most prevalent cancers among women worldwide and women living with HIV are at increased risk. As a result, screening all women living with HIV aged 15+ is essential for early identification and treatment of cervical lesions. Clients eligible for Cervical ca should be screened at ART clinical visit or ARV refill site. All clients screened positive should get immediate treatment in the facility based on MOH's guideline.</p> <p>Data for the numerator should be generated by counting the total number of HIV-positive women on ART who received a cervical cancer-screening test. The screening may be done using VIA or HPV DNA testing modalities.</p>	
Disaggregation	<p>Age: 15-19, 20-24, 25-29, 30-49, 50+</p> <p>Screening type: VIA, HPV DNA</p> <p>Result:</p> <p>For VIA:</p> <ul style="list-style-type: none"> - Negative, - Positive: eligible for cryotherapy/ thermo coagulation - Positive: Not eligible for cryotherapy/ thermo coagulation - Suspicious cancerous lesion <p>For HPV DNA: Positive, Negative</p> <p>Type of treatment: Cryotherapy, LEEP, Thermal ablation/thermo-coagulation</p>	
Sources	ART register, HIV clinical care tally sheet, EMR-ART	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.14. HIV_HeP_TST: Number of individuals tested for Hepatitis

Definition	<i>Number of individuals tested for Hepatitis (Hepatitis B and Hepatitis C)</i>	
Formula	<i>Number of individuals tested for Hepatitis (Hepatitis B and Hepatitis C)</i>	
Interpretation	<p>Epidemiologically, Ethiopia is in the region where Hepatitis B infection prevalence is labeled hyper-endemic with a prevalence of between 8 – 12% and that of Hepatitis C prevalence is estimated at not less than 2.5%. Principally with application of appropriate measures, infection from viral hepatitis and subsequent chronicity is preventable. Effective vaccines are available to prevent Hepatitis A, B and E viruses whereas, primary prevention of Hepatitis B and C are possible and cost effective by promoting safe blood and safe sexual behavior. Screening and early identification is an essential component of hepatitis prevention and control program.</p> <p>This indicator is intended to monitor the trends of hepatitis-tested service, which in forecasting the supply need to ensure continuity of the service. Testing for hepatitis is an entry point to the continuum of care for patient who are positive for hepatitis.</p>	
Disaggregation	<p>Type of Hepatitis: Hepatitis B; Hepatitis C</p> <p>Sex: M, F</p> <p>Age: <15 and >=15</p>	
Sources	Lab Register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.1.15. HIV_HeP_TX: Proportion of diagnosed Hepatitis B and C patients who received treatment

Definition	Proportion of diagnosed Hepatitis B and C patients who received treatment	
Formula	Number of Hepatitis positive patients who received hepatitis treatment	X100
	Total number of individuals diagnosed positive for hepatitis	
Interpretation	This indicator measures access to treatment service for hepatitis B and hepatitis C patients. It measures the percentage of hepatitis B & C positive client who received treatment during the reporting period. Indicator for hepatitis B and C have to be calculated separately since their treatment modality is different.	
Disaggregation	Type of Hepatitis: Hepatitis B; Hepatitis C Sex: M, F Age: <15 and >=15	
Sources	Hepatitis Treatment Register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2. Tuberculosis and Leprosy Prevention and Control Indicators

2.2.1. TB_TX: TB Treatment coverage

Definition	Percentage of new and relapse TB cases that were notified and treated during the reporting period among the estimated TB cases in the same period	
Formula	Number of all forms of TB (New and Relapse) cases that were notified and treated during the reporting period	X 100
	Estimated number of incident TB cases in the population during the reporting period	
Interpretation	<p>TB treatment coverage is one of the key indicators in evaluating the effectiveness of TB control. It helps to measure the burden of the disease and to monitor TB identification and treatment. TB treatment coverage is calculated as the number of notified and treated all forms of TB cases (including new bacteriologically confirmed, new clinically diagnosed and relapses) divided by the total number of TB cases estimated to occur in the area during a given time period.</p> <p>*The denominator is provided by annual WHO-Estimates for the whole country. There may be real differences in TB epidemiology in urban, Agrarian and pastoralist regions, though this indicator tells annual trend in TB treatment coverage of the country. However, over and under achievement of this indicator should be interpreted by considering existing factors including burden of the diseases, and other population factors.</p> <p>NOTE: TB cases diagnosed by Smear microscopy, any WHO approved Rapid diagnostics (WRD) such as GeneXpert MTB/RIF, Ultra, Truenat) and Culture are classified under Bacteriologically Confirmed TB cases.</p>	
Disaggregation	Age: 0-4, 5-9, 10-14, 15-19, 20-24, 25-34, 35-44, 45-54, 55-64, 65+ Sex: Male, Female Type TB: - Bacteriologically Confirmed :New and Relapse : - Clinically diagnosed : (New Pulmonary negative TB, all Extra Pulmonary TB)	
Sources	TB unit register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.2. TB_RET_X: Tuberculosis Re-treatment Rate

Definition	<i>The Proportion of re-treatment TB Cases (Treatment after relapse, Treatment –after -failures Treatment –after -lost to follow up & other previous treated with unknown or undocumented treatment outcome) among new and retreatment TB cases detected in the reporting period</i>	
Formula	$\frac{\text{Total number of retreatment TB cases during the reporting period}}{\text{Total number of new and retreatment TB cases registered during reporting period}}$	X100
Interpretation	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	
Sources	TB unit register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.3. TB_CR: Cure Rate for bacteriologically confirmed Pulmonary TB cases

Definition	<i>The percentage of a cohort of new and relapse bacteriologically confirmed PTB cases that were cured as demonstrated by bacteriologic evidence in the reporting period</i>	
Formula	$\frac{\text{Number of cohort of (new \& relapse) bacteriologically confirmed Pulmonary TB cases registered during specified cohort period (e.g. during a given month of the previous year) that were cured}}{\text{Total number of new \& relapse bacteriologically confirmed PTB cases registered in the same cohort period}}$	X 100
Interpretation	TB cases recorded as cured must have a negative sputum smear or culture 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, hospitals and other health facilities that provide DOTS services. Cure rate at woredas, Zones, regions, and MOH can also be calculated by aggregating the reported data from health facilities that provide DOTS.	
Disaggregation	Type of bacteriologically confirmed TB : New; Relapse Treatment outcomes type: Cured, Treatment completed, lost to follow up, death, failure, not evaluated, moved to DR-TB register	
Sources	TB unit register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.4. TB_TSR: TB Treatment Success rate (TSR) among all forms of TB cases

Definition	<i>Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified during a specified period</i>	
Formula	<i>Number of all forms of TB diagnosed cohort of TB cases registered during the specified cohort period of the previous year that successfully completed the treatment</i>	X100
	<i>The total number all forms of diagnosed TB cases registered during the same cohort period during</i>	
Interpretation	It measure the degree of successful TB treatment completion. TB cases recorded as cured and completed for their course of treatment are included for this indicator. This indicator measures the program’s capacity to retain patients (quality DOTs) through a complete course of chemotherapy with a favorable clinical result. TSR is the key indicator in evaluating the effectiveness of TB control. TB treatment success rate can be calculated at all Health Centers and hospitals and other health facilities that provide DOTS services. TSR at woredas, Zones, regions, and MOH can also be calculated by aggregating the reported data from health facilities that provide DOTS.	
Disaggregation	Type of TB - Bacteriological confirmed new Pulmonary TB - Bacteriologically confirmed relapse Pulmonary TB - Clinically diagnose pulmonary TB - Clinical diagnosed EPTB	
Sources	TB unit register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.5. TB_UTX: Unsuccessful treatment outcome among all forms of TB

Definition	<i>The percentage of cohort of all forms (new and relapse) of TB cases (Bacteriologically confirmed, clinically diagnosed) registered in a specified period that failed (A TB patient whose sputum smear or culture is positive at month 5 or later during treatment), died during treatment and interrupted treatment for two or more consecutive months among all forms of TB cases in the same period</i>	
Formula	<i>Number of all forms of TB cases registered in the specific cohort period with unsuccessful treatment outcome (lost to follow up, died and failed)</i>	X 100
	<i>The total number of all forms of TB cases registered during the same cohort period</i>	
Interpretation	The unsuccessful outcome measures the quality of DOTs or TB care. Unsuccessful treatment outcome includes death, lost to follow up, failure. Death is one of the unsuccessful outcome; The target in the END TB strategy is to reduce TB deaths by 35% in 2020 and by 95% in 2035 compared to the 2015 level. Unsuccessful outcome can be calculated at all Health Centers, hospitals and other health facilities that provide DOTS services, woredas, zones, regions, and MOH.	
Disaggregation	Death, LTFU, Failure, Not evaluated	
Sources	TB unit register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.6. TB_COMM: Proportion of all forms of TB cases notified and treated from community referral

Definition	<i>Proportion of TB case detection contributed by the community out of all TB cases identified during reporting period</i>	
Formula	<i>Number of all forms of TB cases notified and treated who were referred by HEWs during the reporting period</i>	X100
	<i>Total Number of TB cases that were notified and treated during the reporting period</i>	
Interpretation	<p>The indicator is intended to measure the extent of community involvement in TB case detection. 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 Agents, health extension workers or, community members supporting patients (treatment supporter)</p> <p>NB: the denominator of this indicator “all forms of notified TB cases” refers to the number of all forms of TB cases registered in TB unit. The numerator of this indicator doesn't include those presumed TB cases referred by the community for further investigation and diagnosis</p>	
Disaggregation	None	
Sources	TB unit register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.7. TB_CBTSR: Community based TB Treatment success rate

Definition	<i>Proportion of all forms of TB cases successfully treated (cured plus completed treatment) among those received treatment adherence support at community for at least full course of the continuation phase treatment</i>	
Formula	<i>Number of cohort of TB cases who were cured or completed treatment among all forms TB patients registered during a specified cohort period that received community based adherence support by HEWs</i>	X 100
	<i>Total number of patients who started TB treatment in same reporting period of pervious year and who received any form of treatment adherence support from Health extension workers</i>	
Interpretation	<p>Evidence has shown that community-based treatment results in treatment success rates comparable to or higher than those of hospital- or facility-based do 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 particularly relating to treatment outcome of patients. The data for calculating this indicator should be reported along with treatment outcome report for the same cohort by the health care workers at the health facility.</p> <p>Note that at least full course of continuation phase refers to patients who took their treatment during intensive phase and continuation phase or during continuation phase only at the community</p>	
Disaggregation	None	
Sources	TB unit register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.8. TB_DX_PRIV: Proportion of notified TB cases (all forms) contributed by other governmental and private facilities

Definition	<i>Percentage of notified TB cases (all forms) contributed by PPM sites (other governmental, private-for profit and private-not for profit facilities) during the reporting period among notified all forms of TB in the same period</i>	
Formula	<i>The number of all forms of TB cases notified by PPM TB Sites during the reporting period</i>	X100
	<i>Total number of all forms of TB cases notified during the same period</i>	
Interpretation	This indicator measures the contribution of the PPM sites (other governmental, private-for profit and private-not for profit facilities) in detecting all forms of TB cases. A patient diagnosed at facilities and referred to a public facility for diagnosis and/or initiation of anti TB treatment should be considered as a PPM contribution and be included in the numerator.	
Disaggregation	None	
Sources	TB unit register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.9. TB_CI: Contact investigation coverage

Definition	<i>Percentage of contacts of people with bacteriologically (new and Relapse) confirmed TB cases who were evaluated for TB</i>	
Formula	<i>Number of contacts of people with bacteriologically-confirmed index TB cases who were evaluated for TB</i>	X 100
	<i>The total number eligible contacts with bacteriologically confirmed index TB cases</i>	
Interpretation	People who are exposed to active TB are at increased risk for TB infection and disease. TB disease may be as high as 5% or more among household contacts, particularly children. PLHIV exposed to active TB have a higher risk for rapid progression to TB disease. Contact investigation aims to identify these people and evaluate if they need treatment for TB disease or TPT. These activities can arrest the progression of infection and treat the disease early on in its course, reducing its severity, lethality and transmission. Contact tracing and investigation is key to increase TB detection among people who have had contact with index bacteriologically confirmed cases. It is one of the underperformed activities of TB prevention and control programs. The indicator measures the performance of tracing and investigating contacts of people with bacteriologically confirmed T patients.	
Disaggregation	- Type of index case: Drug susceptible and DR-TB contact, - Age: (<5; 5-14; >=15)	
Sources	TB unit register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.10. TB_TPT: TB Preventive Therapy (TPT) Coverage

Definition	Number of individuals initiated on TPT out of those eligible, expressed as a percentage	
Formula	Total number of individuals eligible for TPT who initiated treatment during the reporting period	X100
	Total number of individuals eligible for TPT during the reporting period	
Interpretation	<p>Tuberculosis (TB) is one of the leading causes of morbidity and mortality, and the risk is high for persons living with HIV (PLHIV). TB preventive therapy (TPT) works synergistically with, and independently of, antiretroviral therapy (ART) to reduce TB morbidity, mortality and incidence among PLHIV. TB Preventive Treatment (TPT) is one of the most powerful ways to prevent TB disease after exposure to the TB bacteria. This indicator (also referred to as TPT initiation) should include all people deemed to be at risk and eligible for TPT by the national policy. Those who are eligible for TPT include PLHIV who are screened negative for active TB; people who are close contacts with bacteriological confirmed TB index cases. Monitoring the number of PLHIVs and close contacts of index TB cases who receive TPT is an important component of TB prevention program.</p> <p>All clients who are eligible and started TPT in the reporting period should be counted and reported. TPT data is reported from two departments: 1) from TB clinic and 2) from ART clinic</p> <p>Disaggregation by PLHIV (newly or currently enrolled on ARV), contacts of index TB cases allows monitoring the eligible target groups.</p> <p>Disaggregation by TPT regimen (6H, 3HP, 3HR) helps to assess the uptake of each regimen, inform the procurement, and supply chain management.</p>	
Disaggregation	<p>Age disaggregation (<5, 5-14, >=15),</p> <p>Disaggregation by regimen: 6H, 3HP and 3RH</p>	
Sources	TB unit register; ART register; HIV clinical care tally sheet, EMR-ART	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.11. TB_IPT: TPT Completion Rate

Definition	Number of individuals completing TPT out of those initiating treatment	
Formula	Number of cohort of individuals that completed TPT treatment among those who started 12 months prior to the reporting period	X 100
	Number of cohort of individuals started TPT 12 months prior to the reporting period	
Interpretation	<p>This indicator measures the performance of TB and HIV programs in scaling up TPT, with the goal of preventing progression to active TB disease among eligible population groups and decreasing ongoing TB transmission in this population. This indicator helps assess the quality of implementation of programmatic management of tuberculosis preventive treatment (PMTPT) given that the effectiveness of TPT depends upon its completion. The reporting period for this particular indicator is every 12 months.</p> <p>This indicator helps assess the quality of implementation of TPT given that the effectiveness of TPT depends upon its completion. The reporting period for TPT completion should be earlier, i.e 12 months preceding the reporting period to allow time for completion of the TPT.</p>	
Disaggregation	<p>Age disaggregation (<5, 5-14, >=15),</p> <p>Disaggregation by regimen: 6H, 3HP and 3RH</p>	
Sources	TB unit register; ART register; HIV clinical care tally sheet, EMR-ART	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.12. TB_TST_WHO: Percentage of new and relapse TB patients tested using a WHO recommended rapid tests at the time of diagnosis

Definition	<i>Patients tested using a WHO recommended rapid test at the time of diagnosis, divided by the total number of new and relapse TB patients, expressed as a percentage</i>	
Formula	<i>Number of new and relapse TB patients initially tested using a WHO recommended rapid test at the time of TB diagnosis</i>	X 100
	<i>Total number of new and relapse TB patients</i>	
Interpretation	Early and accurate diagnosis of TB and drug resistance will require rapid diagnostic tests. This facilitate early and prompt treatment and help decrease disease transmission, prevent unfavorable outcomes and reduce case fatality. The national TB Program (NTP) recommend using WHO rapid diagnostic tests (Xpert and others) to diagnose tuberculosis. Patient diagnosed for TB using rapid diagnostic test should be recorded and reported to the NTP on a monthly basis.	
Disaggregation	Age: < 5, 5-14, >15yrs Sex: M/F	
Sources	TB unit register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.13. TB_DST: Drug Susceptibility testing (DST) coverage for TB patients

Definition	<i>Percentage of TB patients with Drug susceptibility testing (DST) results for at least rifampicin among bacteriological confirmed new and retreatment TB patients</i>	
Formula	<i>Number of notified bacteriologically confirmed Pulmonary TB cases with drug susceptibility testing results for at least rifampicin during the reporting period</i>	X 100
	<i>Number of notified bacteriologically confirmed Pulmonary TB cases</i>	
Interpretation	Testing for drug susceptibility for WHO-recommended drugs is essential to provide the right treatment for every person diagnosed with TB. Early detection of resistance is intended to ensure an appropriate drug regimen from the start and presumably increase the likelihood of success and alleviate amplification of resistance patterns. This indicator measures the availability and access to drug susceptibility testing for at least rifampicin for TB patients.	
Disaggregation	Registration group: <ul style="list-style-type: none"> • New • Previously treated including relapse and; • Unknown treatment history 	
Sources	TB unit register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.14. TB_DR_TD: Drug Resistant (DR) TB case detection rate

