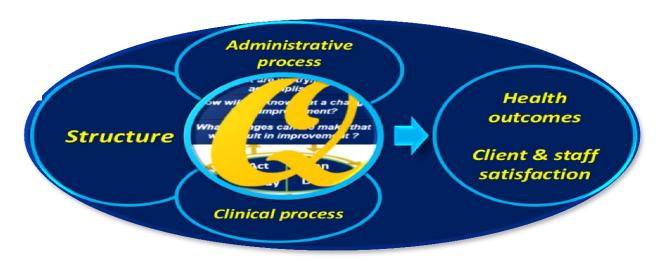


# FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA MINISTRY OF HEALTH

# **HSTQ**

### **HEALTH SECTOR TRANSFORMATION IN QUALITY**

A guide to transform the quality of health care in Ethiopia



**Version 1** 

September, 2016

# FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA MINISTRY OF HEALTH

# HSTQ

**HEALTH SECTOR TRANSFORMATION IN QUALITY** 

**Version 1** 

September, 2016

### **FOREWORD**

The Ethiopian ministry of health has started implementing its Health Sector Transformation Plan (HSTP)2015/16-2019/20(2008 to 2012 EFY) since July 2015 and one of the four transformation agendas contained in this plan is quality and equity of health care. Improving the quality of healthcare services into high quality person-centered health service provision is a timely agenda and the only means required to deliver the promise of universal health coverage.

The national health care quality strategy was launched on March 2016 with the aim of providing person-centered, efficient, effective, equitable and high quality health care for Ethiopia, resulting in improved health outcomes for the country.

The Health Sector Transformation in Quality (HSTQ) document is developed to facilitate and sustain the implementation of the HSTP, and in particular, the transformation agenda of quality and equitable health care in health facilities and community as a whole.

Accordingly, this document is structured in four sections; the first section is the quality improvement guideline which describes the overall concepts, principles, process and models of health services' quality improvement.

The second section explains how the Ethiopian quality structure will be organized at each level of the health care system, from the federal ministry to the community level, since the successful implementation of quality improvement (QI) activities requires appropriate structures at all levels.

The third section contains the clinical audit guidelines which describe the clinical audit approach and process to assess the clinical practice against the national standards at health facilities. And the last section focuses on health service quality standards which have been developed from the existing relevant quality standards, operational and or clinical guidelines through a consultative process with experts and stakeholders.

To this end, this document is the product of different consultative workshops, seminars and meetings with the relevant directorates of the Federal Ministry of Health (FMOH), Regional Health Bureaus (RHBs), professional associations, developmental partners and experts.

Hence, I am definitely sure that this HSTQ document will ignite, catalyze and transform the quality improvement practices and activities of the health system and will help to achieve and realize the ambitious goals of the Health Sector Transformation Plan.

### Daniel G/Michael Burssa (MD, MPH)

Director General, Medical Service General Directorate Federal Democratic Republic of Ethiopia Ministry of Health

### MESSAGE OF THE DIRECTORATE

Since its launch in the 1990s, the Health Sector Development Program (HSDP) has led to considerable expansion of the health services through rapid expansion of infrastructure, increased availability of the health workforce; increased budgetary allocation and improved financial management. However, improvement in Quality of health services at every location is still not perceived, generally.

The National Quality Strategy was launched with aim of providing quality and equitable access to all segments of Ethiopian population by 2020. 'Quality' should be the core and most important aspect of services being rendered at any all Healthcare services. In most Healthcare settings services is delivered through the clinical aspect and usually do not address & overlook client's expectations which goes beyond diagnostic, curative or rehabilitative care& includes courtesy, compassionate behavior of the staff, cleanliness of the facility, delivery of prompt & respectful service. Those who can afford, visit private facilities where their costs are very expensive and leaves the large mass of the population particularly the poor and those living in rural areas with lesser means to have access to such services.

Policy makers, planners and programme managers have a responsibility to respond and fulfill the needs of the community,

especially of those who are unable to meet challenging financial expectations from private services but needs equal opportunity, at par with those who can afford. Meeting these needs and expectations of sick and ailing is the responsibility of public health service provider.

Addressing such issues needs institutionalization of integrated quality planning, quality control and bold quality improvement activities in to the routines of all hospitals.

Quality Improvement is cyclical process which needs to be continuously monitored against defined standards and measurable elements. Regular assessment of health facilities by their own staff and 'action-planning' for traversing the observed gaps is the only way in having a viable quality assurance programme in all Health institutions.

Several guidelines such as National TB and Leprosy Treatment Guidelines, National Chronic HIV care guidelines, National Malaria Diagnosis and Treatment Guidelines etc, have been developed in the past 20 years and continue to be developed in other programmatic areas to ensure the quality of healthcare services provided for clients or patients. However, there was no standard guideline defining quality assurance and its different parameters in regards to timely, efficient, effective, safe, equitable and patient centered care.

Hence this HSTQ manual has been prepared comprehensively beginning with areas of concerns/diseases of high priority, defining its standards, quality elements and verification points both from service provider and service seekers aspect. A prudent mix of technical, infrastructural and client perspectives has been incorporated in these guidelines to address and ensure quality of health services in comprehensive and multitude manner.

In addition, the HSTQ manual in accompany with the EHSTG guidelines, are going to be the main tools to transform the administrative and clinical process of hospital functions. Using these tools, the Ministry of Health has prepared to launch a nationwide

quality improvement initiatives which is going to be operationalized and catalyzed through the EHIAQ platform. It is, therefore, hoped that all hospitals will take advantage of these guidelines and initiate quick and time bound actions as per the road map placed in the National Quality Strategy.

I must appreciate the efforts and initiatives of all experts and partners involved in the preparation and finalization of this manual.

I also deeply appreciate the commitments of all staffs of Health Service Quality Directorate of the ministry for finalizing this manual after a series of consultative meetings and workshops

### Ayele Teshome (M.D, OB/GYN)

Director, Health Service Quality Directorate Federal Democratic Republic of Ethiopia Ministry of Health

### **Acknowledgement**

The HSTQ document has been developed by the Health Service Quality Directorate of the Ministry of Health. The contribution and insightful inputs given by all HSQD experts helped in firming up the guideline within a set time period.

We appreciate the efforts and initiatives of the entire team of HSQD (mentioned below), who have coordinated the process of developing these guideline and making substantial technical contributions. Contribution by the following individuals deserves a special recognition for their robust and sound inputs collating all available information and putting their best efforts in preparation of the final document.

### **Quality Improvement Guideline**

Dr. Ayele Teshome FMOH HSQD

Dr Eyob Geberhawariat FMOH/WHO

**Quality Structure Guideline:** 

Dr Daniel Gebremicheal FMOH/MSGD

Dr. Ayele Teshome MOH/HSQD

**Clinical Audit Guideline** 

Dr. Ayele Teshome FMOH HSQD

Dr Eyob Geberhawariat FMOH/WHO

**Maternal Care Quality Standards** 

Dr. Ayele Teshome FMOH HSQD

Dr Eyob Geberhawariat FMOH/WHO

Dr Malede Birara St Paul Millennium Medical College

Sr. Aynalem Legesse FMOH/HSQD

Dr Birhanu Sendeq

### **Neonatal & Child Care Quality Standards**

Dr. Ayele Teshome FMOH/HSQD

Dr. Dagnew Muluneh FMOH/WHO

Dr Fatuma Abdella FMOH/WHO

Dr. Gizeneshi Wondemneh Minilik II General Hospital

Dr Samuel Z/kidus FMOH/HSQD

Mahlet Asayehegne FMOH/HSQD

### **HIV Care Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Mr. Andargachew Abebe FMOH HSQD

Dr Negash Tulu ICAP

Dr. Aster Shewamare Zewditu Memorial Hospital

Dr Mohamed Zeydan ICAP

Mr.Tamerat Asefa ICAP

### **TB Care Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Mr. Abiy Dawit FMOH/HSQD

### **Malaria Care Quality Standards**

Dr. Ayele Teshome FMOH HSQD

### **Nursing/Midwifery Care Quality Standards**

Sr. Gezashign Denekew FMOH/HSQD

Yezabinesh Kibre Ethiopian Midwives Association

### Non Communicable Diseases care Quality standards

Dr. Atlibachew Teshome FMOH/HSQD

Dr. Wubayahu Walelgne FMOH DPCD

Dr. Molla Gedfaw FMOH DPCD

Dr Samuel Z/kidus FMOH/HSQD

### **Surgical Care Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Esayas Mesele FMOH HSQD

### **Standard Treatment Guideline Adherence Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Dr. Robel Wondimagegnehu FMOH/HSQD

### **Patient safety Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Dr. Robel Wondimagegnehu FMOH/HSQD

### **Patient Centred Care Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Dr. Robel Wondimagegnehu FMOH/HSQD

### **Data Quality Standards**

Dr. Ayele Teshome FMOH HSQD

Mr. Habtamu Milikias FMOH/HSQD

Mr. Yakob Seman St Peter Hospital

We would also like to express our sincere gratitude to Dr. Daniel G/Michael for his continued support, comments and overseeing of the progress of the development of the document.

We would finally like to appreciate contributions of ICAP Ethiopia, IHI, and CHAI through the process of the development and finalization of the guideline.

### 1 TABLE OF CONTENTS

ection I	
JALITY IMPROVEMENT GUIDELINES	<b>«</b> »
INTRODUCTION	
QUALITY IMPROVEMENT CONCEPTS AND DEFINITIONS	
PRINCIPLES OF HEALTH SERVICES QUALITY IMPROVEMENT	. ii
1.1.1 Client focus	. ii
1.1.2 Provider focus	٠i.
1.1.3 Systems and processes focus	٠i.
1.1.4 Team work	٠i.
1.1.5 Effective communication	٠i.
1.1.6 Use of data	٠i.
QUALITY IMPROVEMENT AS A CYCLICAL PROCESS	٠.
THE QUALITY IMPROVEMENT MODELS	vi
1.1.7 KAIZEN: 5-S	vi
1.1.8 MODEL FOR IMPROVEMENT	.x
CTION II	<b>«</b> »
'HIOPIAN QUALITY STRUCTURES	<b>«</b> »
2.1. INTRODUCTION	. 1
2.1.1 FMOH	. 1

2.1.2 RHBs	2
2.1.3 ZHD and WoHO level	3
2.1.4 Health Facility level	3
SECTION III	«»
CLINICAL AUDIT GUIDELINES	«»
3.1. INTRODUCTION	1
3.2. DEFINITION	1
3.3. RATIONALE	1
3.4. THE FIVE STAGE APPROACH IN CLINICAL AUDIT	2
3.4.1 Stage 1 – Planning for audit	2
3.4.2 Stage 2 - Standard and quality measure selection	3
3.4.3 Stage 3 – Measuring performance	4
3.4.4 Stage 4 – Making improvements	7
3.4.5 Stage 5 – Sustaining improvements	7
SECTION IV	«»
HEALTH SERVICE QUALITY STANDARDS	1
4.1 INTRODUCTION	1
4.2 GENERAL DIRECTION	3
4.3 HEALTH SERVICE QUALITY STANDARDS	5
Table 1: HEALTH SERVICE QUALITY STANDARDS FOR MATERNAL HEALTH CARE	5
TABLE 2 HEALTH SERVICE QUALITY STANDARDS FOR NEONATAL AND CHILD HEALTH CARE .	30
HEALTH SERVICE QUALITY STANDARDS FOR COMMUNICABLE DISEASES CARE	57
HEALTH SERVICE QUALITY STANDARDS FOR NON COMMUNICABLE DISEASES	94
HEALTH SERVICE QUALITY STANDARDS FOR STG ADHERENCE	124

HEALTH SERVICE QUALITY STANDARDS FOR SURGICAL SERVICES	128
NURSING AND MIDWIFERY SERVICE QUALITY STANDARDS	137
QUALITY STANDARDS FOR CRC AND PATIENT CENTERED CARE	149
PATIENT SAFETY QUALITY STANDARDS	153
HEALTH CARE DATA QUALITY STANDARDS	158

### Introduction

The huge investment on health infrastructure construction and health workforce development for the Page | 1 expansion of primary and secondary health care unit in the last 20 years has been a huge success for *Ethiopia*. However, the wide disparities of equity and quality of health care delivery across and within regions have been worrisome for the ministry. Hence quality and equity are pillars and cornerstones of the transformation agenda in the strategic plan (HSTP 2016 to 2020).

