

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPA MISIRTY OF HEALTH

NATIONAL HIV SERVICE QUALITY IMPROVEMENT TOOL KIT

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Table of Contents

For	ward	i
Ack	nowledgments	ii
Acr	onyms/Abbreviations	iii
1.IN	TRODUCTION	iv
1.1	Health service delivery in Ethiopia	1
1.2	HIV service in Ethiopia	2
1.3	Background and Rationale of HIV Service quality Improvement Tool kit	3
2. 0	BJECTIVES	6
2.1	General Objective:	7
2.2	Specific objectives:	7
3. O	VERVIEW OF HIV SERVICE QUALITY MANAGEMENT	8
3.1	Basic concepts quality management	9
3.2	Guiding principles on HIV related health care quality improvement	11
3.3	Components of HIV service for improvement	13
3.4	Expected output/outcomes of quality HIV service delivery	16

4. IMPLEMENTATION OF QUALITY IMPROVEMENT	
FOR HIV SERVICES	18
4.1 Quality Structures	19
4.2 Roles and responsibilities	20
4.2.1 FMOH	20
4.2.2 RHBs	21
4.2.3 ZHD and WoHO level	22
4.2.4 Health facilities	22
4.2.5 Development partners & IPs	24
4.3 Key strategies in quality improvement:	25
4.4 Clinical Audit	26
4.4.1 Introduction	26
4.4.2 Definition	26
4.4.3 Rationale	27
4.4.4 The five stage approach in clinical audit	27
4.5 Steps In Quality Improvement	37
5. MONITORING AND EVALUATION	46
6. HIV SERVICE DELIVERY QUALITY STANDARDS	52
ANNEXES	94
Annex 1: Facility Level Quick Standard Of Care (Soc) Self-Assessment Tool	96
Annex 2: Summary of QI Tools for Health Facility Level Action and Example Case Scenario	106

Forward

Since the evidence of the first HIV infection in Ethiopia, tremendous achievements have been documented in the prevention and control of HIV. HIV counselling & testing, Prevention of Mother to child Transmission of HIV (PMTCT), care & support to the infected & affected and antiretroviral therapy are the major services provided at large scale in the country.

The Federal Ministry of Health (FMOH) together with its stakeholders at all levels has expanded these services via task sharing, training of health professionals, provision of clinical mentor, and decentralization with the goal to achieve universal access to HIV services in the country. More recently, the country has been working to achieve the three 90 HIV global targets.

We are now at a stage where quality is more important than access especially in a setting where there is a rational sharing of tasks mid-level professionals and community health workers. Hence, it necessitates devising a mechanism to ensure the quality of the services provided at various levels in the country. Federal Ministry of Health in collaboration with its stakeholders took different measures to improve and standardize quality improvement models for HIV related services. This quality improvement toolkit is intended to give a general guide to continuous quality improvement for HIV services in the country.

It is our hope that health care providers, program managers and implementing partners will use this toolkit to improve the quality of HIV prevention, care and treatment services. Lastly, I would like to thank all partners and experts for their technical support during the design and development of this toolkit.

AND THE REST OF THE PERSON OF

Kebede Worku, MD, MPH State Minster

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Acronyms/Abbreviations

AIDS	Acquired Immune Deficiency Syndrome	
ART	Anti-Retroviral Therapy	
BCC	Behavioral Change Communication	
CBC	Total Blood Count	
CD4	Cluster of Differentiation 4	
CQI	Ccontinuous Quality Improvement	
DNA	Deoxyribonucleic Acid	
EDHS	Ethiopian and Health Demographic Survey	
EHSTG	Ethiopian Health Sector Transformation Guideline	
EID	Exposed Infant Diagnosis	
ENHQS	Ethiopian National Health Quality Strategy	
FMOH	Federal Ministry of Health	
HIV	Human Immune Deficiency Virus	
HPs	Health Posts	
HR	Human Resource	
HSQD	Health Services Quality Directorate	
HSTQ	Health Sector Transformation in Quality	
IOM	Institute of Medicine	
MSGD	Medical Services General Directorate	
NHQS	National Health Quality Strategy	
OFT	Organs Function Tests	
PHCU	Primary Health Care Unit	
PMTCT	Prevention of Mother-to-Child Transmission of HIV	
PCR	Polymerase Chain Reaction	
QI	Quality Improvement	
STIs	Sexually Transmitted Infections	
VL	Viral Load	
WoHO	Woreda Health Office	
ZHD	Zonal Health Department	

INTRODUCTION

1.1. Health service delivery in Ethiopia

The Ethiopian health service is restructured into three tier system. These are the PHCU (primary level healthcare), secondary and tertiary level healthcare. PHCU is composed of a health center and five satellite health posts, primary hospital, primary and medium clinics. Secondary level health care is composed of general hospital, specialty center and specialty clinics. This level is expected to give services for 1 million people. The tertiary level is composed of specialized hospital and intended to give services for 5 million people (figure 1).

Decentralization of health service in the country has been done to larger extent in the last decade. Consequently the coverage of health services has also increased. The current health sector transformation plan of Ethiopia considers quality of health services as one of the pillars. Even though there are significant changes in engaging the private sector in health service provision, the government is still the main health care provider and source of finance particularly in the rural parts of the nation.

Specialized Tertiary Level healthcare Hospital General hospital **Secondary Level health Care** Specialty Center Specialty Clinic **Primary** Medium Clinic hospial • Primary Clinic Health **Primary Level** health Care center **Health Center Health Post**

Figure 1: Health care tier system in Ethiopia

1.2. HIV service in Ethiopia

The existence of HIV infection in Ethiopia was recognized in the early 1980s with the first two AIDS cases reported in 1986. Since then, the epidemic has rapidly spread throughout the country. Urban HIV prevalence among pregnant women age 15-49yrs had reached to a peak value of 14.3% in 2001 and rural HIV prevalence had reached to a peak value of 4.1% in 2003. Since then there has been a continued effort to combat the impact of the epidemic. Both the ANC and EDHS suggest substantial declining of HIV prevalence among young people and urban population.

In response to the epidemic a national HIV policy was framed, surveillance system established and three consecutive five year strategic frame-works or plans to intensify the multi-sectoral response to HIV in the country were developed.

Given the current state of the epidemic and in line with global recommendations, the current strategic plan (4th) was developed in an investment case approach. Accordingly, the following main areas of intervention were identified.

- SBCC for most at risk population and vulnerable groups
- Condom distribution and use
- prevention and control of STIs
- Targeted HIV testing and counseling
- PMTCT
- ART

Based on the set priorities, four strategic objectives and three critical enablers have been formulated in the HIV investment case.

The Four Strategic Objectives:

- 1. Implement high impact and targeted prevention program
- 2. Intensify targeted HIV testing and counseling services.
- 3. Attain virtual elimination of MTCT
- 4. Optimize and sustain quality care and treatment.

Increased access to comprehensive HIV prevention, care and treatment services through decentralization and task sharing need to be coupled with provision of quality services to improve health outcomes. Accordingly, this national HIV service quality improvement frame work is adapted from the National HSTQ document to address quality aspects of the HIV services across all levels of the health system.

1.3. Background and Rationale of HIV Service quality Improvement Tool kit

The provision of quality health services is essential to maintain health, prevent disease, and minimize morbidity and mortality from illness - all of which are necessary for ensuring a prosperous nation. The Federal Ministry of Health (FMOH) of Ethiopia observed that despite remarkable achievements in health infrastructure expansion, increments in volume and mix of trained and deployed human resources for health and steady widening of access to health care that there still exist variations in health outcomes.

This was found to be as a result of differences in the quality of health care availed across the various levels of the healthcare delivery system. In response, the FMOH released the National Health Care Quality Strategy (NHQS) which was launched on March2016 with the aim of promoting and ensuring the provision of standardized person-centered, efficient, effective, equitable and high quality health care in Ethiopia. The ministry intends to ensure improved health outcomes for individuals and the community. This guidance will help facilities to constantly work towards the delivery of high quality and measurable services.

Given that HIV is among the leading causes of morbidity and mortality in Ethiopia, the ministry has included the national HIV prevention and control program as one of the core tracked programs by the Joint Consultative Forum (JCF) which is the highest governing body of the Ethiopian Health Sector Transformation Plan (HSTP) 2015/16 - 2019/20 (2008-2012 EFY).

The Health Sector Transformation In Quality (HSTQ) guideline incorporates HIV as one of the prioritized communicable diseases and has developed practice standards for HIV care based on which health professionals can measure their performance and work on improving the quality of the HIV prevention, care and treatment services

This HIV service quality improvement tool kit modeled after the Ethiopian National Health Care Quality Strategy (ENHQS), Health Service Transformation in Quality (HSTQ), Ethiopian Hospital Service Transformation Guideline (EHSTG) and the Tool kit for HIV/ AIDS services in Ethiopia provides a blueprint for ensuring quality HIV services to patients and clients.

The rationale for developing the HIV Service Quality Improvement Tool kit is to:

- Contribute to the delivery of quality HIV/AIDS service
- Develop quality improvement tools so as to provide a simple, systematic way to monitor measure and improve HIV/AIDS services resulting in increased service uptake and improved adherence and retention in care.
- Strengthen data analysis and utilization at the different levels of the health system so that evidence based decision making and efficient resource use will be intensified.
- Provide a framework that links and amalgamates quality related guidance in the NHQS and HSTQ into a single easy to refer document to be used in the context of quality HIV service delivery by all relevant staff.

NATIONAL HIV SERVICE QUALITY IMPROVEMENT TOOL KIT

OBJECTIVES

2.1. General Objective:

The general objective of the HIV Service Quality Improvement Tool kit is to contribute to the provision of standardized high-quality HIV service.

2.2. Specific objectives:

- To promote a culture of client-centered care and patient safety.
- To promote a culture of continuous quality improvement.
- To strengthen use of performance data for quality improvement at all levels (national, regional, zonal, woreda, facility and community.)
- To foster the development and integration of standardized quality improvement infrastructure
- To standardize quality management and improvement processes at different levels of the health system.
- To support progress towards the achievement of the three 90's and other global HIV targets.

OVERVIEW OF HIV SERVICE QUALITY MANAGEMENT

3.1. Basic concepts quality management

To date, there is no universally accepted definition of "quality." However, in Ethiopia, as highlighted in the HSTP, quality and equity are defined together, believing that the two must go hand-in-hand. Through various consultative processes, the domains that have been prioritized in this strategy are: safe, effective, patient- centred, efficient, accessible, comprehensive, affordable, and timely. With these prioritized domains, quality in Ethiopia is defined to be: "Comprehensive health service that is measurably safe, effective, patient- centred, and uniformly delivered in a timely way that is affordable to the Ethiopian population and appropriately utilizes resources and services efficiently."

There are six generally accepted dimensions, or aims, of quality, as laid out by the Institute of Medicine(IOM)

- i. Safe: avoiding injuries to patients from the care that is intended to help them; the WHO defines "patient safety" as the prevention of errors and adverse effects to patients associated with health care
- **ii.** *Effective*: providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit
- **iii. Patient-centered:** providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions
- **iv.** *Timely:* reducing waits and sometimes harmful delays for both those who receive and those who give care
- **v.** *Efficient:* avoiding waste, including waste of equipment, supplies, ideas, and energy
- vi. **Equitable:** providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status⁷

In drilling deeper in to quality, it is also helpful to spell out the three core elements of quality, namely *quality planning*, *quality improvement*, *and quality control*. Leveraging all three pillars in a holistic way is one of the key foundations of the National Health Care Quality Strategy.

i. Quality Planning

Quality planning brings systems thinking to the highest levels of leadership and governance. It responds to the measured gap between what the population needs, and what is currently being delivered in the health system. It then establishes the goals, policies and strategy to close this gap, and ensures that the resources are allocated to do this effectively. Quality planning involves designing a structure that delivers the right care to patients at the right time by the right provider.

ii. Quality Improvement

Quality improvement(QI) is a continuous process whereby organizations iteratively test and measure changes in work routines, set and achieve ambitious aims, shift whole system performance, and spread best practices for rapid uptake at a larger scale to address a specific issue or suite of issues they have determined to improve. One useful way to define quality improvement is: "...the combined and unceasing efforts of every one—health care professionals, patients and their families, researchers, payers, planners, and educators—to make the changes that will lead to better patient outcomes (health), better system performance (care), and better professional development (learning)."