Definition	<i>Proportion of bacteriologically confirmed DR-TB cases that are notified during the reporting period among the total number of estimated DR-TB cases</i>	
Formula	<i>Number of bacteriologically confirmed DR-TB cases that are notified during the reporting period</i>	X 100
	<i>Total number of *estimated DR-TB incident cases among notified TB cases during the same specified period</i>	
Interpretation	<p>Culture and Drug susceptibility tests (DST) for at least rifampicin are indicated in patients presumed to harbor drug-resistant TB strains. This indicator is useful to determine the burden of DR-TB in the country. Furthermore, it helps national TB control program for planning of DR-TB treatment expansion, forecasting, quantification and procurement of second line drugs (SLDs) and reagents.</p> <p>NB: All detected DR-TB cases are expected to be reported by health facilities including DR TB Treatment initiating centers where they were first detected. The detection could be completed within the facility or with the support of external laboratory facility (after sample is sent for detection). In order to avoid double reporting of detected cases, treatment initiating centers (TICs) should not include DR-TB cases detected and referred by other facilities for DR-TB treatment in their DR detection report.</p> <p>NB: *The denominator is provided by annual WHO-Estimates for the country.</p>	
Disaggregation	<p>Sex: Male ,Female,</p> <p>Type: DR-TB, RR only, MDR ,Pre-XDR, XDR</p> <p>Age: <15, >= 15</p>	
Sources	DR-TB register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.15. TB_DR_TX: DR TB treatment coverage

Definition	<i>Percentage of DR-TB cases that are registered and started treatment on the national recommended regimen in the reporting period among total number of notified in the same reporting period</i>	
Formula	<i>Number of DR-TB cases that are registered and started on Second line drugs (SLD) treatment regimen in the reporting period</i>	X 100
	<i>Total number of DR-TB patients notified during the same reporting period</i>	
Interpretation	<p>This indicator measures the capacity of programs to enroll DR-TB cases on appropriate treatment. The program manager is responsible for ensuring that all cases in which DR-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.</p> <p>A comparison of the number of enrolled DR-TB cases to those detected indicates 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.</p>	
Disaggregation	<p>HIV status: Positive, Negative , Unknown HIV Status</p> <p>Registration group: New, Previously Treated with first-line anti TB drug (FLD), Previously treated with second-line anti TB drug (SLD), Unknown treatment history</p> <p>Diagnosis: Bacteriologically confirmed pulmonary, bacteriologically confirmed extra pulmonary and clinically diagnosed (Pulmonary and EPTB),</p> <p>Type of Regimen : Shorter regimen, Longer Regimen, Individualized Regimens</p>	
Sources	DR-TB register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.16. TB_DR_TXO: Final Outcome of RR/MDR-TB Cases

Definition	<i>A cohort of DR-TB cases for whom final outcome has been determined among those enrolled on DR -TB treatment during the year of assessment</i>	
Formula	<i>Number of cohort of RR/MDR-TB cases enrolled on RR/MDR-TB treatment regimen during reporting period for whom final outcome has been determined</i>	X 100
	<i>Total number of RR/MDR-TB cases enrolled on RR/MDR-TB treatment regimen during the same cohort period</i>	
Interpretation	<p>This indicator shows the final treatment outcomes for patients enrolled to DR-TB treatment. The final treatment outcome of cohort of DR-TB patients report should be reported based on the timeline recommended for specific regimen type. Generally, final outcome of the patient both in short and long term regimen should be compiled at 24 months after the last patient in the cohort starts treatment. Most of the patients will finished their treatment within the first evaluation periods. However there are patients who will continue their treatment longer than the majority group especially patient enrolled to long term regimen. Therefore, the final outcome of these cohort cases are compiled and monitored twice at 24 and 36 months. Thus written document of the final outcome of DR-TB patients on long term regimen should be recorded in DR-TB Register and reported once again to the National TB program at 36 months.</p>	
Disaggregation	<p>Final Outcome: Cured, Completed, Failed, Died, Lost to follow up, Not evaluated</p> <p>Regimen type: Short term, Long term</p>	
Sources	DR-TB register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.17. TB_MN: Proportion of all forms of TB and DR-TB patients with malnutrition

Definition	<i>Percentage of notified all forms of TB and DR-TB patients with Malnutrition in the reported period among all registered TB/DR-TB cases screened for malnutrition</i>	
Formula	<i>Number of notified all forms of TB and DR-TB patients with Malnutrition in the reported period</i>	X 100
	<i>Total number of notified and treated all forms of TB and DR- TB cases screened for Malnutrition</i>	
Interpretation	<p>Malnutrition is an important co-morbid condition among TB/DR-TB patients with significant impact on treatment outcomes. This indicator will help measure the magnitude of malnutrition among notified TB/DR-TB patients and will help in proper planning for nutritional care needs of TB/DR-TB patients.</p>	
Disaggregation	Nutritional Status: Normal, MAM, SAM	
Sources	Unit TB Register; DR-TB register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.18. TB_HIV: Proportion of registered new and relapse TB patients with documented HIV status

Definition	<i>Number of new and relapse TB and DR-TB patients who had an HIV test result recorded in the TB register expressed as a percentage of the number registered during the reporting period</i>	
Formula	<i>Number of (new and relapse)TB and DR-TB patients registered during the reporting period who had an HIV test result recorded in the TB register</i>	X100
	<i>Total number of new and relapse TB and DR-TB patients registered in the TB register during the reporting period</i>	
Interpretation	<p>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. The following point are crucial for effective HIV Screening of TB patients. 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 documented HIV result from previous testing acceptable to the health care provider (such as performed in the past 3–6 months from a reliable laboratory). This indicator measures the combined services' ability to ensure that TB patients know their HIV status under program conditions.</p>	
Disaggregation	<p>Type of TB: DS TB (All forms); DR TB</p> <p>Sex: male , female,</p> <p>HIV status: HIV positive, HIV Negative , Unknown</p>	
Sources	Unit TB register, DR TB register	
Reporting level	Heath center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.19. TB_ART: Proportion of HIV-positive new and relapse TB patients on ART during TB treatment

Definition	<i>Number of HIV-positive new and relapse TB patients who receive ART during TB treatment expressed as a percentage of those registered HIV positive TB cases during the reporting period</i>	
Formula	<i>Number of TB cases with documented HIV-positive status who start or continue ART during the reporting period</i>	<i>X 100</i>
	<i>Number of registered TB cases with documented HIV-positive status during the reporting period</i>	
Interpretation	<p>This indicator measure the extent to which programs effectively link HIV-infected TB patients to appropriate HIV treatment. The HIV status of TB patients is often determined at the TB clinics, but ART for TB cases is frequently provided by the HIV program. Therefore, provision of ART for this population often implies successful linkage between the TB and HIV program. Therefore, reconciliation of the information between the TB and ART registers at facility level should be done regularly. It is an outcome indicator to measure commitment and capacity of TB services to ensure that HIV-positive TB patients are able to access ART. Limitation: this indicator may miss patients diagnosed towards the end of reporting period whose ART treatment status may not be updated in the TB registers.</p> <p>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. Note that irrespective of the CD4 cell count, ART should be provided as soon as possible to HIV positive TB patients and no later than eight weeks after TB treatment begins. It should be given as a matter of emergency within the first two weeks of TB treatment among HIV-positive TB and DR-TB patients with profound immune-suppression (i.e. CD4 count < 50 cells/mm³). 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.</p>	
Disaggregation	Sex: Male , Female Age: 0-4, 5-14, 15+ Previously known HIV Positive; newly tested HIV-positive	
Sources	Unit TB Register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.20. LEP_NOT: Leprosy notification per 10,000 population

Definition	<i>Proportion of leprosy cases detected among estimated number of leprosy cases in the population</i>	
Formula	<i>The number of leprosy cases detected and notified per 10,000 population in the catchment area</i>	<i>X 10,000</i>
	<i>Estimated number of population in the catchment area</i>	
Interpretation	The number of leprosy cases reflects the performance of the leprosy prevention and control program. This indicator is a proxy for leprosy incidence in a given area. It has to be calculated at national and subnational level up to population size of 10,000. 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. The indicator should be compared with leprosy estimates, which are updated annually by the Ministry of Health and mapping data of the respective administrative level. Having the total number of relapse cases will reflect the quality of treatment service provided and the number rises, it indicates magnitude of transmission of leprosy and circulation of drug resistant strain of leprosy.	
Disaggregation	Age: <15, >=15, Sex: Male, Female Type; Paucibacillary, Multibacillary Registration group :New, Relapse , other retreatment (defaulters, others)	
Sources	Leprosy register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.21. LEP_DIS: Grade II disability rate among new cases of leprosy

Definition	<i>The proportion of new cases of leprosy with disability grade II at the time of diagnosis</i>	
Formula	<i>Total number of new leprosy cases having disability grade II at time of diagnosis during reporting period</i>	<i>X 100</i>
	<i>Total number of new leprosy cases detected during the same period</i>	
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	
Sources	Leprosy register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.2.22. LEP_TX: Leprosy treatment completion rate

Definition	Percentage of a cohort of leprosy cases registered in a specified period that successfully completed treatment	
Formula	The number of leprosy cases who completed treatment successfully during specified cohort period	X 100
	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 leprosy patients through a complete course of chemotherapy with a favorable clinical result. The duration of treatment for PB and MB is different; hence, treatment completion rate should be done for PB and MB cases separately.	
Disaggregation	Type: PB, MB	
Sources	Leprosy register	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

2.3 Malaria Prevention and Control

2.3.1. MAL_DX: Morbidity attributed to malaria

Definition	Malaria cases per 1000 population at risk population	
Formula	Number of new malaria OPD + IPD cases (All malaria cases, of any species – whether clinical or laboratory (Microscopy & RDT) diagnosis	X 1,000
	Total population at risk of malaria in the catchment area	
Interpretation	Malaria case counts are quite sensitive and specific indicators for probability of an epidemic. According to Epidemic Prevention and control guideline, malaria cases should be plotted and reviewed weekly. When the epidemic threshold is reached, the higher level should be notified and more frequently 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, laboratory confirmed (P. falciparum /P. vivax/Mixed), Travel History	
Data source	OPD register, IPD register, Emergency register, disease tally (for HPs)	
Reporting level	Health Post /health center /Hospital/Clinic	
Reporting Frequency	Monthly	

2.3.2. MAL_DEATH: Facility based death attributed to malaria

Definition	<i>Proportion of all inpatient & emergency deaths due to lab confirmed malaria from the total deaths in the facility</i>	
Formula	<i>The total number of all inpatient & Emergency deaths due to laboratory confirmed malaria</i>	X 100
	<i>Total number of deaths reported in the health facilities during the reporting period</i>	
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, Pregnant	
Data Source	IPD register and Emergency registers	
Reporting level	Heath Post /health center / Hospital/Clinic	
Reporting Frequency	Monthly	

2.3.3. MAL_POS: Malaria positivity rate

Definition	<i>Percentage of slides/ RDT found positive among all slides/RDT tests performed</i>	
Formula	<i>Number of slides/RDT positive for malaria</i>	X 100
	<i>Total number of slides/RDT performed for malaria diagnosis</i>	
Interpretation	The slides / RDT positivity rate assesses the proportion of slides/RDT positive for malaria among tested patients with fever/malaria symptoms. 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, Pregnant	
Data source	Laboratory register for Health center and Hospital, Service delivery tally (for HPs)	
Reporting level	Heath Post /health center /Hospital/Clinic	
Reporting Frequency	Monthly	

2.3.4. MAL_FULL: Proportion of confirmed malaria cases fully investigated and classified

Definition	<i>Proportion of confirmed malaria cases fully investigated and classified from the total malaria cases</i>	
Formula	<i>Total number of malaria cases fully investigated and classified</i>	X100
	<i>Total number of malaria cases in elimination targeted Woredas</i>	
Interpretation	Case classification becomes important during the last stage of malaria elimination and is a primary reason for case investigation. This indicator shows the effort to investigate additional cases from the community following the index case within 70-meter radius and contribute identification of the presence of malaria cases in the community.	
Disaggregation	None	
Data Source	Malaria notification, screening and registration	
Reporting level	Heath Post /health center	
Reporting Frequency	Monthly	

2.3.5. MAL_FOCI: Proportion of foci fully investigated and classified

Definition	<i>It is the proportion of foci in elimination targeted Woredas where foci were fully investigated and classified from the total new potential and active foci</i>	
Formula	$\frac{\text{Total number of new potential and active foci that were fully investigated}}{\text{Total number of foci in elimination targeted Woredas}}$	X100
Interpretation	A foci investigation is conducted to identify the main features of a location, including the population at greatest risk, the rate of infection of disease, the distribution of vectors responsible for malaria transmission and the underlying condition that support it. This indicator helps to measure from the identified foci in the elimination districts with larva positive breeding sites and adult mosquito to take remedial actions (draining, filling, and larvicide, LLINs utilization and IRS).	
Disaggregation	None	
Data Source	Malaria notification, screening and registration and Malaria elimination form	
Reporting level	Heath Post /health center	
Reporting Frequency	Monthly	

2.3.6. MAL_PAR: Annual parasite incidence

Definition	<i>Confirmed malaria cases (microscopy or RDT) per 1000 persons per year.</i>	
Formula	$\frac{\text{Number of laboratory (microscopy or RDT) confirmed cases}}{\text{Total Population within the catchment}}$	X 1000
Interpretation	This indicator helps to see the transmission intensity in a given area and to monitor the effectiveness of anti-malaria interventions.	
Disaggregation	None	
Data Source	Laboratory register	
Reporting level	Heath Post /health center /Hospital	
Reporting Frequency	Monthly	

2.3.7. MAL_IRS: Proportion of unit structures covered by Indoor residual spraying

Definition	<i>Proportion of unit structures in IRS targeted areas that were sprayed in the last 12 months.</i>	
Formula	$\frac{\text{Number of unit structures sprayed}}{\text{Total number of unit structures in the target area for IRS}}$	X 100
Interpretation	<p>This indicator is directly related to operations: It indicates the proportion of houses sprayed with insecticide among targeted houses and is useful to increase the level of prevention of malaria in the targeted population.</p> <p>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 spray able 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. Collectively, these ideal activities comprise the level of adequacy referred to above.</p> <p>N.B on average one HH is equivalent to 1.5-unit structures.</p>	
Disaggregation	None	
Data Source	Administrative records	
Reporting level	WorHO, ZHD/SHO	
Reporting Frequency	Annually	

2.3.8. MAL_EQA: Proportion of health facilities covered by External Quality Assurance (EQA) for malaria diagnosis

Definition	<i>Health facilities (Public & Private) conducting malaria microscopy that are participating in the quarterly national/regional/sub-regional EQA with blinded rechecking, Panel and/or onsite evaluation method</i>	
Formula	<i>Number of health facilities participating in the quarterly blinded rechecking EQA for malaria diagnosis</i>	X 100
	<i>Total number of health facilities conducting malaria laboratory diagnosis (microscopy)</i>	
Interpretation	This indicator helps to know the quality of malaria diagnosis in the health facilities and it is calculated from the total health facilities conducting malaria microscopy.	
Disaggregation	None	
Data Source	Administrative Record (Lab record)	
Reporting level	Health center /Hospital	
Reporting Frequency	Quarterly	

3. Prevention and Control of Neglected Tropical Diseases

3.1 NTD_SCH: Proportion of individuals who swallowed MDA drug for Schistosomiasis

Definition	<i>Number of children who swallowed a drug to prevent schistosomiasis from the expected eligible children</i>	
Formula	<i>Number of individuals who swallowed praziquantel drug for Schistosomiasis</i>	X 100
	<i>Total children whose age is between 5-14 yr within specific cluster</i>	
Interpretation	Mass drug administration is among the globally recommended strategies for NTD prevention and control. This indicator monitors mainly the preventive chemotherapy coverage for the prevention of schistosomiasis disease. This indicator count the number of persons who are treated by MDA drugs at community/school level. It also evaluate the number of children who swallowed drug (praziquantel) among the total children who are eligible (5 years-14 years) to take the drugs.	
Disaggregation	Sex: M/F Age: 5-14yr; >=15	
Data source	Integrated MDA register	
Reporting level	Heath Post	
Reporting Frequency	Monthly	

3.2. NTD_STH: Proportion of individuals who swallowed drug for soil transmitted helminthiasis (STH)

Definition	<i>Number of children who swallowed a drug to prevent soil transmitted helminthiasis from the expected eligible children</i>	
Formula	<i>Number of individuals who swallowed Albendazole or albendazole drug for STH</i>	X 100
	<i>Total children whose age is between 5-19 within the specific cluster</i>	
Interpretation	Mass drug administration is among the globally recommended strategies for NTD prevention and control. This indicator is used to monitor program implementation for the prevention and STH worm intensity reduction among children whose age is 5 years-19 years. The program uses anti helminthiasis drug either Albendazole or Mebendazole for mass drug administration campaigns conducted in the community or at school level.	
Disaggregation	Sex, age: 5-14, 15-19, >=20	
Data source	Integrated MDA register	
Reporting level	Heath Post	
Reporting Frequency	Monthly	

