

REPUBLIC OF KENYA



MINISTRY OF HEALTH

Kenya HIV Quality Improvement Framework (KHQIF)

2014

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Table of Contents

Foreword	ii
Acknowledgements.....	iii
Contributors.....	iv
Executive Summary	vii
CHAPTER 1	1
1.1 Situational Analysis of HIV/AIDS in Kenya	1
1.2. Background and rationale for the KHQIF	2
1.3. Goals and Objectives of the KHQIF	2
CHAPTER 2	3
2.1 Principles of the KHQIF.....	3
2.2 Systems approach to Quality management	3
2.2.1 The Donabedian model.....	3
2.2.2 The 5S Approach to creating an enabling environment.....	5
2.2.3 The PDSA cycle for Continuous Quality Improvement.....	6
2.2.4 Total Quality management.....	7
2.3 Tools for implementation of Quality Improvement activities	8
CHAPTER 3	9
3.1. Overview of Performance measurement.....	9
3.2. Performance measures	11
3.3 Kenya HIV QI Indicator File and Register Reviews.....	11
3.3.1 Kenya HIV Quality Improvement Indicators	11
3.3.2 HIV QI File and Register Review Data Collection methodology	12
3.3.4 HIV QI Indicator Data Analysis	13
CHAPTER 4	14
4.1 Leadership for QI initiatives	14
4.2 KHQIF Management Structure.....	14
4.3 Functions of the QI Management structures	15
4.3.2 National HIV QI TWG.....	16
4.3.3 County QI Committee	16
4.3.4 Facility Quality Improvement Team.....	16
4.3.5 Work Improvement Teams.....	16
4.4 Dissemination Practices within the KHQIF Management Structure	17
CHAPTER 5	19
5.1. KHQIF Implementation plan	19
5.2 Phases of the KHQIF Implementation Plan:.....	20
CHAPTER 6	23
6.1 KHQIF Monitoring structures and mechanisms	23
6.1.2 Biannual evaluation of the KHQIF	24
6.1.3 Recognition and reward	24

Foreword

The Ministry of Health through the National AIDS and STI Control Programme (NASCOP) is taking the lead in providing tools, training and continuous mentorship towards ensuring a continuum of HIV care that addresses clients' needs in a respectful, effective, and efficient manner. A culture of continuous quality improvement (CQI) will be utilized to achieve this goal. Ensuring that HIV care professionals employ CQI processes requires that health personnel acquire the necessary knowledge, skills and abilities to identify and define problems and devise specific interventions to continuously improve and evaluate quality.

This framework is a guide for defining, measuring and improving performance of HIV health services across different care facilities. It incorporates the strategic overview captured in the *Kenya Quality Model for Health (KQMH)* for implementing key principles and practices necessary to effectively monitor, manage and improve health services. The framework's usefulness depends on the extent to which organizations and clinical leaders adapt it to local structures, environment and needs. The framework is built on a foundation of good clinical governance, and clearly delineates management responsibility for ensuring that the quality of service and care is addressed with the same rigor as financial governance, and demands that corresponding accountability is delegated throughout the organization.

The primary intent of the operational manual accompanying this framework is application of Quality Improvement in health facilities. Depending on the state of each health service, the Standard Operating Procedures (SOPs) and tools may be applied as a model, a reference, a plan, a source of ideas or a benchmark to review progress and identify quality improvement gaps. Where specific examples of activities, structures and processes are given, these should be considered in terms of relevance to local institutions.

A quality program is only as successful as the culture within which it is implemented. Developing a comprehensive approach to quality improvement in HIV care, takes time and can only be achieved in stages. This is because quality improvement is an iterative process that requires to be constantly developed to meet changing internal and external contexts, expectations and stakeholder needs. If well used, the framework and operational manual will support the attainment of external quality landmarks such as: accreditation and certification, and will support the development of funding and policy guidelines at each level of the healthcare system.



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Abbreviations

CCC/PSC	Comprehensive Care Clinic/Patient Support Centre
CQI	Continuous Quality Improvement
EMR	Electronic Medical Records
eMTCT	Elimination of Mother-to-Child Transmission
EWI	Early Warning Indicators
HCA	HIV-exposed Infant Cohort Analysis
HEI	HIV-exposed Infant
KAIS	Kenya AIDS Indicator Survey
KHQIF	Kenya HIV Quality Improvement Framework
KMA	Kenya Medical Association
KASF	Kenya AIDS Strategic Framework
KNHSSP	National Health Sector Strategic Plan
KQMH	Kenya Quality Model for Health
MOH	Ministry of Health
NASCOP	National AIDS and STI Control Program
PDSA	Plan Do Study Act
PMTCT	Prevention of Mother-to-Child transmission
QA	Quality Assurance
QI	Quality Improvement
QIT	Quality Improvement Teams
QM	Quality Management
TWG	Technical Working Group
WIT	Work Improvement Teams

Definition of Terms

Quality	The degree to which a health or social service meets or exceeds established professional standards and client expectations.
Quality Management	A set of coordinated activities and infrastructure within an organization, designed to support the activities that address quality of care provided.
Quality Improvement	A management approach that includes the combined efforts of all stakeholders (healthcare professionals, clients and their families, and educators) to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.
Quality Assurance	A means of establishing standards (for example, clinical protocols and guidelines, program and administrative standard operating procedures) and consistently using them as a basis for assessing performance. Results from quality assurance monitoring lead to the quality improvement process.
Continuous Quality Improvement	An approach to quality management that builds upon traditional quality assurance methods by emphasizing on the organization and systems. This approach focuses on “process” rather than the individual, recognizes both internal and external “customers”, and promotes the need for objective data to analyze and improve processes.
Small Tests of Change	A method to break down change into manageable chunks, and test each small part to make sure that things are improving and no effort is wasted.
Improvement Cycles	A quality improvement cycle is a planned sequence of systematic and documented activities aimed at improving a process.
Indicator	In health, it is defined as a characteristic of an individual, population, or environment, which is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population (quality, quantity and time).
Benchmarking	The continuous and collaborative discipline of measuring and comparing the results of key work processes with those of the best performers when evaluating organizational performance.
QI Project	A set of related activities designed to achieve measurable improvement in processes and outcomes of care. Improvements are achieved through interventions that target health care providers, clients and the community.

Executive Summary

The *Kenya HIV Quality Improvement Framework (KHQIF)* describes a vision and direction for ensuring safety and quality in delivering of HIV services. The framework describes key processes and activities to be implemented across the healthcare system towards fulfillment of the vision, and actualization of national HIV goals.

The framework is based on the Ministry of Health's Strategic Plan which highlights gaps in delivery of HIV care and treatment services as well as eMTCT. The framework outlines the quality services needed to ensure set outcomes and benchmarks are attained. The framework is envisioned as a critical support tool for accelerating the achievement of universal HIV service coverage, optimizing patient retention and wellbeing, and reducing mother-to-child transmission of HIV in Kenya.

The KHQIF is consistent with the Kenya Quality Model for Health (KQMH) and other HIV national guidelines and provides the minimum norms, standards, protocols and guidelines for continuous quality improvement in HIV service delivery. The framework is designed as a reference model, plan, source of ideas or benchmark to review progress and identify gaps at various levels of the healthcare system. Where specific examples of activities, structures and processes are given, these should be considered within the specific context and institution where the framework is being applied. The framework is designed to be used in conjunction with the HIV Quality Improvement operational manual so as to add value to health service safety and quality, besides aligning HIV service delivery to national goals.

This KHQIF provides an introduction to continuous quality improvement (CQI) using the Plan Do Study Act improvement method that focuses on small tests of change. Furthermore, the framework proposes proven strategies that have been used to improve the performance of health care organizations, and provide guidance in performance measurement against the recommended national HIV QI indicators.

The management infrastructure for maintaining and sustaining QI is clearly highlighted, as are the different roles of QI teams at National, County and Facility level. A QI initiative is only as successful as the culture within which it is implemented. The KHQIF highlights the role of leadership and QI teams in adapting programs to local structures, environment and needs. Health care managers must take responsibility in promoting a culture where openness, mutual respect and teamwork are encouraged and rewarded. This culture should provide the foundation for a planned approach to quality that encompasses staff and client values, identifies clear priorities, allocates resources, utilizes standard QI methodologies, provides education and supervision, supports institutionalization of change, ensures consistent reporting, and promotes sharing of experiences and best practices through QI learning forums.