Several overlapping and complementary QI models exist, which all stem from the "Science of Improvement" that starts with an aim and develops tests towards improvement. These include Lean, Six Sigma, Kaizen, and the Model for Improvement.

In Ethiopia, *Kaizen* is adopted to be the *engine* driving improvement, while the *Model for Improvement* is endorsed as the "*vehicle*" that provides structure for improvement. Specifically, Kaizen focuses on improving efficiency and lowering cost, through methodology that can be integrated with other complementary

quality improvement tools and approaches, such as the Model for Improvement. At the heart of both methodologies are small rapid tests of change that lead to learning and improvement.

Model for improvement

It is the application of knowledge in making changes in response to the following three fundamental questions:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in an improvement?

These three questions provide the basis for making any sort of improvement through trial and learning using the Plan, Do, Study, and Act (PDSA) framework.

iii. Quality Control

Quality control (QC), is a normative process that includes quality assurance, where a system seeks to ensure that quality is maintained or improved, and errors are reduced or eliminated. QC programs evaluate current health care quality, identify problem areas, create a method to overcome issues, and monitor the method taken to improve quality.

3.2. Guiding principles on HIV related health care quality improvement

- Commitment to quality by all: All stakeholders providing HIV related services should be committed to continuously measure quality of care they are providing and take improvement measures.
- Quality improvement is a continuous process: No level of quality can be the maximum it can be. Always there is a room for improvement.

- 3. Use of data: Data is needed to determine the baseline performance status, decision-making, planning, monitoring and evaluation. Quality improvement efforts should be based on evidence. This requires use of correct, complete and current data.
- **4. Measurement linked with improvement:** Measuring quality of care should always lead to corrective actions which can address problems identified during measurement.
- **5. Holistic perspective:** Service quality should be viewed from the perspective of not only providers but also that of consumers including patients, caregivers and the community.
- **6. Client focused:** quality improvement should focus to increase the likelihood that clients will be benefited maximally and satisfied by the processes and outcomes of care provided to them
- **7. Facility level ownership:** Quality measurement and improvement should be owned primarily by the care providing institutions. The tool for improving quality of services should be one that can easily be used by providers. This will also increase the empowerment and sense of ownership of the health care providers. The data should be analysed and used first by the team onsite.
- **8. Effective communication**: Results from quality measurement should be regularly disseminated/communicated for consumers including care providers, receivers, funding agents and administrators.
- 9. Integration and alignment of quality improvement with routine activities: Continuous quality measurement and improvement should be part of the routine services for each implementing institution providing HIV services.

10.Team work and Accountability: Teamwork should be emphasized in the quality improvement process and every individual participating in the provision of HIV services should develop a sense of accountability.

3.3. Components of HIV service for improvement

1. Voluntary Counselling and Testing (VCT)

- » Pre-test counselling
- » HIV testing
- » Post-test counselling
- » Ongoing counselling
- » Linkage with HIV treatment

2. Provider Initiated HIV Testing and Counselling (PITC)

- » Offering test for target population
- » Giving pre-test information
- » HIV testing
- » Post –test counselling
- » Linkage with HIV treatment

3. Prevention of Mother to Child HIV Transmission (PMTCT)

- » Offering HIV testing during ANC, labour & delivery, postnatal and family
- » planning visits
- » Giving pre-test information
- » HIV testing
- » Post-test counselling
- » Partner testing
- » Screening/diagnosis and management of Ols

- » OI prophylaxis for the mother
- » Screening and management of malnutrition
- » Initiate ARV for all HIV positive pregnant and lactating mothers
- » Counselling on delivery and care plan
- » Counselling on infant feeding
- » Delivery services
- » Infant HIV prophylaxis
- » Early infant diagnosis
- » Infant CTX therapy
- » HEI care
- » Linkage of HIV infected infants to HIV treatment

4. Prevention and treatment of sexually transmitted infections

- » STI screening/diagnosis
- » Syndromic management of STI
- » Partner notification and treatment
- » Risk reduction counselling and education
- » Condom demonstration and provision

5. TB/HIV collaborative activities

- » Offer HIV testing for all TB patients
- » Routine Screening of TB in all patients with HIV
- » INH preventive therapy for all HIV infected patients with negative TB screening
- » Linkage of HIV patients diagnosed with TB for TB treatment
- » Linkage of HIV positive TB patients for ART
- » TB infection Control

6. HIV treatment

- » HIV retesting for verification
- » Screening/diagnosis and management of Ols
- » Ol prophylaxis
- » Baseline Lab tests(CD4,CBC, OFT)
- » Adherence preparation
- » Initiation of ART as early as possible
- » Screening and management of malnutrition
- » Counselling and provision of family planning services
- » Monitoring for adverse drug events
- » Monitoring of treatment response (Routine clinical assessment, Routine Viral load)
- » Routine adherence assessment and support
- » Routine screening for TB,STI
- » Prevention and risk reduction counselling and support
- » Partner and family screening for HIV
- » Counselling and support for disclosure
- » Identify and manage treatment failure

7. Pharmacy services

- » Adherence Counselling and dispensing
- » Adherence monitoring
- » Adverse drug event management and reporting

8. Laboratory

- » Confirmatory HIV testing (verification of discordant HIV test results)
- » Quality assurance
- » Lab tests (CBC, OFT, CD4, VL, EID/DNA/PCR, Pregnancy test, HBsAgetc)
- » Sample transportation and result report

9. Cross cutting and support functions

- » Documentation / recording
- » Infection prevention (IP)
- » Post-exposure Prophylaxis (PEP)
- » Stock management
- » Leader ship and Management

3.4. Expected output/outcomes of quality HIV service delivery

- 1. Reduced risky behaviours among HIV negative clients of HCT
- 2. Prevention of HIV infection among children
- 3. Reduced risky behaviours among HIV positives
- **4.** Early detection and enrolment of HIV positives into care and treatment
- 5. Prevention of opportunistic infections
- **6.** Initiation of ARV to all HIV infected patients
- 7. Sustained viral suppression of patients on ART
- 8. Improved referral and networking
- 9. Integrated clinical services
- 10. Satisfaction of clients receiving care

NATIONAL HIV SERVICE QUALITY IMPROVEMENT TOOL KIT

OF QUALITY IMPROVEMENT FOR HIV SERVICES

This HIV service quality improvement toolkit will be implemented as part the National Health Service quality improvement framework to improve quality of HIV services in Ethiopia. The framework will have the following major activities:

- **1.** Aligning the HIV quality improvement system with the national quality improvement framework.
- 2. Coordinating and monitoring the implementation of the framework at different health facilities and measuring trends in performance across facilities throughout the country based on reports from health facilities, supportive supervision, review meetings, and periodic evaluations.
- **3.** Motivating health facilities through recognition of best performers, arranging experience sharing sessions, and review meetings on quality improvement issues.

Successful implementation of QI activities need appropriate structures at all levels. The roles, responsibilities and linkages of these structures must be clearly defined. This helps to identify the monitoring and supervisory systems that are required to support the QI programmes. Effective leadership and management commitment at all levels is also key to the success and sustainability of QI programmes.

Ql activities should be an integral part of service delivery and apply to preventive, curative, rehabilitative and support services at all levels. It must involve every department and every health worker. Quality structures at all levels should be derived from existing structures for effective implementation.

4.1. Quality Structures

The HIV service quality improvement framework will be implemented as part the National Health Service quality improvement framework and will utilize the quality structures articulated in the HSTQ with technical support from HIV program experts at all levels.

For strengthening the QI activities, FMOH instituted the following organizational arrangements need to be set up at various levels with the roles and responsibilities defined for each level.

Federal Ministry of Health: Health Service Quality Directorate (HSQD) supported by a National Health Care Quality Steering Committee.

Regional Health Bureau: Quality Unit (QU) led by Curative and Rehabilitative Core Process Owner (CRCPO) and supported by a Regional Health Care Quality Steering Committee.

Zonal Health Desk: *Quality focal person* **Woreda Health Office:** *Quality focal person*

Hospitals: Quality Unit (QU) led by a physician assigned to work in

the unit as his/her main / regular responsibility

Health centers: *Quality Committee / health performance monitoring team (HPMT)*

Community level: Health Development Army (HDA) working as

Quality Improvement Team (QIT)

4.2. Roles and responsibilities

In order to strengthen QI implementation for HIV services, FMOH recommended that the following organizational arrangements need to be set up at various levels with the roles and responsibilities defined for each level.

4.2.1.FMOH

Primary responsibilities of FMOH include:

- Developing policies, strategies, guidelines, protocols, manuals.
- Coordinating countrywide quality improvement program.
- Identifying structure gaps (medical equipment, skill lab establishment, IT infrastructures) to strengthen the quality structure.

- Providing supportive supervision to health facilities.
- Monitoring quality of care.
- Setting research agenda
- Validating, ranking and recognizing performance of facilities.
- Providing capacity building support to RHBs
- Strengthening good governance to clients and staffs
- Design staff motivation schemes.
- Mobilizing resources for quality improvement
- Document best practices and promote knowledge management.
- Conducting national review meetings (evaluate performances, identify areas of QI, experience sharing between regions, giving national directions)
- Coordinating and conducting quality summits
- Establishing quality resource centre.
- Strengthening private public partnerships.

4.2.2 RHBs

The regional HIV team shall collaborate with the regional health service quality unit. The regional HIV team will contribute to the accomplishment of the following roles and responsibilities of the regional quality team:

- Develop regionally-contextualized quality strategies and roadmap.
- Adapt national standards to develop regionally-contextualized standards.
- Co-ordination, provide guidance and coaching of QI activities in the region.
- Organize trainings, workshops and seminars on different quality issues

- Provide mentorship and supportive supervision to health facilities
- Review progress of QI activities, identify gaps and prepare action plans for improvement.
- Design reward/incentive systems to encourage high performance by validating institutions and promoting best practice.

4.2.3. ZHD and WoHO level

Quality focal persons in ZHDs and WoHO will:

- Co-ordinate and support health facilities in their respective zones and woredas through co-ordination, guidance and feedbacks to the health facilities.
- Promote OI awareness.
- Monitor performance of health facilities.
- Organize training for health workers to improve their knowledge and skills and support the training of health facilities in quality improvement.
- Encourage best performance by comparing institutions and promoting best practice.

4.2.4. Health facilities

Health facility leadership is essential for quality improvement activities to succeed. Health facility leaders play a key role by creating a culture of quality improvement. This culture will foster a common understanding that performance data will be used to improve care for patients, and will not 'blame' or 'punish'. Facility leaders can support quality improvement activities in the following ways:

- Create a vision for quality by setting shared goals for performance/quality of care.
- Build staff capacity for quality improvement to make sure that staffs understand what OI is about and how to do it.

- Build motivation for quality improvement by communicating to staff that improvements are possible and welcomed, and encouraging them to set time aside to talk about quality and make it part of their jobs.
- Establish a quality improvement team to manage this process at the facility.
- Involve all health facility staff who work in HIV care including physicians, nurses, clinic officers, data clerks, pharmacists, logistics staff, and outreach workers.
- Conduct self-assessment of quality by using the nationally set criteria and other additional indicators set by themselves to fit for their specific setting and situation.
- Provide time to openly discuss both successes and failure among staff members.
- Make sure that the 'voice' of the patient is heard and acted on through surveys, exit interviews, suggestion boxes or other means.
- Involve staff and community members in understanding data and making decisions based on it.
- Use available/existing resources to strengthen quality improvement activities.
- Allocate resources (time, HR, and budget) for QI implementation.
- Document best practices and promote knowledge management.
- Identify, adopt, benchmark best practices.