3.3. NTD_LF: Proportion of individuals who swallowed drug for lymphatic filariasis(LF)

Definition	<i>Number of people who swallowed a drug to prevent lymphatic filariasis from the expected eligible population</i>	
Formula	<i>Number of individuals who swallowed ivermectin or Albendazole drug for LF</i>	X 100
	<i>Total population whose age is above 5 years within the specific cluster or endemic district</i>	
Interpretation	Mass drug administration is among the globally recommended strategies for NTD prevention and control. This indicator is among the five preventive chemotherapy neglected tropical disease program which is used to monitor the lymphatic filariasis program implementation for the prevention of lymphatic filariasis infection by administering ivermectin or Albedazole for the eligible population group whose age is above 5 yr. This indicator is used also to evaluate the elimination program of LF in Ethiopia by 2025.	
Disaggregation	Sex: M/F age: 5-14, >=15 years	
Data source	Integrated MDA register	
Reporting level	Heath Post	
Reporting Frequency	Monthly	

3.4. NTD_ONCH: Proportion of individuals who swallowed drug for onchocerciasis

Definition	<i>Number of who swallowed ivermectin to prevent onchocerciasis from the expected eligible population</i>	
Formula	<i>Number of individuals who swallowed ivermectin drug for onchocerciasis</i>	X 100
	<i>Total population whose age is above 5 years within the specific cluster or endemic district</i>	
Interpretation	Mass drug administration is among the globally recommended strategies for NTD prevention and control. This indicator is among the five preventive chemotherapy neglected tropical disease program which is used to monitor the onchocerciasis program implementation for the prevention of onchocerciasis infection by administering ivermectin for the eligible population group whose age is above 5 yr. This indicator is used also to evaluate the elimination program of onchocerciasis in Ethiopia by 2025.	
Disaggregation	Sex: M/F Age: 5-14, >=15	
Data source	Integrated MDA register	
Reporting level	Heath Post	
Reporting Frequency	Monthly	

3.5. NTD_TR: Proportion of individuals who swallowed drug for trachoma

Definition	<i>Number of people who swallowed azithromycin or took tetracycline eye ointment to prevent trachoma from the expected eligible population</i>	
Formula	<i>Number of individuals who swallowed azithromycin drug for trachoma</i>	X 100
	<i>Total population who are eligible for the trachoma MDA within the specific cluster or endemic district</i>	
Interpretation	Mass drug administration is among the globally recommended strategies for NTD prevention and control. Trachoma is known to be one of the major causes of blindness in Ethiopia. The demand for trachoma mass treatment is enormous. This indicator is among the five preventive chemotherapy neglected tropical disease program which is used to monitor the trachoma program implementation for the prevention of trachoma infection by administering azithromycin or tetracycline eye ointment for the eligible population. This indicator is used also to evaluate the elimination program of trachoma in Ethiopia by 2025.	
Disaggregation	Sex: M/F Age: 0-6 months, 6 months - 7 yrs; 7yr-14 yrs; >=15 yrs	
Data source	Integrated MDA register	
Reporting level	Heath Post	
Reporting Frequency	Monthly	

3.6. NTD_VL: Number of visceral Leishmaniasis (VL) cases treated

Definition	<i>Number of patients who are diagnosed and treated for visceral leishmaniasis using leishmaniasis drugs</i>	
Formula	<i>Number of individuals who are diagnosed and treated for visceral leshmaniasis</i>	
Interpretation	This indicator is used to monitor the visceral leishmaniasis control program in the country. This disease is fatal form of leishmaniasis that should be targeted for elimination. The objective of this indicator will tell about the progress of the program implementation. The disease incidence per annual is between 2,500- 4,000 cases in the country. Therefore, this indicator is used to monitor how many of the cases are investigated and managed.	
Disaggregation	Sex: M/F Age: <5; 5-14; 15+ yrs VL type: Primary, relapse, Post Kalazar Dermal (PKD) HIV status: Positive, Negative Treatment outcome: cure, defaulted, death, treatment failure, transfer out	
Data source	Leishmaniasis register	
Reporting level	Health center/Hospital	
Reporting Frequency	Monthly	

3.7. NTD_CL: Number of cutaneous Leishmaniasis (CL) cases treated

Definition	<i>Number of patients who are diagnosed as cutaneous Leishmaniasis by confirming parasite leishmania and treated by anti leishmaniasis</i>	
Formula	<i>Number of cutaneous leishmaniasis cases diagnosed and treated</i>	
Interpretation	This indicator is used to monitor the cutaneous leishmaniasis control program in the country. This disease causes disfigurement and stigma. And the objective of this indicator will tell about the progress of the program implementation. The disease incidence per annual is between 20,000- 30,000 cases in the country. Therefore this indicator will monitor how many of the cases have been reached and are managed.	
Disaggregation	Sex: M/F Age: <5; 5-14; 15+ yrs CL type: Primary, relapse Treatment outcome: cure, defaulted, death, treatment failure, transfer out	
Data source	Leishmaniasis register	
Reporting level	Health center/Hospital	
Reporting Frequency	Monthly	

3.8. NTD_TT: Proportion of Trachomatous Trichiasis (TT) cases who received corrective TT surgery

Definition	<i>Proportion of individuals with confirmed trichiasis for whom trichiasis corrective surgery was performed among all confirmed TT cases in the specific cluster</i>	
Formula	$\frac{\text{Number of individuals who have confirmed eyelid inversion or trichiasis}}{\text{Total number of estimated TT cases in the specific geography or population}} \times 100$	X100
Interpretation	Trachoma is the most common infectious cause of blindness worldwide. It causes trichiasis (in turning of the eyelash to touch the eye) which can cause visual loss. Surgery is the main treatment for trichiasis. In Ethiopia, there are backlogs of TT cases, which require an intensive TT surgical intervention. This indicator monitors the TT backlog clearance and used to evaluate the program's implementation status in reducing blindness due to preventable trachoma.	
Disaggregation	Sex: M/F Age: <15; >=15 yrs	
Data source	TT surgery register	
Reporting level	Health center/Hospital	
Reporting Frequency	Monthly	

4. Prevention and Control of Non-Communicable Diseases and Mental Health

4.1. NCD_HTNDX: Number of hypertensive patients enrolled to care

Definition	<i>Number of confirmed hypertension cases registered for treatment(enrolled to care)</i>
Formula	<i>Number of hypertensive patients enrolled to care</i>
Interpretation	<p>All individuals with confirmed hypertension are eligible to be enrolled to hypertensive care. Drug therapy is defined as taking medication for management of raised blood pressure or hypertension. Non-pharmacological management or healthy life style counseling is defined as giving advice by health workers to quit using tobacco, reduce excess alcohol intake, reduce salt in diet, eat at least five servings of fruit and/or vegetables per day, reduce fat in diet, start or do more physical activity, maintain a healthy body weight or lose weight.</p> <p>The global action plan on the prevention and control of NCDs suggests at least 50% of eligible people receive drug therapy and counseling to prevent heart attack and stroke. This indicator permits monitoring trends in the number of patients with hypertension who received treatment for hypertension. Moreover, it shows health seeking behavior of the community. Furthermore, it helps to design prevention, counseling and treatment interventions at health facilities, which further contribute to avoid cardiovascular complications. Treating hypertensive patients is associated with a decrease in cardiovascular complications. WHO recommends drug therapy for prevention and control of heart attacks and strokes because it is feasible, has high impact and affordable, even in low- and middle-income countries such as Ethiopia.</p>
Disaggregation	<p>Age: 18-29; 30-39; 40-65; >=70</p> <p>Sex: Male, female</p> <p>Type of Care:</p> <ul style="list-style-type: none"> ▪ Health lifestyle Counselling only (HLC) ▪ Pharmacological management and HLC <p>Timing of enrollment:</p> <ul style="list-style-type: none"> ▪ Newly enrolled to care ▪ Previously in care
Data source	HTN/DM Treatment Register
Reporting level	Health center / Hospital/Clinic
Reporting Frequency	Monthly

4.2. NCD_HTNTX: Six-monthly control of blood pressure among people treated for hypertension

Definition	<i>Proportion of patients registered for hypertensive treatment at the health facility whose blood pressure is controlled 6 months after treatment initiation</i>	
Formula	<i>Number of patients with controlled blood pressure at the last clinical visit</i>	X 100
	<i>Number of the cohort of patients registered for the treatment of hypertension during the month that ended 6 months previously</i>	
Interpretation	Controlled hypertension is an indication of the quality of care for hypertension patients. Controlled hypertension means Systolic blood pressure (SBP) of less than 140mmHg and Diastolic Blood Pressure (DBP) of less than 90 mmHg. Lost to follow-up means when hypertension patients do not report to the health center or hospital for more than 28 days after last appointment. Therefore, calculating hypertension control rate is an important indicator to measure the effectiveness of clinical services in the program.	
Disaggregation	Treatment Outcome after 6 months: <ul style="list-style-type: none"> Controlled, uncontrolled, lost to follow up, died, transferred out Age: 18-29; 30-39; 40-65; >=70 Sex: Male, female	
Data source	HTN/DM Treatment Cohort Register	
Reporting level	Health center / Hospital/Clinic	
Reporting Frequency	Monthly	

4.3. NCD_CVD: Proportion of patients with high CVD risk who received treatment

Definition	<i>It is the proportion of patients with high CVD risk (among those with HPN and DM) and received treatment for CVD risk reduction</i>	
Formula	<i>Number of patients with high CVD risk that received treatment</i>	X 100
	<i>Total number of patients with high CVD risk</i>	
Interpretation	<p>CV risk, according to WHO risk assessment, refers to the chance of having fatal or non-fatal heart attack/stroke in the next 10 years with the current risk profile of the patient. CVD risk factors are any biologic or environmental conditions known to increase the inherent risk of having CV event. Risk factor can be preventable. Primary Prevention from CVD is control of risk factors before cardiovascular disease develops while Secondary Prevention is Prevention of further occurrence or progression of previous cardiovascular disease.</p> <p>There are two types of WHO risk charts based on availability of laboratory to measure blood glucose and cholesterol levels. These are CVD risk charts that include measurements of total cholesterol and information on diabetes mellitus.</p> <p>The laboratory-based CVD risk charts should be used for treatment decisions. The variables needed for using this chart are as follows: History; Age (between 40 to 74 years); smoking history; current smoking; and sex.</p> <p>Individuals with >=20% of lab based risk category and >=10% of non-lab based category are considered to be at high risk of CVD.</p>	
Disaggregation	Type of treatment: With Statin , Without Statin Age: 40-59; 60-74 Sex: Male, female	
Data source	HTN/DM Treatment Register	
Reporting level	Health Center/Hospital	
Reporting Frequency	Monthly	

4.4. NCD_DMDX: Number of new diabetic patients enrolled to care

Definition	Number of confirmed diabetes cases registered for treatment (enrolled to care)
Formula	Number of new diabetic patients enrolled to care
Interpretation	WHO recommends glycemic control for prevention and control of heart attacks and strokes because it is feasible, high impact and affordable, even in low- and middle-income countries. This indicator allows monitoring trends in the number of patients with diabetes who received treatment. Monitoring treatment of diabetes at health facilities shows health seeking behavior of the community. Further, it helps to design prevention, counseling and treatment interventions, which further contribute to avoid macro vascular and micro vascular complications. Those patients newly enrolled to care after confirmation of diagnosis and those patients that were previously in care that are self-referred, referred from OPD, NCD screening corner or other units/health facilities will be included in the numerator. Those individuals found to have raised blood sugar after screening will be included in the denominator.
Disaggregation	<p>Type of treatment:</p> <ul style="list-style-type: none"> ▪ Health lifestyle Counselling only (HLC) ▪ Pharmacological management and HLC <p>Timing of enrollment:</p> <ul style="list-style-type: none"> ▪ Newly enrolled to care ▪ Previously in care <p>Age: <15, 15-29, 30-39, >=40</p> <p>Sex: Male, Female</p>
Data source	HTN/DM Treatment Register
Reporting level	Health center /Hospital/ Clinic
Reporting Frequency	Monthly

4.5. NCD_DMTX: Six-monthly control of diabetes among individuals treated for diabetes

Definition	Proportion of newly enrolled diabetic individuals with controlled blood glucose at 6 months after initiating treatment	
Formula	$\frac{\text{Number of patients with controlled diabetes at the last clinical visit}}{\text{Number of cohort of patients registered for treatment of diabetes during the month that ended 6 months previously}} \times 100$	X 100
Interpretation	<p>This indicator allows monitoring of diabetes control among newly enrolled diabetic patients 6 months after initiating treatment. Monitoring this indicator shows the quality and effectiveness of the program. It is a quality indicator, which helps to design prevention, counseling and treatment interventions to further contribute to avoid macro vascular and micro vascular complications.</p> <p>Diabetes is labelled as controlled when fasting blood glucose (FBG) level is below 130mg/dl at the last clinical visit in the most recent month just before the reporting period.</p>	
Disaggregation	<p>Treatment outcome:</p> <ul style="list-style-type: none"> ▪ Controlled, uncontrolled, Lost to follow up, Died and Transfer out <p>Age: <15, 15-29, 30-39, >=40</p> <p>Sex: Male, Female</p>	
Data source	HTN/DM Treatment Cohort Register	
Reporting level	Health center/ Hospital/ Clinic	
Reporting Frequency	Monthly	

4.6. NCD_CV_SCRN: Proportion of women aged 30–49 years screened for cervical Ca

Definition	<i>The proportion of women between ages 30 – 49 screened either with Visual Inspection with Acetic Acid (VIA) or Human Papilloma Virus (HPV) DNA test for cervical cancer</i>	
Formula	<i>Number of women aged 30–49 years who have been screened for cervical cancer in the reporting period</i>	X 100
	<i>Estimated number of women aged 30–49 years in the catchment</i>	
Interpretation	<p>This indicator is intended to monitor trends in the 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 (usually in family planning clinics) from health facilities providing the service. 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. Additionally Ethiopia has also introduced the HPV DNA test as an additional screening test in addition to the VIA screening test previously in use.</p> <p>Early detection and treatment of precancerous lesions can result in massive improvements in the chance of survival, and are especially important in developing countries where access to expensive cancer treatment is limited. There is sufficient evidence that cervical cancer screening can reduce cervical cancer mortality by 80 per cent or more among screened women.</p> <p>The service is provided integrated with family planning service and during the service; cervical in-take form will be used to document the required information during screening. HPV DNA test positive only tells us the presence of human papilloma virus infection. Therefore, women whose HPV DNA test turned positive should undergo VIA screening to identify presence of lesion.</p>	
	Disaggregation	<p>Screening type: VIA, HPV DNA</p> <p>Result for VIA:</p> <ul style="list-style-type: none"> ▪ Negative, ▪ Positive: eligible for cryotherapy/ thermo coagulation ▪ Positive: Not eligible for cryotherapy/ thermo coagulation ▪ Suspicious cancerous lesion <p>Result for HPV DNA test: Positive, negative</p>
Data source	Cervical Cancer Screening and Treatment Register	
Reporting level	Health Center/Hospital/Clinic	
Reporting frequency	Monthly	

4.7. NCD_CV_TX: Proportion of eligible women who received treatment for cervical lesion

Definition	Percentage of women with a precancerous lesion on VIA test who received treatment	
Formula	Number of women 30 - 49 years with cervical lesion treated	X 100
	Number of women 30 - 49 years with identified pre-cancerous cervical lesion	
Interpretation	This indicator is intended to monitor the proportion of women with precancerous cervical lesions who received treatment of precancerous lesions with treatment approaches such as cryotherapy, LEEP or thermal ablation. This can result in massive improvements of survival, and are especially important in developing countries where access to expensive cancer treatment is limited.	
Disaggregation	Treatment type: <ul style="list-style-type: none"> ▪ Cryotherapy ▪ LEEP ▪ Thermal Ablation/Thermo-coagulation 	
Data source	Cervical Cancer Screening and Treatment Register	
Reporting level	Health Center/Hospital/Clinic	
Reporting Frequency	Monthly	

4.8. NCD_CSR: Cataract surgical rate (CSR)

Definition	Number of cataract operations performed per million population	
Formula	Number of Cataract surgeries performed	X 1,000,000
	Total population in the catchment area	
Interpretation	The CSR is a performance indicator that indicates the extent of the effort to control cataract blindness and it 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 us to improve training and influence policy. It is simple to collect output indicator recommended by WHO, it show the performance in relation to the country's need to do cataract surgeries. It helps decision makers to allocate resources based on the performance and workload of the facilities and regions.	
Disaggregation	None	
Data source	Operation Register	
Reporting level	Health Center/Hospital/Clinic	
Reporting Frequency	Monthly	