Dramatic improvement in quality of health care services is within reach through underpinning and parallel reforming transformation agendas (f Information Revolution and Woreda transformation) combined with the Compassionate Respectful Caring (CRC) initiative by health care providers.

Quality improvement in health institutions has been exercised in different institutions and hospitals with support from the partners' organization since 2009. Yet an organized effort to lead it in a vertical fashion has been run by the ministry of health since 2011 with Quality planning and auditing of Ethiopian Hospital reform implementation guideline.

The National Quality strategy provides a roadmap for addressing key quality challenges in health care institution through conducting regular quality planning, quality improvement and quality assurance activities for accelerating the improvement of health care quality nationwide. The focus of Quality planning is to set standard structure and standard protocol as in the process with shared responsibility and ownership targeting to 100% in the reference of the best evidence based practice guidelines.

However Quality improvement is aimed at community health outcomes as road map mainly measured by the domain of preventing premature death, reducing disability and improving quality of care. Sometimes the problem lies in designing the perfectly ideal and right change idea for the wrongly identified problem where there are bigger challenges for continuous quality improvement plan which might lead to new innovative and best evidenced based practice in the existing standard treatment protocol.

The Federal Ministry of Health (through its Medical Service General Directorate's the Health sector quality directorate) has prioritized the following strategic transformation focus areas from 2016-2020. These are;

- Improving the quality of care for Maternal, neonatal and child health
- Improving the quality of care for Communicable diseases like HIV/AIDS, TB, and Malaria

- Improving the quality of care for major Non communicable diseases like cardiovascular diseases, Diabetes, chronic respiratory disease, and epilepsy
- Improving the quality of care for Clinical and surgical services with special emphasis on scaling up and working towards universal access for essential and emergency surgical and anesthesia care.

### Rationale

The national health care quality strategy aims at providing quality health services to all people of Ethiopia. In realizing this commitment, the ministry through the Health Service Quality Directorate developed this Quality Improvement Framework with the purpose of encouraging the health workers at all levels and other stakeholders in the sector to institutionalize and develop a culture of quality in health care provision using available resources. The purpose of these guidelines is to enable all health facilities to have a credible quality improvement program, so that they not only provide full range of services, but also ensure that the services meet quality standards.

The Federal Ministry of Health will be using these guidelines and the quality standards to harmonize efforts and implement all the quality initiatives through the well-established EHIAQ platform, with the ultimate aim of improving the quality of care and subsequent health outcomes of the Ethiopian population, by 2020.

### Scope of the document

HSTQ has the following three sections:

Section I: Quality improvement guidelines

Section II: Ethiopian quality structure

Section III: Clinical audit guidelines

Section IV: Health service Quality standards

### **Development of the guidelines**

These guidelines is a result of consultative and collaborative efforts in designing and implementing the National Quality Strategy, organized and managed by Ministry of Health through Health Service Quality Directorate. The development process included recommendations from MOH representatives, Development partners, Professional Associations and Health facilities and workers working in the health sector.

### **Target Audience**

The QI guideline is intended to be used by all stakeholders (policy makers, RHBs, academic hospitals, development partners, health facility leaders, health care providers and clients) working in the health sector. And especially, it is to be used by front line workers in health facilities.

**SECTION I** 

**QUALITY IMPROVEMENT GUIDELINES** 

### INTRODUCTION

The National Quality Strategy (NQS) was launched in March, 2016 with the goal "to consistently improve the outcomes of clinical care, patient safety, and patient-centeredness, while increasing access and equity for all segments of the Ethiopian population, by 2020." Following the great success in expansion of health services through rapid expansion of infrastructure, increased availability of skilled human resources and increased budgetary allocation, improvement in Quality of health services is now the priority.

Quality improvement (QI) in health care is the ability of health providers to provide care that will address the clients' needs in an effective, responsive and respectful manner on continuous basis. Quality improvement aims to identify, implement and maintain best clinical and organizational practices that ensure better care for clients in order to achieve positive health outcomes.

Quality in Health System has two components:

- Technical Quality, on which, usually health service providers are more concerned about it and has a bearing on outcome or end-result of services delivered.
- Service Quality, which pertains to those aspects of facility based care and services; usually a concern for patients, and has bearing effect on patient satisfaction

### QUALITY IMPROVEMENT CONCEPTS AND DEFINITIONS

To date, there is no universally accepted definition of "quality" within the global health care community. Generally, the definition from the US Institute of Medicine (IOM) issued: "The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."

Within a similar framework, Dlugacz, Restifo, and Greenwood (2004) definequality more specifically to be "A care that is measurably safe, of the highest standard, evidence-based, uniformly delivered, with the appropriate utilization of resources and services."

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- centered, efficient, accessible, comprehensive, affordable, and timely. With these prioritize domains; quality in Ethiopia is defined to be:

"Comprehensive care that is measurably safe, effective, patient- centered, and uniformly delivered in timely way that is affordable to the Ethiopian population and appropriately utilizes resources and services efficiently."

İ

There are six generally accepted dimensions, or aims of quality as laid out by the IOM are:

- 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-centere: 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 inequality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status<sup>7</sup>

In drilling deeper into 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, every time.

### 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 everyone —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)."

Quality improvement begins with an identification of a clear aim statement or charter, to answer the question: "What are we trying to accomplish?" Several overlapping and complementary QI model sexist, 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 thought to be the *engine* driving improvement, while the *Model for Improvement* can be seen as the "vehicle" that provides structure for improvement. Specifically, Kaizen focuses on improving efficiency and lowering cost, through a 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 sustained improvement.

### 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. Processes consist of both internal quality assurance

and external quality assurance. For instance, these monitoring and improvement activities may be internally motivated (problems are identified and addressed from within a healthcare facility by a facility based QI team) or externally required (standards are set, and problems are identified through inspection by government agencies (woreda, zone, region, federal).

### PRINCIPLES OF HEALTH SERVICES QUALITY IMPROVEMENT

The principles of health services quality improvement are:

### 1.1.1 Client focus

Clients are the reasons for existence of healthcare providers. They provide the purpose for the structure. One of the main goals for quality improvement is to meet the expectations of the clients both internal and external. External clients are generally the population served, including patients, caretakers, families, and communities. Internal clients are health workers who may need a service from a colleague to perform a job function.

Knowing the needs of clients both felt and unfelt is important for health facility or institution to identify issues related to quality improvement. Felt needs are those, which a client is aware of, while unfelt needs are those that the client is unaware of. For a quality improvement Program to succeed it has to carefully identify its clients and learn their needs and expectations and then find ways to meet them.

### 1.1.2 Provider focus

The health workers play crucial role in provision of health services. For them to execute their responsibilities they need support from administrators. The support include getting clear job description, receiving clear and immediate feedback on performance, equipment and supplies, good work environment, recognition, motivation, etc.

### 1.1.3 Systems and processes focus

A system is a set of interacting and interdependent parts and processes working together to accomplish an activity. A process is a series of steps used to perform a task or accomplish a goal. A system is made up of inputs processes and outputs. Health care delivery involves a number of processes occurring simultaneously, each affects the quality of services offered. In order to do an activity, it is important to understand what need to be done, which steps have to be taken, and in which order.

### 1.1.4 Team work

A team is a group of professionals working together towards achieving a common goal. In health care, service deliveries are too many and complex for one health care provider to work individually. Teamwork is a process involving health workers of various

disciplines or professionals to accomplish a task. Collaboration and assisting each other is necessary for effective teamwork.

The team should also be able to lobby, sensitize, and share information with others on what they are doing. The purpose of doing so is to get support from leadership of the organization/ health facility so that leadership can incorporate the QI plan into overall plan for the health facility.

### 1.1.5 Effective communication

Effective communication is a process of sharing or exchanging information between two or more persons. It involves the transfer of information, ideas, emotions, knowledge and skills between people. Effective communication is essential for ensuring the quality of health care delivery and the satisfaction of users or clients.

### 1.1.6 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 based practice. This requires use of correct, complete and current data.

### QUALITY IMPROVEMENT AS A CYCLICAL PROCESS

We do planning in our everyday lives and in our facilities also. It is equally important to plan for QI. Planning for quality is not an individual task but should be done by the whole QI team and staff of the health facility. It is the task of all staffs to carefully plan activities that will facilitate the implementation of QI activities in their facility. A budget should be prepared with the plans so that resources are committed for quality improvement. The activities should be well organized, systematically carried out and properly coordinated.

QI is a cyclical process involving following major four steps:

### • Setting up Standards and Measurable elements (see section IV)

To provide consistently high-quality services, the foremost requirement is to set quality standards against which the performance can be measured. These standards must meet the specific requirements of the health system and encompassing all three aspects of Quality of care i.e. Structure, Process and outcome. We need standards to check whether our activities meet client and professional expectations. Standards are usually set at the national level but can be adapted for the lower levels. Protocols and Guidelines can also help us to improve the quality of our services.

### • Communicating the staff and assessment of health facilities against the set standards

Communication plays a very important role in QI. Whatever decision the SMT and QU takes must be well understood by all members and properly communicated to other staff. It is important to communicate these standards set by the facility to all members of staff. Each facility has its own effective way to communicate information to the staff.

Following the communication, the facility conducts assessment of the health facility performance against pre-determined standards of care. Such an assessment provides an understanding of the areas where the actual performance falls short of the set standards. This can be done using different methods including:

- Conducting Clinical audit (see *section III*)
- Auditing regularly collected and reported data's
- Collecting feedbacks from customers and their families, facility workers, regulatory agencies, insurance agencies, supportive supervision findings etc.
- Identify, Prioritize, Define and analyze the problems

Once the assessment is done and problems or gaps are identified, we need to prioritize the problems as we cannot solve all the problems at the same time. We can determine the priority problem areas as well as opportunities for improvement. It may be helpful to first select the

simple ones that we have resources to solve. Once we see results of our activities, we are encouraged to do more.

Once the problem areas have been identified and prioritized, we try to define them. We state them as problems. What we want to accomplish?

After the problem is defined, we analyze to find the root causes to the problem. Simple methods for problem analysis include Brainstorming, 5 why's, driver diagrams, fish bone diagrams etc.

### Suggest a solution and Preparing & implementing action plan and Evaluate

After analyzing the problem, the team should suggest ways of correcting the problem. Again, this can be done through brainstorming to gather a lot of possible solutions. You can also find out how other facilities have addressed similar problems (benchmarking). Some problems are easy to solve while others are difficult. The solution you choose should be practicable and within your available resources (money, material and human)

Once a decision is made on the solution, the next step is to develop an action plan and implement it. The action plan spells out the activities to be undertaken based on the solutions, persons responsible, time frame for each activity, resources required, expected output and how monitored. After passage of an agreed time-frame, follow-up assessment is required to be done to ensure that the plan has been adhered and the gaps have been closed. For follow up, indicators should be monitored to see if we are achieving our goal before the final evaluation

As the elements related to quality are dynamic in nature, gaps may be found in those areas also, where none existed in the past /previous assessment (s). Therefore it is important to repeatedly assess a facility for incremental changes for the improvement.