CHAPTER 1

Introduction to the KHQIF

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 Ministry of Health (MoH) observed that variations in health outcomes across the country that result from differences in the quality of health care. In response, the MoH in 2011, released implementation guidelines for the *Kenya Quality Model for Health (KQMH)*, which seek to ensure that facilities are constantly working towards the provision of high quality, measurable services.

Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV and AIDS) is one of the leading causes of morbidity and mortality in Kenya. The National HIV Quality Improvement Framework (KHQIF) provides the blueprint for ensuring quality HIV services to patients and clients, and has been modeled after the KQMH to ensure quality in HIV-specific healthcare services.

This document provides an overview of the framework within which HIV Quality Improvement (QI) will be implemented across the country. To support the implementation of the KHQIF, an operational manual has been developed, which provides detailed descriptions of methodologies, competencies, skills and tools.

1.1 Situational Analysis of HIV and AIDS in Kenya

According to the Kenya AIDS Indicator Survey 2012, Kenya's national HIV prevalence is 5.6%, with 1.2million people estimated to be living with HIV (PLHIV). All PLHIV should be enrolled in care, based on the 2011 antiretroviral treatment (ART) guidelines.

It is estimated that 815,007, adults and 151,065 children are in need of treatment while 79,036 HIV-infected pregnant women need prevention of mother-to-child transmission (PMTCT) services. As of December 2013, over 2,400 facilities provided ART services to 596,228 adults and 60,141 children representing 80% and 43% ART coverage respectively. There are an estimated 4761 PMTCT sites in Kenya and in 2014, 96.9% of women attending ANC took the HIV test. In the same year, 69,815 (88%) women were identified as HIV-positive and 52,383 (66%) received antiretrovirals for PMTCT. In 2014, 54,154 HIV-exposed infants received a Deoxyribonucleic Acid Polymerase Chain Reaction (DNA PCR) test by 2 months, which is 68 of the population estimate of 79,036 infants. 7.1% of infants tested positive by 1st PCR

In 2013, UNAIDS, launched the 90-90-90 targets that are fundamental to acceleration of HIV prevention, care and treatment. This means by the year 2020, 90% of all people PLHIV should know their status, 90% of people diagnosed with HIV will be linked to care within 3 months of diagnosis, 90% will receive and be retained on ART and 90% will have viral suppression. Kenya aims to achieve these global targets through scale up of HIV prevention care and treatment interventions as spelt out in the Kenya AIDS Strategic Framework (KASF) 2014/15- 2018/19.

The management of PLHIV requires long-term follow-up and includes advanced laboratory, pharmaceutical, and data services. To increase access, services continue to be decentralized to lower level facilities and the community. Achieving the desired outcomes from service expansion will require continuous investments in quality improvement at all levels of the healthcare system, and the involvement of service delivery and management personnel. The KHQIF responds to existing and potential gaps in the quality of services and outcomes of the national HIV response.

1.2. Background and rationale for the KHQIF

The provision of quality health services is anchored in Vision 2030 and the Kenya Health Sector Strategic Investment Plan (KHSSP). As outlined in Vision 2030, the Government of Kenya aims to create “a globally competitive and prosperous country with a high quality of life for all by the year 2030.” A high-quality healthcare system is essential to achieve this goal. KHSSP aims to “improve access to and quality of person-centered essential health services.” In addition, the Kenya AIDS Strategic Framework 2014/15-2018/19 (KASF) has prioritized cost effective and quality prevention, treatment, care, and support services informed by a rights-based approach. The MOH has also developed the Kenya Quality Model for Health (KQMH) to serve as the conceptual framework for an integrated approach to continuous quality improvement (CQI).

Whereas the general principles of QI are standard irrespective of improvement models or health condition, the processes, indicators and data collection approaches and tools vary depending on health-specific needs. Against this background, the Ministry of Health developed the Kenya HIV Quality Improvement Framework (KHQIF). KHQIF provides a platform for implementing quality improvement specifically for HIV services across different levels of the healthcare system. It uses a defined set of indicators, tools and methods for measuring and continuously improving the quality of care.

1.3. Goals and Objectives of the KHQIF

Goal: The overarching goal of the KHQIF is to ensure provision of high-quality HIV services, ensure best outcomes at patient and program levels, and contribute to the attainment of a good quality of life and well-being for people living with HIV and AIDS in Kenya, prevent new infections and eliminate MTCT.

Specific objectives:

1. To provide a common platform for both public and private stakeholders in quality improvement of HIV services.
2. To promote client-centered care and safety.
3. To accelerate progress towards achievement of universal HIV prevention, care and treatment coverage and eMTCT targets.
4. To promote a culture of continuous quality improvement informed by performance data and improvement cycles across all healthcare levels; national, county, and facility.
5. To foster the development and integration of national, county and facility quality improvement infrastructures for HIV management.

CHAPTER 2

Approach to Quality Improvement

There are different models and approaches to QI. Approaches vary in their effectiveness at driving change within different implementation contexts and with other aspects such as performance assessment methodologies and intervention protocols. The choice of a quality improvement approach is influenced by multiple factors such as the nature of the organization, available technology and skill sets, the nature of the product (a good or a service), besides other considerations.

There are different QI models currently being implemented in the country. KHQIF has adopted the Plan Do Study Act (PDSA) and Sort, Set, Shine, Standardize and Sustain (5S) approaches, which together form the Total Quality Management (TQM) model that is best suited to the continuous improvement of services for patients with chronic conditions. This model, which will be standardized in Kenya, also conforms to existing QI standards in place in the Kenyan health sector.

Quality

Quality has many definitions. One that can be applied to the Kenyan healthcare system is *'doing the right thing the first time, in the right way, and at the right time'*. KHQIF provides the blueprint for enabling healthcare professionals serving patients with HIV and AIDs *'do the right thing, the right way, all the time'*. Quality improvement is the key to creating this culture and this framework shows how healthcare providers and managers can implement QI initiatives, continuously measure progress, report and disseminate best practices, and use the data generated to improve health services at local, facility, county and national levels.

2.1 Principles of KHQIF

The QI methods used in the KHQIF are based on core principles that lend themselves to immediate translation into practical approaches for integration into health care delivery systems. Similar to the Kenya Quality Model for Health (KQMH), the KHQIF embraces the principles of TQM as shown in figure 2.1. This approach ensures that all aspects of a healthcare system that potentially have impact on a particular service are considered in the QI model.

2.2 Systems approach to Quality management

2.2.1 The Donabedian model

The KHQIF approach to QI is based on Donabedian's classical model for assessing quality of care, which employs a paradigm of 'structure, process, and outcomes'. The model requires the identification of structures (inputs and resources) necessary to provide high-quality services, and processes (planned activities) to ensure the desired quality of care (outcomes) is achieved.

The model is applicable to healthcare systems of varying size and complexity, from standalone PMTCT or immunization clinics, to complex teaching hospitals. Under the Donabedian model, QI can be tailored to meet the specific needs of an organization's healthcare delivery system, as well as the needs of various levels within a health system. Figure 2.2 illustrates the typical structures (inputs), processes (activities), and outcomes (results) in the Donabedian model adopted for the Kenya HIV care system.