Mental Health

4.9. MH_TX: Proportion of individuals treated for priority mental health disorders

Definition	<i>It is the proportion of individuals who were diagnosed and treated for priority mental health disorders, including depression, psychosis, bipolar, epilepsy and substance use disorders</i>	
Formula	$\frac{\text{(Number of individuals who were treated for depression)}}{\text{(Estimated number of individuals with Depression)}}$	X 100
	$\frac{\text{(Number of individuals who were treated for psychosis)}}{\text{(Estimated number of individuals with psychosis)}}$	
	$\frac{\text{(Number of individuals who were treated for bipolar disorder)}}{\text{(Estimated number of individuals with bipolar disorder)}}$	
	$\frac{\text{(Number of individuals who were treated for epilepsy)}}{\text{(Estimated number of individuals with epilepsy)}}$	
	$\frac{\text{(Number of individuals who were treated for substance use disorder)}}{\text{(Estimated number of individuals with substance use disorder)}}$	
Interpretation	This indicator measures coverage of services for priority mental health disorders that includes Depression, Psychosis, Bipolar, and epilepsy and substance use disorder. The numerator is the number of people that received mental health service and the denominator is the expected number of people with priority mental health disorders in the catchment area. For each priority mental health disorders, the estimate can be taken from national or subnational studies.	
Disaggregation	<p>Type of disorder:</p> <ul style="list-style-type: none"> - Depression, - Psychosis, - Bipolar, - Epilepsy - Substance use disorder) <p>Age: <15, 15-24, 25-49, 50+</p> <p>Sex: Male, Female</p>	
Data source	OPD and IPD registers	
Reporting level	Health center /Hospital/ Clinic	
Reporting Frequency	Monthly	

4.10. NCD_CDBD: Proportion of children (<18) diagnosed and treated for childhood developmental and behavioral disorders

Definition	<i>It is the proportion of children under 18 years of age who have been diagnosed and treated for childhood developmental and behavioral disorders, from the estimated number of children with the disorders</i>	
Formula	<i>Number of children treated for childhood and behavioral disorders</i>	X 100
	<i>Estimated number of children with childhood developmental and behavioral disorders</i>	
Interpretation	<p>This indicator measures access to services targeting childhood and developmental disorders. It measures the proportion of children who are diagnosed and treated for major childhood and developmental disorders such as autistic disorders, intellectual disability, learning and developmental problems, attention deficit hyperactivity disorder (ADHD), Conduct and Oppositional Disorders down's syndrome, and others.</p> <p>For each childhood developmental and behavioral disorder, the estimate can be taken from national or subnational studies.</p>	
Disaggregation	Sex: M/F Type of disorder	
Data source	OPD and IPD registers; IMNCI register; Mental Health Follow up register	
Reporting level	Health center /Clinic/ Hospital	
Reporting Frequency	Monthly	

5. Hygiene and Environmental Health

5.1. HEH_HHLW: Proportion of HHs with liquid waste management

Definition	<i>Proportion of HH having safe liquid waste disposal site</i>	
Formula	<i>Number of households having liquid waste disposal site</i>	X100
	<i>Total number of households</i>	
Interpretation	<p>This indicator measures availability of liquid waste management system at household level. Liquid wastes at household level should be managed by preparing seepage pit, septic tanks, connected to sewer lines and latrines. Thus, this indicator measures the status of liquid waste management by the households.</p> <p>Limitations: Health extension workers may not visit all household in one quarter. So, the indicator may not represent the actual status of the kebele quarterly.</p>	
Dis-aggregation	None	
Source	Hygiene & Sanitation card (FF)/eCHIS, household register	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

5.2. HEH_HHSW: Proportion of HHs with safe solid waste management

Definition	<i>Proportion of HH having safe solid waste disposal site</i>	
Formula	<i>Number of households having solid waste disposal site</i>	X100
	<i>Total number of households</i>	
Interpretation	<p>This indicator measures availability of solid waste management system at household level. Safe solid waste disposal at HH level includes burial, composting, providing household wastes to authorized collectors, disposing in municipal containers by households.</p> <p>Limitations: Health extension workers may not visit all household in one quarter. So, the indicator may not represent the actual status of the a kebele quarterly</p>	
Dis-aggregation	None	
Source	Hygiene & Sanitation card (FF)/eCHIS, household register	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

5.3. HEH_HHSF: Proportion of households having sanitation facilities

Definition	<i>Proportion of households having sanitation facilities disaggregated by basic, limited and unimproved facilities</i>	
Formula	<i>Number of households having sanitation facilities</i>	X100
	<i>Total number of households</i>	
Interpretation	<p>This indicator measures Proportion of households having sanitation facilities disaggregated by basic, limited and unimproved facilities. These facilities are classified into three categories that include:</p> <p>Basic sanitation services: Use of improved sanitation facilities that are not shared with other households.</p> <p>(Improved sanitation facilities are Sanitation facilities that are designed to hygienically separate human excreta from human contact. These include wet sanitation technologies such as flush and pour flush toilets connected to sewers, septic tanks or pit latrines, and dry sanitation technologies such as dry pit latrines with slabs and composting toilets.)</p> <p>Limited sanitation services: Use of improved sanitation facilities shared between two or more households.</p> <p>Unimproved sanitation services: Use of unimproved sanitation facilities. (Unimproved sanitation facilities are Sanitation facilities that do not hygienically separate human excreta from human contact. This includes dry pit latrines without slabs, hanging latrines, bucket latrines, and flush and pour-flush toilets discharging to an open drain.)</p> <p>No sanitation services: no sanitation facility in the household</p> <p>Limitations: Health extension workers may not visit all household in one quarter. So, the indicator may not represent the actual status of the kebele quarterly.</p>	
Dis-aggregation	Basic, limited, unimproved Sanitation Facilities, No facility	
Source	Hygiene & Sanitation card (FF)/eCHIS, household register	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

5.4. HEH_HHHWF: Proportion of households having hand washing facilities at the premises

Definition	<i>Proportion of households having hand washing facilities at the premises disaggregated by basic & limited hand washing facilities</i>	
Formula	<i>Number of Households having hand washing facilities at the premises</i>	X100
	<i>Total number of Households</i>	
Interpretation	<p>This indicator measures Proportion of households having hand washing facilities at the premises disaggregated by basic & limited hand washing facilities Hand Washing Services: may be fixed or mobile, and include sinks with tap water, buckets with taps, tippy-taps, and jugs or basins designated for hand washing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other traditional hand washing agents.</p> <p>Basic hand washing service: availability of a hand washing facility on premises with soap and water.</p> <p>Limited hand washing service: availability of hand washing facility on premises but without soap or water.</p> <p>No hand washing facility: no hand washing facility of any kind on premises.</p> <p>Limitations: Health extension workers may not visit all household in one quarter. So, the indicator may not represent the actual status of the kebele quarterly.</p>	
Dis-aggregation	Basic, limited, No facility	
Source	Hygiene & Sanitation card (FF)/eCHIS, household register	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

5.5. HEH_HHHH: Proportion of households with healthy housing

Definition	<i>Proportion of households with healthy housing disaggregated by separate animal house, smokeless stove and separate Kitchen</i>	
Formula	<i>Number of households with healthy housing</i>	X100
	<i>Total number of households</i>	
Interpretation	<p>This indicator measures the Proportion of households with healthy housing. Healthy housing is one of the health extensions packages that is implemented at household level. The package is intended for the prevention of diseases related with indoor air pollution, zoonotic diseases. For the house to be Healthy, it should fulfill at least Separate kitchen, Smokeless stove and separate animal house. Healthy housing can be disaggregated as, a house with</p> <p>Separate kitchen, Smokeless stove, separate animal house</p> <p>Limitations: Health extension workers may not visit all household in one quarter. So, the indicator may not represent the actual status of the kebele quarterly.</p>	
Dis-aggregation	Separate kitchen, Smokeless stove, separate animal house	
Source	Hygiene & Sanitation card (FF)/eCHIS, household register	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

5.6. HEH_ODF: Proportion of kebeles declared ODF

Definition	<i>Proportion of kebeles declared ODF registered as new and existing among total number of kebeles</i>	
Formula	<i>Number of kebeles that have been declared open defecation free [Existing + New]</i>	X100
	<i>Total number of kebeles</i>	
Interpretation	<p>This indicator measures the number of Kebeles which have declared open defecation free and verified and certified by Woreda ODF verification Team based ODF verification and certification protocol.</p> <p>Existing: number of ODF kebeles declared in previous quarter and still sustained ODF until reporting quarter</p> <p>New: Number of ODF Kebeles declared in reporting quarter</p> <p>Limitations: The kebele status may be changed over time.</p>	
Dis-aggregation	Existing, New	
Source	Hygiene & Sanitation card (FF)/eCHIS	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

5.7. HEH_WSTST: Proportion of water schemes for which water quality test conducted

Definition	<i>Proportion of water schemes for which water quality test conducted</i>	
Formula	<i>Number of water schemes tested for water quality</i>	X100
	<i>Total number of water schemes</i>	
Interpretation	<p>This indicator measures Proportion of water schemes for which water quality test conducted. Water quality test includes test of drinking water sources for physical, microbiological, chemical parameters which is conducted by woreda health Offices using portable water test kits and should be conducted biannually in regular basis and occasionally based on rumors indicated suspicion of contaminated water.</p> <p>Positive for Micro biological test result means E.coli count equals to or more than 1.</p> <p>Limitations: The woreda may not visit all water schemes in one quarter. So, the indicator may not represent the actual status of the Woreda quarterly.</p>	
Dis-aggregation	Total water quality test, Positive for Microbiological test	
Source	Admin record	
Reporting level	Woreda Health Office	
Reporting Frequency	Quarterly	

5.8. HEH_HFWATER: Proportion of health facility with water service

Definition	<i>Proportion of health facility with water service disaggregated by basic, limited & No services</i>	
Formula	<i>Number of health facilities with water services</i>	X100
	<i>Total number of Health facilities</i>	
Interpretation	<p>This indicator measures the Proportion of health facility with water service. Availability of water service can be reported with disaggregation as;</p> <p>Basic water service: Water is available from piped water, boreholes or tube wells, protected dug wells, protected springs, rainwater, and packaged or delivered water in which their nature of design and construction have the potential to deliver safe water on the premises. The water source should be within the premises of the health facility.</p> <p>Limited water services: Water is available from piped water, boreholes or tube wells, protected dug wells, protected springs, rainwater, and packaged or delivered water in which their nature of design and construction have the potential to deliver safe water within 500 meters of the premises, but not all requirements for basic service are met. The water source is not in the health facility but is within 500m from the health facility.</p> <p>No water services: Water is taken from unprotected dug wells or springs, or surface water sources; or an improved source that is more than 500 meters from the premises; or there is no water source.</p> <p>Limitations: Needs continuous supervision of water facilities in Health facilities, training and capacity building of woreda health office staffs.</p>	
Dis-aggregation	Basic, limited or No Service	
Source	Admin	
Reporting level	Health post/ Health center/Hospital	
Reporting Frequency	Quarterly	

5.9. HEH_HFSAN: Proportion of health facility with sanitation facilities

Definition	<i>Proportion of health facility with sanitation facilities disaggregated by basic, limited & no sanitation service</i>	
Formula	<i>Number of health facility with sanitation facilities</i>	X100
	<i>Total number of Health facilities</i>	
Interpretation	<p>This indicator measures Proportion of health facility with sanitation facilities. Availability of sanitation facilities can be reported with disaggregation as;</p> <p>Basic sanitation service: Access and use of wet sanitation technologies – such as flush and pour flush toilets connecting to sewers, septic tanks or pit latrines – and dry sanitation technologies – such as dry pit latrines with slabs, and composting toilets designed to hygienically separate human excreta from human contact, with at least one toilet dedicated for staff, at least one sex-separated toilet with menstrual hygiene facilities, and at least one toilet accessible for people with limited mobility.</p> <p>Limited sanitation services: At least one wet sanitation technologies – such as flush and pour flush toilets connecting to sewers, septic tanks or pit latrines – and dry sanitation technologies – such as dry pit latrines with slabs, and composting toilets is available, but not all requirements for basic service are met.</p> <p>No sanitation services: Toilet facilities are unimproved (e.g. pit latrines without a slab or platform, hanging latrines, bucket latrines) or there are no toilets.</p>	
Dis-aggregation	Basic, limited or No sanitation Service	
Source	Admin	
Reporting level	Health Post/Health center/Hospital	
Reporting Frequency	Quarterly	

5.10. HEH_HFWASTE: Proportion of health facilities with healthcare waste management services

Definition	<i>Proportion of health facilities with healthcare waste management services</i>	
Formula	<i>Number of health facilities with healthcare waste management services</i>	X100
	<i>Total number of Health facilities</i>	
Interpretation	<p>This indicator measures Proportion of health facility with waste management services. Availability of waste management services can be reported with disaggregation as;</p> <p>Basic waste management service: Waste is safely segregated into at least three categories: bins, sharps and infectious wastes, and are treated and disposed safely.</p> <p>Limited waste management services: There is limited separation and/or treatment and disposal of sharps and infectious waste, but not all requirements for basic service are met.</p> <p>No waste management services: There are no separate bins for sharps or infectious waste, and sharps and/or infectious waste are not treated/disposed of safely.</p>	
Dis-aggregation	Basic, limited or No Service	
Source	Admin	
Reporting level	Health post/Health center/Hospital	
Reporting Frequency	Quarter	

6. Health Extension and Primary Health Care

6.1 HEPHC_MODEL_H: Model Households

Definition	<i>Proportion of households that are currently model based on model household criteria</i>	
Formula	<i>Number of currently model households in the catchment</i>	X100
	<i>Total number of households in the catchment area</i>	
Interpretation	<p>This indicator measures the extent to which households are producing their health by implementing the health extension program components. It is about transfer ownership and responsibility of maintaining their health to individual households.</p> <p>Households that put at least 75% of the HEP packages into practice are considered as Model. Currently Model Households = (Previously graduated + Newly graduated) minor dropout</p> <p>Limitation: Health extension workers may not visit all household in one quarter. So, the indicator may not represent the actual status of the kebele quarterly.</p>	
Dis-aggregation	None	
Data Source	Family Folder (eCHIS), household register	
Reporting level	Heath Post	
Reporting Frequency	Quarterly	

6.2 HEPHC_HPPHCU: Proportion of high performing PHCUs

Definition	<i>Proportion of primary health care unit that score 85% & above in average based on agreed criteria</i>	
Formula	<i>Number of high performing PHCUs</i>	X100
	<i>Total Number of PHCUs</i>	
Interpretation	<p>This indicator measures high performing PHCUs based on a set of criteria. A PHCU will be considered as high performing if it scored an average weight of more $\geq 85\%$. All the criteria need not to be fulfilled independently. Primary health care unit encompass one health center with in average 5 satellite health post.</p> <p>Producing high performing PHCUs is a critical component of to achieving woreda transformation, which is currently measured Quality and Equity Score (50%), Information Revolution Score (15%), MCC; Health workforce Score (10%), Leadership/ Governance Score (20%) and Health Financing Score (5%).</p>	
Dis-aggregation	None	
Source	Admin record	
Reporting level	WoHO	
Reporting Frequency	Quarterly	

6.3. HEPHC_COMP_HP: Proportion of health posts providing comprehensive health services

Definition	<i>Proportion of health posts that provide comprehensive health services</i>	
Formula	<i>Number of health posts providing comprehensive health services</i>	X100
	<i>Total Number of health posts</i>	
Interpretation	<p>This indicator measures the number of comprehensive health posts in the woreda. The type of service, HR and other criteria to become comprehensive health post are defined in HEP optimization roadmap, which guides the HEP program for the coming 15 years. The roadmap categorizes health posts in to three, namely: comprehensive health post, basic health post and integrated health post based on different criteria. In the coming five years 10% of current health posts are expected to be changed to comprehensive health post.</p> <p>If a health post's status changes from one to another, then their HR, service delivery and logistic system also changes. Therefore, monitoring this change is a very important aspect during the HSTP-2 period.</p>	
Dis-aggregation	Basic and Comprehensive	
Source	Admin Record	
Reporting level	Woreda HO	
Reporting Frequency	Annually	

6.4. HEPHC_MODEL_K: Model Kebele

Definition	<i>Proportion of model kebele among total kebeles</i>	
Formula	<i>Number of Model Kebeles</i>	X100
	<i>Total number of Kebeles</i>	
Interpretation	<p>This indicator measures the number of model kebeles in the catchment area. A Kebele is labeled as model if it scored an average weight of more $\geq 85\%$ based on preset criteria and which is further verified by woreda verification team.</p> <p>The model Kebele status can be calculated based on the following categories:</p> <ul style="list-style-type: none"> - Quality and equity Score (40%) - Information Revolution Score (20%) - Leadership/Governance Score (40%) <p>Kebele will be considered model if it scored an average weight of $>85\%$.</p>	
Disaggregation	None	
Source	Admin Record	
Reporting level	Health center	
Reporting Frequency	Quarterly	