The implementation of the above activities may vary depending on the level of the facility along the health tier model. Key implementation mechanisms in this regard include facility quality unit/committee/focal person, HIV multi-disciplinary team, and performance monitoring team.

4.2.5. Development partners & IPs

- Actively participate in national and sub-national steering committees and technical working groups.
- Support capacity building of the health system for effective QI implementation.
- Support in the monitoring and evaluation of efforts of quality improvement at all levels.
- Support knowledge management, skill transfer, and advocacy on Ql.

IMPLEMENTING QUALITY IMPROVEMENT IN HEALTH FACILITIES

Ql is the process of improving services and care through the routine use of patient and program data. Several contextual factors, such as leadership and teamwork, also have a bearing on the quality of HIV service. Program managers and health-care providers need to continuously monitor the quality of HIV services. This can be done by comparing implementation against set standards, analysis and use of routinely collected data at facility level and consultation with service users or community networks on the needs, values and preferences related to HIV care services that they receive.

Methods of improving the quality of care focus on common key processes and functions in health facilities, and how they link together to achieve desired outcomes. HIV care systems that are planned in a methodical manner will result in care that better meets patient needs and follows national HSTQ and HIV service guidelines.

The key principles for improving HIV services include:

- Focusing on the needs of the patient.
- Implementing an improvement model that includes measuring, testing change, re-measuring, and applying change.
- Providing leadership support to improve the system of HIV service.

- Identifying and including knowledgeable staff who will participate in improvement activities.
- Using standardized tools that will help examine clinic processes through analysis of real-time data
- Integrate HIV QI activities into the routine HIV services.

4.3. Key strategies in quality improvement:

- Ensure that the HIV service has the minimum functioning systems and infrastructure as per the national guideline.
- Build the capacity of facility-based health care workers.
- Use a multidisciplinary approach to prioritize and implement quality improvement areas.
- Create a shared goal to develop and agree on a plan on how the improvement activities will be implemented, who will lead them, and how they will be started.
- Involve patients and their families since they bring valuable ideas based on their experiences in receiving services.

Health facilities will assess their service quality to answer two categories of guestions:

- **1.** What is the level of quality of service against the nationally set standards?
- 2. What additional quality issues need improvement?

The first question will be standard for all facilities throughout the country and performance will be measured using the indicators selected at the national level. This monitoring question will be facility specific for which the facilities are allowed to identify additional indicators based on their local situations. Facilities will perform the quality improvement cycle to identify and manage gaps related to the two categories of questions. These processes will make up facility-specific quality improvement programs.

No single quality improvement methodology can be used to implement every QI activity. Thus, it is recommended to use alternate evidence-based quality management tools and approaches endorsed by HSTQ. Specifically, Kaizen, which focuses on improving efficiency and lowering cost, can be integrated with other complementary quality improvement tools and approaches like kaizen, clinical audit and model for improvement.

4.4. Clinical Audit

4.4.1. Introduction

Healthcare audit is not new. It is a quality improvement activity that most healthcare employees have done for a long time as part of everyday practice. The purpose of healthcare audit is to monitor to what degree standards for any given healthcare activity are met, identify reasons why they are not met, and identify and implement changes to practice to meet those standards. These standards should be evidenced based. These standards can be clinical or non-clinical

It is the duty of all clinicians to ensure that they deliver the best care to their patients. All clinicians should be auditing their work. Clinicians have a duty to use the findings of audit to improve clinical care and move towards best practice i.e. audit is an essential tool for Continuous Quality Improvement (CQI).

Clinical and Healthcare Audit ideally should be multidisciplinary but uni-disciplinary audits may also be conducted.

4.4.2. Definition

In 1989 by the US department of health Clinical audit is defined as

"The systematic critical analysis of the quality of clinical care, including the procedures used for diagnosis and treatment, the use of resources and the resulting outcome and quality of life for the patient."

Later in 2002, the National institute for Clinical Excellence (NICE) defined Clinical audit as;

"A quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit standards and the implementation of change."

Aspects of the structure, process and outcome of care are selected and systematically evaluated against explicit criteria. Where indicated changes are implemented at an individual, team, or service level and further monitoring is used to confirm improvement in healthcare delivery.

4.4.3. Rationale

Healthcare audit should be undertaken as a routine part of everyday practice to:

- Enable staff and service users to evaluate and measure practice and standards
- Offers a way to assess and improve patient care, to uphold professional standards and do the right thing.
- Identifying and measuring areas of risk within the service.
- Create a culture of quality improvement and best practice in the clinical setting.
- Is educational for the participants (provide up to date information with evidence based good practice)
- Offers an opportunity for increased job satisfaction.
- Increasingly seen as an essential component of professional practice.
- Improve the quality, effectiveness and efficiency of healthcare.

4.4.4. The five stage approach in clinical audit

Clinical audit is a cyclical process which can be outlined in five stages (figure 3):

Stage 1: Planning for audit

Stage 2: Standard/criteria selection

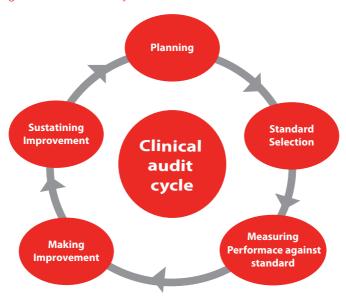
Stage 3: Measuring performance

Stage 4: Making improvements

Stage 5: Sustaining improvements

Each stage of the clinical audit cycle must be undertaken to ensure that an audit is systematic and successful.

Figure 2: Clinical audit cycle



Stage 1: Planning for audit

If a clinical audit is to be successful in identifying areas of excellence or areas for improvement, it requires effective planning and preparation. The amount of planning and preparation will depend on the specific circumstances of each audit.

Planning for audit can be described in three main steps:

» Involving all relevant stakeholders

All relevant stakeholders should be given the opportunity to contribute to the clinical audit. Without the support of colleagues and their commitment to participate any audit will be difficult. It is vital that all employees are involved in the subject of audit; understand the aim of the audit and their role in it.

Management should be involved in the audit process, which should reflect the mission statement and the objectives of the organization they manage. Audit projects are best conducted within a structured program with effective leadership, participation by all employees with an emphasis on team working and support.

Clinical audit should have also the commitment of the lead clinician within the field of concern. Such commitment need not necessarily involve the clinician's direct participation, but they should at least approve of the audit's conduct.

All those involved in the audit should be committed to change, if necessary as a result of audit and there should be greater multi professional working across the different clinical and managerial disciplines that contribute to the patient's episode of care.

It is also recommended that 10% of all audits should have active service user involvement. Common methods of including service users in the clinical audit process are:

- Gathering service user feedback, for example letters of complaint.
- Analysis of comments made at service user forums.
- Interview with service users
- Service user surveys.
- Focus groups, etc.
 - » Determining the audit topic

This is a very important step that must be given careful consideration. Subjects for clinical audit should be selected with a view to improving the quality or safety of care or of service provision. The Donabedian (1966) classification system of structure, process and

outcome can be used to focus on areas of practice from which a topic may be selected.

Selection of the audit topic needs careful thought and planning, as clinical staff and service providers have limited resources with which to deliver clinical audits. Mandatory audits will take resource priority. All other audits s

hould therefore be prioritized to ensure that available resources are used effectively. These audits should focus on areas with the greatest need to improve practice.

» Planning the delivery of audit

For a clinical audit to be effective and successful, the following points have to be addressed in the planning of the delivery of audit:

The audit team must understand the overall purpose of the audit they are to perform. The delivery of an audit topic with no clear purpose will deliver little or no improvement to the quality and effectiveness of clinical care. The purpose of the audit may be outlined in the form of aims and objectives.

The audit team needs to involve the right people with the right skills from the outset. Therefore, the identification of skills required and of individuals possessing these skills should be a priority.

All audit team members should be appropriately trained and briefed with regard to their role

Stage 2: Standard and quality measure selection

When the audit topic has been selected, the next essential step is to review the available evidence to identify the standards and audit criteria against which the audit will be conducted. Standards should be 'robust' and evidence based (Potter, Fuller & Ferris, 2010).

Useful sources for standards include:

- Locally or nationally endorsed clinical guidelines;
- Standards and clinical guidelines from relevant quality and safety programmes, clinical care programmes and professional bodies; and
- Clinical guideline development organizations such as NICE, SIGN, etc.

If national or local guidelines are not available, a literature review may be carried out to identify the best and most up to date evidence from which audit criteria may be generated.

A standard describes and defines the quality of care to be achieved, and for each standard a quality statement and quality measures will be defined which gives the detail of what needs to be achieved for the standard to be reached. For a quality measure to be valid and lead to improvements in quality of care, they should be consistent with SMART quidance:

- **Specific** (explicit statements, not open to interpretation).
- Measurable
- Achievable (of a level of acceptable performance agreed with stakeholder).
- Relevant (related to important aspects of care).
- Theoretically sound or timely (evidence based).

The measurement of compliance against criteria of care is at the heart of clinical audit. In order to compare actual care with care that should be provided, each audit criterion should have an 'expected level of performance' or 'target' assigned to it. A defined level or degree of expected compliance with audit criteria; may be expressed in percentage or proportion of cases.

Stage 3: Measuring performance

This stage has the following four steps: data collection, data analysis, drawing conclusion and presentation of results.

Data collection

This is collection of relevant data about current practice in order to facilitate comparison. Before data collection commences, a structured approach should be taken to the identification of relevant data and to ensuring that the data collection process is efficient, effective and accurate.

Important points to be considered in data collection include:

» Data type:

• The type of data required is dependent on the audit question and objectives. The aim of data collection is to enable comparison of current practice against the audit standard; therefore the type of data collected must facilitate this comparison. Data types can be of categorical (nominal/ordinal) and quantitative or numerical (discrete/continuous).

» Data items:

All data collected must be relevant to the aims and objectives of the audit. It is equally important that each data item is adequate and not excessive for the purpose of measurement of practice against the relevant audit criteria. Collection of data which is not required for the purposes of measurement provides little or no benefit, is more time consuming and may infringe compliance with information governance requirements and practices

» Sources of data:

 The source of data for an audit should be specified and agreed by the audit team. The source specified should provide the most accurate and complete data as readily as possible.

- » Data collection methods:
 - Can be retrospective/ cross sectional / prospective.
- » Sample selection methods:
 - It is often not possible or necessary to gather data on all service users, events or items for audit purposes; therefore sampling is often required. It is important that any sample selected is representative of the population under examination. There are numerous sampling methods which may be used; however random sampling and convenience sampling tend to be the most commonly used methods.

» Sample size:

• Clinical audit is not research. It is about evaluating compliance with standards rather than creating new knowledge, therefore sample sizes for data collection are often a compromise between the statistical validity of the results and pragmatic issues around data collection i.e. time, access to data, costs. The sample should be small enough to allow for speedy data collection but large enough to be representative. In some audits the sample will be time driven and in others it will be numerical

Data analysis Step

Data collection is only part of the process of measuring performance, in order to compare actual practice and performance against the agreed standards, the clinical audit data must be collated and analyzed. The basic aim of data analysis is to convert a collection of facts (data) into useful information in order identify the level of compliance with the agreed standard

The basic requirement of an audit is to identify whether or not performance levels have been reached. This requires working out the percentage of cases that have met each audit criterion. In order to calculate the percentage it is necessary to identify both the total number of applicable cases for a criterion (the denominator) and the total number within the denominator group that met the criterion (the numerator).

Drawing conclusions

After results have been compiled and the data has been analyzed against the standards, the final step in the process (where applicable), is to identify the reasons why the standard was not met.

In order to understand the reason for failure to achieve compliance with clinical audit criteria, the audit team should carefully review all findings. Individual cases where care is not consistent with criteria should be reviewed to find any cases which may still represent acceptable care.