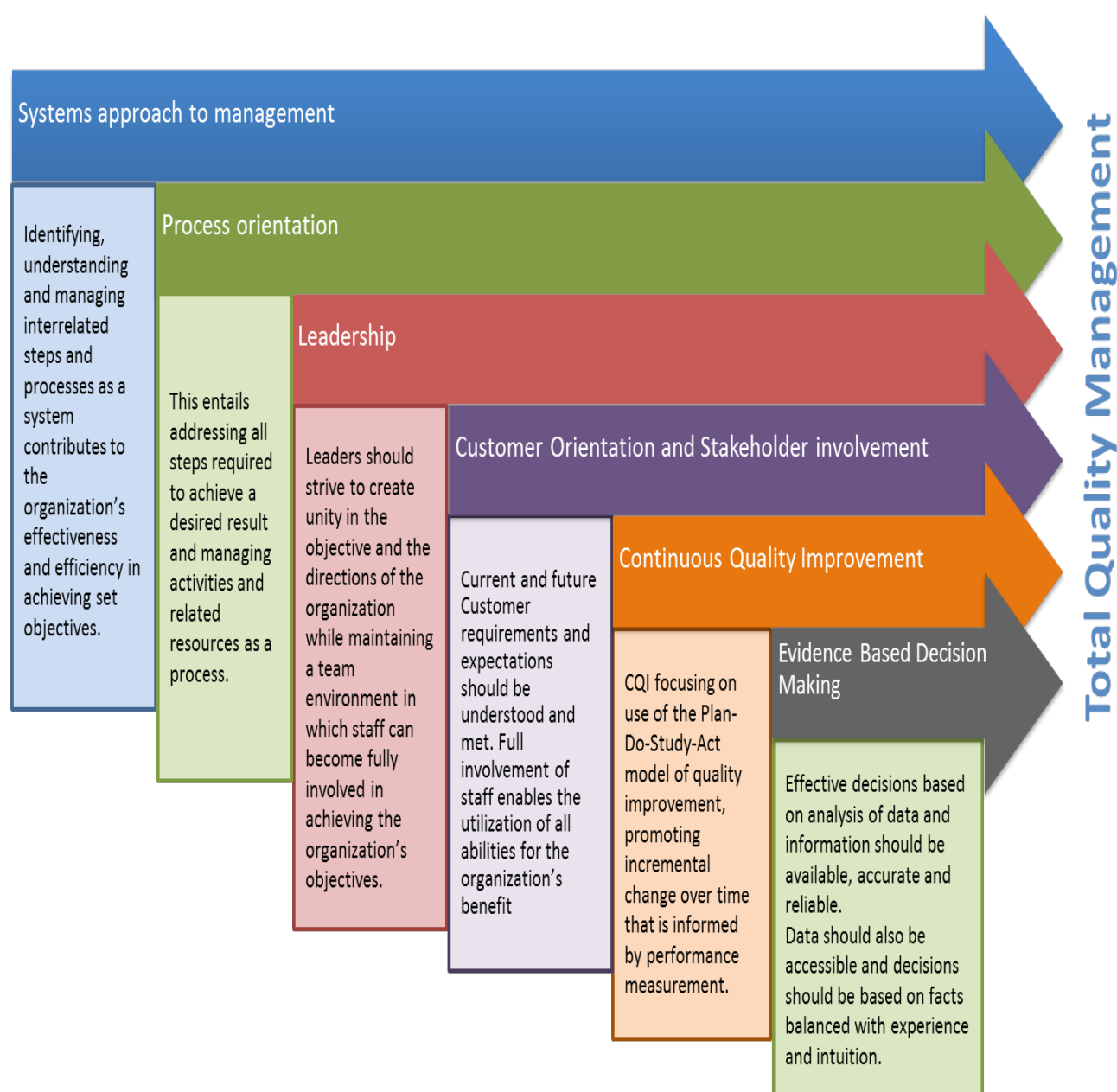


Figure 2.1: Principles of KHQIF (adapted from KQMH)

Activities or processes within a healthcare organization contain two major components which constitute a system;

- 1) what is done (what care is provided); and
- 2) how it is done (when, where, and by whom care is delivered).

QI is achieved by addressing either component; however, the greatest impact is achieved when both are addressed.

Working within this systems-based approach, KHQIF emphasizes the creation of an enabling environment for successful implementation of QI initiatives, and strengthening the capacity of healthcare service providers to improve and sustain improvements. An enabling environment is achieved using the 5S approach and provider capacity is built using the PDSA approach. Both approaches depend on the iterative use of routine service and program data to measure improvements in service delivery and processes, and the extent to which consumer (patient) and program needs are met (outcomes).

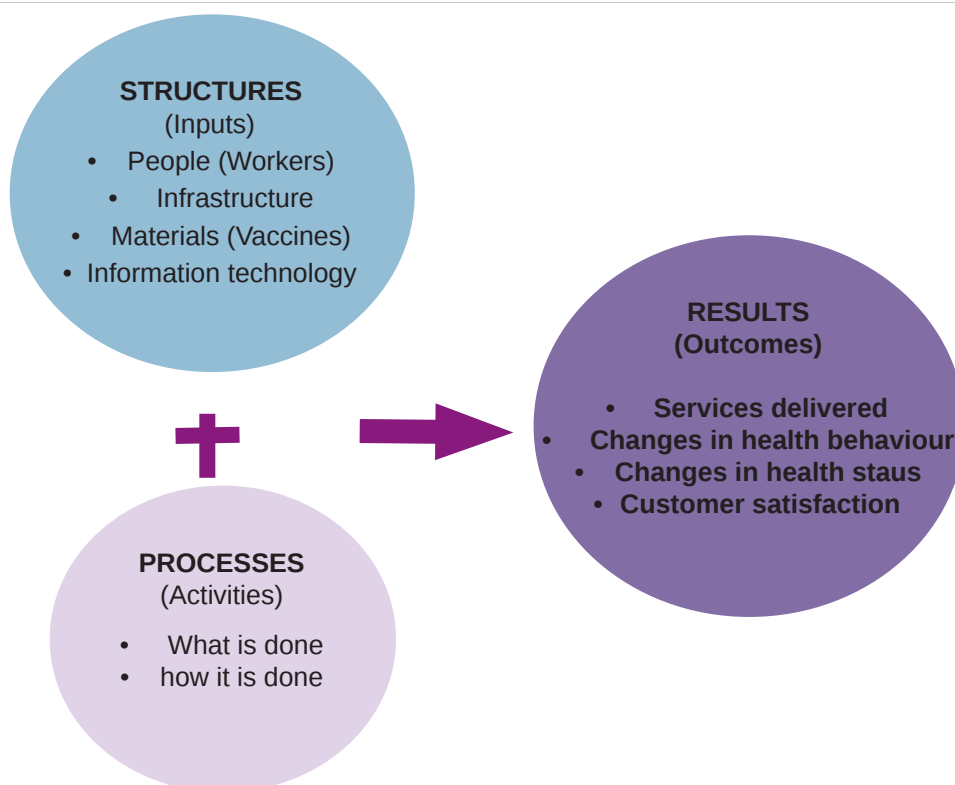


Figure 2.2: The Donabedian model for Quality Improvement

2.2.2 The 5S Approach to creating an enabling environment

5-S is a provider-focused strategy for improving the 'work environment'. The 5S model engages and supports health workers to acquire skills and competencies required to embrace and effect 'change' within the workplace.

The approach was started in Japan and involves:

- **Sorting:** identifying essential aspects of services and eliminating unnecessary aspects.
- **Setting:** arranging materials and tasks in an efficient order.
- **Shining:** cleaning and bringing order to the workspace.
- **Standardizing:** establishing standard protocols for a service
- **Sustaining** improvements that have been gained.

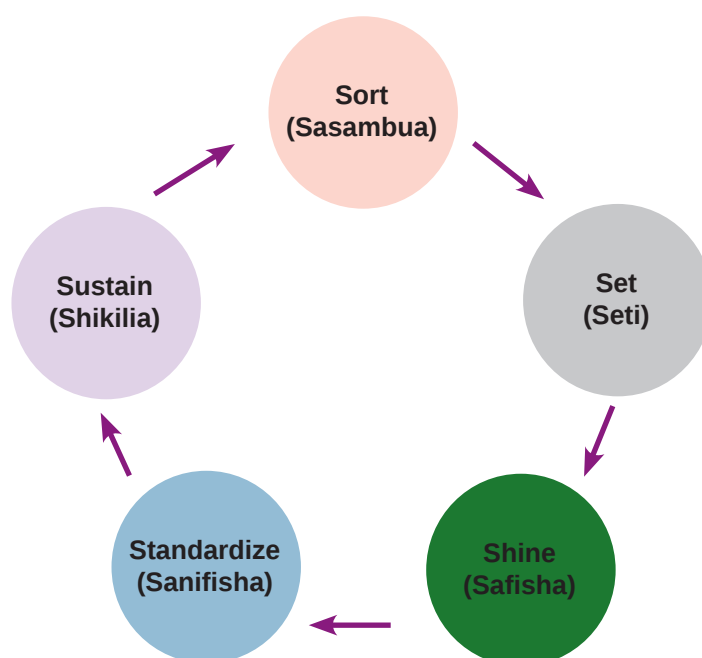


Figure 2.3: The 5S approach translated to Kiswahili

The Kiswahili translation of the 5 steps is shown in figure 2.3. The 5-S process is usually a precursor to Continuous Quality Improvement (CQI) processes.