7. Medical services

7.1. MS_OPD: Out-Patient Attendance Per-Capita

Definition	<i>Number of outpatient department visits (days) per person per year.</i>
Formula	$\frac{\text{Total number of outpatient visits}}{\text{Total catchment population}}$
Interpretation	<p>Outpatient attendance shows the level of utilization of and access to outpatient health care services. It 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). It has been demonstrated that OPD attendance visit goes-up when such barriers are removed through bringing services closer to people and reducing user fees. It is used to examine trends, variations, and use of service by type of facility and health care services by the type of facility and health care services, geographic districts, and urban rural locations.</p> <p>Every patient or client who visited any health facility including public, private, non-governmental, and community-based health facilities for any service should be included in OPD attendance report. Patients who attend the following services should be INCLUDED in the outpatient count and should be counted once a day:</p> <ul style="list-style-type: none"> • 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 <p>Patients who attended services at dressing and injection room</p>
Dis-aggregation	Age, sex
Source	Service delivery tally (for HP)/Central Card Room Register and OPD attendance tally
Reporting level	Health Post/Health center/Clinic/Hospital/
Reporting Frequency	Monthly

7.2. MS_BOR: Bed Occupancy Rate

Definition	Percentage of available beds that have been occupied over a given period	
Formula	Sum-total of the length of stay (in days) in the reporting period	X100
	(Number of beds available)X(Number of days in the period)	
Interpretation	<p>Bed occupancy rate (BOR) is calculated as a percentage of the number of beds effectively occupied (bed-days) for curative care divided by the number of beds available for curative care multiplied by the number of days in the period. It is a measure of the efficiency of inpatient services. Hospitals are most efficient at a BOR of about 85%. If the BOR is lower, resources may be wasted. If the BOR is higher than 85% there is a danger of staff burn-out, over-crowding, and shortage of beds during sudden increases in demand for in-patient services during epidemics or emergency situations. Higher BOR is usually associated with reduced patient safety and privacy and is associated with an increase in rates of in-hospital mortality. BOR could be sharply increased during epidemics or emergency situations. In resource-limited situations, hospitals may admit patients beyond their capacities and treat them by keeping them on the floor, trolleys and stretchers and BOR could be raised beyond 100%. Measuring BOR helps hospitals to determine inefficiencies or stresses in service delivery to investigate and take action to address it, and also to plan for the future staff or other resource requirements.</p>	
	<p>An operational (in-patient) bed includes beds for all components of curative care of illnesses (including both physical and mental or psychiatric illnesses) or treatment of injury), diagnostic, therapeutic, and surgical procedures; and obstetric services. It EXCLUDES beds in emergency room or emergency gynecology departments, beds in day units or day surgery, temporary beds (stretchers or trolleys, observation or recovery beds in the emergency department, operating room or outpatient department, labor suite beds, delivery beds or couches, examination beds for non-patients (e.g. beds for mothers accompanying children), beds or cots for healthy babies who are born in the hospital or visiting the facility as accompany. Beds for rehabilitative care, long term and palliative care should also be excluded.</p>	
	<p>The length of stay should ONLY be counted for the actual reporting period. If a patient was admitted during a previous reporting period, their length of stay during that previous reporting period should not be counted for the current period. During calculation, INCLUDE patients admitted to both public and private facilities.</p> <p>Limitation: Comparing the performance of hospitals of the same level but with different number of beds using BOR may be misleading. Hospitals with fewer beds (fewer than the standard) can have higher BOR than hospital of the same level (in the tier system) with higher number of hospitals</p>	
Dis-aggregation	None	
Source	Inpatient admission/discharge (IPD) register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.3. MS_ALOS: Average Length of Stay (in days)

Definition	<i>The average length of stay (in days) of patients in an inpatient facility during a given period of time</i>	
Formula	<i>Total length of stay (in days)</i>	
	<i>Number of in-patient discharges</i>	
Interpretation	<p>Average length of stay is a measure of health service quality and efficiency [2, 3]. It reflects the appropriate utilization of inpatient services. By monitoring length of stay, hospitals can assess if patients remain in hospital for longer than what is necessary, perhaps due to non-clinical reasons, and investigate further if required. The longer the patient stays at hospital, the greater the risk of developing health facility-acquired infection, lower patient capacity of hospitals and increased costs. Decreased ALOS has been associated with decreased risks of nosocomial infections and side effects of medication rates, reduced burden of medical fees and increase the bed turnover rate and lowered social costs [8].</p> <p>NB: If the patient is directly discharged or transferred to home or other facility from ICU the length stay should be counted.</p> <p>During calculation, discharge includes discharge due to any possible reasons including death, referral, terminal, absconded, or death. Analysis by type of ward is more informative for facility level analysis and pinpoint area of improvement.</p> <p>Limitations: Regional or national level aggregation of ALOS may be less informative to identify types of disease and wards with increased or lower ALOS.</p>	
Dis-aggregation	None	
Source	Inpatient admission/discharge register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.4. MS_HBD: Hospital Bed Density

Definition	<i>Total number of hospital beds per 10, 000 population</i>	
Formula	<i>Total number of functional beds in the hospital</i>	<i>X 10,000</i>
	<i>Total number of population</i>	
Interpretation	<p>The indicator contributes to the measurement of facility infrastructure management, such as physical availability and accessibility of health services. It is a measure of access to hospital service, equity in access and plan for possible expansion of hospital service. It excludes labor and delivery beds. The total population should consider all population that need to have access to hospital service.</p> <p>Limitations: the indicator shows access at a point in time. Because of catchment population overlap at the lower level, the indicator could be exaggerated.</p>	
Dis-aggregation	None	
Source	Tally sheet/register at liaison/ward to capture the number of beds	
Reporting level	Hospital	
Reporting Frequency	Annually	

7.5. MS_ASSTECH: Assistive Technology Service Coverage

Definition	<i>Percentage of clients received AT service among those who sought AT service</i>	
Formula	<i>Total number of clients received AT service</i>	X100
	<i>Total number of clients registered to receive AT service</i>	
Interpretation	Assistive technology (AT) service coverage measures the demand satisfied for AT by people with different types of disability. It shows the inclusiveness of the health service to provide technology services to the disabled to improve their quality of life.	
Dis-aggregation	Category of disabilities (Physical, mobility, hearing, others) Age, sex	
Source	AT service register (New)	
Reporting level	Hospital	
Reporting Frequency	Quarterly	

7.6. MS_LaBT: Essential laboratory test availability

Definition	<i>The number of days in which all health center or hospital specific essential laboratory tests were available in the reporting period</i>	
Formula	<i>Total number of days each essential laboratory tests are available in the facility during the reporting period</i>	X100
	<i>(Total number of facility specific essential tests) X (Total number of days in the reporting period)</i>	
Interpretation	Hospitals and health centers are required to avail the minimum laboratory tests recommended by Food and Drug Administration standards at all times. The availability of health facility specific essential laboratory tests is a measure of service availability. Essential tests should ALWAYS be available at the health facility. If one of these tests is unavailable at any time, the health facility should take action to identify and address the cause. For the RHB, knowledge of the availability of health facility specific essential laboratory tests in hospitals helps to assess the adequacy of access to laboratory tests and helps to address issues of good governance. The list of essential laboratory tests at each level is annexed.	
Dis-aggregation	None	
Source	Log sheet or tally sheet	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.7. MS_RoR: Referral-out Rate

Definition	<i>Proportion of patients who are referred to another health facility</i>	
Formula	<i>Number of referred patients (emergency + non-emergency)</i>	X100
	<i>Total number of patients or clients seen in the health facility</i>	
Interpretation	<p>A referral is the process in which a health worker at one level of the health system, having insufficient resources (drugs, equipment, skills) to manage a clinical condition, seeks the assistance of a better or differently resourced facility at the same or higher level to assist in, or take over the management of the case. An effective referral system ensures a close relationship between all levels of the health system and helps to ensure people to receive the best possible care closest to home.</p> <p>Referral rate is an indicator of quality of health care. Referrals are systems that are important for clients to receive the proper care they need in another health facility. A high number and proportion of referrals made from a health facility to another health facility may indicate that the health facility is not providing all services required, whereas a low number and proportion of referrals might indicate that the health facility is not following referral guidelines and is treating patients beyond their capacity. Knowing the rate of referrals helps to plan for future service provision.</p> <p>A referral rate of a facility ranges from 10-20% and it should be interpreted cautiously by taking expert's suggestion into consideration. When referral rate is below 10%, it indicates the need to conduct audit on professional scope of practice to discern if the health facility is practicing health care delivery beyond its scope. If the referral rate is above 20%, it signifies the need to identify the top-five reasons for referral and consider expanding service.</p> <p>Limitation: The indicator is more informative at the facility level and doesn't indicate reasons for referral-out.</p>	
Dis-aggregation	Emergency and non-emergency	
Source	Referral register/Liaison register, OPD tally sheet	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.8. MS_AMBU: Ambulance service utilization for referral service

Definition	<i>Percentage of referral-in with ambulance among the emergency referral-ins</i>	
Formula	<i>Total number of emergency referral-in with ambulance</i>	X100
	<i>Total number of all emergency referral-in the reporting period</i>	
Interpretation	<p>This indicator shows the percentage of emergency referrals that used ambulance to travel to the health facility and roughly measures the utilization ambulance service. Because this indicator doesn't show the service quality, it should be interpreted along with ambulance response rate, which shows the use of EMT or nurse accompanying the emergency case. When calculating this indicator, all referrals including referral-ins should be included in the denominator.</p>	
Dis-aggregation	Pre-facility, between facility	
Source	Emergency register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.9. MS_AMBUR: Ambulance service response rate

Definition	Percentage of community ambulance requests for whom ambulance was dispatched	
Formula	Number of ambulance requests for whom ambulance was dispatched	X100
	Total number of community requests made for ambulance service	
Interpretation	<p>Pre-facility emergency care and ambulances service is an emergency care outside of a health facility or at the scene and continuing care during transportation with ambulance and ends with proper hand over of patient or victim to respective health facility. When it is accessible to the community, it contributes for reduction of deaths and disability due to acute illness and severe injuries. A high response rate indicates the services the system's responsiveness and availability of services, and adequacy of the number of ambulances. Low response shows demand and capacity gap. The target is more than 90% of actual emergency call has to get ambulance dispatch for the service. The dispatch center where the register will be put could be different and it should be placed in all centers where there are call and dispatching of ambulances.</p> <p>Limitation: This indicator doesn't show the community demand for ambulance service, as the community members who have awareness about the service and who have the capability to make a call request ambulance services.</p>	
Dis-aggregation	<ul style="list-style-type: none"> Number of Ambulance dispatched (With EMT/nurse, Without EMT/nurse) With case (labor and delivery , Road Traffic Accident and other)	
Source	Ambulance service register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.10. MS_EMERG_MR: Facility emergency department mortality rate

Definition	Percentage of patients died at the emergency department within 24 hours among all emergency attendances	
Formula	Total number of deaths in emergency unit within 24 hours	X100
	Total number of emergency room attendances	
Interpretation	<p>The emergency department mortality is a measure of the quality of care provided by the emergency department of the health facility within 24 hours of arrival at the emergency room. A high mortality could indicate that the facility is providing poor quality emergency care with unnecessary patient deaths against national target. Nationally emergency room mortality should be less than 0.6 %. The number of deaths within the facility in places other than emergency room should be captured as absolute number can be used to see the trend.</p> <p>N.B. A Patient who is already dead on arrival should be excluded in the indicator.</p> <p>Dead on arrival means when the patient arrives to the triage area and confirmed dead by the physician.</p>	
Dis-aggregation	Sex: Male/Female Age <15 years, 15+ years < 24 hours, >=24 hrs	
Source	Emergency register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.11. MS_EMERG24: Emergency room attendances with length of stay > 24 hours

Definition	<i>The proportion of all emergency room admissions who remain in the emergency room for > 24 hours</i>	
Formula	<i>Total number of admissions who remain in emergency room for more than 24 hours</i>	X100
	<i>Total number of emergency room discharges</i>	
Interpretation	<p>Hospitals have emergency room beds where patients can stay for a short period of time to receive emergency treatment. However, the length of stay in the emergency room should always be less than 24 hours. If a patient requires treatment for longer than 24 hours, the patient should be transferred to a ward. If emergency room beds are occupied by patients for more than 24 hours, then the emergency room will become congested and there is a danger that the emergency room will not have the capacity to receive any NEW emergency attendances.</p> <p>The indicator includes all patients registered in the emergency room (of both sexes and all ages) and excludes patients who were already dead (i.e. no vital signs present) on arrival.</p>	
Dis-aggregation	None	
Source	Emergency register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.12. MS_VAP: Percentage of ventilator associated pneumonia

Definition	<i>The percentage of ICU clients who have developed ventilator associated pneumonia among those who were intubated for mechanical ventilation</i>	
Formula	<i>Total number of clients developed ventilator associated pneumonia</i>	X100
	<i>Total number of ICU clients on ventilator</i>	
Interpretation	<p>Ventilator associated pneumonia is one of the common complications that affects the clients in the ICU. The probability of developing VAP of a patient in the ICU depends on the skills of ICU staff to provide mechanical ventilation to patients and it measures the quality of ICU service and determines the outcome of the patient.</p>	
Dis-aggregation	None	
Source	ICU register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.13. MS_ICU_MR: Mortality rate in Intensive Care Unit

Definition	Percentage of patients who died in the ICU among those admitted to ICU	
Formula	Number of deaths in ICU	X100
	Total number of discharges from ICU	
Interpretation	<p>Intensive Care Unit (ICU) service is an initiative to enhance critical care in the Ethiopian health care delivery system. The ICU has to have at least 4-6 bed, along with cardiac monitors for each of the beds, and mechanical ventilators. The ICU mortality rate helps to monitor the quality of care in the ICU. Even though the number of beds in ICU of hospitals is few, it consumes 8% to 20% of the hospital's budget.</p> <p>The mechanical ventilator machine, without appropriate monitoring and evaluation, has its own side effects including machine related baro-trauma, infections, machine failure which is associated with serious effect to the patient. Death with mechanical ventilation means death of a patient after mechanical ventilation was provided with endotracheal intubation. Death without mechanical ventilation is death of a patient without being provided with a mechanical ventilation using endo-tracheal intubation.</p> <p>Though there is no known data about specific death related to conditions associated with use of mechanical ventilator; according to WHO recommendation, total mortality rate in ICU for developing countries lie between 30% and 35%. If the general mortality rate is more than 35 %, it needs investigation.</p> <p>NB. This indicator doesn't include Neonatal ICU death. In addition, discharge should include the deaths as denominator. It should also exclude death at high dependency units.</p> <p>Limitation: the indicator could underestimate the mortality in the ICU as patients who are not actually eligible for ICU may be admitted to the ICU</p>	
Dis-aggregation	With vent, without vent, <24 hours, >=24 hours	
Source	ICU register	
Reporting level	Hospital	
Reporting Frequency	Monthly	

7.14. MS_PO_MR: Perioperative mortality rate

Definition	All-cause death rate prior to discharge among patients having one or more procedures for a major surgery in an operating theatre during relevant admission for a major surgery	
Formula	Number of deaths among patients having one or more procedures in an operating theatre admitted for major surgery	X 100
	Total number of patients for whom major surgery has been conducted	
Interpretation	<p>This indicator is rough measure of quality and safety of surgical service in the facility. It includes all death that happen after anesthesia was provided to the patient until discharge. The denominator for this indicator, which is the number of major surgical procedures done per year is an indicator of met need for surgical services. Ethiopia had the least surgical volume in the world [9]. With the high surgical need of the population, this indicator will show progress across time towards meeting demand for surgical care services. It informs policy and planning regarding met and unmet need for surgical service. It is a rough indicator of access to service [2]. Hospital procedure volume is assumed to be a proxy measure of experience of doing surgeries repeatedly over long period of time. There is a relation between volume and outcome of surgeries, when the surgical volume of a hospital is very high and surgeries are concentrated in high volume centers, it has been associated with better outcomes. [10]. WHO estimates about 6495 operations per 100,000 populations per year are required in sub-Saharan Africa in which 95% of those requiring surgical care do not have access to the service [11, 12].</p> <p>NB: Major surgery is defined as a procedure performed under general anesthesia, regional anesthesia or profound sedation in an operation theatre.</p>	
Dis-aggregation	Elective, emergency	
Source	OR register, IPD register	
Reporting level	Hospital	
Reporting Frequency	Monthly	

7.15. MS_ICU_LOS: ICU length of stay

Definition	<i>The average length of stay (in days) of patients in the ICU during a given period of time</i>	
Formula	<i>Sum total length of stay in ICU (in days)</i>	X100
	<i>Number of ICU discharges</i>	
Interpretation	The duration of ICU stays for clients that received care at ICU indicates the quality of care at the ICU. Bed rest is considered as part the treatment for admitted patients with critical illnesses. An average of 3.3 days of stay in an ICU bed is considered adequate to provide adequate rest and treatment for critical patients. A critical patient is expected to spend an additional 1.5 days in non-IUC bed [13].	
Dis-aggregation	None	
Source	ICU register	
Reporting level	Hospital	
Reporting Frequency	Monthly	