Cases of unacceptable care should then be reviewed in order for the team to:

- Clearly identify and agree on areas for improvement identified by the clinical audit.
- Analyze the areas for improvement to identify what underlying, contributory or deep-rooted factors are involved.

There must be a clear understanding of the reasons why performance levels are not being reached to enable development of appropriate and effective solutions. There are a number of tools that can be utilized to facilitate a root cause analysis, including process mapping, the 'five whys' and cause and effect diagrams (fishbone diagramming).

Presentation of results

The aim of any presentation of results should be to maximize the impact of the clinical audit on the audience in order to generate discussion and to stimulate and support action planning.

There are various different methods for the presentation of clinical audit results including:

Visual presentations, for example, posters which are useful
ways of reaching as many stakeholders as possible. Data can
also be presented visually using tables, charts and graphs in
both written and verbal presentations (for example, through
using presentation software like Microsoft PowerPoint).

- Written reports for submission to the relevant clinical lead, directorate or governance committee.
- Verbal presentations at relevant meetings.

Stage 4: Making improvements

The purpose of performing clinical audit is to assess the degree to which the clinical services offered comply with the accepted evidence based practice standard.

Clinical audit results may show areas of excellent or 'notable practice' and this should be acknowledged. For such audits there should be an explicit statement saying 'no further action required' in the audit summary report and a rationale why re-audit is not required.

Clinical audit results may also identify 'areas for improvement' where the required standards are not being met.

The clinical audit group should interpret and discuss the findings in order to clarify the areas where action is required so as to improve the quality of clinical care and its outcomes. All audit reports should be shared with the relevant bodies including department heads where audit was conducted.

Change is often the most difficult part of the audit. When the audit team has developed the recommendations, decisions should be made on how changes can be introduced and monitored. Results should be used in conjunction with feedback and local consensus to change clinical practice and to improve standards.

Priorities for action should be identified and these should be clearly documented. All audits should be accompanied by a quality improvement plan in order to achieve the required improvements in practice.

Ashmore, Ruthven and Hazelwood (2011c) identify clinical audit as a change process, stating:

'Audit that simply measures but does not drive change to address problems identified is not good audit. All good audit projects must include a program of change activity and post-identification of the findings from audit, to ensure necessary changes happen.'

Stage 5: Sustaining improvements

The audit cycle is a continuous process. A complete audit cycle as described by Ashmore, Ruthven and Hazelwood:

'... ideally involves two data collections and a comparison of one with the other, following implementation of change after the first data collection, in order to determine whether the desired improvements have been made. Further cycles may be necessary if performance still fails to attain the levels set at the outset of the audit. At this stage there may be justification for adjusting the desired performance levels in the light of the results obtained.'

Where quality improvement plans are put in place, monitoring should be performed to ensure plans are implemented as agreed and within the agreed timeframe.

Clinical leads and/or managers who agree to implement quality improvement plans are accountable for the delivery of quality improvement plans and sustaining quality improvement. A summary report of progress should be submitted through the appropriate lines of responsibility at regular intervals.

The appropriate quality improvement team is responsible for monitoring and reporting the progress of implementation through the reporting structure. The progress of any quality improvement plan associated with an audit should be formally assessed at regular intervals and appropriate actions to be taken should be determined where progress is not being maintained.

Where plans have not been implemented, a rapid re-audit is recommended to ensure that changes have indeed improved practice and to ascertain whether further audit procedures are required in the short term.

Performance indicators can be used to monitor improvements as a result of quality improvement activities. A small number of key performance indicators may be developed for each quality improvement project/intiative to monitor implementation of the improvement plans.

Completion of an audit cycle will usually result in improvements in practice. This should be communicated to all stakeholders. A successful audit in one service may be transferable to other parts of the service. Completed audits should be shared locally via the most appropriate mechanisms, including department quality and safety meetings, journal club meetings, the intranet, newsletters and local conferences and seminars. Consideration should also be given to sharing clinical audit work regionally and nationally through relevant journals, conferences and other media.

Remember to close the loop by re-auditing, as audit is a continuous cycle. If following an initial audit it is found that desired performance levels are not being reached, and a program of change activity has been put in place; then the audit should be repeated to show whether the changes implemented have improved care or whether further changes are required. This cycle is repeated until the desired performance levels are being achieved.

4.5. Steps In Quality Improvement

No single quality improvement methodology can be used to implement every QI activity. Thus, it is recommended to use alternate evidence-based quality management tools and approaches endorsed by HSTQ. Specifically, Kaizen, which focuses on improving efficiency and lowering cost, can be integrated with other complementary quality improvement tools and approaches such as the clinical audit and model for improvement.

The improvement of performance and quality often requires the use of a streamlined, step-by-step methodology, the creative management of the process of change, and the joint, active involvement of providers, clients and communities in the improvement process. The approach to quality improvement could be a proactive one focusing not on fault finding but on improving quality. Quality improvement is a continuous process that can be viewed as a spiral flow of actions.

It involves five main steps in quality improvement

- 1. Diagnosis of problem /gap identification
- 2. Setting goals for improvement
- **3.** Selecting indicators to track progress towards goals
- 4. Taking specific quality improvement actions
- 5. Measuring change and recognition of achievements

Step1: Diagnosis of the problem/gap identification

This step involves the identification and clear understanding of components or areas in the process of HIV care provision that need improvement. In the health care setup, this step can be done by assessment through surveys, analysis of experience of providers and/or clients and the community. The assessment will identify problems related to the three components of quality measurement developed by Avedis Donabedian:

- **1.** Resource: the setup in which care is being provided including structure and system
- **2.** Process: the process of care provision (how care is being provided)
- 3. Outcome: the outcome of services.

The result from assessment of these three components shows how organizational inputs are used to produce intended outcomes through the accomplishment of planned activities. These components cover all possible areas for the occurrence of problems in quality. They will assess if the necessary resources are available and appropriately managed, whether care is provided based on scientific recommendations and the level to which expected outcomes are achieved. The diagnosis should answer questions like:

- What is the problem and to what extent does it affect the HIV service?
- Where and when does the problem occur?
- What are the root-causes for the occurrence of the problem?
- What are the potential solutions to solve the problem?
- Had the problem occurred before, if so how was it dealt?

Once the problems are identified and well understood, health facilities and implementing partners involved in the quality improvement program can set goals to be achieved through a continuous process improvement.

Step2: Setting goals for improvement

After the identification and description of problems in quality, the next step in the process of quality improvement is to set goals for improvement. Setting goals for quality improvement will help all involved in the process to share a common view about the future and mobilize resources towards same direction. The overall objective should be SMART (specific, measurable, appropriate, realistic and time bound) in order to simplify tracking of achievements.

In order to achieve the goals that are set, intervention should be selected; and a joint action plan prepared and implemented. Keep in mind that the priorities ultimately chosen should be important and relate to national guidelines; represent key community and clinic staff concerns; be measurable; and include areas that the team will realistically be able to improve. For example, we can determine that equipment is broken, but we cannot use improvement projects to fix it. However, if patients are not receiving necessary laboratory tests, we can improve the process by redesigning systems such

as clinic flow patterns, and then test these changes to see if they work. When we are starting quality improvement processes, select one priority as you learn how to do the work. The selection of one priority in no way suggests that other identified areas are not important; merely it indicates that they can be addressed later. A good aim statement fulfills the following requirements: a defined boundary that specifies the scope of the improvement goal; specific numerical goals for outcomes that are ambitious but achievable; a timeframe (how much improvement by when?); and guidance on how the aim will be achieved.

Step3: Selecting indicators and developing measurement plan

Tracking changes towards the achievement of goals is one of the steps in quality improvement, which will be described as a fifth step in this part. To monitor performance at that step, setting quality indicators is crucial. Quality indicator is a retrospectively measurable element of practice performance for which there is evidence or consensus that it can be used to assess quality of service provided and hence changes it. The indicators could be derived from standards of qualities by converting them into measurable terms.

Measurement is critical for quality improvement. Measurement tells us what is really happening, as opposed to what we think is happening. It tells us what is being documented in the clinic records and is available to help with the decision-making of providers who see the patient. It tells us whether tasks that are supposed to be done are being done, and done well. Health facilities may choose to measure additional indicators based on Step 1 (setting priorities).

Step4: Taking specific quality improvement actions

From the possible options to solve specific problems identified in step1, the management should identify the most effective, efficient, ethical and feasible strategies of quality improvement. The selected strategy will be implemented at each level to produce the desired quality improvement goals. Improvement comes from the application of knowledge in making changes in response to three fundamental questions.

- 1. What we are trying to accomplish?
- 2. How will we know that a change is an improvement?
- 3. What changes can we make that will result in an improvement?

These three questions provide the basis for making any sort of improvement through trial and learning, the use of data and the design of effective changes. To facilitate the development of tests and implementation of changes, the Plan, Do, Study, and Act (PDSA) framework will be applied. Here is a brief description of PDSA:

- *Plan:* Plan ahead for change. Analyse and predict the results.
- **Do:** Execute the plan, taking small steps in controlled circumstances as a pilot.
- Study: Check if the results are consistent with expectations.
- *Act*: Take action to standardize or improve the process.

The cycle begins with a plan and ends with an action based on the learning gained from the Plan, Do and Study phases of the cycle. The three questions and the PDSA cycle combined will form the basis of a model for improvement. The model is applicable for both simple and sophisticated situations and applied efforts may differ depending on the complexity of the service to be improved.

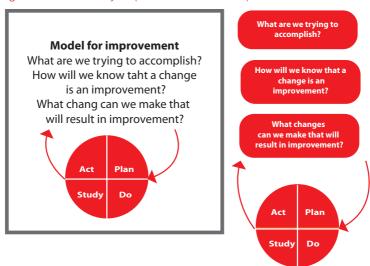


Figure 3: The PDSA Cycle (extracted from HSTQ)

Step5: Measuring change and recognizing achievements

Along with the implementation of quality improvement strategies, the level of quality of HIV services needs continuous measurement to track changes towards the set goals. Measurement should be done using the selected indicators in step3. Findings from quality measurement after analysis are the tools for advocacy to take further actions for quality improvement. This can mobilize resources; create a competitive environment among health care providers through introducing and sustaining recognition mechanism and increase awareness of beneficiaries on quality of HIV services.

Step 6: Spreading and sustaining changes

To sustain successful quality improvement activities, health facilities will make necessary efforts to spread positive changes to other programs and integrate into other existing health systems and day-to-day clinical processes. To this end, the quality improvement process will be documented and best practices will be communicated.

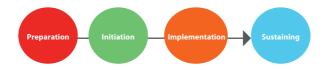
HIV Service QI Implementation Plan

The HIV Service QI implementation plan is a blueprint for rolling out QI in a manner that matches the expansion of HIV care. Effective roll out of this implementation plan will require leadership and active participation by a team of well-equipped facilitators at all levels – national, region and facility. Under the implementation plan, teams will ensure the following key components are prioritized:

- Health Worker Engagement: Facility staff will be involved in rolling out the HIV Service QI at all stages from development and planning through implementation, and evaluation.
- Community Participation: Community representation is a major factor in decision-making. Investments will be made to enable rights-holders to fully exercise and understand their rights and responsibilities in QI efforts. Mechanisms will be setup to ensure sustained engagement of the community.
- Promotion of Evidence Based Practice: In addition to making data from operations more accessible and usable, QI methodologies will continue being developed with scientific rigor to ensure future data can be applied to all kinds of research investigations. This approach enables QI activities to provide infrastructure for conducting health services and clinical research, outcome studies, meta-analyses, generating research hypothesis, and developing evidence-based practice

Phases of the HIV Service QI Implementation Plan

Figure 4: HIV Service QI Phases of Implementation



As depicted in the figure 4 above the HIV service QI implementation plan requires undertaking activities in four sequential and complementary steps. It begins with the preparation phase followed by introductory then implementation and is tied by a maintenance phase that guarantees the sustaining of the gains achieved. It is needless to state that the activities need to be contextualized and matched with available resources and the scope of the service at hand. The following is succinct outline of what measures need to be put in place for effective implementation of the HIV service QI.