At the end of the agreed period we check to see whether we have achieved our goal. Then the cycle continues, either for improvement if the goal is not achieved or for sustainability if the goal is achieved.

While implementing a change idea for a particular gap identified, all QI processes generally use four sequential steps: *Plan, Do, Study, and Act* 

### 1) Planning phase

- define the problem to be addressed
- collect relevant data, and
- ascertain the problem's root cause

### 2) Doing phase

- develop and implement a solution, and
- decide upon a measurement to gauge its effectiveness

### 3) Studying phase

- confirm the results through before-and-after data comparison;
- Measure the new processes and compare the results against the expected results to ascertain any differences.

### 4) Acting phase

- Document results
- Inform others about process changes, and
- Make recommendations for the problem to be addressed in the next PDSA cycle.

### THE QUALITY IMPROVEMENT MODELS

The design and context in which QI programs are implemented, as well as the methods used to carry out the changes, matter greatly. The evaluation of QI approaches to decide which one is best poses substantial challenges given the multitude of changes occurring simultaneously during implementation as well as the existence of concurrent external and internal stimuli to improve care. There is little research assessing the effectiveness of one or more hospital or national quality strategies. The lack of evidence is largely a result of the difficulties of evaluating this type of intervention and of proving that the results are due to the strategy and not to other changes.

In sum, no quality improvement methodology can be recommended over another on the basis of evidence of effectiveness, ease of implementation or costs. From what is known, no quality improvement program is superior and real sustainable improvement might require implementation of some aspects of several approaches be it together or consecutively. Improvement experts agree that "one size fits all" does not apply to improvement approaches. Rather context and available evidence should guide the choice of improvement approach to be used.

### 1.1.7 KAIZEN: 5-S

Kaizen (5-S) is a management tool, used as a basic, fundamental and systematic approach for productivity, quality and safety improvement in all types of organizations. It is a philosophy and a way of organizing and managing the workspace and work flow with the intent to improve efficiency of work by eliminating waste, improving flow and reducing process reasonableness.

Improvement of work processes often is sustained only for a while, and workers drift back to old habits while managers lose determination and perseverance. 5-S in contrast involves all staff members in establishing new disciplines so that they become the new norms of the organization i.e. by internalization of concepts.

5S is literally five abbreviations of Japanese terms with five initials of S. These are *Seiri*, *Seiton*, *Seiso*, *Seiketsu*, *and Shitsuke*. In English, 5Ss were translated as *Sort*, *Set*, *Shine*, *Standardize*, *and Sustain* respectively.

### 1.1.7.1 **SORT**

The practice of Sort (Seiri) is to remove unused stuff from your working place. It starts from the identification of unwanted items in the workplace. It has to be initiated by disposing everything that is no longer needed after identification of unwanted items. A Simple way of Sorting is to categorize all equipment, machines and furniture into three (3) categories; Unnecessary (not need it), May/May not be necessary (May not need it), and Necessary (Need it)

*Unnecessary:* Unnecessary items should be discarded, if the item is not repairable. If the item is repairable, repair it and stored as it may needed other department/sections or other hospitals.

May/May not be necessary (May not need it): May be necessary items mean that the items are not used often (once a month) or it is functioning but not used in current workflow. This kind of items should be stored in sub-store of department/sections or should be used in other department/sections which need them.

**Necessary** (**Need** it): Necessary items should be organized properly according to current workflow. This will be explained in "Setting" activities.

Remaining items have to be arranged and stored according to frequency of use. All areas including floors, cupboards and tabletops have to be cleaned. The changes made have to result in more efficient work than before. A central store may be allocated to store

unwanted items for 'just in case. Rules for regular disposal need to be established.

### 1.1.7.2 **SET**

The practice of Set (Seiton) is to organize all necessary items in proper order for easy services provision. It emphasizes the proper orderliness of things in the workplace. Signboards are set at the entrance for easy access of the locations of the organization. All locations are named or numbered. Every item has to be labeled with an inventory number (discretely) and assigned a location. The assigned location is marked on the item and at the location. Visual controls including color coding are practiced. Files and cupboards are indexed. Items are placed to facilitate easy access and to optimize workflow.

### 1.1.7.3 SHINE

The practice of Shine (Seiso) is to maintain high standards of cleanness. All the items including the floors, walls, windows and equipment are cleaned. Appropriate cleaning tools, methods and materials are identified and practiced. Waste bins are made available at required places. Cleaning maps and schedules are developed for the continuous practice of cleaning.

### 1.1.7.4 STANDARDIZE

Standardization (Seiketsu) is to set up the sort, set and shine as norms in every section of health facility. It establishes the regular and continuous practice of maintaining tidiness, orderliness, and cleanliness (first 3-Ss). All processes and procedures of the organization are standardized to reduce the cycle time, to reduce waste, to improve safety and to improve outcome. Thus, the following kinds of activities are implemented in this phase:

- Development of Standard Operational Procedures (SOPs)
- Display, marking of safety signs and marks
- Garbage typing collection system (infectious/non-infectious, recycling etc.), following the national guidelines
- Zoning for storing/parking equipment

"Checklists" should be developed for each activity/service area and utilize it for standardization.

**Equalization** is another important thing in this phase for reducing variability. Variability is the cause of creating needless work in the workflow. Therefore, consider equalizing the followings:

- Individual capacity: Standard Operational Procedures,
  Information sharing
- Quality, Productivity and Safety: Standard Operational Manual and Standard Operational Procedures

- Staff's mindset towards to CQI activities: Fair performance evaluation and awards to good practice, equal opportunity of training
- Information: Sharing of policy/strategy for QI and current situation of CQI activities

### 1.1.7.5 **SUSTAIN**

Sustain (Shitsuke) is to train and maintain discipline of the health care workers engaged. It is about the discipline to maintain the consistent practice of 5S. Training programs are carried out for employees. Competitions are organized and good practices are rewarded. Authoritarian rule is not practiced and employees are motivated to internalize 5S. Training should include organization-wide meetings where management and employees announce their results. This acts as an incentive to motivate staff and to practice benchmarking.

Once again, since 5S tasks appear minor, staff may not concentrate on 5S after the initial implementation. Inspections through supervision teams and continuous evaluations of all work units are essential to keep track of the 5S program.

The following activities are expected to be conducted in this phase:

- Periodical training of staff
- Periodical monitoring by both supervision teams

- Quality competitions and rewarding good practices
- 5S Poster development and display
- Establishment of 5S corner within department/section
- Display of 5S progress chart/table/graphs

#### "5S in mind":

5S is usually used for "things", however, it is important to implement "5S in your mind" for practicing 5S activities appropriately.

- Sort your mind to concentrate on your work
- Set your mind to organize your work
- Shine and Standardize your mind to enjoy your work and maintain your way of working
- Sustain your mind to carry out your work actively and maintain your work quality.

#### "5S in brain":

- Sort in your brain is to clarify your work on what / for whom / what purpose / how / by who and by when
- Set in your brain is to prioritize your work
- Shine in your brain is to manage your work step by step
- Standardize in your brain is to remove barriers of managing your work
- Sustain of your brain is to solve problems and execute your work continuously

Doing 5S of the mind and brain is very important for changing your attitude in positive way and accelerates 5S implementation appropriately.

### 5s as foundation of all QI programs:

The Implementation of 5S will serve as a foundation of all other QI Initiatives. The 5S principles are implemented starting with a few targeted areas and use the results from these areas; to win support from the remaining areas to implement the 5S principles. On improvement of the work environment from 5S implementation; then QI can now come in to improve various aspects of quality in health services, including the technical issues.

Hence, after the 5-S step, QI process meets client's satisfaction. However, even though stepping up to QI process, 5S activities must be continued to maintain the foundation of QI.

Hence, the five steps of Sort-Set-Shine-Standardize-Sustain are a sequence of activities to improve the work environment to be as convenient and comfortable as possible and thereby also improve service contents with respect to preparedness, standardization, and timeliness. 5S activities are the tools to prepare the best obtainable stage for them to make the most use of their skill and knowledge.

With these principles, KAIZEN (5-S) is going to be used as an entry point or initial step toward continuous quality improvement of the health care delivery.

### 1.1.8 MODEL FOR IMPROVEMENT

Improvement comes from the application of knowledge in making changes in response to three fundamental questions.

- What we are 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, 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. 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. (See figure 1)

The model is applicable for both simple and sophisticated situations and applied efforts may differ depending on the complexity of the product or process to be improved

QI works by addressing processes of care with in the health system. "Every system is perfectly designed to achieve the result it achieves".

The emphasis on systems is central to QI since poorly designed systems generate inefficiency, waste, poor health care quality and negative health outcomes.

QI methods deliberately tackle a range of quality problems among the many interrelated parts of a system. Key system functions are analyzed to identify unnecessary, redundant, or missing parts. Based on analysis of the current system, a QI team hypothesizes and tests changes in the organization of care that may result in improved quality and efficiency. Increasing efficiency with in a system by promoting only effective activities and ceasing all unnecessary, wasteful, and potentially harmful activities can yield important quality benefits & cost savings

••

### 1.1.9 SUMMARY

In Ethiopia, Kaizen is thought of as *the engine* driving improvement, while the Model for Improvement can be seen as the *"vehicle"* that provides structure for improvement. Specifically, Kaizen focuses on improving efficiency and lowering cost, through a 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 sustained improvement.

Currently, Federal Ministry of Health of Ethiopia is planning to cascade QI works in all health institutions down to the level of the primary health care units using the already established EHIAQ (Ethiopian Health Institutions Alliance for Quality) platform. To avoid confusion with use of different QI methodologies, it is highly recommended to use Kaizen and Model for Improvement by all stakeholders working in the health sector including development partners.

Hence, in Ethiopian context, Kaizen and Model for Improvement (the 5-S and the Improvement Collaborative Approach) is going to be applied in improving the health care service delivery of the country.



Figure 1: PDSA cycle

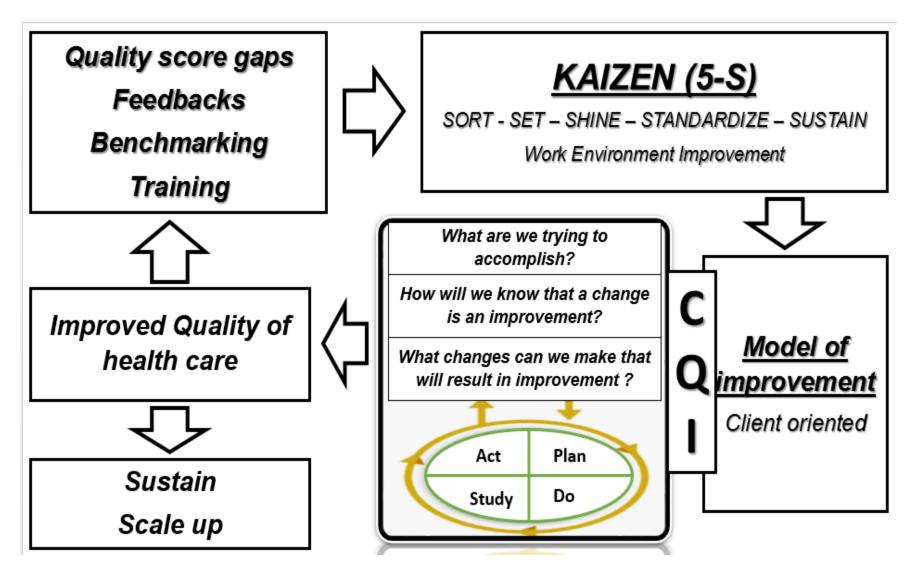


Figure 2: schematic diagram to show the linkage between Kaizen and model for improvement

### **SECTION II**

### ETHIOPIAN QUALITY STRUCTURES

### 2.1. INTRODUCTION

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

QI activities should be an integral part of service delivery and applies 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 drive from existing structures for effective implementation.