7.16. MS_PO_MEAN: Mean duration of in-hospital pre-elective operative stay

Definition	<i>The mean duration of in-hospital pre-elective operative stay in days</i>	
Formula	<i>Total number of in-hospital pre-elective operative stay in days</i>	X100
	<i>Total number of elective surgeries conducted in the period</i>	
Interpretation	The mean duration of in-hospital pre-elective operative stay shows the length of duration a patient spends in the hospital from admission to operation. It shows the readiness of the surgical team and the facility within the acceptable duration. It is a proxy measure of cancellation of surgeries in that if there a higher cancelation rate, the mean duration of in-hospital pre-elective operative stay will be higher.	
Dis-aggregation	None	
Source	Register at liaison (schedule) Additional registration at OR	
Reporting level	Hospital	
Reporting Frequency	Monthly	

7.17. MS_SURG_WAIT: Number of clients in the waiting list for elective surgical service

Definition	<i>The number of clients in the waiting list for elective surgery</i>	
Formula	<i>The absolute number of clients in the waiting list for elective surgery</i>	
Interpretation	In countries where the access to surgical services is limited, hospitals usually tend to have long list of clients waiting for surgical procedures [12]. The number of clients in the waiting list for surgery roughly measures access to surgical services and can help to inform allocation of resources and finalize the plan. It shows the backlog, demand for elective surgeries and the need for expanding surgical services.	
Dis-aggregation	Age, <15 years, >=15 years	
	General surgery, Urology , Neurology , Orthopedics, Plastic, Pediatrics, Gynecology, Ophthalmology, ENT, Others	
Source	Register at liaison to capture	
Reporting level	Hospital	
Reporting Frequency	Monthly	

7.18. MS_SURG_DELAY: Delay for elective surgical admission

Definition	<i>The average number of days that patients who underwent elective surgery during the reporting period waited for admission</i>	
Formula	<i>Sum total of number of days between date added to surgical waiting list to date of admission for surgery</i>	X100
	<i>Number of patients who were admitted for elective surgery</i>	
Interpretation	<p>It is the average number of days between the dates each patient was added to the waiting list to their date of admission for surgery. Delays in surgery for different conditions are associated with a significant increase in morbidity and mortality. The Government has set a stretch objective that any outpatient who requires a bed should receive the service within 2 weeks. By monitoring the waiting time for surgical admission, hospitals can assess the adequacy of surgical capacity and identify the need for improved efficiency in systems and processes, and/or the need for additional surgical staff and/or resources</p> <p>EXCLUDE:</p> <ul style="list-style-type: none"> • Elective Caesarean Sections • Emergency Surgery • Ophthalmic Surgery <p>NB: If a cold case patient is admitted on the same day (the same calendar date) that the decision for surgery is made, then their number of days on the waiting list should be counted as zero.</p>	
Dis-aggregation	None	
Source	Surgical waiting list register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

7.19. MS_IPMR: Inpatient mortality rate

Definition	<i>Inpatient deaths before discharge per 100 patients discharged</i>	
Formula	<i>Number of inpatient deaths</i>	X100
	<i>Total number of discharges</i>	
Interpretation	<p>Provides rough evidence regarding quality of care when compared with other facilities. Care 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 discharges 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 Health Post.</p>	
Dis-aggregation	Age: 0-4, 5-10, 11-19, 20-29, 30-45, 46-65, >=66 Sex: Male, Female	
Source	In-patient registers.	
Reporting level	HC/Clinic, Hospital	
Reporting Frequency	Monthly	

7.20. MS_MORB10: Top 10 causes of morbidity

Definition	<i>The ten leading causes of morbidity per 1000 population</i>	
Formula	<i>Number of new OPD + IPD Cases from specific diseases</i>	X100
	<i>Total population in the catchment area</i>	
Interpretation	<p>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. This indicator may show the burden of specific diseases in the community.</p> <p>Note:-The numerator should include only those who are new cases so that a person will not be counted more than once for the same illness/disease.</p>	
Dis-aggregation	Age: 0-4, 5-10, 11-19, 20-29, 30-45, 46-65, >=66 Sex: Male, Female	
Source	Outpatient (OPD) registers, Inpatient register, Emergency register; Disease information tally (HP)	
Reporting level	Not to be reported but to be analyzed	
Reporting Frequency	Annual but can be done at anytime	

7.21. MS_MORT10: Top ten causes of institutional mortality

Definition	<i>The ten leading causes of mortality</i>	
Formula	<i>Number of deaths in a health facility from specific disease</i>	X100
	<i>Total number of discharge</i>	
Interpretation	<p>The top ten causes can be known from the annual totals of monthly IPD deaths reported. 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. IPD death is death of a patient who was alive when he/she came to the health facility and died afterwards. Note that patients who died at arrival before admission/at emergency should not be counted and include deaths from OPD, emergency, IPD, ICU and NICU.</p>	
Dis-aggregation	Age: 0-4, 5-10, 11-19, 20-29, 30-45, 46-65, >=66 Sex: Male, Female	
Source	Outpatient (OPD) registers, Inpatient register, Emergency register; Disease information tally (HP)	
Reporting level	Not to be reported but to be analyzed	
Reporting Frequency	Analysis Frequency (Any time)	

8. Pharmaceuticals and medical devices and their rational and proper use

8.1. PMS_SUP_FILL: Supplier fill rate

Definition	<i>Supplier fill rate is the percentage of correctly filled items (at least 80%) by quantity by supplier (EPSA, or other private supplier who have agreement to supply) of total order made by a health facility over a given period.</i>	
Formula	<i>Number of line item delivered at least 80% of the requested amount</i>	X100
	<i>Total number of line item requested</i>	
Interpretation	<p>This indicator measures supplier's ability to fill orders completely in terms of items and quantity during a definite period of time.</p> <p>An item in an order is considered completely filled if at least 80% of the request is filled in the correct quantities with the correct products.</p> <p>This indicator also helps health facilities to identify which items are causing the most problems and find another mechanism for obtaining those items</p>	
Disaggregation	<p>By type of supplier: (EPSA, others),</p> <p>By category: RDF, Program</p>	
Sources	RRF report, Receiving voucher of HF, approved procurement request by DTC or HF head	
Reporting level	Health center/Hospital/	
Reporting Frequency	Quarterly	

8.2. PMS_AVAIL: Essential Drugs Availability

Definition	<i>The number of months in which a tracer drug was available averaged over all tracer drugs during the month</i>	
Formula	$\Sigma (\text{tracer drugs} \times \text{months available})$	X 100
	$\Sigma \text{tracer drugs} \times \Sigma \text{total number of months in time period}$	
Interpretation	<p>Essential drugs should always be available. Essential drug availability is the proportion of months in the time period under consideration for which a given tracer drug was available when needed. The availability can be averaged over several tracer drugs to give a general picture of availability. The type of essential drug that needs to be available differs by type of health facility. The following drugs are those essential drugs that are selected as tracers for essential drug availability:</p> <p>For Health Posts:</p> <ul style="list-style-type: none"> ▪ Amoxicillin dispersible tablet ▪ Oral Rehydration Salts ▪ Zinc dispersible tablet ▪ Gentamycin Sulphate injection ▪ Medroxyprogesterone Injection ▪ Arthmeter + Lumfanthrine (Coartem) tablet (any packing) ▪ Ferrous sulphate + folic acid ▪ Albendazole tablet/suspension <p>For health centers and hospitals:</p> <ul style="list-style-type: none"> ▪ Medroxyprogesterone Injection ▪ Pentavalent vaccine ▪ Magnesium Sulphate injection ▪ Oxytocine inj ▪ Gentamycin injection ▪ ORS+/- Zinc sulphate ▪ Amoxcillin dispersable/suspension/capsule ▪ Iron + folic acid ▪ Albendazole/Mebendazole tablet/suspension ▪ TTC eye ointment ▪ RHZE/RH ▪ TDF/3TC/DTG ▪ Co-trimoxazole 240mg/5ml suspension ▪ Arthmeter + Lumfanthrine tablet ▪ Amlodipine tablet ▪ Frusamide tablets ▪ Metformin tablet ▪ Normal Saline 0.9% ▪ 40% glucose ▪ Adrenaline injection ▪ Tetanus Anti Toxin (TAT) injection ▪ Omeprazole capsule ▪ Metronidazole capsule ▪ Ciprofloxaxillin tablet ▪ Hydralizine injection <p>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</p>	
Disaggregation	No disaggregation	
Sources	This information is available from records kept at the facility drug dispensary	
Reporting level	Health post /Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

8.3. PMS_ABIOTIC: Percentage of encounters with an antibiotic prescribed

Definition	<i>The percentage of encounters with one or more antibiotics prescribed per individual patient</i>	
Formula	<i>Total number of encounter with one or more antibiotics</i>	<i>X 100</i>
	<i>Total number of encounter</i>	
Interpretation	<p>This indicator measures the overall level of antibiotics use. Imprudent use of antibiotics leads to antimicrobial resistance. The emergence and spread of Antimicrobial resistance (AMR) continues to threaten the ability to treat common infections and is becoming ever-growing concern in the healthcare community. AMR can lead to treatments becoming ineffective and accelerate the spread of infections. The cost of AMR to national economies and their health systems is significant as it affects productivity of patients or their caretakers through prolonged hospital stays and the need for more expensive and intensive care.</p> <p>One of the major preventive intervention to curb antimicrobial resistance is proper antibiotic prescription and utilization. Globally, only 20-30% of the prescription for patient encounter should have antibiotic.</p> <p>Encounter refers to every patient's or client's visit to the health facility. Whether a patient is given one or more prescription papers per visit, all is considered as one encounter.</p> <p>Limitation: Those clients that are sent home with counseling and advice i.e. without a prescription are missed</p>	
Disaggregation	No disaggregation	
Data Sources	Drug dispensing Register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

8.4. PMS_FILL100: Percentage of client with 100% prescribed drug filled

Definition	<i>Percentage of clients who get all the prescribed medicines (100%) from the health facility dispensary among all the clients who received prescriptions in a given time period.</i>	
Formula	<i>Number of client who received all prescribed drug</i>	<i>X 100</i>
	<i>Total number of client who received prescription</i>	
Interpretation	<p>This indicator measures proportion of clients who get all the prescribed drugs within the facility. It is one of the indicators that tell about continuous availability of medicines. Getting prescribed drugs within the facility pharmacy improves patient satisfaction and overall trust and confidence in the health sector.</p> <p>It is expected that all clients should get all the prescribed drugs (100%) from the health facility dispensary.</p>	
Disaggregation	No disaggregation	
Sources	Drug dispensing Register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

8.5. PMS_FSML: Percentage of medicines prescribed from the facility's medicines list

Definition	<i>The percentage of medicines that are prescribed from the health facility medicine list out of the total number of medicines prescribed</i>	
Formula	<i>Total number of medicines prescribed from Health facility medicine list</i>	X100
	<i>Total number of medicine prescribed</i>	
Interpretation	<p>Every health facility is expected to have a medicine list specific to the facility based on its history of disease burden. This facility medicine list is revised periodically to address emergence of new needs and change in disease pattern in the facility.</p> <p>Accordingly, health care workers are expected to prescribe medicine that are listed in the health facility. The more health care workers prescribe medicines from the health facility list, the better chance that patients /clients get the medicine and the more likely that patients get them for cheaper price. It also prevents clients from frustration and improves satisfaction.</p> <p>Monitoring this indicator regularly and taking corrective actions for any gap identified should be a major activity of health facilities</p>	
Disaggregation	No disaggregation	
Sources	Drug dispensing Register	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Monthly	

8.6. PMS_WAST: Pharmaceuticals wastage rate

Definition	<i>The percentage of the stock of products, in value, that are unusable because of expiration or damage during a period to the total value of the products received during the same period plus the quantity of the products found during the beginning of the period</i>	
Formula	<i>Unusable stock of products during a period in monetary value</i>	X100
	<i>Beginning stock+ received stock during the same period in monetary value</i>	
Interpretation	<p>This indicator can be calculated for any facility that manages pharmaceutical of interest. It can be measured over any period but it is preferable to be calculated for unusable stock with in a quarter. It is usually calculated after a physical inventory is taken. Unusable stock that has been accumulated for long period and were not disposed previously (expired and damaged items that were transferred from previous quarter) should not be included during calculation of this indicator. In addition, items that were unusable during the quarter reviewed but were disposed with in the quarter should be taken in to consideration during calculation. This indicator is one of the performance indicators to have efficiency gain, which is one of the HSTP priorities. The target in HSTP is to reduce wastage of pharmaceuticals to less than 2%.</p>	
Disaggregation	By: RDF, Program	
Sources	Bin cards/stock cards	
Reporting level	Health center/Clinic/Hospital	
Reporting Frequency	Quarterly	

8.7. PMS_EQUIP: Functionality of medical equipment

Definition	Percentage of functional medical equipment from the health facility's updated medical equipment inventory list	
Formula	Number of functional medical equipment in the health facility	X 100
	Total number of available medical equipment in the health facility from updated medical equipment inventory list	
Interpretation	<p>This indicator measures percentage of functional medical equipment in the health facility at the time of reporting. Functional medical equipment are instruments which are giving the expected services. To monitor and evaluate this indicator, the health facility should establish computer based or manual medical equipment inventory system and also should update the inventory whenever additions or omissions of medical equipment occur to the health facility. Health facilities should use the Medical Equipment Inventory Form to register medical equipment that is available in the health facility.</p> <p>Medical equipment refers to a capital medical device used for specific purpose of diagnosis and treatment of disease or rehabilitation following disease or injury it can be used alone or in combination with any accessory consumable or other devices requiring professional installation, user training, commissioning, maintenance, calibration, decommissioning.</p>	
Disaggregation	No disaggregation	
Sources	Facility medical equipment inventory	
Reporting level	Health center/Clinic/Hospital/	
Reporting Frequency	Annual	

9. Regulatory systems

9.1. RS_STAN: Proportion of health facilities that met Ethiopian health facility requirements

Definition	<i>Proportion of all types of public, private and non-governmental health facilities that met of Ethiopian health facility requirements according to their respective level.</i>	
Formula	<i>Number of health facilities that met Ethiopian health facility requirements at least 75% (Green Level)</i>	X 100
	<i>Total number of health facilities</i>	
Interpretation	<p>To improve quality health service, emphasis will be given to improve standards of health facilities and enforce the implementation of the national health facility requirements by health facilities. The purpose of this indicator is to track the provision of quality health service to the public in standardized health facilities.</p> <p>In order to enable health facilities to deliver quality health services, it will be applied strong regulation to fully implement the national health facility requirements to ensure their competence so that the public will receive quality health service.</p> <p>This is very important to assess the capacity of the Health facilities on the quality and safety of healthcare services provided at each level of care. Since the indicator will be applied equally to healthcare facilities, it will provide valuable information about the number of healthcare facilities in the country that fulfill the minimum standards that ensure the quality and safety of service delivery. This again helps the government in order to plan for the expansion of the standardized healthcare services to meet the access and quality targets in the country.</p>	
Disaggregation	Private and Public	
Data Sources	Inspection/Supervision report	
Reporting level	WorHO/ZHD/RHB/MOH	
Reporting Frequency	Annually	

9.2. RS_FOOD: Proportion of food and drinking service establishments that met Ethiopian hygiene and environmental health requirements

Definition	<i>Proportion of food and drinking service establishments that met Ethiopian hygiene and environmental health requirements</i>	
Formula	<i>Number of food and drinking service establishments that met Ethiopian hygiene and environmental health requirements</i>	X 100
	<i>All food and drinking service establishments</i>	
Interpretation	<p>Despite the effort of health regulatory bodies there are gaps in implementation of hygiene and environmental health requirements of food and drinking service establishments. To improve hygiene and environmental health of food and drinking service establishments, national requirements are being developed. Therefore, food and drinking service establishments will be enforced to implement national hygiene and environmental health requirements. This will help food and drinking service establishments to improve hygiene and environmental health. It is very important to assess the hygiene and environmental health of food and drinking service establishments at each level. The measurement of this indicator will help the government to design effective strategies to enforce food and drinking service establishments to implement national hygiene and environmental health requirements and to reduce hygiene and environmental health related diseases.</p>	
Disaggregation	No disaggregation	
Sources	Inspection report	
Reporting level	WorHO/ZHD/RHB/MOH	
Reporting Frequency	Annually	

10. Human resource development and management

10.1. HR_HCW2P: Health care worker to Population ration by Category

Definition	<i>This refers to the health Staff to population ratio by category: Physician (Specialist, sub-specialists and all types of Doctors), Health officers, all types of nurses, Midwives, ESO and Level IV health extension worker etc).</i>	
Formula	1:	$\frac{\text{Total Population}}{\text{Total number of health care workers at the end of the year (by category)}}$
Interpretation	<p>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, interpretation should be done cautiously; population densities and geographic conditions are also powerful influences on staffing needs. Staffs who left for training should be counted.</p> <p>According to the World health organization (WHO), the expected Physician to population density is 1 per 10,000, 1 to 5,000 population for Nurse and 1 midwife to 5,000 population. Altogether (Doctors, Nurses and midwife) 2.3 per 1,000 population.</p>	
Disaggregation	<p>By profession category: Physician (Doctor, health officer, All types of Nurse, Midwife, ESO and Health extension worker etc)</p> <p>Sex: Male/ Female</p>	
Sources	Facility personnel records, Administrative records, HRIS	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Annually	