Preparation

The main goal of the preparatory phase is broad-based understanding and familiarization of the QI framework, assessing and identifying needs and gaps, and establishing the necessary support for QI implementation – both with existing care systems and from key stakeholders. The preparatory phase ends with the establishment of Quality Improvement Teams.

- Familiarize with the HIV service QI and build leadership support.
- Integrate and align Quality Goals in the National/Region/Facility QI plans.
- Conduct advocacy for buy-in from relevant stakeholders.
- Establishment of Quality Improvement Teams.

Initiation

- Work within the existing system to establish HIV service QI infrastructure:
- Conduct organizational assessment.
- Develop HIV service QI action plans:
- Sensitization to HIV service QI principles and training of QI managers:
- Training of frontline health providers and dissemination of objectives:

Implementation and monitoring

- Implement model for improvement at every level.
- Conduct ongoing performance measurement.
- Measure, monitor and review progress of HIV service QI implementation at every level.

Sustaining

- Standardize and sustain existing QI initiatives through a culture
 of data use. Communicate recommendations for improvement
 to management and the management in turn will incorporate
 the recommended changes appropriately, either as standards
 or best practice guidelines.
- Ensure ongoing capacity building.
- Integrate QI dissemination into other existing health related dissemination forums. Always ensure proper documentation as this forms the basis for reviewing progress and detailed sharing of achievements.
- Implement awards and recognition system for good QI Performers
- Reinforce desired results. Here the key is to find small and regular ways to recognize QI teams that put in exemplary performance.

MONITORING AND EVALUATION

The overall quality improvement program will be regularly monitored and evaluated for its functioning. Trends in the level of performance on selected quality indicators across facilities and through time are the targets for monitoring while the impact and outcome of quality improvement projects on quality of care will be the area for evaluation. The number of indicators will be as small as it will be informative and as large as it will not be difficult to collect and analyze data at facility level. Each selected indicator needs to have its own threshold level that signifies what a particular finding of an indicator is.

Monitoring needs to be directed towards:

- 1. What the level of implementation of the HSQIF is.
 - » Coverage of the HSQIF implementation and
 - » Whether health facilities are running the HSQIF as planned.
- **2.** What the level of quality in the country as measured by the selected indicators for quality is.

For monitoring the quality improvement activities the facilities will conduct monthly review meeting with the Woreda health offices and/or the zonal health departments. Regional quarterly review meeting will be conducted in addition to regular supportive supervision. The national quality technical working group at FMOH oversees the regional activities.

HIV Service Quality Improvement Framework Monitoring structures and mechanisms

Facility, woreda, zone, regional and national committees will be involved in monitoring and evaluating the implementation of the HIV Service Quality Improvement Framework. The committees will use various methods including meetings, supportive supervision, mentorship visits, and periodic performance reviews as outlined in Table below.

Table 1: HIV Service Quality Improvement Framework monitoring mechanisms

Level	M & E Structures	Monitoring Mechanisms	What is to be measured / track ?
National	National HIV Service Quality Task Force (QTF)	 Quarterly national HIV service quality task force meetings (includes progress monitoring, report review sessions and addressing bottle necks) Provide ongoing technical assistance to the regions through follow up, SS and RM) Quarterly HIV QI Indicator report Two year program evaluation 	 # of QTF meeting conducted # of SS, RM, Training)given to the regions /its output or result
Regional	Regional Health Care Quality Steering Committee	 Receive and review quarterly facility QI reports and HIV QI indicator summary reports from zones /facilities Prepare regional summary reports Quarterly regional QI steering committee meetings Quarterly SS visits to implementing facilities. Periodic program evaluation Biannual RMs 	 # of facilities implementing QI framework and reports # of regional QI steering committee meeting conducted # of SS/RM on QI conducted

Zonal	Zonal QI team	 Receive and review quarterly facility QI reports and HIV QI indicator summary reports from facilities Prepare zonal summary reports Quarterly supportive supervision visits to implementing facilities 	 # of facilities implementing QI framework and reports # supportive supervision visits
Facility	Facility QIT	 Monthly health facility QIT meetings Internal supervision by facility management Compile quarterly Facility QI Report and Facility HIV QI indicator summary report and submit to Woreda/ zone/region 	 # of staff trained on QI # of QI report submitted
Community level	HDA lead	Monthly HDA meeting	Monthly HDA meeting and QI report

Evaluation of the HSQIF will be conducted periodically. The evaluation will be facilitated by the national QI task force and will assess achievements against goals, explore lessons learnt and challenges encountered, and measure the overall effectiveness of the framework on quality of HIV service delivery. A comprehensive and systematic evaluation methodology will be employed with information obtained from data and document review, surveys, interviews and focus group meetings with stakeholders. Sources of data will include regional and facility QI reports; HIV program reports and where required targeted review of client files and records will be carried out. The periodic evaluation report will include:

SEPTEMBER 2018

- A summary of completed and ongoing QI activities by region.
- Trends of identified performance measures from the QI framework and other HIV service areas.
- Analysis of HIV program data with special emphasis on performance indicators and patient or population outcomes.
- A revision of the Ethiopian HIV QI Indicators.
- Evaluation of the effectiveness of the QI program including progress toward safe clinical and service delivery practices.
- Review of lessons learnt, and assessment of interventions for identification of best practices.
- Recommendations for future QI improvements and scale up.

NATIONAL HIV SERVICE QUALITY IMPROVEMENT TOOL KIT

HIV SERVICE DELIVERY QUALITY STANDARDS

Quality statements	Quality measures	Score 1 lfmet 0 lf Unmet	REMARK/verification criteria
HIVCARESTAND, condoms and as clients.	ARD1: Facilities with HIV services n ssociated materials. Condoms have	eed to provide risl e at least one mon	HIVCARESTANDARD1: Facilities with HIV services need to provide risk reduction assessment and counseling with a reliable supply of condoms and associated materials. Condoms have at least one month of shelf life before expiration, easily accessible, and displayed to clients.
HC1.1Risk reduction interventions are in place	condoms (latex and lubricant- compatible condoms) are available in the facility all the time, are easily accessible and promotion and education tools are available in the clinic	2	Observation AND Document review 1. for each of the following bullets in the yare met and Oifthey are unmet • non-expired condoms are available • no stock out in the previous 3 month • easily accessible (in a bowl on the counter, in a dispenser, or distributed during the visit) regardless of whether they are sold(i.e., social marketing)or distributed for free • promotion and education tools (e.g., pamphlets, flyers, posters) are available • Penile model for demonstration
	The facility routinely provides risk reduction counseling(e.g., condom use and other safer sex practices, alcohol and other drug reduction Counseling, etc.)	10	CLIENTINTERVIEW Interview5patientsonwhattherisks are

HIV CARE STANDARE	HIV CARE STANDARD 2: Each facility has a reliable supply of HIV test kits and adult ARVs	s and adult ARVs
HC2.1 HIV test kits	The facility has no stock-out of ARVs (1st line or	Review Bin card (drug store) / stock
and ARV drugs supply	2nd line in the last three month	management system
management is	NB: any ARV, Check both at store and dispensary	physical observation (both store and
ensured		dispensary)
	The facility had no stock-out of rapid test kits in the	Review Bin card (drug store) / stock
	last three month (all test kits)	management system Review register in
		VCT room if there is interruption

HIV CARE STANDARD 3: For every HIV patient, provide routine care and manage complications	HIV CARE STANDARD 3: For every HIV patient , competent and motivated staff are consistently available to provide routine care and manage complications	aff are	consistently available to
H3.1 Every HIV patient	-patient receiving services from a competent staff	20	 Review training record
has access at all times to a		points	and check there is a
competent staff for routine			trained health professional
care and management of			on basic HIV care and
omplications			treatment and currently
			working in the facility.
			 review training record
			there is at least one
			laboratory professionals
			trained on HIV related
			testes and currently
			working in the facility
			 review training record
			and there is at least one
			pharmacy professionals
			trained on basic HIV
			pharmacy and currently
			working in the facility
			 there is a current guideline
			and manual on HIV /AIDs
			care and treatment and
			other etc. are available

HC3.2.Every HIV patient has access at all times to at least one skilled	a roster is used which is accessibly displayed in all areas, detailing the names of staff on duty, the times of their shift and their specific roles and responsibilities	-	Observation
provider and support staff for routine care and management of	HIV patients received attention within the appropriate time for their condition as per facility policy on triage and waiting time	10	CLIENT INTERVIEW About timeliness
complications	All HIV patients were satisfied with the health-care received	10	CLIENT INTERVIEW Satisfied/ Not satisfied
	all HIV patients were satisfied with the care and support from the facility staff	10	CLIENT INTERVIEW Satisfied/ Not satisfied
	≥ 80% Staffs had a satisfactory performance appraisal on the previous month appraisal	5	Document review
	all staff reported to be "highly satisfied" with their job in relation to the working environment and support of hospital management	∞	STAFF INTERVIEW Select 4 HCWs randomly and verify
	No staff is actively considering looking for a new job because of poor working environment and poor hospital management support	∞	STAFF INTERVIEW Select 4 HCWs randomly and verify

HC 3.3 Every health facility has managerial and clinical leadership that is	Action plan is developed and implemented / implementation in progress for the gaps identified from the patient and provider satisfaction surveys	10	Document review
collectively responsible for creating and implementing appropriate policies and fosters an environment that supports	Monthly meeting is conducted to review data, monitor QI performance and make recommendations to address Problems identified, and to celebrate those who have performed and encourage staffs who are struggling to improve.	5	Verify if it was done in the previous month
facility staff to undertake continuous quality improvement	all HIV department heads are trained in QI and leading change (use of information, enabling behavior, continuous learning)	5	-review training roaster
	Quarterly meetings conducted with HIV client (PLHIV associations) to review its performance, identify problems and make recommendations for joint actions for quality improvement	-	Verify if the last quarter before this month is conducted
	Action plan is developed and implemented / implementation in progress for the gaps identified from stakeholders forum	10	Document Review
	health facility leaders communicated through established mechanisms (e.g. a dashboard of key metrics) that track the performance of the facility to all relevant staff	5	See last month's report and management meeting minute

HIV care standard 4: The health info improve care for HIV/AIDS patients	HIV care standard 4. The health information system enables the use of data for early and appropriate action to improve care for HIV/AIDS patients	e use of data fo	r early and appropriate action to
HC 4.1 All HIV services /clients have a complete and accurate standardized medical record	HC4.1 All HIV services The health facility has registers, data- /clients have a collection forms, clinical and observation complete and accurate charts in place at all times, designed to standardized medical routinely record and track all key care record	_	Observation
	all HIV patients who were seen within the facility in the previous month have complete record of all information in the client chart and registered on the HMIS register in alignment with ICD code	10	CHART REVIEW Verify if all information is recorded in the client chart is registered on the HMIS register
HC 4.2 Every health facility has a mechanism in place for data collection, analysis and feedback, as part of its monitoring and performance improvement activities	HC 4.2 Every health facility has a mechanism in place for and feedback, as part of its monitoring and performance improvement activities ART clinic working HCWs regularly conducts 40 month AND develops and their data every month AND develops and implements a QI and feedback, as part of its monitoring and performance improvement activities	40	40 (10 for each bulleted criteria's) if the following were done in the previous month ·HIV care assessment and their data was assessed in the previous month ·Gaps were identified ·QUALITY PLANNING for the gap ·Implementation and follow up in progress
	The health facility implements standard operating procedures and protocols in place at all times for checking, validating and reporting data	2	Check previous month minutes if the ART clinic staff evaluated their data before reporting (DQAs done, LQAs)

1 if all are met Review all pages of register which of feither of were used in the past month and verify	were decemble for the first months and verify if ART patient registers meet ALL the following criteria	National standard versions in use	Entries are legible and ≥90% of	fields Complete	Updated daily/weekly (per guidelines)	Reviewed regularly completeness	1 if all are met Draw 10 follow up charts and review	National standard versions in use	Entries are legible and ≥90% of	fields Complete	Updated daily/weekly (per guidelines)	Reviewed regularly
1 if all are met 0 if either of	the four are	register					1 if all are met	0 if either of	the four are	unmet or no	follow up	charts
Pre ART /ART registers are in use and all the necessary information are filled as	appropriate						Follow up charts are in use and complete	all the time				
HC 4.3 Each facility retains accurate,	complete, and updated patient Pre	ART/ ART registers and	tollow up cards that	ale legulally leviewed.								