Whenever new methods and tools are introduced, the 5S approach can be applied to institutionalize the change. In addition to evaluating, implementing, standardizing and sustaining change, the 5S approach;

1. Improves productivity by making tools and equipment readily available for use and reducing time loss associated with the introduction of new practices
2. Improves health worker performance by maintaining a clean and organized work environment and keeping potential hurdles out of the way
3. Improves health and safety including infection control, prevention of accidents and management of occupational hazards

Once improvements in the work environment and infrastructure have been implemented, the PDSA cycle can then be introduced to improve the quality of services.

2.2.3 The PDSA cycle for Continuous Quality Improvement

PDSA model developed by Walter Shewart provides a framework for developing, testing and implementing changes leading to QI. PDSA is used for action-oriented learning and incorporates testing a change in the real work setting by planning, implementing, observing results, and then acting on what is learned.

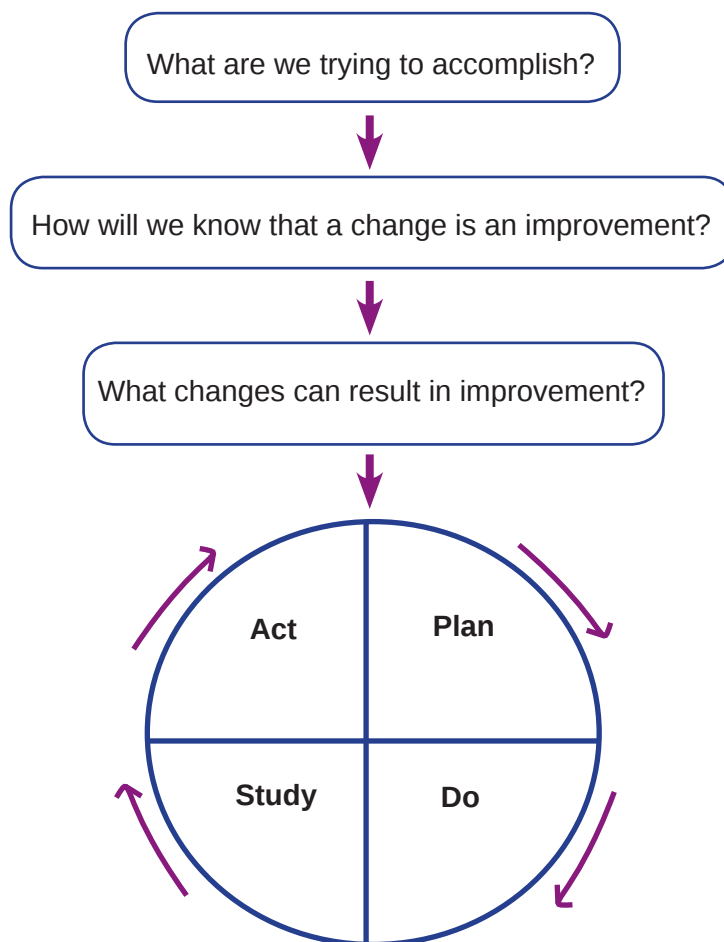


Figure 2.4: The Improvement Model (Adapted from the Institute for Health Care Improvement)

The framework involves evaluating three key questions meant to ensure that teams identify effective changes. These questions include:

- What are we trying to accomplish? A QI team's response to this question helps to clarify targets and desired results.
- How will we know that a change represents an improvement? Actual improvement can only be proven through measuring an outcome that demonstrates movement toward the desired result. A QI team should identify data for such measurements.
- What changes will result in improvement? Improvement occurs only when a change is implemented, but not all changes result in improvement. Effective changes need to be identified prior to full implementation.

PDSA cycles enable teams to test changes before wholesale implementation, and provide stakeholders with the opportunity to assess the proposed change for impact. Table 2.1 presents the steps in the PDSA cycle.

Table 2.1: Steps in the PDSA Cycle

PDSA cycle steps and key questions	
PLAN: Plan the change	<ul style="list-style-type: none"> • Which process needs improvement? • What information and data do we need to understand the problem? • What is our project goal? • What change should be implemented? • How will the change be implemented? • How will the effect of the change be measured? • How will the required data be collected, documented and analyzed?
DO: Implement/ Test the change	<ul style="list-style-type: none"> • Implement the change • Continuously monitor and collect data per the plan
STUDY: Monitor and review the change	<ul style="list-style-type: none"> • Did the results match the theory/predictions? • Is there an improvement? If yes, by how much? • Are there trends? • Are there any unintended side effects? • Is the process more difficult using new methods? • Is the change scalable? <p>Note: Studying should go on continuously throughout the improvement cycle.</p>
ACT: Revise and plan use of lessons learnt	<ul style="list-style-type: none"> • Should the change be modified or a new change tested? (Return to Step 1: Plan) • Should the change be adopted? (continue to scale up/ maintenance phase)

2.2.4 Total Quality management

Implementers can direct interventions to a wide range of health and organization issues as long as they work within KHQIF priorities. The 5S and PDSA approaches to creating an enabling environment and strengthening the capacity of health workers, forms the basis of the TQM approach used in KQMH. KHQIF conforms to the overarching approach to total quality management within the KQMH principles with approaches being localized to facilities and made contextually relevant, but amenable to holistic deployment to achieve nationwide quality improvements.

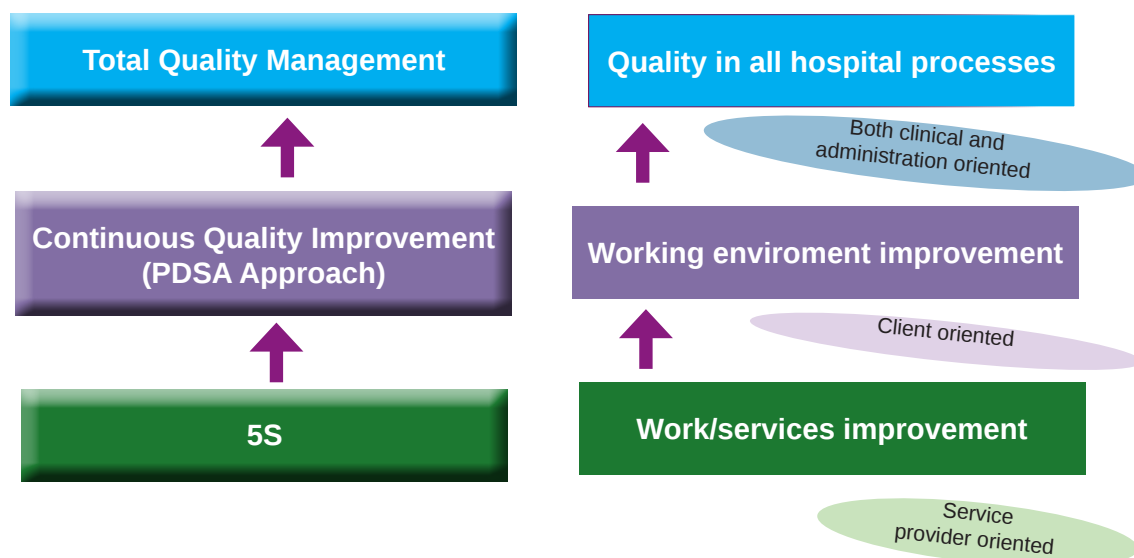


Figure 2.5: KQIMH approach to Total Quality Management

2.3 Tools for implementing quality improvement activities

Every problem or performance gap is unique to the patient population and the context within which different facilities operate. QI interventions should be tailored to meet contextual needs to ensure relevance and enhance impact.

However, some interventions have been identified as necessary across multiple contexts and these are outlined in the KHQIF Operational Manual. It is important to note that the teams described in the KHQIF management structure are responsible for developing interventions to address the root cause of particular gaps in service delivery, that are specific to each service area.

Different tools and methods can be used to support each step in 5S and PDSA processes. These include; flow charts, brainstorming tools, multi-voting, client focus groups, cause and effect diagrams, Pareto charts, bar charts and run charts. QI project interventions should be documented using the standard QI reporting template. The use of standard tools will ensure a consistent approach to documentation thus enabling initiatives to be applied across all health services. QI tools and reporting templates are found in the *KHQIF Operational Manual*.

Chapter 3

Performance Measurement

Performance measurement at all levels is critical for effective implementation of KHQIF. Appropriate indicators must be established and validated, data collection sources and methodologies must be identified, reporting tools and systems must be defined, and the basis for benchmarking must be determined. This section provides an overview of performance measurement under the KHQIF.