For strengthening the QI activities, FMOH recommended 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 HealthBureau:** Quality Unit (QU) led by 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 / HPMT

Community level: Health Development Army (HDA) working as

Quality Improvement Team (QIT)

### 2.1.1 FMOH

In the FMOH, *HSQD* will play a leading role to operationalize all quality improvement works in the health sector. Coordination and Harmonization of all quality improvement efforts in the other directorates and agencies will be guided and overseen by the *National Health care Quality Steering Committee (NHQSC)*, which is led by HSQD and members represented by directors/ assistant directors of all directorates/agencies and relevant technical experts from developmental partners working in the health sector. The activities to undertaken by the NHQSC is guided by a TOR (see annex)

### Primary responsibilities of FMOH include:

- Developing policies, strategies, guidelines, protocols, manuals
- Coordinating countrywide quality improvement program
- Strengthen the quality structure
- Provide mentoring and supportive supervision to health facilities
- Developing clinical guidelines and protocols
- Setting national standards
- Monitoring quality of care
- Validating, ranking and recognizing performance of facilities
- Catalyzing and coordinating the EHIAQ network and sharing best experiences across the country
- Providing training to RHBS, ZHD, WoHO and health facilities
- Providing technical support on
  - Strengthening had
  - o EHSTG implementation
  - Medical equipment management
  - APTS and community pharmacy establishment
- Strengthening community forums
- Strengthening good governance to clients and staffs
- Strengthening staff motivation

- Mobilizing resources for quality improvement
- Identify structure gaps (medical equipments, skill lab establishment, it infrastructures) and support their
- Conduct national review meetings (evaluate performances, identify areas of QP and QI, sharing experiences b/n regions, giving national directions)
- Coordinate and conduct quality summits
  - National quality forum (share QI project experiences, publications)
  - o Envisioning African and international quality forum
- Establishing quality resource center
- Strengthening private public partnerships

### 2.1.2 RHBs

RHBs will establish a *Quality Unit*. The primary role of the Quality Unit will be to provide overall guidance, mentoring and monitoring of QI efforts in the Region through facilitation, coaching, monitoring and supervision.

The Quality Unit in RHB will be assisted by a *Regional Health Care Quality Steering Committee (RHQSC)*, which will consist of representatives from all programme divisions in the RHB.

Some of the responsibilities of the Quality unit are:

- Develop region specific quality strategies and roadmap to operationalize it
- Developing region-specific standards and adapt national standards
- Co-ordination, guidance and coaching of QI activities in the region
- Organizing quality trainings, workshops and seminars
- Mentoring and supportive supervision to health facilities
- Review progress of QI activities, identify gaps and prepare action plans
- Encouraging high performance by validating institutions and promoting best practice
- Establishing reward/incentive systems

### 2.1.3 ZHD AND WOHO LEVEL

Quality focal persons in ZHDs and WoHO will function to:

- Co-ordinate and support health facilities in their respective zones and woredas through Co-ordination, guidance and feedbacks to the facilities
- Promoting QI awareness
- Monitoring performance of health facilities
- Supporting the training of facilities in quality assurance

- Encouraging high performance by comparing institutions and promoting best practice
- Organizing training for health workers to improve their knowledge and skills

### 2.1.4 HEALTH FACILITY LEVEL

### 1. Quality Unit (QU) in hospitals

The Quality Unit will have a *physician* assigned to work in the unit as his/her main / regular responsibility and coordinatingall QI activities in the facility. The Quality Unit will be assisted by a *Quality committee* represented by heads of all clinical departments and selected experts working in the health facility and will work to mainstream QI concepts and activities in all departments. The head of QU is responsible for coordinating the activities of the QU and Quality Committee. He / She is member of the Senior Management Team and will work as a link person between the QU and the Hospital Management.

Generally, the Quality Unit will function to:

- Coordinating and providing guidance and information to heads of department and Senior management teams
- Coordinate all QI projects
- Coordinate the implementation of guidelines, protocols and Quality standards

- Ensure adherence to quality standards
- Monitoring the implementation of quality activities
- Promoting QI awareness
- Coordinate clinical audit programmes
- Conducting patient satisfaction surveys
- Coordinate the use of facility data to improve quality of care
- Identify quality problems and drawing up action plans
- Disseminating information on QI to staff
- Regular reporting of quality scores
- Ensure interdepartmental coordination

### 2. HPMT / Quality Committee in Health centers

This team / committee identify and solve problems that emerge in the health center, with every worker in the team or committee being part of the action team. The team / committee will refer problems that they cannot solve to management.

#### 3. Role of SMT

The SMT should be committed to QI and control programmes in the health facility. They should provide all the support needed to carry out QI activities. Management should willingly commit the necessary resources to QI.

#### 4. Role of Staff

All staff should be aware of the need to improve quality in their routine duties. They should also bring quality issues to the attention of the QU that are beyond them that require more analysis and planning. Members of staff assigned to carry out specific quality improvement tasks should see those tasks as part of their routine responsibilities rather than extra duties.

### 5. Community Quality Improvement Team (QIT)

This team should be led by level I or II certified member of the women health development army and will get direct support from health extension workers. The team should be involved in the community based data collection and data utilizations for decision process, and in the identification and scaling up of best practices in the community. This platform will be a key for enhancing the health literacy of the community at large.

### **SECTION III**

### **CLINICAL AUDIT GUIDELINES**

### 3.1. 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.

## 3.2. 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.

### 3.3. 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.

# 3.4. 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.

## 3.4.1 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:

#### a) Involve 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 programme 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.

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

#### c) 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

# 3.4.2 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 guidance:

- 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.

## 3.4.3 Stage 3 - Measuring performance

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

#### a) 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

O 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

o Can be retrospective/ cross sectional / prospective.

### • Sample selection methods

O 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

## b) 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).

#### c) 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).

#### d) 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.

## 3.4.4 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 have 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 programme of change activity and post-identification of the findings from audit, to ensure necessary changes happen.'

## 3.4.5 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 program 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.

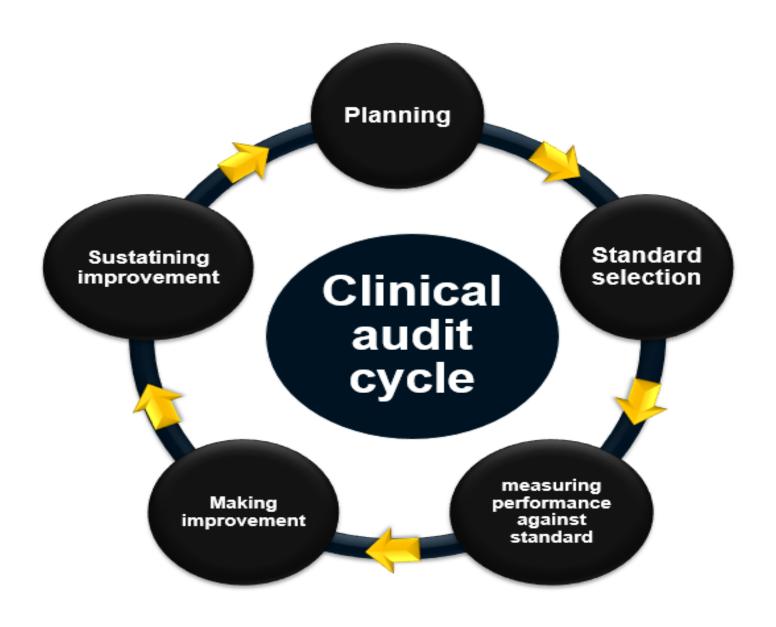


Figure 3: Clinical audit cycle



HEALTH SERVICE QUALITY STANDARDS

### 4.1 INTRODUCTION

A Standard is a statement of expected level of quality and it states clearly the

- Inputs required to deliver a service
- How things should be done (process) and
- What the output or outcome should be.

When we compare what is expected in the standards to what we do, we shall be able to identify any quality gaps and then make plans to improve upon it.

Clinical Standards can be set for any level of the healthcare system i.e. national, regional or facility level. The use of standards will ensure quality care and reduce the differences in managing patients among prescribers. It will also get value for money.

In carrying out any health activity there are three stages that are followed, using the well-accepted 'Donabedian model' frame-work. We need inputs (resources), we should also define clearly how things are going to be done (processes) and know what results to expect (outcome). Standards must therefore be set for each of the three areas.

#### • Input Standards

Input or structure standards define the resources that must be supplied for the activities to be carried out e.g., the physical structure, people, equipment and materials. Evaluation of the quality that relies on such structural elements implicitly assumes that well qualified people with well-appointed and well organized settings will provide high quality care. However, it is not always the case. Also, it is acknowledged that, full compliance to infrastructure and HR norms may not be possible. However, after meeting the minimum infrastructure and HR norms, it would be logical to expect a minimum quality in the available services. The proposed system strives to provide quality health care within these constraints.

#### Process Standards

Process standards describe the tasks or steps that must be carried out until the activity is completed (effectiveness, safety, patient centeredness, efficiency, equity, timeliness of care)

#### • Output/ Outcome Standards

Output/ Outcome standards describe the outputs or results of the activities carried out and denote to what extent goals of the care have been achieved.

The main pillars of the Quality Measurement systems are *QUALITY STANDARDS*. Quality standards are divided in to *QUALITY STATEMENTS* which in turn will be again divided in to *QUALITY MEASURES*.

National Quality Standards have been developed taking into consideration the existing relevant Quality standards and operational/clinical guidelines through a consultative process with experts and stakeholders.

The quality unit will coordinate regular internal assessment *monthly* (except the CRC & patient centeredness quality score which is going to be done *quarterly*). Action plan will be prepared on observed non conformities. The 'action planning would need allocation of resources for traversing the gaps. Therefore, each identified gap and its 'action-plan' would require the following three subsets of activities:

- Resource Allocation for each gap
- Designating a person, responsible for the action
- Time-frame

Apart from internal assessment that is integral part of facility level QI activities, there will be periodic assessments by RHBs and FMOH for mentoring, supportive supervision, recognition, enforcement or punitive purposes.

Assessment process comprises of gathering the information from many sources, such as:

• Staff interview

- Review of records
- Observation
- Interviews with the patients and attendant

For each of the priority areas (Maternal Health, Neonatal and Child Health, Communicable Diseases, NCD, CRC and Patient centeredness, Patient Safety, Surgical Service, STG adherence Standards, data quality, nursing service quality), to get the specific quality score, the total score of the hospital performed will be divided by the total score expected (excluding NA quality measures) and the result will be multiplied by 100%.