HC5.1 All clients before initiating ART hitial evaluation was done have had WHO staging or CD4 count at each clinical assessment, initiated on correct regimen, monitored for drug toxicity and cotrimoxazole was prescribed if indicated ART patients were initiated ART regimen Patients on ART are monitor toxicity			
ART patients w ART regimen Patients on ART	Initial evaluation was done comprehensively forall HIV clients (based on intake and follow up form)		
ART regimen Patients on ART toxicity	ART patients were initiated on correct	10	CHART REVIEW
Patients on ARI toxicity		10	CHART REVIEW
	Patients on ART are monitored for drug toxicity	10	CHART REVIEW
In each clinical	In each clinical assessment, patient		
eligibility for Cotrimoxazole and prescribed if indicated.	is assessed	10	CHART REVIEW
HC5.2 Each facility that provides ART A written proce has an adherence support system	A written procedure or algorithm is available that addresses all the adherence	_	Observation
	ents		

	The facility implemented adherence preparation and adherence monitoring	10	CHART REVIEW Verify if each of them in their last assessment have documentation of adherence assessment at the
HC5.3 Patients on ART receive routine monitoring for treatment failure using CD4 and/or viral load per national guidelines, and results are documented in the medical Record.	A written procedure or algorithm is available for monitoring patients on ART and responding to results of CD4 and/or viral load tests	-	Observation
	ART patients have access to CD4 and/ or viral load testing (either on-site or by referral) to monitor for treatment failure	10	Review 10 adult charts on ART for >12 Months and were seen in the past month.
HC5.4 All HIV-infected clients receive counseling on disclosure of their HIV status to their sex partner(s) and the importance of partner testing for HIV.	The facility provides partner HIV testing and counseling services	2	Review 10 adult ART charts for ≥12 Months and were seen in the past month.
	The facility provide disclosure support for all client	5	

HC5.5 All facilities that provide services to perform and document syndromic STI screening at each clinical assessment and offer STI management and treatment in line with national or WHO STI guidelines either onsite or through referral.	PLHIV are provided with syndromic STI screening at each clinical assessment and offered treatment when indicated.	10	Document Review 10 adult ART charts for ≥12 months and were seen in the past month.
HC5.6 Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments (BMI or MUAC) per national guidelines and managed accordingly	A written procedure or algorithm is available for providing nutrition assessment, categorizing nutrition status, and responding to assessment results with nutrition counseling and referral per national guidelines	-	Review the document
	Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments (BMI or MUAC) per national guidelines	10	Review 10 adult ART charts for ≥12 months and were seen in the past month
	Each patient's nutrition status is categorized and Nutrition counseling and treatment / referrals is provided based on assessment results.	10	Review 10 adult ART charts for ≥12 months) and were seen in the past month.

HCS.7 All facilities have a protocol for performing and documenting screening for active tuberculosis (TB) on intake and at each clinical visit for all HIV-infected patients.	A written procedures or algorithms for TB screening is avallable	-	Document Review
	There is a standardized practice of TB screening and documentation at each clinical assessment per national guidelines for all HIV-infected patients	10	Review 10 adult ART charts for ≥12 Months and were seen in the past month. Verify if each of them in their last assessment were screened or active tuberculosis (TB) and the screen reviews all 4 of the following symptoms (cough, fever, night sweats, and weight loss)
HC5.8 HIV-infected clients who screen negative for active TB receive IPT per national guidelines	A written procedures or algorithms for IPT per national guidelines is available	_	Document review
	HIV-infected clients who screen negative for active TB receive IPT per national guidelines	5	CHART REVIEW Review 10 adult ART charts for ≥12 Months and were seen in the past month.
	HIV-infected clients who screen positive for active TB receive workup and treatment as per national guidelines	5	

and child PLHIV document and track referrals of ART patients to community corservices when eligible bas and the patents attending HIV as services have access to high quality in the patending and services, including safer pregnancy injectures and contraceptives, edu depending upon their fertility.	HC5.9 All health facilities treating adult and child PLHIV document and track referrals of ART patients to community health workers, community based services (e.g., community health workers, community based care, PLHIV support groups) The referral system include follow-up and documentation to determine if the patient accessed the referral services HC5.10 All clients attending HIV and or by referral including COC, injectable, implants, IUCD, BTL, vasectomy depending upon their fertility. HC5.10 All clients attending safer pregnancy counseling and contraceptives, educated by the contraceptives, including safer pregnancy injectable, implants, IUCD, BTL, vasectomy efferending upon their fertility.	Document Review Document Review Document Review
	contraception and safe conception on display or available to clients (e.g., pamphlets, posters, brochures, inserts, etc.) FP education and/or counseling is routinely offered onsite to clients who wish to delay or prevent pregnancy.	CLIENT INTERVIEW

The system contains the following core elements: defined staff roles/responsibilities procedures for patient identification and tracking standardized documentation that includes updating of relevant facility indicators	1 Document Review	1 Document Review
There are standard procedures for identifying and tracking adult and pediatric ART patients who have lost to follow up on their appointments	ART patient tracking documentation is complete and shows evidence of lost to follow up ART patients brought back into care	Tracking results are used to update facility outcomes (e.g., Lost-to-Follow-Up [LTFU] rates)
HC5.11 Each ART facility has a standard procedure for identifying and tracking ART patients (both adults and children) who have defaulted on their appointments.		

HIV CARE STANDARI	HIV CARE STANDARD 6: For HIV positive pregnant and lactating women, evidence based PMTCT service is	stating women,	evidence based PMTCT service is
provided in ANC, L&D, and postnatal), and postnatal		
HC6.1 Each facility	ANC registers exist, used properly and reviewed requilarly.	1 if all are met O if either of	Review the last 10 pages of register and verify if it meets ALL the following
complete, and		the four are	criteria
updated patient		unmet or no	National current versions in use
registers that are		register	Entries are legible and ≥90% of fields
regularly reviewed			complete
			Updated daily/weekly (per guidelines)
			Reviewed regularly
	PMTCT cohort register exist, used	1 if all are met	Review the last 10 pages of register
	properly and reviewed regularly	0 if either of	and verify if it meets ALL the following
		the four are	criteria:
		unmet or no	National current versions in use
		register	Entries are legible and ≥90% of fields
			complete
			Updated daily/weekly (per guidelines)
			Reviewed regularly

HC6.2 All HIV- infected pregnant and lactating women have documented prescription of ART as	All HIV-infected pregnant and lactating women have documented prescription of ART as early as possible	10	Review register or chart entries for 10 HIV positive women (can include both new and previous diagnoses) who enrolled in ANC between 3 and 15 months prior to today's visit
early as possible	ART regimen is correct as per the national guideline	10	Review register or chart entries for 10 HIV positive women (can include both new and previous diagnoses) who enrolled in ANC between 3 and 15 months prior to today's visit
	ART toxicity monitoring (history, P/E, Lab) is done as per the national guideline	10	Review register or chart entries for 10 HIV positive women (can include both new and previous diagnoses) who enrolled in ANC between 3 and 15 months prior to today's visit
HC6.3 Prescription of Cotrimoxazole (CTX) ,according to national guidelines.	Cotrimoxazole is initiated if indicated as per the national guideline	10.	Review register or chart entries for 10 HIV positive women (can include both new and previous diagnoses) who enrolled in ANC between 3 and 15 months prior to today's visit

Observation	Referral log book	Observation
-	_	
The hospital has a standardized practice to document referrals of PLHIV to community-based services (e.g., community health workers, community-based care, PLHIV support groups)	The referral system include follow-up and documentation to determine if the patient accessed the referral services	The hospital provide documentation showing that facility staff review the referrals logbook routinely to optimize linkages to community services
HC6.5 All health The hosp facilities treating practice adult and child PLHIV to PLHIV document and (e.g., contrack referrals of ART commur patients to community groups)	services.	

HC6.6 All HIV-infected	HC6.6 All HIV-infected The facility provides partner HIV testing 10	10	Review 10 ART charts of HIV positive
clients receive	and counseling onsite		women in PMTCT/MCH care > 3
counseling on safe			months.
disclosure of their			
HIV status to their sex			
partner(s) and the			
importance of partner			
testing for HIV AND			
Routine, systematic			
HIV testing of all			
children (<15 years)			
of adult patients is			
conducted at MCH			
clinics.			
	There is a standardized practice to	10	Review 10 ART charts of HIV positive
	ensure routine testing of all children of		women in PMTCT/MCH care > 3
	ART patients at MCH clinics		months.

 Observation	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.		Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.
A written procedure or algorithm is available for providing nutrition assessment, categorizing nutrition status, and responding to assessment results with nutrition counseling and referral per national guidelines	Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments (BMI or MUAC) per national guidelines	Each patient's nutrition status is categorized and Nutrition counseling and treatment / referrals is provided based on assessment results.	A written procedures or algorithms for TB screening is available	There is a standardized practice of TB screening and documentation at each clinical assessment per national guidelines for all HIV-infected patients
HC6.7 The ART facility performs routine monitoring of nutrition status through regular anthropometric	assessments (BMI or MUAC) per national guidelines, nutrition status categorized and	managed accordingly	HC6.8 All facilities have a protocol	for performing and documenting screening for active tuberculosis (TB) on intake and at each clinical visit for all HIV-inforted and extinute inforted in a second in the s

HC6.9 All HIV-infected	HC6.9 All HIV-infected A written procedures or algorithms for	-		
negative for active	ודיו שלי וומנוטוים שלים ואים ואים ואים ואים ואים ואים ואים וא			
TB receive IPT per national guidelines	HIV-infected clients who screen negative for active TB receive IPT per national guidelines	10	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.	
HC6.10 All facilities that provide services to People Living with HIV (PLHIV) perform and document STI screening at each clinical assessment and offer STI management and treatment in line with national STI guidelines either onsite or through referral	PLHV are provided with syndromic STI screening at each clinical assessment and offered treatment when indicated	10	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.	

	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.
-	0
a written procedure or algorithm is available for monitoring patients on ART and responding to results of CD4 and/or viral load tests	ART patients have access to CD4 and/ or viral load testing (either on-site or by referral) to monitor for treatment failure
HC6.11 All patients on antiretroviral therapy (ART) receive routine monitoring for treatment failure through assessment	of CD4 and/or viral load per national guidelines, and results are documented in the medical record.