3.1. Overview of Performance measurement

Performance measurement is the process of collecting, analyzing and reporting information on the performance of a service, system or organization. In healthcare, performance measurement assesses care services and outcomes against evidence-based standards. It forms the basis for evidence-based care and the formulation of strategies that move services from actual to desired state (Figure 3.1). Objective and transparent measurement enables healthcare providers, institutions, clients, and communities to assess the quality of the healthcare system.

What 'IS' and 'SHOULD' be the situation at the facility

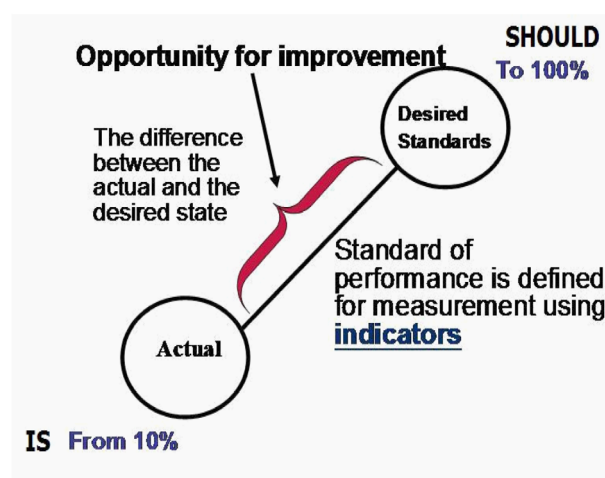


Figure 3.1: Actual versus Desired state of services

The process of QI begins with determining performance measures, and proceeds to data collection and analysis, formulating plans and interventions for improvement, implementing plans, and evaluation. Within the QI framework, this cycle is iterative and is repeated in the continuous cycle of quality improvement, such as PDSA as described in Chapter 2. In order to maximize the impact of effective interventions and minimize ineffective solutions. The PDSA cycles or small tests of change with repeated measurement are carried out. Practices that result in desired outcomes are selected for system-wide adoption and institutionalization.

Facility based QI activities can range from a single team focusing on improving one aspect of care, to a comprehensive QI program with many teams working on a wide variety of QI projects with well-established plans and an oversight committee.

Performance measures used in KHQIF are aligned with the six quality-of-care domains prescribed by the World Health Organization (WHO) (table 3.1). A healthcare system that adequately assesses care in all these dimensions is well prepared to meet clients' needs and if selected performance measures are properly applied and metrics routinely used in improving services, clients will experience care that is safer, more reliable, more responsive, more integrated, and more available. Care covers the full array of preventive, acute, and chronic services, which patients require at different times. In this set up, healthcare workers also benefit through increased job satisfaction and are increasingly able to serve patients adequately.

Table 3.1: Quality of Care dimensions and associated performance data
(Adapted from WHO)

Quality Dimension/Criteria	Data/types for identifying, prioritizing, and measuring change in HIV-related QI projects
Safety: avoiding or reducing to acceptable limits of actual or potential harm from health care management or the environment in which healthcare is delivered	<ul style="list-style-type: none"> • Adverse events and incidents (side effects and toxicity) • Sentinel events (HIV drug resistance/ early warning Indicators) • Internal bench marking • Benchmarking against other services or departments • Morbidity and mortality meetings or reports • Accreditation reports
Accessibility: Obtaining healthcare that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need.	<ul style="list-style-type: none"> • Service utilization • Client feedback (e.g. client focus groups, exit surveys) • Waiting times • Missed appointments rates
Effectiveness: Care, intervention or action achieves desired outcome.	<ul style="list-style-type: none"> • Clinical indicators, medical file reviews • Benchmarking against other services and departments • Morbidity and mortality meetings or reports
Efficiency: Achieving desired results with the most cost-effective use of resources	<ul style="list-style-type: none"> • Service utilization data • Finance and expenditure data • Audits of equipment and resource usage • Client feedback • Waiting times
Acceptability or patient-centeredness: Service is respectful and client orientated; respect for dignity, confidentiality, participation in choices, promptness, quality of amenities, access to social support networks and choice of provider	<ul style="list-style-type: none"> • Service utilization data • Client feedback • Accreditation reports • Adverse events (side effects and toxicity)
Equity: Delivering health care which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status)	<ul style="list-style-type: none"> • Clinical indicators, medical file reviews • Audits against international standards or evidence- based guidelines • Service utilization data • Service mapping

By adopting the WHO dimensions, the KHQIF encourages teams to investigate the areas most needful in their local contexts (time and situation) to determine which set of measures cover the areas of concern.

3.2. Performance measures

Data for assessing QI interventions should be collected from various sources including routine facility and community data sources (Table 3.2). In addition, organizational assessments should be used to continuously assess performance at all levels and should be conducted before initiating QI activities.

Table 3.2 Examples of performance measurement activities

Activity (grouped)	Source	Method of collection	Review Period	Level of Data Use
Facility QI Organizational Assessment	Facility staff	Interview or focus group discussion (FGD) using Organizational Assessment (OA) checklist	Annually	Facility, County and National
County/ National QI Organizational Assessment	County/ National Staff	Interview or FGD using OA checklist	Annually	County, National
Staff feedback	Facility staff	Staff meetings	Monthly	Facility
		Staff survey (anonymous)	Annually	Facility
Client/ consumer/ community feedback	Clients	FGD during clinic visits	Ongoing	Facility
	Community	Community meetings	Varies	Facility
	Clients	Support group discussions	Ongoing	Facility
	Clients	Exit interviews	Every 6 months	Facility
	Clients or community	Suggestion boxes	Ongoing	Facility
Routine reports/ health information system data, including routine cohort analysis (ART, HEI/HCA, EWI)	Registers, reports- District Health Information System (DHIS)	Daily or routine facility documentation of services	Varies – daily, monthly, quarterly, annually	Facility county national
Kenya HIV QI Indicator File and Register Reviews	Patient files, electronic medical records database	Chart abstraction for predefined sample (95% confidence interval) or All eligible clients for facilities with EMR systems	Files – 6 monthly registers – monthly and aggregated at 6 months	Facility county national

3.3 Kenya HIV QI Indicator File and Register Reviews

The Kenya HIV QI indicator medical file reviews are one source of performance measurement data. The process is summarized in this section and the detailed standard operating procedure (SOP) is found in the KHQIF operational manual. It is important to note that the 6-monthly QI file reviews are only one of the many data sources, and the facility QI teams should review all data sources at least monthly during regular meetings.

3.3.1 Kenya HIV Quality Improvement Indicators

The KHQIF defines thematic areas (shown in Table 3.3) from which a standard minimum set of indicators is derived, for use by health facilities to assess quality of care. Assessment using these indicators will enable identification of gaps in quality of services for targeted improvement at facility level. A full list of indicators is found in Appendix 1.

Table 3.3: HIV QI indicators by thematic areas

Thematic Area	Service/Indicator Area
Service Coverage	<ul style="list-style-type: none"> • ARV Initiation (for infected Adults, pregnant women and children) • Laboratory monitoring (CD4, Viral Load) • TB screening and IPT • Nutrition (nutritional assessment, counseling and support) • Family/partner testing • Reproductive Health (Family Planning, Cervical Cancer screening) • HIV Exposed infant (HEI) testing
Patient Outcomes	<ul style="list-style-type: none"> • Virologic suppression • MTCT rates among HEI
Retention	<ul style="list-style-type: none"> • Retention in care and treatment for adults, pregnant women and children, HEI/mother-baby pair
Cross-Cutting and other areas	<ul style="list-style-type: none"> • Disclosure status among HIV-infected children • HEI feeding status • Voluntary male medical circumcision adverse events • Maternal health (skilled delivery, use of partograph)

All indicators are defined and periodically reviewed by the National HIV Quality Management Technical Working Group, which consists of the MOH and other national and implementing partners. The TWG will convene every two years to review and revise indicators based on changes in clinical guidelines and experiences in the field, that affect the validity of measures and their relevance to care services and outcomes. Based on priorities and need, county health management teams may decide to add other indicators, that are not included in the national indicators. As a guide, all QI indicators should be;

S – Specific

M – Measurable

A – Achievable

R – Realistic

T – Time bound

For each indicator selected, there must be a ready source of data; a clear protocol for collecting the data, and a feasible method of addressing gaps in performance identified using the indicator.