### **4.2 GENERAL DIRECTION**

Unless specific direction is provided for a specific quality measure, the following general guidance will be used for ALL QUALITY MEASURES requiring **CLIENT INTERVIEW**, **STAFF INTERVIEW** and **CHART REVIEW** 

- For those quality measures requiring CLIENT INTERVIEW for verification, select5 clients leaving the facility after service use on the day of assessment
  - Conduct EXIT INTERVIEW for the required information. (Alternatively, TELEPHONE CALL can be used if clients served in the previous month are reachable)

- Score each client response from 2 if the criteria is met
- Score 0 for each client response if the criteria is unmet
- NA for each specific case not identified
- For those quality measures requiring STAFF INTERVIEW for verification, select 4 STAFFS (as specified in the remark section) working in the facility on the day of assessment
- Conduct INTERVIEW/ SKILL demonstration for the required information.
- Score each staff response from 2 if the criteria is met
- Score 0 for each staff response if the criteria is unmet
- For those quality measures requiring **CHART REVIEW** for verification, data source will be the previous month HMIS register in the specific HMIS register
- Select 10 MRNs from the HMIS register (one MRN randomly from all MRNs of every 3<sup>rd</sup> day of Day 1-30)
  - If the day is weekend / holiday and the room is serving only for working days, select 2MRNs from the next working day
  - If you cannot find the specific clinical condition in a specified day of the month, use the next days of the register until you are able to find
    the required clinical condition
- Trace the charts from the medical record room
- Verify if the required information is documented in the chart
- Each chart will be scored from 1 or 0 depending on the presence or absence of the information respectively, and totally the QUALITY MEASURE will be scored from 10
  - If the documented information is not legible, that specific chart will be given a score of 0
  - Absence of documentation is taken as the service was not provided
  - NA for each chart for which the specific clinical condition is not identified.

## **4.3 HEALTH SERVICE QUALITY STANDARDS**

## Table 1: HEALTH SERVICE QUALITY STANDARDS FOR MATERNAL HEALTH CARE

Quality statements	Quality measures	Score	Remark / verification criteria's
	The health facility has an appropriate working system		
	es, supplies and equipment for providing quality mater		rvices.
MH1.1Water, energy, sanitation, hand-washing and waste-disposal	continuous electric supply with backup generator is available	1	
facilities are functional, reliable, safe and sufficient to meet the needs of	In case of power cut, generator is automatic or can be started within 5 minute	1	
staff, women and their families	continuous water supply is available	1	
	adequate backup water source is available when there is interruption from the main source	1	
	functional telephone is available in Liaison office	1	
	Telephone service is available for internal communication	1	Central operator or separate lines in laboratory, pharmacy etc.
	Telephone service is available in the compound for public use	1	Alternative means for mothers to use if there is no public phone
	leak-proof covered and labelled waste bins and impermeable sharps containers available to segregate waste into 4 categories	1	
	at least one functioning hand hygiene station per 10 beds with soap and water or alcohol based hand rubs in all ward	3	Verify in all wards / rooms used for maternal service 0 if missed / nonfunctional even in one room
	Health-care staff demonstrate cleaning their hands correctly as per the WHO 5 moments for hand hygiene	8	STAFF INTERVIEW Check the skills of 4 HCWs

written, up-to-date protocols and awareness raising materials (posters) on cleaning and disinfection, hand hygiene, operating water, sanitation and hygiene facilities, safe waste management are available at all areas and are visibly posted	1	Verify in all wards / rooms used for maternal service 0 if missed even in one room
<ul> <li>sanitation facilities are</li> <li>appropriately illuminated at night</li> <li>accessible to people with limited mobility</li> <li>gender separated for staff and attendants</li> <li>hand washing stations with soap and water</li> <li>adequate number (at least 1 latrine per 20 users for inpatient settings)</li> </ul>	6	1 for each bullet if standard is met in all maternal service area sanitation facilities
rooms are well ventilated , illuminated, regularly cleaned and maintained	1	
sufficient funds is allocated to support rehabilitation, improvements and ongoing operation and maintenance of water, sanitation, hygiene and health-care waste services	3	Document review
Curative and preventative risk-management plan exists for managing and improving water, sanitation and hygiene services	1	
suggestion box, register, complaint handling office is available for handling compliant of mothers and their families	1	
suggestions and complaints are reviewed in the day to day HDA and appropriate measures are taken when needed	5	

		ı	
	women and families attending the health facility were	10	CLIENT INTERVIEW
	satisfied with the water, sanitation and energy services		
	and would recommend the health facility to friends		
	and family		
	all health-care staff are satisfied with the water,	8	STAFF INTERVIEW
	sanitation and energy services and believed that such		2 HCW and 2 Support staffs
	services contribute positively to providing quality care		
	women and families attending the health facility were	10	CLIENT INTERVIEW
	satisfied with the water, sanitation, power and lighting		
	source and would recommend the health facility to		
	friends and family		
MH1.2 Labor, childbirth and	Temperature of the room is good (20-30 c)	1	Room Thermometer
postnatal areas are designed,	There are screens or curtains b/n each beds to ensure	1	
organized and maintained so that	privacy		
every woman and newborn can be	Has an accessible and functional bathroom or shower	1	
cared for, according to their needs, in	room and toilet with door and hand washing basin		
privacy, facilitating continuity of care	with soap to be only used by women in labor.		
	Sufficient space is present for pregnant women to be	1	
	able to walk around and for one companion at the first		
	stage of labor 1:20m between beds and 90 cm between		
	wall area as per national standard		
	a dedicated area is present in labor and childbirth area	1	
	for resuscitation of newborns (Newborn Corner)		
	The facility practices and enables all women to room-	10	CLIENT INTERVIEW
	in to allow mothers and infants to remain together 24		
	h a day		
	Family member/support person is allowed to remain	10	CLIENT INTERVIEW
	with woman constantly during labor and birth		
	Mother is offered oral fluids and light food during	10	CLIENT INTERVIEW
	labor		
	Mothers are allowed to Labor AND deliver in their	10	CLIENT INTERVIEW
	preferred position		
	surgical service is provided with an adequately	1	
	equipped operating theatre located in close proximity	·	
	and easily accessible from labor and childbirth areas		
	and cash, accession from taour and children areas		<u> </u>

	ICU (for General, comprehensive specialized hospitals) or at least high dependency unit near nursing station( for district hospital) is present for most seriously ill women to provide a care in a separate Unit  a dedicated separate ward is present for admitting sick and unstable small babies	1	
	all pregnant women attending the health facility reported that it has a clean and conducive physical environment for childbirth	10	CLIENT INTERVIEW
	all women giving birth in the health facility were satisfied with the environment of the labor and childbirth area, including the cleanliness, proximity to toilet, general lighting, level of crowding and privacy	10	CLIENT INTERVIEW
MH1.3 An adequate stock of medicines, supplies and equipment is available for routine care and	has labeled essential drugs AND stock management in	1	
management of complications	here is functional and regularly monitored refrigerator (fridge) in labor ward	1	
	Are all essential drugs available in the labor ward at all times in sufficient quantity	2 See annex	2 if all present 1 if one missed 0 if two or more missed
	Essential equipments needed in the labor ward are available	2 See annex	2 if all present 1 if one missed 0 if two or more missed
	All essential drugs needed for surgical service are available in Operating theater at all times in sufficient quantity  Full range of contraceptive methods should be	2 See annex	2 if all present 1 if one missed 0 if two or more missed
	available  All drugs and equipments needed for CAC are available in the facility		
	All essential equipments needed for surgical service are available & functional in Operating theater	See annex	2 if all present 1 if one missed 0 if two or more missed

All essential lab tests needed for maternal health care	2	2 if all present
are available all the time	See annex	1 if one missed
are available an the time	See annex	0 if two or more missed
Mothers were able to get all leb tests AND drugs in	10	CLIENT INTERVIEW
Mothers were able to get all lab tests AND drugs in	10	CLIENT INTERVIEW
the facility (during pregnancy or labor)	1	1 :6 -11:
Personal protective equipment and	1	1 if all varieties are present
IPPS consumables are available at all times in		0 if anyone is missed
sufficient quantity (all PPE and antiseptics of all		
varieties)	•	
Staffs are able to get all PPE in need and the hospital	8	STAFF INTERVIEW
management is supportive of all inquiries		Interview 4 HCWs
Beds and couches are well maintained and have	1	
rubber sheet cover at delivery and postnatal wards		
Blood is available from blood bank and stored	1	
properly (in a fridge with temperature record)		
Blood should be provided without replacement	1	
Labor ward has adequate first stage and second stage	4	4 if as per recommendation
beds		3 if b/n 85-100%
First stage beds		2 if b/n 50-85%
4 – Primary H.		0 if less than 50%
6 – General H.		
8 – Comprehensive Specialized H.		
Second stage couches		
2 – Primary H.		
2 – General H.		
4 - Comprehensive Specialized H		
All the necessary equipments needed for newborn	1	1 if all are present
resuscitation are available		0 if one missed
radiant warmer		
• A new born sized Ambubag (with volume of		
250 ml/less) with no- 0 and 1 mask		
• suction bulb		
laryngoscope		
• airway		
•		
neonatal size endotracheal tubes		
• pulse oximeter		

		1	
	All relevant guide lines needed in the labor and		1 if all are present
	delivery room are available in the service areas	See annex	0 if one missed
	All relevant guide lines needed in the ANC room are	1	1 if all are present
	available in the service areas	See annex	0 if one missed
	All relevant guidelines needed in FP and CAC are	1	
	available in the service areas		
	All relevant guide lines needed in the pediatric OPD	1	1 if all are present
	and Wards are available in the service areas	See annex	0 if one missed
	women birthing in the health facility who purchased	10	CLIENT INTERVIEW
	their own gloves, Drugs or other necessary items		
	a written, up-to-date, staffing policy is present		
	indicating the numbers, types and competencies of		
	staff, that is reviewed on an ongoing basis according		
	to the workload		
	every woman and newborn, competent and motivated st	aff are consist	tently available to provide routine
care and manage complications			
MH2.1 Every woman and child has	A clear communication channels is present to reach	1	
access at all times to at least one	staff on duty at all times		
skilled birth attendant and support			
staff for routine care and management	a roster is used which is accessibly displayed in all	1	
of complications	areas, detailing the names of staff on duty, the times		
	of their shift and their specific roles and		
	responsibilities		
	No administrative barriers for laboring mothers and a	10	CLEINT INTERVIEW
	functional triage (Laboring mothers go directly to		
	labor ward before any administrative procedure)		
	Emergency triage exists for sick pregnant mothers	1	
	who are not in labor		
	women received attention within the appropriate time	10	CLIENT INTERVIEW
	for their condition as per facility policy on triage and		
	waiting time		
	all women giving birth at the health facility were	10	CLIENT INTERVIEW
	informed on danger signs for her and the baby and		
	emergency preparedness		
		•	