HC6.12 The care/ treatment facility has a standard procedure	A written procedure or algorithm is available for identifying and tracking defaulters	-	
for identifying and tracking HIV positive pregnant and breastfeeding women on ART who have defaulted on their appointments.	There are standard procedures for identifying and tracking HIV+ women after delivery who have defaulted on their appointments		The system contains the following core elements: defined staff roles/responsibilities procedures for patient identification and tracking standardized documentation that includes updating of relevant facility indicators
	ART patient tracking documentation is complete and shows evidence of defaulted ART patients brought back into care	-	Register review
	Tracking results are used to update facility indicators (e.g., Lost-to-Follow- Up [LTFU] rates)		

Interview and observation	Interview and observation) CLIENT INTERVIEW	
All options of FP methods are available in the facility including COC, injectable, implants, IUCD, BTL, vasectomy	Education materials (IEC) about contraception and safe conception on display or available to clients (e.g., pamphlets, posters, brochures, inserts, etc.)	FP education and/or counseling is routinely offered onsite to clients who wish to delay or prevent pregnancy	Education materials (IEC) about contraception and safe conception on display or available to clients (e.g., pamphlets, posters, brochures, inserts,
HC6.13 All clients attending HIV services have access to (onsite	or by referral) high quality voluntary family planning counseling and services, including	saler pregnancy counseling and contraceptives, depending upon their	fertility intentions.

a written procedure or algorithm 1 Review delivery register entries of 10 is available for provision of PTC in women attending labor ward in the maternity	There is routine provision of PITC for 10 eligible pregnant women attending maternity	a written procedure or algorithm 1 is available for provision of ARVs to mother-infant pairs in L&D	Is there routine provision of ART for 5 Review delivery register entries from mothers and ARV prophylaxis for infants at L&D women in maternity in the last month	a written procedure or algorithm is available for provision of ARVs to
a written pro is available fr maternity	There is rout eligible preg maternity	a written pro is available fo mother-infar	Is there routi mothers anc at L&D	a written pro is available fo
HC6.14 Routine PITC is provided to all eligible women	attending maternity for labor and delivery.	HC6.15 ART for HIV –infected women and ARV prophylaxis for	their exposed infants at maternity /L&D	

Quality statements	Quality measures	Score 1 if Met 0 if Unmet	REMARK/verification criteria
HIV CARE STANDARD 7: Ev	HIV CARE STANDARD 7: Evidence based care is provided for HIV EXPOSED INFANTS (HEI)	OSED INFANTS (HEI)	
HC7.1 All HIV-exposed infants receive NVP for HIV prophylaxis	Routine provision of NVP to HIV exposed infant immediately after delivery OR for infants coming postnatal at the earliest time possible	10	Review 10 mother-baby cohort register for the past 12 weeks/3 month to up to
	Depending on timing of initiation and maternal prophylaxis timing the NVP is given for 6 to 12 weeks.	10	
	Recommendation job aid is available at each service point.		Observe presence of job aids
	There is a system for documenting prophylaxis.	-	Verify that the activity has a system for documentation

HC7.3 All HEIs initiate CTX by 6 weeks of age or as early as possible.	A written procedure or algorithm for provision of CTX to HEIs is available		
	The facility initiates CTX for all HEIs by 6 weeks of age or as early as possible.	10	Review registers' entries of 10 HEIs born 3 or more months prior to this last month (up to one year prior)
HC7.4 All HIV exposed infants who are lost to follow-up are traced and	There are standard procedures for identifying and tracking HIV-exposed infants who are lost to follow-up.	1	Review case managers/ mother support group/ adherence supporter
brought back to care	Tracing outcomes are documented and used.	1	logbooks and related tools.
HC7.5 The facility retains accurate, complete, and upto-date patient registers (HEI	There is a mother-infant appointment book and cohort register.	_	Register or appointment book review
follow up card and PMTCT cohort register) that are regularly reviewed.	Regular review findings and actions taken.	1	Minutes/official communications with memo/ letter
	Records of HEIs are filled on HEI follow up cards and PMTCT cohort register	10	Review registers' entries of 10 HEIs born 3 or more months prior to this last month (up to one year prior)

HC7.6 There is a reliable	The facility has not stock-out of EID	Revie	Review stock management	
supply of Early Infant	supplies in the last three months	tools	tools such as bin card	
Diagnosis (EID) dried blood	Diagnosis (EID) dried blood resulting in an interruption of HIV testing			
spot (DBS) kit containing	for infants			
a collection card, alcohol	EID supplies are distributed to testing	Obse	Observation at testing	
swabs, gauze, lancets,	points in the facility	point	points periodically.	
moisture absorber, sample		Offici	Official communication to	
validity indicator, plastic		the	the concerned department	
package and latex gloves.		in cas	in case of gaps	
	-		-	

HC7.7 ALL HIV infected	HIV-exposed infant register indicates	10	Review registers' entries
infants identified through	all linkages to treatment by including		of 10 HEIs born 3 or more
EID services should be	unique ART number Or referral paper/		months prior to the current
linked to ART services and	feedback is documented on infant's		month (up to one year prior)
linkage documents	chart.		1 for each chart if registered
			0 for each chart if not
			registered
			or not identified
	There is a standardized practice of	10	Review registers' entries
	documenting enrollment into ART		of 10 HEIs born 3 or more
	services of HIV-infected infants identified		months prior to this last
	through EID services		month (up to one year prior)
			1 if enrollment documented
			0 if not documented
			NA for non-ART site

HIV CARE STANDARD 8:	HIV CARE STANDARD 8: Care and treatment provided for children living with HIV as per the guideline.	en living with HIV as	per the guideline.
HC8.1 All pediatric patients provided Co-trimoxazole (CTX), according to national guidelines.	All children living with HIV are prescribed with CTX prophylaxis as per national guideline	10	Review follow-up card of 10 charts from all children on ART in the facility.
HC8.2 All children infected with HIV are	There is a written procedure/algorithm for TB screening for children	_	Verify presence of Job aid/ guideline
screened for active TB on intake and at each clinical visit.	There is a standardized practice for pediatric TB screening and documentation at each visit	10	Review follow-up card of 10 charts from all children on ART in the facility.
	All children screened negative for TB are initiated on INH prophylaxis	10	Review follow-up card of 10 charts from all children on ART in the facility.
	All children diagnosed with TB are linked/referred for TB treatment	10	Review follow-up card of 10 charts from all children on ART in the facility.

HC8.3 All children with HIV infection are routinely assessed for nutritional status at intake and at each clinical visit.	A written procedure or algorithm is available for providing nutrition assessment, categorizing nutrition status, and responding to assessment results with nutrition counselling and support/referral per national guidelines	_	Verify presence of guideline/ job aids
	All children's' nutrition status is categorized and Nutrition counselling and treatment / referrals is provided based on assessment results.	10	Review follow-up card of 10 charts from all children on ART in the facility.
HC8.4 All HIV infected children under five years of age are routinely	All Charts of HIV infected children under five years of age have attached growth monitoring charts.	10	Review 10 charts from all under five children on ART in the facility.
monitored for growth and development.	All under five children infected with HIV have their anthropometric indices plotted on their growth monitoring charts	0	Review 10 charts from all under five children on ART for ≥ 6 months.
	All under five childrens' growth status is categorized and nutritional counselling and treatment/ referral is provided based on results.	10	Review 10 charts from all under five children on ART for ≥12 months.

HC8.5 All children on ART receive routine monitoring for treatment failure using viral load /CD4 as per	HC8.5 All children on ART A written procedure or algorithm is receive routine monitoring available for monitoring treatment for treatment failure using failure using viral load/CD4 for children viral load /CD4 as per on ART.	_	Verify presence of dosing job aid/tool/guideline
national guideline, and results are documented.	There is documented routine viral load/ CD4 testing results in the charts of children on ART.	10	Review 10 charts of children on ART for ≥ 6 months.
HC8.6 All HIV infected children are prescribed with age and weight	There is a pediatric ARV dosing tool (e.g., table, wheel, brochure) with weight and age bands available to the ARV provider	1	Verify presence of dosing job aid/tool/guideline
appropriate ARV regimen and dosage as per the national guideline.	All children on ART have their dosage adjusted based on weight and age changes	10	Review follow-up cards of 10 charts of children on ART for ≥ 6 months.

HC8.7 All children on ART	HC8.7 All children on ART A written procedure is available for	_	Verify presence of guideline/
are provided with routine assessme adherence assessment and children.	assessment and support of adherence in children.		job aids
noddns	There documented routine adherence assessment and support for children on	10	Review follow-up cards of 10 charts of children on ART.
	ART		
HC8.8 All children on ART	HC8.8 All children on ART A written procedure is available for	-	Verify presence of guideline/
are provided with routine	counselling and support of disclosure in		job aids
disclosure counselling and children. support.	Children.		
-	There is documented routine disclosure	10	Review follow-up cards of
	counselling and support for children on		10 charts of children on ART.
	ART		

HIV CARE STANDARD 9: guideline.	HIV CARE STANDARD 9: Care and treatment provided for adolescents living with HIV as per the national guideline.	scents living with HIV	/ as per the national
HC9.1 All adolescent patients provided Co-trimoxazole (CTX), according to national guidelines.	All adolescents living with HIV are prescribed with CTX prophylaxis as per national guideline	10	Review follow-up card of 10 charts from all adolescents on ART in the facility.
HC9.2 All adolescents infected with HIV are	A written procedure or algorithm for adolescents TB screening is available	_	Verify presence of guideline/ job aids
screened for active TB on intake and at each clinical visit.	There is a standardized practice for adolescent TB screening and documentation at each visit	10	Review follow-up card of 10 charts from all children on ART in the facility.
	All adolescents screened negative for TB are initiated on INH prophylaxis	10	Review follow-up card of 10 charts from all children on ART in the facility.
	All adolescents diagnosed with TB are linked/referred for TB treatment	10	Review follow-up card of 10 charts from all children on ART in the facility.

HC9.5 All adolescents on ART are provided with routine adherence assessment and support	A written procedure is available for assessment and support of adherence in adolescents.	_	Verify presence of guideline/ job aids
	There documented routine adherence assessment and support for adolescents on ART	10	Review follow-up cards of 10 charts of adolescents on ART.
HC9.6 All adolescents on ART are provided with routine disclosure counselling and support.	A written procedure is available for counselling and support of disclosure in children.		Verify presence of guideline/ job aids
	There is documented routine disclosure counselling and support for children on ART	10	Review follow-up cards of 10 charts of children on ART.
	Adolescent-specific peer leaders or support groups is arranged		Verify that there are peer group support services –grade as 1 if available, o-if not and NA for health canters and facilities not applicable

	Extended/weekend hours for adolescents to receive clinical services is in place	1	Verify the presence of service through registers and follow-up cards
HC9.7 All adolescents living with HIV are provided with friendly sexual and reproductive	There is a written procedure for sexual and reproductive health service for adolescents	-	Verify presence of guideline/ job aid
nealth services	All adolescents on ART are provided with routine screening for STI	0	Review 10 follow-up cards and verify practice
	All adolescents on ART are provided with routine sexual and reproductive health education and counselling.	10	Review 10 follow-up cards and verify practice

HIV care Standard dignity.	HIV care Standard 10: Communication with HIV patients is effective and they receive care with respect and dignity.	eceive	care with respect and	[
HC10.1 All HIV patients and	HIV/AIDS patients and their families are given the opportunity to discuss their concerns and preferences	10	Client interview	
their families are satisfied with services provided by health care	Health-care staffs demonstrate the following skills: active listening, 10 asking questions, responding to questions, verifying client's and their families understanding, and supporting client's in problemsolving		Client interview	:
workers.	HIV/AIDS patients and their families cared in the facility felt they were adequately informed by the attending care provider(s) regarding examinations, any actions and decisions taken about their care	10	Client interview	
	HIV/AIDS patients and their families cared in the facility expressed overall satisfaction with the health services	10	Client interview	
	HIV/AIDS patients and their families cared in the facility reported that they were satisfied with the health education and information they received from the care providers.	10	Client interview	

HC10.2 All HIV	HIV clients receive care that is respectful of and responsive to their 10 Client interview	10	Client interview
clients have	preferences, needs, and values.		
privacy around	The physical environment of the health facility facilitates privacy	10	10 Client interview
the time of	and provision of respectful care, confidential care including the		
Clinical evaluation			
, and their	The health facility has written, up-to-date, protocols to ensure	-	Observation
respected	privacy and confidentiality for all clients throughout all aspects of		
מילילים	care		