3.3.2 HIV QI File and Register Review Data Collection methodology

HIV QI Indicator Medical File Reviews will occur twice a year at facility level with data collated within two time periods; January to June and July to December of each year. Data analysis for period 1 will be in July while analysis for period 2 will be in January of the following year. In subsequent rounds of data collection, the indicator package may be revised as necessary after review of the performance measurement and data collection processes. Depending on facility type, the data collection process will vary as summarized in Table 3.4. Some indicators may be assessed more frequently depending on the QI project the facility selects and its capacity to collect data. The register can be reviewed monthly.

Table 3.4: Data collection procedures

Facility	How to sample	How to calculate
Non-EMR*, with no computer	<ul style="list-style-type: none"> Develop “Active Case Listing” Use sampling chart to determine sample size Randomly select files 	Manual abstraction tool
Non-EMR, with computer	<ul style="list-style-type: none"> Develop “Active Case Listing” Use sampling chart to determine sample size Randomly select files 	Manual abstraction tool, with option of QI database on computer
EMR	<ul style="list-style-type: none"> All records that have been updated in the EMR for the period 	EMR auto generated but some manual collation may be required for eMTCT.

*EMR = electronic medical records

3.3.3 HIV QI Indicators, Data Transmission and Storage

Facility level QI data will be stored and utilized by facility QI teams and care providers, before sharing with county QI leadership. At the sub-county level, a QI database will be established to serve as a repository and source for all QI data from facilities. Counties will share QI data with NASCOP who will have a central database for reporting on national progress of QI goals with aggregated data from across the country.

3.3.4 HIV QI Indicator Data Analysis

Data will be analysed and synthesized at various levels of service delivery (facility, sub-county, county and national) to enhance evidence-based decision-making. The results obtained will be summarized as HIV QI performance trends. The focus of analysis will be comparing actual performances against expected results. At the facility, performance of QI initiatives will be measured against internal targets. Analysis of county and national data will enable performance at different levels to be compared, and lead to in-depth exploration of underlying factors and establishment of program benchmarks.

Chapter 4

Quality Management Infrastructure

Appropriate infrastructure is essential in implementing a quality management system. Quality management teams with the requisite technical and political leadership need to be established and equipped with well-developed goals, plans, collaboration protocols and monitoring tools. This chapter outlines the composition and functions of quality management teams at various levels of the healthcare system, and their inter-relationship.

4.1 Leadership for QI initiatives

Strong and supportive leadership is an essential ingredient for sustaining QI activities in health service delivery. National and county health administrators and facility management staff are responsible for creating a vision for CQI and making it priority. Leaders also need to participate in setting goals, promoting principles of QI and coaching teams in QI techniques and tools.

Below is a list of some concrete goals for leadership teams in a QI culture:

- Set quality as a top priority, and clearly communicate this message to stakeholders
- Reinforce values through coaching and mentoring.
- Invest in staff so that staff ensure quality initiatives are adopted.
- Provide resources to support quality improvement activities.
- Continuously communicate progress to staff and stakeholders.
- Celebrate and recognize team effort and quality achievements.

Roles of leadership in implementing QI:

- *Energize providers to envision changes that lead to improvements*
- *Enroll staff to participate in making improvements*
- *Engage staff in dialogue about where improvements are needed and how they can be accomplished*
- *Empower staff to propose new ideas and make changes*
- *Educate staff on principles and techniques of quality improvement*
- *Enable staff to invest time in quality improvement activities*
- *Express thanks to staff for doing a quality job*

4.2 KHQIF Management Structure

The KHQIF will operate within existing structures of the national healthcare system. Changes to the national structure resulting from future reforms will be reflected in the composition and structure of KHQIF management teams to ensure consistency and guarantee continued relevance and commitment. Table 4.1 provides an overview of the KHQIF management structure.

Table 4.1: KHQIF Management Structure

Level	Management structure	Membership
National	National Quality Management (QM) Technical Working Group (TWG)	MOH Heads of Directorates, Divisions, and Units; Development partners
	National HIV QI TWG	Head of NASCOP and section leads; representatives of relevant MoH Divisions/Units; representatives of HIV program implementing partners; HIV client representatives (nominated from the existing national people living with HIV [PLHIV] networks); private sector representatives
County	County QI committee	County health management team, county implementing partner representatives; Client representatives (the existing county PLHIV networks), Select facility representatives (ensuring representation of all facility levels), private sector representatives
Sub-County	Sub-county QI committee	Sub-County Health Management Team, county Implementing partner representatives; client representatives (the existing county PLHIV networks), select facility representatives (ensuring representation of all facility levels), private sector representatives
Facility	Facility quality improvement team (QIT)	Facility health management team or departmental heads, Community representative, HIV client representative, facility CQI manager from supporting implementing partners
	Sectional work improvement team (WIT)	Departmental staff; comprehensive care clinic (CCC) WIT may include staff providing HIV services in other departments in the facility and HIV client representative

4.3 Functions of the QI Management structures

Teams at each of the levels will be responsible for setting goals, planning activities, implementing and rolling out, and program evaluation. They will also be responsible for reporting of findings and data to the next level. Annual goals will be based on national goals and strategies, and informed by the previous year's performance. Each team will identify the lead person in charge of managing team plans and activities.

Table 4.2 Functions of QI Management Structures

Roles/Responsibilities	National QM TWG	National HIV QI TWG	County QIT	Sub-County QIT	Facility QIT	Section WIT
National or county level environmental scanning for emerging trends to influence policy	x	x	x			
Periodically reviewing the KHQIF and its indicators, training material and curricula		x				
Developing policies guiding implementation of QI in health settings (including HIV)	x	x	x			
Mobilizing resources for QI at respective levels	x	x	x	x	x	x
Coordinating development partners involved in QI activities at respective levels	x	x	x	x	x	x
Holding quarterly TWG or QIT meetings for stakeholders	x	x	x	x		

Roles/Responsibilities	National QM TWG	National HIV QI TWG	County QIT	Sub-County QIT	Facility QIT	Section WIT
Training county, sub-county, and facility teams	x	x	x	x		
Capacity building, mentoring, and coaching county teams	x	x				
Capacity building, mentoring, and coaching sub-county teams			x			
Capacity building, mentoring, and coaching facility QIT			x	x		
Capacity building, mentoring, and coaching WITs			x	x	x	
Conducting annual organizational assessments at respective levels	x	x	x	x	x	x
Developing annual QI workplans	x	x	x	x	x	x
Holding regular (at least monthly) meetings with performance data reviews					x	x
Implementing CQI (5-S, PDSA) and ongoing performance measurement			x	x	x	x
Routine reporting on QI Projects and QI Indicators every 6 months			x	x	x	x
Organizing and attending learning sessions for different evels (Facility multi-disciplinary teams, continuous medical education, sub-county, county, national)	x	x	x	x	x	x
Scaling up best practices in CQI including use of learning collaboratives	x	x	x	x		
Monitoring and evaluation of QI program at respective levels	x	x	x	x	x	x

4.3.1 National QM TWG

The National QM Thematic Working Group serves one level above the HIV QI TWG and oversees quality management across the entire Kenya health system with a focus on the six primary illnesses. The Director of Medical Services assisted by the Head, Directorate of Quality Assurance and Standards will lead the national QI TWG. The committee shall be charged with formulating national plans, reviewing and approving national and county quality management plans, and country-wide reporting, monitoring and evaluation. The national TWG will meet periodically to review progress in implementing KHQIF nationally and provide guidance as needed.

4.3.2 National HIV QI TWG

The Head of NASCOP or their designee will chair the National HIV QI TWG. Members will be drawn from key stakeholder groups representing patients, facilities and MoH partners in the national response to HIV. The National HIV QI TWG will meet quarterly.

4.3.3 County QI Committee

The county QI committee shall be formed and chaired by the County Chief Officer for Health or their designee. Team members will be drawn from key stakeholder groups representing patients, facilities and partners. Key members will be QI and CQI personnel from implementing partners and major facilities.

4.3.4 Facility Quality Improvement Team

The Facility QIT is charged with leading and coordinating the implementation of QI activities in health facilities. Facility QITs shall be formed and chaired by the facility CQI lead and supported by staff from the county and implementing partners.

4.3.5 Work Improvement Teams

WIT is formed by a small group of staff working in the same department/section with the aim of providing meaningful contribution to QI at individual service level. These teams operate at the level where clients encounter the improvements in quality and safety being implemented at the facility. By engaging direct point of care providers in teams and forums staffed by their peers, WITs will promote early and adequate identification of lagging services, ownership of recommended solutions, efficient use of resources and effective implementation of QI interventions. Health workers (with support and coordination provided by the facility QI lead) will establish WITs. Client representatives will be drawn from the existing community PLHIV networks served by the facility.