	All women were satisfied with the health-care received	10	CLIENT INTERVIEW
	Bi annual appraisal of all staff and a mechanism of recognizing high performing workers is in place	9	1 – document review 8 – STAFF INTERVIEW (2 HCWs and 2 support staffs)
	an enabling supportive environment for professional staff development is in place through  • supportive supervision and mentoring (Monthly)  • refresher training (bi annually)	10	Document review (1 for each) 8 - STAFF INTERVIEW (4 HCWs)
MH2.2 The skilled birth attendants and support staff have appropriate	Staffs know how to prepare 0.5% Chlorine solution	8	STAFF INTERVIEW Select 4 HCWs randomly
competencies and skills mix to meet needs during labor, childbirth and the	Staffs know how to process used instruments (instrumental processing)	8	STAFF INTERVIEW Select 4 HCWs randomly
early postnatal period	Staffs were able to demonstrate skills of basic and advanced neonatal resuscitation	8	STAFF INTERVIEW Select 4 HCWs randomly
	Staffs were able to describe PPH management adequately		STAFF INTERVIEW Select 4 HCWs randomly
	Staffs were able to describe Eclampsia management adequately		STAFF INTERVIEW Select 4 HCWs randomly
	Staffs have good competency in counseling and provision of CAC	5	Staff interview, Client interview
	Staffs have good competency in counseling and provision of FP	5	Staff interview, Client interview
	all women giving birth were satisfied with the care and support from the facility staff	10	CLIENT INTERVIEW
	≥ 80% Maternity Staffs had a satisfactory performance appraisal on the previous month appraisal	5	
	all staff reported to be "highly satisfied" with their job in relation to the working environment and support of hospital management	8	STAFF INTERVIEW Select 4 HCWs randomly
	No staff is actively considering looking for a new job because of poor working environment and poor hospital management support	8	STAFF INTERVIEW Select 4 HCWs randomly

	a written, up-to-date quality-of-care improvement plan and patient-safety programme is present in the maternity  a written, up-to-date, leadership structure, indicating roles and responsibilities with reporting lines of accountability is present in the maternity		
MH2.3 Every health facility has managerial and clinical leadership that is collectively responsible for creating and implementing	Action plan is developed and implemented / implementation in progress for the gaps identified from the patient and provider satisfaction surveys	10	
appropriate policies and fosters an environment that supports facility staff to undertake continuous quality improvement	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 staff who are struggling to improve.	5	Verify if it was done in the previous month
	all maternity leaders are trained in QI (use of information, enabling behavior, continuous learning)	5	
	health facility leaders communicated through established mechanisms (e.g. a dashboard of key indicators) that track the performance of the maternity unit to all relevant staff	5	See last month's report and management meeting minute
	ry woman and newborn receives evidence-based routine period according to National guidelines.	care and man	agement of complications during
MH3.1 All Women coming for ANC follow up are routinely assessed and	All problems identified in classifying form AND	10	CHART REVIEW
are provided with timely and appropriate care according to	BP measured at each visit, interpreted correctly and appropriate management given	10	CHART REVIEW
National guidelines	all essential lab tests (hemoglobin, VDRL, blood group typing, urine analysis, HIV and HBsAg) were done, result interpreted correctly and managed accordingly	10	CHART REVIEW

All lab tests were done in the same facility	10	CHART REVIEW
partners are counseled and tested for HIV	10	CHART REVIEW
Iron folate supplementation is given as per the hemoglobin result and national recommendation	10	CHART REVIEW
Counselling given about danger signs in pregnancy and birth Preparedness and complication readiness is advised/plan developed	10	CLIENT INTERVIEW
Legible and pertinent admission history and physical examination findings are documented	10	CHART REVIEW
Date and time of admission properly filled.	10	CHART REVIEW
Hgb, blood group and Rh and HIV test is done or revised from previous records	10	CHART REVIEW
FHB is monitored as per recommendation on the national guideline	10	CHART REVIEW
Cervical dilation assessed every 4hrs and documented	10	CHART REVIEW
Partograph is used for active stage labor	10	CHART REVIEW
		NA if not in active stage
Parthograph information is collected, recorded as per national guideline and interpreted by skilled birth attendant and is used to support labour management interventions	10	CHART REVIEW NA if Partograph was not indicated 0 if Partograph was indicated but not used
PARTOGRAPH	10	CHART REVIEW
Cervicograph, descent and uterine contraction are filled properly and correctly AND appropriate and timely action is taken when needed		NA if Partograph was not indicated 0 if Partograph was indicated but not used
PARTOGRAPH	10	CHART REVIEW
Maternal Blood Pressure, pulse rate, temperature and urine examination and volume are monitored as per recommendation; any abnormal findings are interpreted and managed accordingly		NA if Partograph was not indicated 0 if Partograph was indicated but not used
	Iron folate supplementation is given as per the hemoglobin result and national recommendation  Counselling given about danger signs in pregnancy and birth Preparedness and complication readiness is advised/plan developed  Legible and pertinent admission history and physical examination findings are documented  Date and time of admission properly filled.  Hgb, blood group and Rh and HIV test is done or revised from previous records  FHB is monitored as per recommendation on the national guideline  Cervical dilation assessed every 4hrs and documented  Partograph is used for active stage labor  Parthograph information is collected, recorded as per national guideline and interpreted by skilled birth attendant and is used to support labour management interventions  PARTOGRAPH  Cervicograph, descent and uterine contraction are filled properly and correctly AND appropriate and timely action is taken when needed  PARTOGRAPH  Maternal Blood Pressure, pulse rate, temperature and urine examination and volume are monitored as per recommendation; any abnormal findings are	partners are counseled and tested for HIV  Iron folate supplementation is given as per the hemoglobin result and national recommendation  Counselling given about danger signs in pregnancy and birth Preparedness and complication readiness is advised/plan developed  Legible and pertinent admission history and physical examination findings are documented  Date and time of admission properly filled.  Hgb, blood group and Rh and HIV test is done or revised from previous records  FHB is monitored as per recommendation on the national guideline  Cervical dilation assessed every 4hrs and documented  Partograph is used for active stage labor  Parthograph information is collected, recorded as per national guideline and interpreted by skilled birth attendant and is used to support labour management interventions  PARTOGRAPH  Cervicograph, descent and uterine contraction are filled properly and correctly AND appropriate and timely action is taken when needed  PARTOGRAPH  Maternal Blood Pressure, pulse rate, temperature and urine examination and volume are monitored as per recommendation; any abnormal findings are

	D. DEC CD   DV	T 40	
	PARTOGRAPH	10	CHART REVIEW
	Fetal heartbeat, molding and liquor status are		NA if Partograph was not
	monitored as per recommendation; any abnormal		indicated
	findings are interpreted and managed accordingly		0 if Partograph was indicated
			but not used
	Delivery summary is properly documented (on	10	CHART REVIEW
	Partograph and delivery summary sheet)		
	Safe child birth check list used routinely; filled	10	CHART REVIEW
	completely and properly		
	Active third stage management of labor is given as per	10	CHART REVIEW
	national guideline recommendation		
	Neonate is given vitamin K 1 mg, TTC eye ointment	10	CHART REVIEW
	and vaccinated with BCG and OPV 0.		0 if one is missed
	Postpartum follow up for the mother is given as per	10	CHART REVIEW
	national guideline recommendation and appropriate		
	management was given when indicated		
	Basic Neonatal care is given as per national	10	CHART REVIEW
	recommendation		
	all newborns on postnatal care wards or areas in the	10	CHART REVIEW
	health facility with documented information on the		
	newborn body temperature, respiratory rate, feeding		
	behavior, and the absence or presence of danger signs		
	Proper discharge evaluation done for both mother and	10	CHART REVIEW
	fetus as per national guideline recommendation		
	Mother demonstrates adequate knowledge on danger	10	CLIENT INTERVIEW
	signs for herself and her baby	10	CEIEIVI IIVIEKVIEW
MH3.3 All Women for whom	Decision notes are written; Indication is justified and	10	CHART REVIEW
cesarean section or laparotomy done	properly documented	10	CHART REVIEW
for obstetric indications are	Date and time of decision and time of incision is	10	CHART REVIEW
routinely assessed and are provided	documented	10	CHARTREVIEW
with timely and appropriate care		10	CHART REVIEW
according to National guidelines	Safe surgery check list is used, filled properly and	10	CHAKI KEVIEW
according to National guidennes	correctly as per the patient condition	10	CHART DEVIEW
	Written Informed consent is obtained	10	CHART REVIEW
	Hgb/Hct and blood group and RH determined	10	CHART REVIEW
	Prophylactic antibiotics given (as per	10	CHART REVIEW
	recommendation)		

		ı	
	Description of procedure (type of skin incision, findings, what was done) documented legibly	10	CHART REVIEW
	Spinal anesthesia was used unless contraindicated	10	CHART REVIEW
	Post-operative follow up is provided as per national guideline recommendation and appropriate management is given when indicated	10	CHART REVIEW
	Daily progress (clinical condition) monitoring is done till discharge	10	CHART REVIEW
	Women know the indication for C/S delivery	10	CHART REVIEW
	Order sheet are revised daily and medication administration sheet are completed and revised accordingly and attached	10	CHART REVIEW
	Nursing process was done and documented	10	CHART REVIEW
	Discharge summary documented	10	CHART REVIEW
	sterile cord ties (or clamps) and scissors (or blades) are used, available in sufficient quantities, at all times, to cover the expected number of births	1	Observation
	clean towels are used for immediate drying of the newborn, available in sufficient quantities, at all times, to cover the expected number of births	1	Observation
	Health-care staff in the labor and childbirth areas of the maternity unit received training in essential newborn care and breastfeeding support	8	STAFF INTERVIEW Interview 4 HCWs
MH3.4 Newborns receive routine care immediately after birth	local arrangements and mechanism are in place to maintain a documented room temperature in the labour and childbirth areas at or above 25 °C and free of draughts	1	Observations
	all newborns were breastfed within 1 hour after birth	10	CLIENT INTERVIEW
	all newborns get their umbilical cord clamped after 1–3 min of birth	1	

	all newborns receive all four elements of essential newborn care:  • immediate and thorough drying  • immediate skin-to-skin contact  • delayed cord clamping  • initiation of breastfeeding in the first hour  all newborns have normal body temperature (36.5–37.5 °C) at the time of the first complete examination	5	Select 5 neonates from postnatal ward and Verify
	(between 60 min and 120 min after birth	1	using thermometer
	the health facility has a written breastfeeding policy that is routinely communicated to all health care and support staff	1	Document Review
	The health facility has local arrangements to ensure that every mother knows when and where postnatal care for herself and her newborn will be provided after hospital discharge	10	CLIENT INTERVIEW
	the health facility has local arrangements for alternative feeding methods, including cup or cup and spoon feeding and avoids bottle feeding	1	CLIENT INTERVIEW
	the health facility local arrangement to inform pregnant women and their families about the benefits and management of breastfeeding	10	CLIENT INTERVIEW
	Feeding of infant formula is only demonstrated to mothers and family members of newborns who need it and includes a full explanation of the hazards of improper use.	1	CLIENT INTERVIEW
	all postpartum women in the health facility were offered counselling on birth spacing and family planning methods prior to discharge	10	CLIENT INTERVIEW
MH3.5 Women with pre-eclampsia or eclampsia promptly receive appropriate interventions.	written up-to-date, clinical protocols are present on the management of pre-eclampsia and available in the labour, childbirth and postnatal areas of the maternity unit that are consistent with national guidelines	1	Document Review
	Detailed history and documentation should be made as soon as the patient is admitted	10	CHART REVIEW

	Management plan was made by senior personnel within two hours of admission (IESO, senior resident or obstetrician).	10	CHART REVIEW
	Maternal and fetal status was followed as per recommendation in the national guideline using preëclampsia chart	10	CHART REVIEW
	All the necessary laboratories were done (U/A for albumin, 24 hr urine protein(optional), LFT, RFT, CBC, uric acid)	10	CHART REVIEW
	All laboratory tests were done in the facility and for free	10	CHART REVIEW
	MgSO4 as treatment and prophylaxis for seizures was given as per recommendation in the national guideline	10	CHART REVIEW NA if not indicated
	Anti-hypertensive was administered as per recommendation in the national guideline	10	CHART REVIEW NA if not indicated
	Magnesium sulphate toxicity was monitored as per recommendation in the national guideline	10	CHART REVIEW NA if magnesium was not indicated
	Fluid balance chart should be maintained for 48 hours, in order to monitor urine output and that no patient should be put at risk of fluid imbalance and pulmonary edema	10	CHART REVIEW
	Corticosteroids for lung maturation should be given to all preterm cases	10	CHART REVIEW NA if not indicated
	Termination was decided when indicated as per national guideline	10	CHART REVIEW
	Mode of delivery was decided as per national guideline recommendation	10	CHART REVIEW
MH3.6 Women with Post-Partum Hemorrhage (PPH) promptly receive appropriate interventions	written, up-to-date, PPH management clinical protocols are available in the childbirth and postnatal care areas that are consistent with national guidelines	1	