10.2. HR_STAFF_STAND: Proportion health Facility staffed as per the standard

Definition	<i>The Proportion of health facilities (Hospital, Health Center & Health post) staffed as per the Ethiopian facility staffing standards</i>	
Formula	$\frac{\text{Number of health facilities meeting staffing standard for particular category}}{\text{Total number of health facilities}}$	X 100
Interpretation	<p>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.</p> <p>There is an Ethiopian facility staffing standard that clearly indicates the staff required for each level of the health system, including the number of each type of professional.</p>	
Disaggregation	By Profession category: Physician (Physicians, health officer, All types of Nurse, Midwives, and ESO)	
Sources	Administrative report	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Annually	

10.3. HR_LICENS: Percentage of health professionals with an active professional license

Definition	<i>The Proportion of health professionals that have active/renewed professional license</i>	
Formula	<i>Number of health professionals that have active/renewed professional license in each professional category</i>	X 100
	<i>Total number of health professionals in each category (at the end of the year)</i>	
Interpretation	<p>All health professionals should have active/renewed professional license to practice in the health system of Ethiopia. In addition, professionals with an active license are supposed to have contemporary knowledge and skill to deliver quality service thereby improving the health status of the population. So all health institutions should check the license status of health professionals and follow license renewal accordingly.</p> <p>An active license is defined as a professional license within the range of the allowed period/time of practice (i.e not expired). The professional category includes physicians (General Practitioners, Dental Medicines and all Specialties under medical Doctor) and all types of Nurses (include all Nursing specialties (Comprehensive Nurse, Neonatal Nurse, Mental Health Nurse, Ophthalmic Nurses etc), midwives, health officer, other</p>	
Disaggregation	By professional category: Physicians, all types of Nurses, Health Officer, Midwives, Others	
Sources	Facility record/Personnel record	
Reporting level	Health center/Clinic/Hospital	
Reporting Frequency	Annually	

11. Enhance informed decision making and innovations

11.1. EIDM_RCOMP: Reporting Completeness

Definition	<i>Proportion of routine reports that were received by the health institution & health administrative level</i>	
Formula	<i>Total number of reports received during a given time period</i>	X 100
	<i>The number of reports expected</i>	
Interpretation	<p>The more complete the reporting, the better it reflects the services provided in the catchment area. Ideally, 100% reporting 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%.</p> <p>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. For now, health facilities are advised to conduct content completeness for selected data elements. In the future the electronic reporting platforms will be designed to generate content completeness.</p> <p>Reporting completeness should be done for each type of report that includes Service report (monthly, quarterly and annually), OPD morbidity report (monthly) and IPD morbidity and mortality report (Monthly) and other data sets.</p> <p>Reporting completeness can also be averaged mainly for service and disease reports.</p>	
Disaggregation	Type of report: Service report, OPD report, IPD report and other data sets	
Data Sources	Data quality and performance monitoring log book/ DHIS-2	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Monthly	

11.2. EIDM_RUNTIME: Reporting Timeliness

Definition	<i>Proportion of routine health and administrative reports that were received within the specified time.</i>	
Formula	<i>Number of reports received according to schedule</i>	X 100
	<i>The number of reports expected</i>	
Interpretation	<p>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.</p> <p>Reporting timeliness should be done for each type of report that includes Service report (monthly, quarterly and annually), OPD morbidity report (monthly) and IPD morbidity and mortality report (Monthly) and other data sets.</p>	
Disaggregation	Type of report: Service report, OPD report, IPD report and other data sets	
Sources	Data quality and performance monitoring log book/ DHIS-2	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Monthly	

11.3. EIDM_LQAS: Proportion of health facilities that conduct reporting consistency check using LQAS

Definition	<i>The Proportion of health facilities that conduct data quality (reporting consistency) checks using LQAS</i>	
Formula	<i>Number of health facilities that conducted LQAS</i>	X 100
	<i>Total number of health facilities</i>	
Interpretation	<p>Discrepancies between data compiled, reported and events recorded in patient / client records are a major source of error and poor quality data.</p> <p>LQAS provide a quick and reliable method for comparing compiled, recorded and reported data. Methodology of tacking LQAS is a standard methodology of 12 samples from registers/ records for comparison with reports. Compiled, recorded and reported data should correspond with LQAS results above 90%. LQAS is relevant to facilities only, where it is used for self-assessment. IT is repeated by supervising institution to incorporate the results. The quality</p> <p>HMIS data can be estimated using a sample of 12 data elements and comparing the results with a standard LQAS table. Selected data elements from the report to be submitted to the next reporting level is compared with the record on registers and tally sheets.</p> <p>Health facilities are expected to conduct LQAS before submitting their report to the next level. If the LQAS score is completed in the reporting format, the receiving administrative health unit can consider that the health facility has conducted the LQAS in that reporting period. Based on this, the administrative health unit can identify the number and proportion of health facilities that are performing data quality checks. However, we need to check this during supervisions in order to verify whether the health facilities are doing the right way of doing LQAS and whether they are taking actions accordingly.</p> <p>Additionally, the first and the last LQAS score will be reported. If the first LQAS score is greater than 90%, there will be no last score.</p>	
Disaggregation	Type of report: Service report, OPD morbidity report, IPD morbidity and mortality report	
Sources	LQAS Minute log book	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Monthly	

11.4. EIDM_LB_NOTI: Proportion of live births notified by the health facility

Definition	<i>This refers to the proportion of live births notified by the health facility among the total expected live birth in that specific period</i>	
Formula	<i>Total number of births notified</i>	X 100
	<i>Expected live births in that specific period</i>	
Interpretation	<p>The health sector is mandated to notify births and deaths happen in the facility and in the community. There is joint monitoring & evaluation procedure between the health sector (health extension worker) and civil registrar office to assess and evaluate the number of births notified by the health sector Versus the number of births registered by the civil registrar office. One of the major reasons raised by the civil registrar office for poor birth registration is poor notification practice by the health sector</p> <p>Birth notification is a crucial intervention which is currently the prime source of data for birth registration. The data from this is vital for national planning. It is necessary to compile accurate, complete and timely vital statistics, which is central to estimating population size and composition at all levels.</p>	
Disaggregation	None	
Sources	Integrated maternal and child health care card (health post), delivery register	

Reporting level	Health post/Health center/Clinic/Hospital
Reporting Frequency	Monthly

11.5. EIDM_D_NOTI: Proportion of deaths notified by the health facility

Definition	<i>This refers to the Proportion of death notified to the health facility among the total expected deaths in that specific period</i>	
Formula	$\frac{\text{Total number of deaths notified}}{\text{Expected number of deaths in that specific period}} \times 100$	x100
Interpretation	<p>This is the proportion of deaths notified by the health facility. This information is very important to further capture causes of death at different age and sex group. These data are vital for pinpointing the diseases and injuries that are cutting lives short and for planning preventive services to avoid premature mortality. Cause of death data are also useful to inform governments about outbreaks of fatal disease. In Ethiopia, more than 90% of death happen outside of the health facility. Notifying them and knowing the probable causes of death for them will give the real time data on the most common causes of death aggregated by different variable.</p>	
Disaggregation	None	
Sources	Emergency register, NICU, ICU, PNC. Delivery register, inpatient register For community level: Death notification pad	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Monthly	

11.6. EIDM_INF_SCOR: Information use score

Definition	<i>The average score of information use as measured by the information use parameters of the IR model wordas assessment measurement tool.</i>	
Formula	$(\text{Data use score} * 100\%) / 40\%$	
Interpretation	<p>Information revolution remains to be one of the transformation agenda during HSTP II as well. The major pillars continue to be transformation in data use culture, digitization and HIS governance. The data use cultural transformation encompasses improving data capturing, availability, accessibility of quality data and use for action. Measuring information use is a challenging concept globally, however Ethiopia practiced measured data use though its IR model worda strategy and mainly the measurement tool.</p> <p>Information use is one of the section in this assessment tool which has clearly defined parameters that are weighted. All facilities and administrative units are expected to self-assess their IR status regularly, develop tailored action plan according to the gap, and implement for the action plan for improvement.</p> <p>Benchmark: Facilities that scored $\geq 90\%$ can be considered as model for data use score and those that scored between 65% and 90% can be considered as candidate facilities. However while those that scored $< 65\%$ are emerging for data use and need critical attention.</p> <p>Facilities will conduct the IR assessment on a quarterly basis and send their aggregate report.</p>	
Disaggregation	HIS structure and resources score (30): Data quality score (30%): Data use score (40%): Total IR score (100%):	
Sources	IR Model worda measurement tool	
Reporting level	Health post/Health center/Hospital	
Reporting Frequency	Quarterly	

12. Health financing

12.1. HCF_ALLOC: Proportion of government health budget allocated to the health sector in the fiscal year

Definition	<i>This refers to the total government budget on health as a percentage of total government budget</i>	
Formula	<i>Total government budget allocated to health</i>	X 100
	<i>Total Government budget</i>	
Interpretation	<p>This indicates the share of government health budget as a proportion of total government budget as it is indicated in the annual government's budget proclamation (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.</p> <p>Moreover, the data from this indicator can be analyzed to see the share of health sector budget as a proportion of total government budget disaggregated by Domestic sources (Government treasury, internal revenue) and external sources (AID) in the fiscal year.</p> <p>(Note that the Internal revenue is the total amount of resource mobilized locally at health facility from clinical and non-clinical services and appropriated by respective legal framework).</p>	
Disaggregation	Government treasury, Internal revenue appropriated and Aid	
Sources	The financial data from MOF/BOFED/WoFED	
Reporting level	WorHo/ZHD/RHB/MOH	
Reporting Frequency	Annually	

12.2. HCF_UTIL: Health budget Utilization

Definition	<i>The proportion of Health budget utilization to allocation</i>	
Formula	<i>Total Health budget Utilized</i>	X 100
	<i>Total health budget allocated (appropriated)</i>	
Interpretation	<p>This indicates that the capacity of the health sectors to utilize the budget allocated disaggregated by source of budget compared with the total allocated budget in the fiscal year. It is calculated for total budget utilized compared with total budget allocated and also by disaggregation for each budget category (Government, aid and internal revenue).</p> <p>Note that the budget utilization of internal revenue is calculated from the total amount of appropriated budget. Total amount of internal revenue generated will also be collected as data element for this indicator. Therefore, the share of internal revenue generated to the total health budget can also be analyzed here. This shows 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.</p> <p>In addition, reviewing the total amount of revenue generated measures the revenue collection potential of the health facility and helps to measure the gaps between what is actually collected and appropriated. If this sum of the bank balance at the end of the previous year and the actual collection is less than the appropriated budget for RRU, the health facility will be constrained to spend as per the plan; if this sum is in excess of the appropriated budget the health facility need to submit additional expenditure plan and use the available amount effectively.</p>	
Disaggregation	<p>Internal revenue generated:</p> <p>Budget Utilized by source: Government treasury, Internal revenue and Aid</p>	

Sources	Administrative and financial Records
Reporting level	Health center/Hospital / WorHo/ZHD/RHB/MOH
Reporting Frequency	Annually

12.3. HCF_REIMB: Proportion of reimbursed amount from the total spent

Definition	<i>This refers to the proportion of reimbursed amount of money to health facilities from total spent on Government, Insurance beneficiaries and other 3rd party, for fee waived, exempted health services, and other health services</i>	
Formula	$\frac{\text{Total reimbursed amount of money to health facilities}}{\text{Total amount of money spent}} \times 100$	X 100
Interpretation	<p>There is no health care service provided for free. In one way or another the amount of money that the health facility spent on beneficiaries should be reimbursed. This indicators measures the reimbursed amount of budget for services provided for fee waived beneficiaries, insured members, exempted health services, 3rd party payment and other health services based on the respective legal framework.</p> <p>To total number of beneficiaries as fee waived, insurance, exempted health services and 3rd party payment will be collected from central medical record unit and finance unit of the health facility.</p>	
Disaggregation	<p>By:</p> <ul style="list-style-type: none"> ○ Fee waived beneficiaries: ○ Insurance beneficiaries: ○ Exempted health services: ○ 3rd party payment: 	
Sources	Financial records at health centers and hospitals and Administrative reports	
Reporting level	Health center/Hospital	
Reporting Frequency	Quarterly	

12.4. HCF_CBHI: Membership Enrollment Rate for CBHI

Definition	<i>Proportion of HHs enrolled in CBHI woreda from those eligible</i>	
Formula	$\frac{\text{Number of HHs enrolled in CBHI woreda}}{\text{Total number of eligible households for CBHI membership in the woreda}} \times 100$	X 100
Interpretation	<p>This indicator deals with the proportion of households enrolled as CBHI members in a woreda for a given year from the eligible ones. CBHI membership in Ethiopia is on voluntary basis and households who reside in the woreda and engaged in the informal sector are eligible for membership.</p> <p>Formal sector employees who reside in the woreda are not eligible for membership. Currently CBHI is mainly implemented in rural areas with few startups in urban settings. Higher enrollment rate is always desired as it means more members in the CBHI scheme and larger risk pooling. Larger risk pooling is very important for the financial sustainability of the insurance scheme.</p>	
Disaggregation	<p>By type of member:</p> <ul style="list-style-type: none"> • Indigent member • Paying member 	
Sources	Administrative records / Woreda CBHI scheme	
Reporting level	WorHO/ZHD/RHB/MOH	
Reporting Frequency	Quarterly	

13. Strengthen leadership and governance

13.1 LG_CSC: Proportion of Primary health Care facilities implementing Community Scorecard (CSC)

Definition	<i>The proportion of Primary health Care facilities with a community Score Card (CSC) value of $\geq 80\%$</i>	
Formula	<i>Number of Primary health Care facilities with a community Score Card (CSC) of $\geq 80\%$</i>	X 100
	<i>Total number of Primary health Care facilities</i>	
Interpretation	<p>This means the number of primary health care facilities who undergo Community Score Card (CSC) and gets the score 80% and greater than 80% based on the stated six measurements of primary health service delivery, from all facility that already started the program. This Indicator is vital for improving the health service delivery by engaging the institutions and the community to solve the public grievance related to services. So far the indicator not only evaluates the status of the service and it also measures the primary health service Good Governance through creating accountability on leadership.</p> <p>Note: Primary health care facilities that did not report their community score card score or that did not conduct the assessment will be considered as having a CSC value of less than 80%.</p>	
Disaggregation	No disaggregation	
Sources	Community score card checklist and template	
Reporting level	Health center	
Reporting Frequency	Quarterly	

13.2. LG_GGI: Proportion of hospitals with Good Governance Index (GGI) of $\geq 80\%$

Definition	<i>The proportion of hospitals with a Good Governance Index (GGI) of $\geq 80\%$</i>	
Formula	<i>Number of hospitals with a Good Governance Index (GGI) of $\geq 80\%$</i>	X 100
	<i>Total number of hospitals</i>	
Interpretation	<p>It measures the status of the Good Governance (GG) of the Hospital by the national stated standards and reviewing those standards against the eight good governance principles so that the system of health service delivery on the Hospital are measured on every quarter bases. Implementing GGI on the hospital changes the service quality in remarkable way through creating accountability and engaging all health care service stakeholders and actors.</p> <p>Note: Hospitals that did not report their Good Governance Index (GGI) score or that did not conduct the assessment will be considered as having a GGI value of less than 80%.</p>	
Disaggregation	No disaggregation	
Sources	Good governance index measurement checklist and template	
Reporting level	Hospital	
Reporting Frequency	Bi-Annual (Will be reported in the quarter when the GGI is conducted)	

13.4. LG_FEM: Proportion of leadership positions in health facilities that are held by females

Definition	<i>This is the proportion of leadership positions in health facilities that are held by women</i>	
Formula	<i>Number of leadership positions held by women at health facility level</i>	X 100
	<i>Total number of leadership positions in health facilities</i>	
Interpretation	<p>In Ethiopia, despite their capabilities, women are deprived of chances and are socially challenged to play their role as leader. Currently, there are bold initiatives to mainstream gender in all health programs and operations, and empower women by ensuring their representation at all levels. A special attention will be given to the development, creation of conducive environment and engagement of women in leadership positions during HSTP II.</p> <p>Leadership position at health facility level is operationally defined as the Head/ Vice head/ Department heads.</p>	
Disaggregation	No disaggregation	
Sources	Administrative records	
Reporting level	Health center/Clinic/Hospital	
Reporting Frequency	Annually	

13.5. LG_GBV: Number of Gender based violence (GBV) survivors who received health care services

Definition	<i>This refers to the number of GBV survivors who received health care services</i>	
Formula	<i>The number of GBV survivors who received health care services</i>	
Interpretation	<p>According to EDHS 2016, among women age 15-49, 23% have experienced physical violence and 10% have experienced sexual violence. Regarding Injuries due to spousal violence, 22% of ever-married women who experienced spousal, physical, or sexual violence reported injuries such as cuts, bruises, or aches and deep wounds and other serious injuries.</p> <p>Astonishingly, only about one-quarter of women who have experienced physical or sexual violence has sought help. The Ministry of health in collaboration with other sectors, is now working on prevention of GBV and expansion of health care services for GBV survivors which include as one-stop service.</p> <p>This indicator includes individuals (Both male and female) who survive any form of gender based violence (sexual, physical, psychological or mixed)</p> <p>At each level, this indicator should be analyzed by looking at trends over time.</p>	
Disaggregation	By Type: Sexual, Physical, psychological and mixed Sex: Male and Female	
Sources	GBV register	
Reporting level	Health center/Clinic/Hospital	
Reporting Frequency	Monthly	