4.4 Dissemination Practices within the KHQIF Management Structure

The flow of Information across the KHQIF is based on the following principles:

- Planning and development at each implementation level
- Stakeholder involvement and representation in final plans at all levels
- Peripheral to central reporting systems in line with systems for other national healthcare programs
- Central to peripheral monitoring and evaluation, guideline dissemination, and training

QI teams at each level will be responsible for ensuring that collated data is first disseminated to and reviewed by local personnel involved in QI. As much as possible, performance data and reports will be presented in easily understood formats including graphics and pictorials as applicable. Stakeholder involvement through dissemination of results builds ownership and is a critical aspect of effective QI.

A summary of dissemination protocols for each implementation level is provided below:

Facility level:

- Using facility-based tools, WITs will submit QI reports to facility QIT leads every six months.
- Facility QIT and WIT will disseminate internal performance reports every six months and display outcomes of QI activities on designated boards.
- Performance data will be made available to facility health management teams (HMT), and other Multi-Disciplinary Teams (MDT) based on facility and program management protocols.
- Using the KHQIF reporting tools found in the *KHQIF operational manual*, facilities will provide facility QI Reports and HIV QI indicator summary reports to sub-county QI coordinators every 6 months.

Sub-county level:

- Sub-county offices will receive QI reports from facilities every 6 months and post them on sub-county information boards. Sub-county QI coordinators will ensure timely submission of reports.
- Reports and key performance findings will be disseminated to sub-county stakeholders through sub-county health management meetings, sub-county learning sessions, and other stakeholder and partner forums.
- Sub-county QI sessions for identification of best practices and lessons learnt shall be held annually.
- Sub-county QI coordinators will use reports submitted by facilities to produce sub-county QI reports and share them with the county QI committee.

County level:

- County offices will receive QI reports from the sub-counties every six months and post these on county information boards. County QI coordinators will ensure reports are submitted on time.
- Reports and key performance findings will be disseminated to county stakeholders through county health management meetings, county learning sessions, and other stakeholder and partner forums.
- County QI sessions will be held annually to identify best practices and lessons learned.
- County QI coordinators will use the reports submitted by sub-counties to produce county QI reports and share with the National HIV QI TWG.

National level:

- The National HIV QI TWG will receive county QI reports every six months.
- In addition to paper based reporting tools, county to national QI reporting will be made via online reporting systems.
- National data will be disseminated at QI TWG meetings, key QI forums and QI learning sessions.
- The National HIV QI TWG will provide performance feedback to counties twice a year.

Dissemination practices: The KHQIF advocates teams to explore and adopt innovative approaches such as county, national and international learning networks to disseminate information. The QI structures at sub-county, county, and national levels will hold annual learning and networking meetings to share QI best practices. Use of storyboards, conferences and other forums to disseminate QI will be encouraged. An added advantage of disseminating information both to the local community and other stakeholders is to facilitate the exchange of information and increase interaction for the mutual benefit of the facility and the county.

Chapter 5

Implementation Plan

Successful implementation of the KHQIF requires that a culture of evidence-based practice be introduced. This requires a plan to systematically introduce the necessary processes, structures, support systems, and ensure stakeholder buy-in and long term participation. An implementation plan is an essential aspect of the roll-out of the KHQIF and this chapter provides a summary overview of this plan.

5.1. KHQIF Implementation plan

The KHQIF implementation plan is a blueprint for rolling out QI in a manner that matches the expansion of HIV care. To ensure different services are prepared to receive, adapt, implement and sustain this initiative, the KHQIF will be carefully introduced in line with the steps outlined in Figure 5.1*.

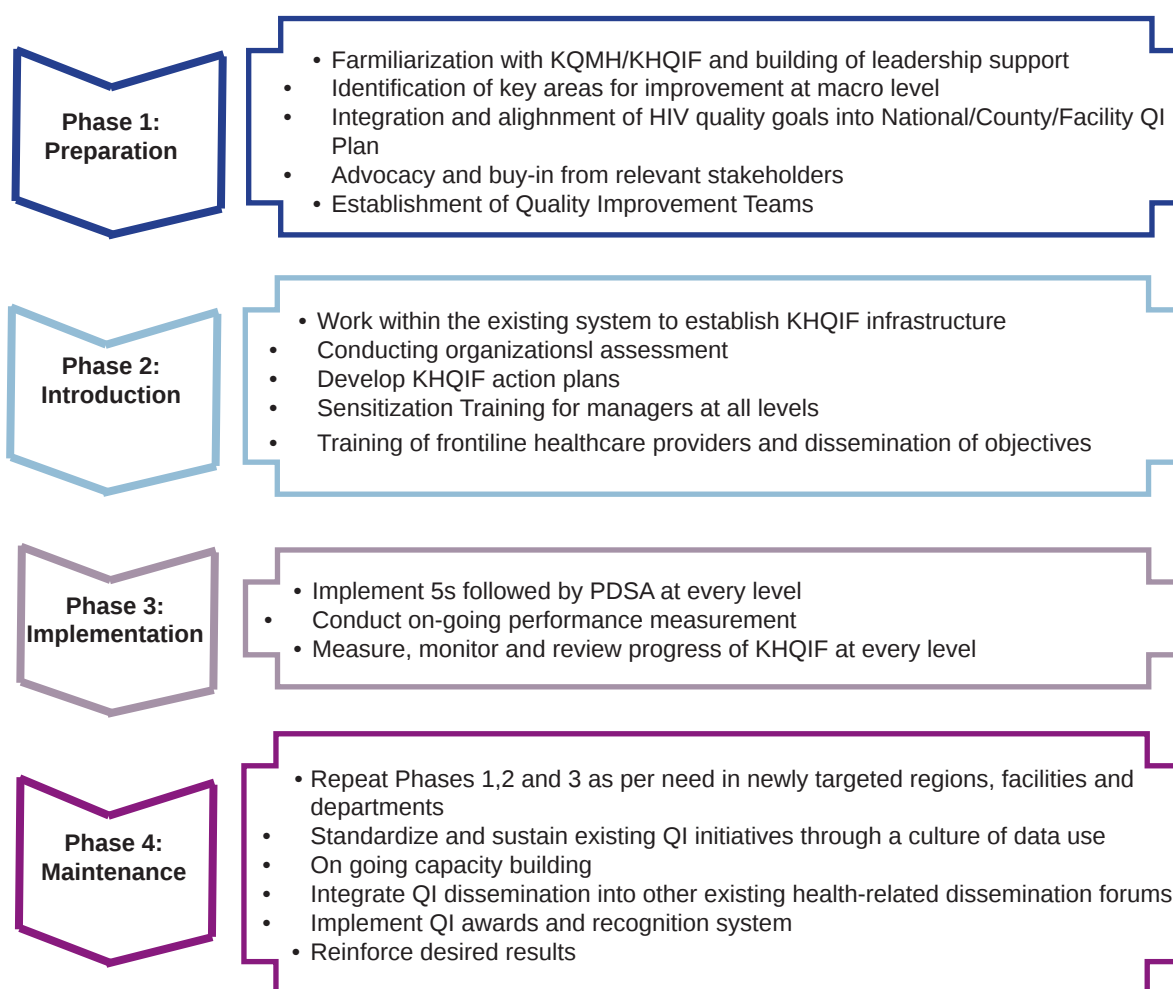


Figure 5.1: KHQIF implementation phases and steps*

* Adapted from the Kenya Quality Model for Health Guidelines

These steps and activities are described below; further details are in the KHQIF operational manual. Effective roll out of this implementation plan will require leadership and active participation by a team of well-equipped facilitators at all levels – national, county 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 KHQIF at all stages from development and planning through implementation, and evaluation.
- **Community participation:** Community representation on the facility QIT and WIT 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 set-up to ensure sustained engagement with 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.

5.2 Phases of the KHQIF Implementation Plan:

Phase 1: Preparation

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

1. Familiarize with the KHQIF and build leadership support

Building leadership support will be through self-reading and familiarization workshops conducted at the national level in conjunction with county quality management teams.

It is crucial for leaders at national, county, sub-county and facility levels to understand QI and believe in its effectiveness since they play a critical role in setting goals, promoting the principles of QI and coaching teams in QI techniques and tools.