	F1 M-1:-1 C/-ff 1 111 : 1 1: 1	10	CHAPT DEVIEW
	Experienced Medical Staff should be involved in the	10	CHART REVIEW
	management of life-threatening obstetric hemorrhage		NA for each chart if inadequate
	within 10 minutes of diagnosis		number of cases are traced
	Double IV line was opened	10	
	Crystalloids were infused	10	
	Oxytocic's were used in the treatment of postpartum	10	
	hemorrhage		
		10	_
	Genital tract exploration was performed to exclude lower genital tract causes	10	
	OR team was activated in case surgical intervention was required	10	
	Maternal vital signs and urine out was monitored during and after PPH management	10	-
	Blood group was known and cross match was initiated in case blood might be required	10	_
	Hematocrit /hemoglobin was determined 12-24 hours after PPH was controlled	10	_
MH3.7 Women with delay in labour progress, or prolonged or obstructed	Legible, pertinent history and physical examination findings are admitted during admission	10	CHART REVIEW
labour receive appropriate	Labor progress was followed as per recommendation	10	CHART REVIEW
interventions according to national guideline	in the national guideline (depending on the stage of labor)		
Burgaine	Fetal status was monitored as per the national	10	CHART REVIEW
	guideline recommendation (depending on the stage of	10	CIMICI REVIEW
	labor)		
	maternal status was monitored as per the national	10	CHART REVIEW
	guideline recommendation (depending on the stage of		
	labor)		
	Abnormal labor was picked at the appropriate time	10	CHART REVIEW
	without delay		
	Appropriate and justified intervention was decided timely	10	CHART REVIEW

	IV line was opened and Crystalloids were given when indicated	10	CHART REVIEW
	Appropriate combination of antibiotics was prescribed when indicated	10	CHART REVIEW  0 if incorrect type dosage/ combination/ frequency / route / duration OR if prescribed without adequate evidence to administer
	Adequate preoperative preparation based on national recommendation was done if surgery was indicated	10	CHART REVIEW
	Postpartum follow up of maternal and neonatal status was done as per national guideline recommendations	10	CHART REVIEW
MH3.8 Preterm and small babies receive appropriate care according to national guidelines	The health facility has written, up-to-date, clinical protocols for care of small and preterm babies in the childbirth areas of the maternity unit that are consistent with national guidelines	1	
	The health facility has supplies and materials to provide optimal thermal care to stable and unstable preterm babies using KMC (support binders, baby hats, socks), clean incubators or radiate warmers	10	KMC with at least 2 beds for primary H. 4 beds for General H. 8 beds for Comprehensive Specialized hospitals 5 for KMC 1 for each of the other items
	The health facility has supplies and materials to provide optimal feeding to preterm babies and support for breastfeeding or alternative feeding (feeding cups and spoons, infant formula, breast pumps, milkstorage facilities, nasogastric tubes, syringe drivers, IV fluids and tubing).	3	
MH3.9 Women with, or at risk of infections during labour, childbirth and early postnatal period promptly	Legible, pertinent history and physical examination findings are documented at admission	10	CHART REVIEW
receive appropriate interventions, according to national guidelines	Diagnosis made based on adequate evidence (puerperal sepsis definition)	10	CHART REVIEW

	Appropriate combination of antibiotics was prescribed	10	CHART REVIEW  0 if incorrect type dosage/ combination/ frequency / route / duration OR if prescribed without adequate evidence to administer
	Essential laboratory tests were done to identify the focus of infection (CBC, B/F, U/A, CXR, Doppler- if indicated)	10	CHART REVIEW
	Maternal monitoring was done during treatment as per recommendation in the national guideline	10	CHART REVIEW
	all women with preterm pre-labour rupture of membranes receive prophylactic antibiotics as per national guideline recommendations	10	CHART REVIEW Trace charts with PROM
MH3.10 Newborns with suspected infection, or risk factors for infection are promptly given antibiotic	a written, up-to-date, clinical protocol on early diagnosis and management of neonatal infection is present	1	
treatment according to WHO guidelines	Health-care staff in the health facility knows the signs of newborn sepsis and how to treat it, as per the national guideline	6	STAFF INTERVIEW 3 HCWs
MH3.11 No woman or newborn is subjected to unnecessary or harmful practices during labour, childbirth and	written up-to-date guidance on harmful practices and unnecessary interventions during labour, childbirth and the early postnatal period is present	1	
the early postnatal period	The health facility does not display infant formula or bottles and teats, including through posters or placards	1	
	The health facility does not give food or drink other than breast milk, unless medically indicated, and does not give pacifiers (also called dummies or soothers) to breastfeeding infants	1	
	all women giving birth in the health facility do not receive augmentation of labour without any indication of delay in progress of labour	10	CHART REVIEW
	all babies born in the health facility do not receive early bathing and removal of vernix within 6 hours of birth	1	Chart review

	all women giving birth in the health facility do not	1	Chart review
	receive routine pubic/perineal shaving prior to vaginal birth		
	all babies born through clear amniotic fluid in the health facility do not receive routine suctioning	1	Chart review
	all women giving birth in the health facility do not receive routine enemas at any time prior to vaginal birth	1	Chart review
MH3.12 Clients should receive the contraceptive method of their choice along with instructions about correct and consistent use after counseling	Clients should undergo brief assessment to identify the contraceptive methods that are safe for them, using history and relevant physical examination	1	Chart review
	Clients receive a contraception method of their own preference on the day of examination (quick start)	1	Chart review
	Clients understands common side effects of the contraception	1	Chart review
	Client knows her follow up plan	1	Chart review
	Using teach back method, client's understanding is assessed	1	Chart review
MH 3.13 Women should have easy access to counselling and services for CAC	The facility provides for both first and second trimester safe abortion services		
	MVA is done according to SOC for first trimester pregnancy		
	Women who are receiving safe abortion or PAC should get pain medication options		
	Women should be provided with post abortion contraception counseling and service following abortion care in the same site		

Maternal health care Standard 4: The women	health information system enables the use of data for ea	arly and appro	opriate action to improve care for
MH4.1 All women have a complete and accurate standardized medical record	The health facility has registers, data-collection forms, clinical and observation charts in place at all times, designed to routinely record and track all key care processes for mothers and newborns	1	Observation
	The health facility has a system to classify diseases in alignment with ICD codes at all times	10	CHART REVIEW Verify if the diagnosis written in the client chart is documented in the HMIS register in alignment with the ICD codes 1 for each chart if aligned 0 for each chart if not aligned
	all women 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 and if the diagnosis is registered on the HMIS register in alignment with ICD code 1 for each chart if all information is recorded on the client chart AND diagnosis is registered on the HMIS register in alignment with ICD code 0 if either of the above two are not met
MH4.2 Every health facility has a mechanism in place for data collection, analysis and feedback, as part of its monitoring and performance improvement activities	ANC, labor and delivery, OR working HCWs regularly conducts reviews of maternal care and their data every month AND develops and implements a QI project for all the gaps identified	40	40 (10 for each bulleted criteria's) if the following were done in the previous month  • maternal care assessment was done 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	5	Check previous month minutes if the ANC, labor and delivery, OR staff evaluated their data before reporting
Maternal health care Standard 5 : Com	munication with women and their families is effective and	d in response t	to their needs and preferences
MH5.1 All women and their families	Women and their families are given the opportunity	10	CLIENT INTERVIEW
receive information about their care	to discuss their concerns and preferences		
and experience effective interactions with staff	health-care staffs demonstrate the following skills: active listening, asking questions, responding to questions, verifying client's and their families understanding, and supporting client's in problemsolving	10	CLIENT INTERVIEW
	Women 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
	Women and their families cared in the facility expressed overall satisfaction with the health services	10	CLIENT INTERVIEW
	Women 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
Maternal health care Standard 6: Wor	men receive care with respect and dignity		
MH6.1 All women have privacy around the time of clinical evaluation , and their confidentiality is respected	The physical environment of the health facility facilitates privacy and provision of respectful care, confidential care including the availability of curtains, screens	10	CLIENT INTERVIEW
	The health facility has written, up-to-date, protocols to ensure privacy and confidentiality for all clients throughout all aspects of care	1	
	The health facility has accountability mechanisms for redress in the event of violations of privacy, confidentiality and consent	1	

MH6.2 No woman is subjected to mistreatment such as physical, sexual or verbal abuse, discrimination, neglect, detainment, extortion or	The health facility has written, up-to-date, zero-tolerance, non-discriminatory policies relating to the mistreatment of clients	1	
denial of services	Any client who reported physical, verbal or sexual abuse, to themselves or their familiesduring clinical evaluation	20	Select and verify 5 clients exiting from the chronic care / specialty clinic 4 for each client if they are protected 0 for each client if report of abuse
	The health facility has written accountability mechanisms for redress in an event of mistreatment	1	
	The health facility has a written, up-to-date policy and protocols outlining clients right to make a complaint about the care received and has an easily accessible mechanism (box) for handing in complaints and is periodically emptied and reviewed	4	4 if present AND periodically emptied and reviewed 1 if only present
	All clients were satisfied with the facility meeting their religious and cultural needs	10	CLIENT INTERVIEW
	All clients reported to be treated with respect and dignity	10	CLIENT INTERVIEW
MH6.3 All clients have informed choices in the services they receive, and the reasons for intervention or outcomes are clearly explained	The health facility has a written, up-to-date, policy in place to promote for obtaining informed consent from clients prior to examinations and procedures	1	Document review
	HCW take informed consent from clients prior to examinations and procedures	10	CLIENT INTERVIEW

## Maternal Health Annex 1 Essential drugs that must be available in emergency drug cabinet of L& D ward

	Г
Uterotonic medication (Oxytocin, Misoprostol, Misoptrostol Po and/ or Ergometrine)	
Magnesium sulphate	
Diazepam	
Antihypertensive medication (Nifedipine and Hydralazine)	
40% glucose	
IV Cannula	
Lidocaine	
Syringe & needle	
IV fluids (crystalloids)	
Tetracycline eye ointment	
Sterile gloves	
Oxygen	
Vitamin K	
Adrenaline	
Ampicillin (PO and IV)	
Amoxacillin	
Erythromycin	
Ceftriaxone	
Metronidazole	
Gentamycin	
Ca gluconate	
TDF/3TC/EFV (ARV drugs)	
Nevirapine syrup	
Aminophylline	
Hydrocortisone	
Dexamethasone/bethamethasone	

## Maternal Health Annex 2: Checklist for medical equipment in Labor and delivery ward and operation theatre (equipment must be functional at the time of assessment

Functional Sphygmomanometer (BP apparatus)
Stethoscope
Suction machine portable
Pinnardstethetescope(Fetoscope)/doppler
Ultra Sound (with trained HCW)
Thermometer
Incubator
Nasal prongs for oxygen administration
Catheter for oxygen administration
5 delivery sets, at least two sterile
Sterile suture kit
Forceps
Vacuum extractor
Urinary Catheter
HIV test kits (KHB, Stat pack)
Stand lamp
Speculum for vaginal examination
Craniotomy set
Sterilizer (Steam or dry)
Ambu-bag with sterile mask
Bed with accessories
IV stand
Mask for oxygen administration
Cord cutting/clumping set
Radiant Warmer
Towels for drying and wrapping new-born babies
weighing scale for baby
Tape to measure baby length and Head circumfrance
Functioning clock
Two Episiotomy set
Suction bulb for NB resuscitation
Long sleeve glove for removal of retained placenta