HC10.3 No HIV	The health facility has written, up-to-date, zero-tolerance, non-	_	Observation
client is subjected	discriminatory policies relating to the mistreatment of clients		
to mistreatment	Any client who reported physical, verbal or sexual abuse, to	20	Select and verify 5 clients
such as physical,	themselves or their families during clinical evaluation		exiting from the chronic care /
sexualor			specialty clinic
verbal abuse,			4 for each client if they are
discrimination,			protected
neglect,			0 for each client if report of
מפושוווופוווני			abuse
extortion or denial	The health facility has written accountability mechanisms for	.	Observation
2017	redress in an event of mistreatment		
	The health facility has a written, up-to-date policy and protocols	4	4 if present and periodically
	outlining clients' right to make a complaint about the care		emptied and reviewed
	received and has an easily accessible mechanism (box) for		1 if only present
	handing in complaints and is periodically emptied and reviewed.		
	All clients were satisfied with the facility meeting their religious	10	Client interview
	and cultural needs		
	All clients reported to be treated with respect and dignity.	10	Client interview

NATIONAL HIV SERVICE QUALITY IMPROVEMENT TOOL KIT

Annexes

HC10.4 All clients	The health facility has a written, up-to-date, policy in place to	<u>—</u>	Document review	
have informed	promote for obtaining informed consent from clients prior to			
choices in the	examinations and procedures.			
services they	HCW take informed consent from clients prior to examinations	10	10 Client interview	
receive, and	and procedures			
the reasons for				
intervention or				
outcomes are				
clearly explained				

Annex 1:FACILITY LEVEL QUICK STANDARD OF CARE (SOC) SELF-ASSESSMENT TOOL

Adult: Randomly draw 5 p	Adult: Randomly draw 5 patient charts and evaluate the performance of the following activities	ormance	of the	follow	ing ac	tivitie	(S	
		Score						Remark
Service delivery component	Activity	1st	2nd	3rd	4th	5th	%	
Retesting	Patient is retested for verification of HIV diagnosis							
Enrolment	Patient registered in both pre-Art and ART registers							
Base line clinical evaluation	Intake and FU forms are filled completely for the patient(Wt, stage, growth monitoring ,nutritional assessment, OI screening)							Score 0 if all are not met
	Baseline laboratory investigations are done(CD4,Hgb)							Score 0 if all are not met
Ol Screening & Management TB screening ids done and documented	TB screening ids done and documented							
	Cryptococcus antigen screening done and is documented							

Adult: Randomly draw 5 p	Adult: Randomly draw 5 patient charts and evaluate the performance of the following activities
OI prophylaxis	CPT is prescribed as per the GL
	TB screening
	IPT is prescribed as per the GL
Adherence preparation	Patient is counseled about ART and
	ready for initiation
ART Initiation	Patient started on ART
ART Monitoring	Adherence monitoring is done
	Drug toxicity is monitored
	T-staging is done for patients on ART
_	
	CD4 count determined for patients
	on OI prophylaxis and for those with
	no VL test access
	Viral Load (VL) testing is done or CD4
	testing if VL not done
	Treatment decision made based on
	lab results for treatment failure
	Clients who missed their
	appointment traced in the last one
	month

Adult: Randomly draw 5 k	Adult: Kandomly draw 5 patient charts and evaluate the performance of the following activities	
Nutritional assessment &	Patient assessed for malnutrition	
Managment	Malnourished clients received/ referred for nutrition support	
Family focused care provision	Family matrix attached or intake form updated for family testing	
	Clients in HIV care counselled for disclosure	
Family planning integration	Family planning integration Family planning options available in the ART clinic	Circle one : Yes No
	Clients counseled and provided with dual family planning options	
STI Managment	Each client in the ART clinic screened for STI	
	STI patients are tested for HIV	Check OPD register for 5
Pediatrics : Randomly		Remark
draw 5 patient charts and		
evaluate the performance		
of the following activities		

Adult: Randomly draw 5 p	Adult: Randomly draw 5 patient charts and evaluate the performance of the following activities	
	1 2 3 4 5 %	
Service delivery	Activity	
component		
Retesting	Patient is retested for verification of	
	HIV diagnosis	
Enrolment	Patient registered in both pre-Art	
	and ART registers	
Base line clinical evaluation	Base line clinical evaluation Intake and FU forms are filled	Score 0 if all are
	completely for the patient(Wt, stage,	not met
	growth monitoring ,nutritional	
	assessment, OI screening)	
	Baseline laboratory investigations are	Score 0 if all are
	done(CD4,Hgb)	not met
Ol Screening	TB screening ids done and	
	documented	
	Cryptococcus antigen screening	
	done and is documented	
OI prophylaxis	CPT is prescribed as per the GL	
	TB screening	
	PT is prescribed as per the GL	

Addit. natidottily draw	Addit, nationily diaw o patient chaits and evaluate the performance of the following activities
Adherence preparation	Caregiver/Guardian is counseled
	about ART and ready for initiation
ART Initiation	Patient started on ART
ART Monitoring	Adherence monitoring is done
	Drug toxicity is monitored
	T-staging is done for patients on ART
	for 6 months
	CD4 count determined for patients
	on OI prophylaxis and for those with
	no VL test access
	Viral Load (VL) testing is done or CD4
	testing if VL not done
	Treatment decision made based on
	lab results for treatment failure
	Clients who missed their
	appointment traced in the last one
	month
Nutritional assessment	Patient assessed for malnutrition
	Mainourished clients received/
	referred for nutrition support

Adult: Randomly draw 5	Adult: Randomly draw 5 patient charts and evaluate the performance of the following activities
Family focused care	Family matrix attached or intake form
provision	updated for family testing
	Clients in HIV care counselled for
	disclosure
TB/HIV collaborative	HIV testing is offered for all TB
activities	patients (ТВ Clinic)
	HIV patients routinely screened for
	18
	INH Preventive Therapy (IPT) is
	provided for HIV patients with
	negative TB screening
	HIV patients diagnosed with TB are
	linked/referred to TB treatment
	HIV positive TB patients are linked /
	referred for ART initiation (TB clinic)
	TB infection control activities are in
	place

Adult: Kandomly draw	Adult: handomly draw 5 patient charts and evaluate the performance of the following activities	Tormance of the	tollowing a	CTIVITION	SS.		
PMTCT	PMTCT: Review the integrated MNCH/PMTCT register And PMTCT Chart for 3 cases	NCH/PMTCT re	gister And F	-MTC	r Chart fo	r 3 cases	
	Activities	Status					
		Yes	No	¥ Z	%	Remark	
	All pregnant women are tested for HIV						
	All pregnant women are initiated on ART						
	CD4 count determined for patients						
	on ART regularly according to the						
	national GL						
	VL testing done for patients on ART						
	regularly according to the national						
	ח						-
	All laboring women are tested for						
	NH						
	HIV positive laboring women are						
	provided ART						
	Partners of Pregnant/Lactating						
	mothers are tested for HIV						

Adult: Randomly draw 5	Adult: Randomly draw 5 patient charts and evaluate the performance of the following activities	formance of the	following ac	tivities		
HEI Follow up	Review HEI/PMTCT Chart/Register for 3 cases (draw 3 charts of HEI followed at ANC/PMTCT clinic)	ər for 3 cases (dr	aw 3 charts	of HEI foll	lowed a	at ANC/
	Activities	Yes	No	% VA		Remark
-	All HE newborn have access to					
	prophylaxis					
	HEI are provided with CPT					
	DBS result received at most within 1					
	month					
	Growth chart plotted at every visit					
	Final HEI status determined and					
	discharge (Cohort Register)					
	DBS + infants linked to ART clinic					
	(Cohort Register)					
Laboratory	Activities	Yes	No	NA	Re	Remark

Adult: Randomly draw 5	Adult: Randomly draw 5 patient charts and evaluate the performance of the following activities	formand	se of the	followin	g activities			
Lab ART Monitoring	Interruption of CD4 test (Machine							
	failure, lack of reagent, etc).							
	Interruption of blood chemistry test							
	(Machine failure, lack of reagent, etc).							
	Interruption of CBC test (Machine							
	failure, lack of reagent, etc).							
	Interruption of Viral Load referral							
	Interruption of blood sample referral							
	(CD4/Chemistry/CBC)							
	Interruption of DBS referral							
	Lab results are received on time						TAT as per the	r the
	based on national standards.						standard	
Supply chain management		ARV Dis	ARV Dispensary Pharmacy Store	Pharma	cy Store		Remark	
Continuous Supply	Stock out of 1st line ARV drugs	Yes	No	ΑN	Yes	0N	¥	
	Stock out of 2nd line ARV drugs							
	Stock out of INH for IPT							
	Stock out of Cotrimoxazle for CPT							
	Stock out of rapid HIV Test Kits							
	Stock out of DBS Kits/accessories							

Prvice	Counselling is done during ART							
	9113119							
	Adherence monitoring is done at							
7 10 1	pharmacy							
	Adverse drug event management							
•	and reporting is done							
וווע נפטווווק אפועוכפא	Targeted HIV testing is done as per							
the gr	the guideline							
Natio	National testing algorithm is							
availa	available and used							
Penile	Penile model is available at VCT clinic							
Cond	Condoms are available at VCT clinic							
Index	ndex case testing is done							
Linkage to care Revier servic	Review the documentation for ten clients from the HTC registers (five for VCT and five PITC at each service points)	ents fron	n the HTC	registe	rs (five for VC	∵ and five	PITC at each	
Activities	vities	1st	2nd	3rd	4th	5th	%	
M VIH	HIV positives from all testing outlets						Check	
are lir	are linked to care						날	
							register	
							at each	
							outlet	

Annex 2:SUMMARY OF QI TOOLS FOR HEALTH FACILITY LEVEL ACTION AND EXAMPLE CASE SCENARIO

Catagory/Activity)	Tools to use	Importance of the tool	Stans
حطرفها بالانتجاب	0000	ווון ספן נמוס נפלווי	School
Problem Identification	SOC	Performance tracking tool. The tool is shown at annex 1	Performance tracking tool. The tool is Review the unit performance based using shown at annex 1
Problem prioritization	Check sheet	Data summarization tool	Prepare check sheet table and populate the frequency
	Pareto chart	Prioritize problems	Construct pareto chart-Write problem statement and aim statement Define your measures of outcome and process
	Problem focusing chart		Construct problem focusing matrix
Problem analysis	Brain storming	Idea generation	Team discussion focusing on the problem
	Flow chart	Locate the problem	Describe the current practice using the FC
	RCA-5whys -fishbone	Find presumptive root causes	Draw cause-effect diagram
Build theory of change	Driver diagram	generate all possible change ideas	Construct the DD
	Solution focusing matrix	Select change ideas to be tested	Construct focusing matrix
Test the change ideas selected and	PDSA, run chart	Test the selected change ideas and learn	Perform PDSA activities and display the result using run chart
determine significance/ acceptability			

Example Case scenario

Yibeltal working in HH hospital ANC department was reviewing his performance using the SOC tool and the findings were as depicted below:

Annex 1. SOC tool filled

The SOC showed 0 partner testing out of 25. The possible causes of lower partner testing were checked out as below using the check sheet. Here the Pareto chart, problem focusing chart or the check sheet can be used to prioritize. In this Yibeltal used the check sheet.

Cause	Frequency
Provider did not offer	17
Woman declined	2
Test kit shortage	1
Partner did not show up	5

Problem statement

Regardless of the national recommendation on the need for routine partner testing of pregnant mothers the partner testing performance review in HH hospital showed that there is 0% partner testing

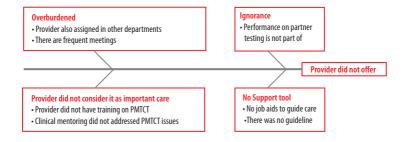
Aim statement

Increase partner testing to 85% to those mothers who have attended in the HH hospital PMTCT unit.

Measurements

SN	Measurement	Base line	Target
1	#mothers in PMTCT care offered partner testing	17/25(68%)	100%
2	#mothers in PMTCT care who had their partner	0%	85%
	tested for HIV		

Detailed cause effect analysis of why the provider failed to offer the test:



Draw the driver diagram