2. Integrate and align Quality Goals in the National/County/Facility QI plans

To ensure buy-in and sustainability of QI efforts, QI plans for implementing the KHQIF will be integrated with existing facility, sub-county, county or national plans for service delivery as a whole. This approach will ensure ownership by the county health management team or sub-county health management team, hospital management and other multi-disciplinary teams.

3. Conduct advocacy for buy-in from relevant stakeholders

Top level managers and leaders engaged in health service provision will be sensitized to ensure stakeholder buy-in, resource mobilization and ownership of CQI at all healthcare levels for sustainability. Sensitization activities will be carried out in collaboration with the Ministry of Health's division of quality improvement. Another key constituency is the community and facility clients. Engaging patient representatives results in smoother uptake of new services and less instability when introducing changes.

4. Establishment of Quality Improvement Teams and Work Improvement Teams

At the facility level, quality improvement teams need to be established before QI activities are implemented. Each service area will form a WIT. This team will provide leadership for CQI initiatives and ensure KHQIF is appropriately implemented. Chapter 4 provides more details on the recommended QI infrastructure.

In putting together QITs and WITs, key questions to consider are:

- How do staff members work together?
- Who is task-oriented?

- Who is a natural leader?
- Who initiates communication?
- How does communication flow among staff?

QITs and WITs shall comprise people who collectively meet the following criteria:

- Staff with fundamental knowledge and common understanding of the services to be addressed.
- Staff that represent all parts of the service areas as needed, including various levels of the health care system.
- At least one of the team members is trained in QI methodology and ideally, the team leader should also have training in facilitating teams.

The ideal size of a QI team is 5-9 persons depending on the needs identified and resources available. Facilities should carefully consider patient representatives on the team as they bring different perspectives and ideas for improvement from a consumer stand point.

Phase 2: Introduction

The second phase of implementing KHQIF has several steps:

- 1. Work within the existing system to establish KHQIF infrastructure:** before introducing QI initiatives, have a clear understanding of the processes (activities) and structures (proposed inputs) with existing infrastructure such that your facility is able to accommodate and sustain the improvements.
- 2. Conduct organizational assessment** (tools and standard operating procedures found in KHQIF operational manual). Organizational assessments should be conducted annually using the tool in the operational manual. The assessment will form the basis for the QI workplan.
- 3. Develop KHQIF action plans:** these should detail activities, resources and timelines for the specific deliverables related to implementation of the KHQIF.
- 4. Sensitization to KHQIF principles and training of QI managers:** facility management and QIT/WIT in particular, should be introduced to the principles and concepts underlying KHQIF: notably, the 5S and the PDSA methods.
- 5. Training of frontline health providers and dissemination of objectives:** when planning for training, the following should be considered:
 - a. The type of change being proposed
 - b. The personnel implementing the change
 - c. The skill level and work experience of the target group.

Training Approach

The national HIV QI TWG is tasked with the selection of key training personnel and identification of capacity building needs of these trainers. These trainers will jointly support the implementation of the KHQIF. Once capacity at the national level is built, the national team will build capacity at the county level and the county team will in turn build sub-county and facility level capacity. The National TWG will oversee the development of HIV QI training materials and training of trainers. The modular training package shall include training on:

- KHQIF Framework
- KHQIF Operational Manual (includes tools/templates)
- QI Indicator Database

All training will be carried out in three formats

- *Structured didactic format* that provides an understanding of the theory and structural components of CQI. Where possible, it is best conducted at facility level for implementers.
- *The experiential format* which is the learning avenue whereby participants learn about the tools and have the opportunity to actually use the tools in simulated exercises or in their CQI projects.
- *The self-learning format* that consists of continuing medical education (CME) through reading learning materials from various sources such as libraries, journals and through e-learning. This allows healthcare providers to understand key quality concepts, evaluate their QI knowledge and learn about other QI topics in health literature.

Phase 3: Implementation

There are three steps in the implementation phase:

1. **Implement 5S followed by PDSA at every level:** See Chapter 2 on *Approaches to QI* and *KQMH Operational Manual Section 3 and 4* for SOPs on 5-S and PDSA.
2. **Conduct ongoing performance measurement:** See Chapter 3 on *Performance Measurement* and *Operational Manual Section 7 and 8*: SOP - QI Indicator File and Register Review.
3. **Measure, monitor and review progress of KHQIF implementation at every level:** You should constantly monitor and evaluate all the steps in the implementation phase. Changes to the general framework or areas being targeted should only be made based on team decisions. It is essential to capture progress using quality assured tools, which are provided in the KHQIF operational manual and Chapter 6 of this book, which outlines the monitoring and evaluation plan for KHQIF.

Phase 4: Maintenance

The following steps are included in the final phase of operationalizing the KHQIF.

1. Repeat Phases 1, 2, and 3 as needed
2. Standardize and sustain existing QI initiatives through a culture of data use. Communicate recommendations for improvement to management and management in turn will incorporate the recommended changes appropriately, either as standards or best practice guidelines.
3. Ongoing capacity building.
4. 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.
5. Implementation of QI awards and recognition system.
6. Reinforce desired results. Here the key is to find small and regular ways to recognize QI teams that put in exemplary performance.

Listed below are some of additional ways to sustain gains made by QIT/WIT:

- Make use of available QI information for ongoing updates to clinical and QI personnel.
- Have regular communication about quality improvement activities.
- Include QI as a standing agenda item on MDT and all departmental or management meetings.
- Celebrate and recognize team efforts.
- Appoint mentors to orient new staff to QI activities.
- Continuously seek input from staff and patients on how QI activities can be improved.

Chapter 6

Monitoring and Evaluation of the KHQIF

Implementation of the KHQIF shall be monitored regularly to track progress. Periodic evaluation shall be carried out to determine whether KHQIF goals and objectives are being achieved, and whether an appropriate set of indicators is being utilized. An annual work-plan will be developed in line with KHQIF goals and objectives and will form the basis for routine monitoring. Evaluation shall be done every two years to determine if the KHQIF is meeting its strategic objectives and explore the need for changes.

6.1. KHQIF Monitoring structures and mechanisms

Facility, sub-county, county and national committees will be involved in monitoring and evaluating the implementation of the KHQIF. The committees will use various methods including meetings, support supervision, mentorship visits, and periodic performance reviews as outlined in Table 6 below.

Table 6.1: KHQIF monitoring mechanisms

Level	M & E Structures	Monitoring Mechanisms
National	National HIV QI TWG	<ul style="list-style-type: none"> Quarterly National QI TWG meetings (includes report review sessions) Incorporate QI into existing HIV stakeholders' forums Provide technical assistance to the counties Bi-annual Kenya HIV QI Indicator report 2 year program evaluation
County	County QI team	<ul style="list-style-type: none"> Receive and review 6 monthly facility QI reports and HIV QI indicator summary reports from sub-counties/facilities Prepare county summary reports Quarterly county QI committee meetings Quarterly mentorship visits to implementing facilities 2 year program evaluation
Sub-County	Sub-County QI team	<ul style="list-style-type: none"> Receive and review 6-month facility QI reports and HIV QI indicator summary reports from facilities Prepare sub-county summary reports Quarterly sub-county QI committee meetings Quarterly mentorship visits to implementing facilities 2 year program evaluation
Facility	Facility QIT	<ul style="list-style-type: none"> Monthly health facility QIT meetings Internal supervision or mentorship by facility management for WITs Compile 6 monthly Facility QI Report and Facility HIV QI indicator summary report and submit to Sub-County QI team 2 year program evaluation
Facility	Facility WITs	<ul style="list-style-type: none"> At least monthly departmental WIT meetings Document ongoing work on QI Project Plan Prepare QI Project Summaries for completed QI cycles Prepare 6 monthly Facility QI Report and HIV QI indicator summary report and submit to Facility QIT

6.1.2 Biannual evaluation of the KHQIF

Evaluation of the KHQIF will be conducted once every two years. This evaluation will be facilitated by the national QI TWG 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 county and facility QI reports; HIV program reports from NASCOP, and where required targeted review of client files and records will be carried out. The two-year evaluation report will include:

- A summary of completed and ongoing QI activities by county.
- 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 Kenya 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.

6.1.3 Recognition and reward

Based on the results from the various monitoring mechanisms described above, the national QI team will recognize and reward counties with the best QI practices. County QI teams shall in turn recognize and reward sub-counties and facilities with the best QI practices. Certificates of recognition will be awarded to top performers and results obtained from these performers will influence benchmarks applied across the program.

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