14. Health infrastructure

14.1. HI_HF2P: Functional health facility to population ratio

Definition	<i>The ratio of functional facility to total population</i>	
Formula	1:	$\frac{\text{Total Population}}{\text{Total number of functional public facilities by type}}$
Interpretation	<p>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.</p> <p>In addition, newly constructed or upgraded health facilities should be reported for further analysis. Newly constructed health facilities 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 health facility from one type to another. Both new construction and upgrading indicates the level of investment in health physical infrastructure.</p>	
Disaggregation	By Facility Type: health post (Basic and Comprehensive), health center, primary hospital, general hospital and specialized hospital	
Sources	Administrative report	
Reporting level	WoHO/ZHD/RHB/MOH	
Reporting Frequency	Annually	

14.2. HI_FUNC_INFR: Proportion health facilities with functional infrastructure

Definition	<i>Proportion of health institutions with electricity, water supply, functional sanitation facilities and functional Network infrastructure</i>	
Formula	<p>A. $\frac{\text{\# of health facilities with electricity} * 100}{\text{Total number of health facilities}}$</p> <p>B. $\frac{\text{\# of health facilities with full functional Network infrastructure} * 100}{\text{Total number of health facilities}}$</p>	
Interpretation	<p>Health institutions need electricity, water supply, functional sanitation facilities and functional network infrastructure to optimally carry out service. Absence of any of electricity, water and sanitation limits the facility's scope for diagnosis and treatment. Availability of water supply and functional sanitation facilities in health facilities is addressed under hygiene and sanitation section.</p>	
Disaggregation	None	
Sources	Administrative records	
Reporting level	Health post/Health center/Clinic/Hospital	
Reporting Frequency	Annually	

Annex 1: List of HMIS Indicators by reporting level and Frequency

Indicators by reporting level and Frequency																
Code	Indicator	Monthly					Quarterly					Annually				
		HP	HC	Clinic	HOSP	WoHO+	HP	HC	Clinic	HOSP	WoHO+	HP	HC	Clinic	HOSP	WoHO+
	Reproductive and Maternal															
MAT_CAR	Contraceptive Acceptance Rate (CAR)	X	X	X	X											
MAT_IPPCAR	Immediate postpartum contraceptive acceptance rate (IPPCAR)	X	X	X	X											
MAT_ANC1	Antenatal Care (ANC) coverage – First visit	X	X	X	X											
MAT_ANC4+	Antenatal Care (ANC) coverage – Four visits	X	X	X	X											
MAT_ANC8+	Antenatal Care (ANC) coverage – Eight or more contact	X	X	X	X											
MAT_SYPH	Proportion of pregnant women tested for syphilis	X	X	X	X											
MAT_SBA	Skilled delivery attendance	X	X	X	X											
MAT_SBR	Stillbirth Rate	X	X	X	X											
MAT_EPNC	Early Postnatal care (PNC) coverage	X	X	X	X											
MAT_CS	Caesarean Section (C/S) Rate		X	X	X											
MAT_ABOR	Women receiving comprehensive abortion care services		X	X	X											
MAT_IMD	Institutional maternal deaths		X	X	X											
MAT_CMD	Number of maternal deaths in the community	X														
MAT_PPH	Women who developed Post-partum Hemorrhage (PPH)	X	X	X	X											
MAT_UTER	Delivered women who received Uterotonics	X	X	X	X											
	PMTCT															
MTCT_TST	Percentage of pregnant, laboring and lactating women who were tested for HIV and who know their results		X	X	X											
MTCT_ART	Percentage of HIV-positive pregnant women who received ART to reduce the risk of mother-to child-transmission during pregnancy, labor & delivery (L&D) and postpartum		X	X	X											
MTCT_HEI_EID	Proportion of HIV exposed infants with virological test		X	X	X											
MTCT_HEI_COTR	Percentage of exposed infants born to HIV-infected women who were started on co-trimoxazole prophylaxis within two months of birth		X	X	X											

MTCT_HEL_ARV	Percentage of infants born to HIV-infected women receiving antiretroviral (ARV) prophylaxis for prevention of mother-to-child transmission (PMTCT)		X	X	X												
MTCT_HEL_ABTST	Percentage of HIV exposed infants receiving HIV confirmatory (antibody test) test by 18 months		X	X	X												
Expanded Program on Immunization (EPI)																	
EPI_HepB-BD	HepatitisB -Birth dose(BD) immunization coverage	X	X	X	X												
EPI_DPT3	DPT3-HepB3-Hib3 (Pentavalent third dose) immunization coverage (< 1 year)	X	X	X	X												
EPI_OPV3	OPV 3 (Oral Polio Vaccine third dose) Immunization Coverage (< 1 year)	X	X	X	X												
EPI_PCV3	Pneumococcal conjugated vaccine (PCV3) immunization coverage (< 1 year)	X	X	X	X												
EPI_Rota2	Rotavirus vaccine 2nd dose (Rota2) immunization coverage (< 1 year)	X	X	X	X												
EPI_IPV	IPV (Inactivated Polio Vaccine) Immunization Coverage (< 1 year)	X	X	X	X												
EPI_MCV1	Measles (MCV1) immunization coverage (< 1year)	X	X	X	X												
EPI_MCV2	Measles second dose (MCV2) immunization coverage (15-24 months)	X	X	X	X												
EPI_FULLLY	Full immunization coverage (< 1 year)	X	X	X	X												
EPI_PAB	Proportion of infants protected at birth against neonatal tetanus	X	X	X	X												
EPI_HP2	HPV 2 (Human Papilloma Virus vaccine (2nd dose) Immunization coverage (14 years old girls)	X	X	X	X												
EPI_VWR	Vaccine wastage rate	X	X	X	X												
Child Health																	
CH_IND	Institutional Neonatal Death Rate		X	X	X												
CH_CND	Number of Neonatal death at community	X															
CH_TX_PNEU	Proportion of under-five children with pneumonia received antibiotic treatment	X	X	X	X												
CH_TX_SYI	Proportion of Sick Young infant treated for Newborn infection	X	X	X	X												
CH_TX_DIAR	Proportion of children with diarrhea who are treated by both ORS and Zinc at community and facility level	X	X	X	X												
CH_KMC	Proportion of low birth weight or premature newborns for whom Kangaroo Mother Care (KMC) was initiated after delivery		X	X	X												

CH_ASPH	Proportion of asphyxiated neonates who were resuscitated (with bag & mask)	X	X	X	X											
CH_TX_NICU	Treatment outcome of neonates admitted to NICU			X	X											
CH_CHX	Proportion of newborns that received at least one dose of Chlorhexidine Digluconate (CHX) to the cord on the first day after birth	X	X	X	X											
CH_CHDM	Proportion of under-five children monitored for child development	X	X	X	X											
	Nutrition															
NUT_LBW	Percentage of live births that weigh less than 2,500gm out of the total live births weighed	X	X	X	X											
NUT_GMP	Proportion of children under two years who participated in Growth Monitoring and Promotion	X	X	X	X											
NUT_VITA	Proportion of children aged 6–59 months who received two doses of vitamin A supplement	X	X	X	X											
NUT_DeW	Proportion of children 24-59 months de-wormed	X	X	X	X											
NUT_IFA	Proportion of pregnant women received IFA 90 plus	X	X	X	X											
NUT_PreSMN	Proportion of Pregnant and lactating women screened for malnutrition	X	X	X	X											
NUT_U5SMN	Proportion of children under five years screened for malnutrition	X	X	X	X											
NUT_TX-U5MN	Treatment outcomes for management of complicated severe acute malnutrition in children 0-59 months	X	X	X	X											
	HIV Prevention and Control Indicators															
HIV_HTS_TST	Percentage of people living with HIV who know their status	X	X	X	X											
HIV_TX_CURR	Percentage of people living with HIV currently receiving ART		X	X	X											
HIV_TX_NEW	Number of adults and children with HIV infection newly started on ART		X	X	X											
HIV_ART_RET	ART retention rate		X	X	X											
HIV_ART_INTR	Number of ART Clients that interrupted Treatment		X	X	X											
HIV_TX_PVLS	Viral load Suppression		X	X	X											
HIV_PrEP	Number of individuals receiving Pre-Exposure Prophylaxis		X	X	X											
HIV_PEP	Number of persons provided with Post-Exposure prophylaxis		X	X	X											
HIV_PLHV_TSP	Proportion of clinically undernourished PLHIV who received therapeutic or supplementary food		X	X	X											
HIV_STI_SCRN	Proportion of STI cases tested for HIV		X	X	X											

HIV_ART_FP	Percentage of non-pregnant women in the reproductive age living with HIV on ART using a modern family planning method		X	X	X												
HIV_TB_SCRN	Proportion of patients enrolled in HIV care who were screened for TB		X	X	X												
HIV_CXCA_SCRN	Proportion of HIV positive women (15+) on ART screened for Cervical Ca		X	X	X												
HIV_HeP_TST	Number of individuals tested for Hepatitis		X	X	X												
HIV_HeP_TX	Proportion of diagnosed Hepatitis B and C patients who received treatment		X	X	X												
	TB Treatment coverage																
TB_TX	TB Treatment coverage		X	X	X												
TB_RETX	Tuberculosis Re-treatment Rate		X	X	X												
TB_CR	Cure Rate for bacteriologically confirmed Pulmonary TB cases		X	X	X												
TB_TSR	TB Treatment Success rate (TSR) among all forms of TB cases		X	X	X												
TB_UTX	Unsuccessful treatment outcome among all forms of TB		X	X	X												
TB_COMM	Proportion of all forms of TB cases notified and treated from community referral		X	X	X												
TB_CBTSR	Community based TB Treatment success rate		X	X	X												
TB_DX_PRIV	Proportion of notified TB cases (all forms) contributed by other governmental and private facilities		X	X	X												
TB_CI	Contact investigation coverage		X	X	X												
TB_TPT	TB Preventive Therapy (TPT) Coverage		X	X	X												
TB_IPT	TPT Completion Rate		X	X	X												
TB_TST-WHO	Percentage of new and relapse TB patients tested using a WHO recommended rapid tests at the time of diagnosis		X	X	X												
TB_DST	Drug Susceptibility testing (DST) coverage for TB patients		X	X	X												
TB_DR_TD	Drug Resistant (DR) TB case detection rate		X	X	X												
TB_DR_TX	DR TB treatment coverage		X	X	X												
TB_DR_TxO	Final Outcome of RR/MDR-TB Cases		X	X	X												
TB_MN	Proportion of all forms of TB and DR-TB patients with malnutrition		X	X	X												
TB_HIV	Proportion of registered new and relapse TB patients with documented HIV status		X	X	X												
TB_ART	Proportion of HIV-positive new and relapse TB patients on ART during TB treatment		X	X	X												

LEP_NOT	Leprosy notification per 10,000 population		X	X	X											
LEP_DIS	Grade II disability rate among new cases of leprosy		X	X	X											
LEP_TX	Leprosy treatment completion rate		X	X	X											
Malaria Prevention and Control																
MAL_DX	Morbidity attributed to malaria	X	X	X	X											
MAL_DEATH	Facility based death attributed to malaria	X	X	X	X											
MAL_POS	Malaria positivity rate	X	X	X	X											
MAL_FULL	Proportion of confirmed malaria cases fully investigated and classified	X	X	X	X											
MAL_FOCI	Proportion of foci fully investigated and classified	X	X	X	X											
MAL_PAR	Annual parasite incidence	X	X	X	X											
MAL_IRS	Proportion of unit structures covered by Indoor residual spraying															X
MAL_EQA	Proportion of health facilities covered by External Quality Assurance (EQA) for malaria diagnosis											X	X	X	X	
Prevention and Control of Neglected Tropical Diseases																
NTD_SCH	Proportion of individuals who swallowed MDA drug for Schistosomiasis	X														
NTD_STH	Proportion of individuals who swallowed drug for soil transmitted helminthiasis (STH)	X														
NTD_LF	Proportion of individuals who swallowed drug for lymphatic filariasis(LF)	X														
NTD_ONCH	Proportion of individuals who swallowed drug for onchocerciasis	X														
NTD_TR	Proportion of individuals who swallowed drug for trachoma	X														
NTD_VL	Number of visceral Leishmaniasis (VL) cases treated		X		X											
NTD_CL	Number of cutaneous Leishmaniasis (CL) cases treated		X		X											
NTD_TT	Proportion of Trachomatous Trichiasis (TT) cases who received corrective TT surgery		X		X											
Prevention and Control of Non-Communicable Diseases and Mental Health																
NCD_HTNDX	Number of hypertensive patients enrolled to cares		X	X	X											
NCD_HTNTX	Six-monthly control of blood pressure among people treated for hypertension		X	X	X											
NCD_CVD	Proportion of patients with high CVD risk who received treatment		X	X	X											
NCD_DMDX	Number of new diabetic patients enrolled to care		X	X	X											

NCD_DMTX	Six-monthly control of diabetes among individuals treated for diabetes		X	X	X												
NCD_CV_SCRN	Proportion of women aged 30–49 years screened for cervical Ca		X	X	X												
NCD_CV_TX	Proportion of eligible women who received treatment for cervical lesion		X	X	X												
NCD_CSR	Cataract surgical rate (CSR)		X	X	X												
Mental Health																	
MH_TX	Proportion of individuals treated for priority mental health disorders		X	X	X												
MH_CDBD	Proportion of children (<18) diagnosed and treated for childhood developmental and behavioral disorders		X	X	X												
Hygiene and Environmental Health																	
HEH_HHLW	Proportion of HHs with liquid waste management								X								
HEH_HHSW	Proportion of HHs with safe solid waste management								X								
HEH_ODF	Proportion of kebeles declared ODF								X								
HEH_HHSF	Proportion of households having sanitation facilities								X								
HEH_HHHWF	Proportion of households having hand washing facilities at the premises								X								
HEH_HHHH	Proportion of households with healthy housing								X								
HEH_WSTST	Proportion of water schemes for which water quality test conducted												X				
HEH_HFWATER	Proportion of health facility with water service								X	X		X					
HEH_HFSAN	Proportion of health facility with sanitation facilities								X	X		X					
HEH_HFWASTE	Proportion of health facilities with healthcare waste management services								X	X		X					
HEP and Primary Health Care																	
HEPHC_MODEL_H	Model Households								X								
HEPHC_HPPHCU	Proportion of high performing PHCUs												X				
HEPHC_COMP_HP	Proportion of health posts providing comprehensive health services																X
HEPHC_MODEL_K	Model Kebele									X							
Medical Service																	
MS_OPD	Out-Patient Attendance Per-Capita	X	X	X	X												

MS_BOR	Bed Occupancy Rate		X	X	X												
MS_ALOS	Average Length of Stay (in days)		X	X	X												
MS_HBD	Hospital Bed Density															X	
MS_ASSTECH	Assistive Technology Service Coverage								X								
MS_LaBT	Essential laboratory test availability		X	X	X												
MS_RoR	Referral-out Rate		X	X	X												
MS_AMBU	Ambulance service utilization for referral service		X	X	X												
MS_AMBUR	Ambulance service response rate		X	X	X												
MS_EMERG_MR	Facility emergency department mortality rate		X	X	X												
MS_EMERG24	Emergency room attendances with length of stay > 24 hours		X	X	X												
MS_VAP	Percentage of ventilator associated pneumonia		X	X	X												
MS_ICU_MR	Mortality rate in Intensive Care Unit				X												
MS_PO_MR	Perioperative mortality rate				X												
MS_ICU_LOS	ICU length of stay				X												
MS_PO_MEAN	Mean duration of in-hospital pre-elective operative stay				X												
MS_SURG_WAIT	Number of clients in the waiting list for elective surgical service				X												
MS_SURG_DELAY	Delay for elective surgical admission				X												
MS_IPMR	Inpatient mortality rate		X	X	X												
MS_MORB10	Top 10 causes of morbidity																
MS_MORT10	Top ten causes of institutional mortality																
Pharmaceuticals and medical devices and their rational and proper use																	
PMS_SUPP_FILL	Supplier fill rate		X	X	X			X		X							
PMS_AVAIL	Essential Drugs Availability	X	X	X	X												
PMS ABIOTIC	Percentage of encounters with an antibiotic prescribed		X	X	X												
PMS_FILL100	Percentage of client with 100% prescribed drug filled		X	X	X												
PMS_FSML:	Percentage of medicines prescribed from the facility's medicines list		X	X	X												
PMS_WAST	Pharmaceuticals wastage rate							X	X	X							
PMS_EQUIP	Functionality of medical equipment												X	X	X		
Regulatory systems																	
RS_STAN	Proportion of health facilities that met Ethiopian health facility requirements																X