### Maternal Health Annex 3 List of drugs and equipments that should be available in operating theatre

Ketamine injection
Oxygen inhalation
Thiopental iv
Halotane
Muscle relaxant (Suxamitanum and Vecronium)
Lidocaine injection and or Bupivacaine
Lidocaine + epinephrine injection
Ephedrine injection
Dexamethasone IV/IM
Diazepam /iv/
Suction machine
Oxygen
Pulse oximeter
Ambu bag (Adult)
Ambu bag (Neonatal)
Spinal Needle
Laryngoscope
Airways
Endotracheal tubes of different sizes
3 Caesarean section sets at least one ready
2 Laparotomy sets with at least one ready

#### Maternal Health Annex 4 Checklist for Guidelines and Protocols

#### Maternity/L&D

- Management protocol on selected obstetrics topics, FMOH 2010
- Mg SO4 administration protocol
- PMTCT Option B+ desk top reference/pocket guide/job aid, DNA PCR/DBS job aid and HIV testing algorithm
- Technical and Procedural Guidelines for Safe Abortion Services in Ethiopia, second edition 2014
- Infection prevention guideline
- Hand washing poster
- Newborn corner guideline
- Newborn resuscitation flow chart/Helping Babies Breathe Poster
- Active management of third stage of labor poster

#### **Neonatal Unit or pediatrics**

- National newborn case management protocol
- Newborn corner guideline
- Newborn resuscitation flow chart
- Pediatric hospital care pocket book on common child hood illness and malnutrition protocol
- Triaging wall chart, job aids are available

#### ANC

- Focused ANC poster
- PMTCT job aids

### Maternal Health Annex 5 Checklist for laboratory services

Lab test
Blood glucose
Haemoglobin
Haematocrit (PCV)
Blood grouping and cross match
Bilirubin
Urine dipstick
Urine microscopy
Full blood count
Liver function tests
Renal function tests
Serum electrolytes
CD4 count or HIV plasma viral loads
Blood culture (for referral and university hospitals)
VDRL/RPR
Microscopy or rapid diagnostic test (RDT) for malaria parasites
CSF microscopy
HBsAg

#### TABLE 2 HEALTH SERVICE QUALITY STANDARDS FOR NEONATAL AND CHILD HEALTH CARE

Quality statement	Quality measures	Score	Remark/verification criteria
Neonatal and child healthcar	re Standard1: The health facility has an appropriate working sy	ystem AND p	physical environment with adequate
working guidelines, utilities,	medicines, supplies and equipment for diagnosis and management	of major neo	natal and child health problems.
NCH 1.1 The pediatric	Separate PEOPD is available	1	
emergency OPD is	Triage room exists for pediatric cases	1	Observation
designed, organized and	Active ETAT and emergency treatment	1	
maintained so that all	serviceisavailable24/7		
children with	Pediatric EOPD is equipped with the necessary	2	Observation
Emergency conditions can be	equipment (See annex 2)		2 if all present
cared			1 if one missed
for, according to			0 if all missed
their needs,	Emergency drugs for pediatric EOPD are available	1	Check availability of emergency
facilitating	(See annex 1)		drugs in the
continuity of care			Emergency box
			2 if all present
			1 if one missed
			0 if all missed
	Availability of 24 hrs. pharmacy services	1	Observation
	Availability of 24 hrs. active laboratory services (See Annex 5)	1	Observation
	Availability of ORT corner in the pediatric	1	Observation
	OPD		
	Well-kept play ground is prepared in the	1	Observation
	POPD area		
	Availability of 24 hrs. blood transfusion service	1	See stock management
			0 if any days of blood shortage
	Availability of 24 hrs. active ambulance service	1	Observation

NCH 1.2 The pediatric ward is designed, organized and maintained	Adequate number of pediatric beds are available in the hospital	3	Observation Minimum number of pediatric beds
so that all admitted children can be Cared for ,according to their needs, facilitating continuity of care per national standards	(20% of total ward beds at all hospital levels)		10 for primary H. 20 for General H. 30 for Referral H. Score3 if 100%, 2 if7 5%,1 if 60%, 0 if <50%
	Availability of pediatric ICU or HDU for admitting critically ill children near the nurses' station	2	Observation At least HDU of 3 beds near to nursing station in primary H.  ICU with at least 5 beds and 1
			mechanical ventilator for General and Referral H.
	Availability of a separate room for admitting pediatric infectious cases(isolation room)	1	Observation At least 10% of the total pediatric beds
	Availability of separate pediatric surgical ward/room	1	Observation A corner for Primary H. and separate for General and Referral H.
	The ward rooms paintings are child friendly	1	Observation
	Playroom/corridor is prepared for admitted children	1	Observation
	Vaccination service is available and All primary vaccines are available and stored well(see National EPI Guideline)	2	Observe storage and check expiry dates 2 if all present 1 if one missed 0 if more than two missed
NCH 1.3 The Neonatal care is designed, organized and maintained So that all sick neonates	NICU is available for critically sick newborns (10% of total ward beds)	1	Observation Minimum number of beds: 3 for primary H. 7 for General H. 15 for Referral H.

can be cared for, according to their needs, facilitating continuity of care	KMC room is available for pre-term babies	1	Minimum number of beds 2 for primary H. 5 for General H. 8 for Referral H.
	The NICU is adjacent to the delivery ward	1	Observation
	Isolation room for admitted newborns with infectious diseases(e.g. neonatal diarrhea)is available	1	Observation Minimum number of beds 3 for primary H. 5 for General H. 8 for Referral H.
	Pediatrician or trained GP on basic Neonatal care and IMNCI is present in the facility	3	Minimally required HCP Primary H 2 GPs and 3 nurses Trained on Neonatal Care and IMNCI
			General H.–1 Pediatrician, 2 GPs and 5 nurses trained on Neonatal care and IMNCI
			Referral H.–2 Pediatricians, 5 GPs and 10 nurses trained on Neonatal care and IMNCI
NCH 1.4 All the necessary guidelines, protocols and manuals needed for neonatal and child health care are available	Updated guidelines and job aids are available and in all units (See annex 3)	1	1 if all present 0 if one missed
NCH 1.5 all the necessary equipment and supplies needed for Neonatal and child health care are available	Essential equipment is immediately available for use and functional (See annex 2)	2	2 if all present 1 if one missed 0 if more than 1 missed
	Pediatric size anesthesia equipment is available and in good working condition (See Annex 4)	1	Anesthesia equipment with pediatric sized spare parts

	Adequate equipment is available in the emergency are and in	2	2 If all present
	the ward (See Annex 2)		1 if only one missed
			0 if more than 1 is missed
NCH 1.6 Essential	Essential lab tests are available all the time and their results		2ifallpresent
laboratory tests needed for	delivered timely to the ward/emergency area (see Annex 5)	2	1ifonemissed
neonatal and child health		2	0iftwoandmoremissed
care are available			

Neonatal and child health care	e Standard 2:The facility provides appropriate ETAT service cons	istently	
NCH 2.1 HCWs working	ETAT system is established	2	Observation
in the pediatric emergency	All emergency department staff are trained in emergency triage	8	Document review–2
department do have the	and treatment of children		Interview randomly 3 HCWs if
necessary knowledge and	(See PB 2016, PP 12-19)		they can describe
Skill for managing pediatric			EPQ classification and can list
Emergencies (Please see			emergency and priority cases in
Pocket Book on Hospital			full. ABC management for
Care for Children (PB), 2016 edition for reference)			emergency cases
edition for reference)			2 for each staff if adequate
			knowledge
			1 if partial knowledge
			0 if in adequate knowledge
NCH 2.2 pediatric	Appropriate plan of management is documented	10	CHART REVIEW
emergencies are	and implemented based on the	10	CHARTREVIEW
appropriately evaluated	Triage finding		
and	Immediate management for emergency cases		
Classified based on the	Front of the cue in priority cases		
ETAT			
NCH 2.3 all pertinent	Time and evidence of triage is documented	10	
evaluation findings and	Documentation is legible, Dated & timed and contains	10	
interventions are	pertinent history and physical findings		
documented legibly			
NCH 2.4 children with	HCWs are able to describe knowledge and skills for	8	STAFF INTERVIEW
emergency conditions are	diagnosing and managing obstructed air ways correctly (see		Ask 4 HCWs
managed timely and	PB 2016, P 18)		NA if not applicable

	HCWs are able to describe indications and administration of oxygen(timing, quantity, delivery methods, monitoring)correctly (see PB 2016, pp 30-31)	8	
	HCWs are able to describe indications and administration of fluids(timing, quantity, delivery methods, monitoring)correctly	8	
	HCWs are able to describe knowledge and skills for diagnosing and managing shock correctly (See PB 2016, PP 31 and 35)	8	
	HCWs are able to describe knowledge and skills for diagnosing and managing Convulsion	8	
Neonatal and child health ca Recommendations	re Standard 3:Evidence based care is provided for a child presenting	ng with <b>COU</b> C	GH as per IMNCI
NCH 3.1 Comprehensive evaluation was done to reach to a diagnosis	Legible and Pertinent history and physical findings are recorded with particular emphasis on Signs of respiratory distress such as general condition of the child, chest- in-drawing, respiratory rate, presence of cyanosis	10	CHARTREVIEW Select 10 charts with an initial symptom of cough from IMNCI /HMIS register  NA for each chart if no adequate
	Diagnosis is correct based on the history, physical examination and laboratory findings documented	10	case with initial symptom of cough
NCH 3.2 Appropriate management was given based on	Antibiotics are administered only based on indications(pneumonia, severe pneumonia etc.) (See PB 2016, PP 136-137)	10	NA if antibiotic was not indicated
recommendations	Appropriate antibiotics are administered at correct doses, frequency, route and duration	10	

Child was re-evaluated as per protocol	10	
2 days later if out patient		
At least Once by physician and twice by a nurse if admitted		
and stable. At least twice by physician and 4x by a nurse if		
critical		

1			1 1
	Resistant organism and changing antibiotic to second line was		
	considered after ruling out complication or other differential		
	diagnosis	10	
	Oxygen is administered to all children if indicated	10	
	Chest x-rays are performed when signs of pneumonia in	10	
	young infants suspected,		
	Complications (e.g. empyema, pneumothorax,		
	abscess) are suspected or not responding to		
	appropriate antibiotic treatment for >48 hour		
	Children in need of bronchodilators are correctly	10	
	identified/diagnosed.		
	(See PB 2016, PP 148-154)		
	Nutritional assessment is done as per protocol,	10	
	nutritional status is documented and appropriate nutritional		
	support is given when indicated		
	e Standard 4:Evidence based care is provided for a child presenting	g with diagnos	sis of <b>ASTHMA</b> as per IMNCI
recommendations			
NCH 4.1 Comprehensive	Legible and Pertinent history and physical findings are	4	CHARTREVIEW
evaluation was done to	recorded with particular emphasis on Signs of respiratory		Select 4 charts (every week) with
reach at a diagnosis	distress such as general condition of the child, chest-		an initial diagnosis of asthma
	in drawing, respiratory rate, presence of		from IMNCI /HMIS register
	cyanosis		NA for each chart if no adequate
			case with diagnosis of asthma

Diagnosis is correct based on the history, physical examination and laboratory findings documented	4	

NCH 4.2 Appropriate management was given based on recommendations	Inhaled bronchodilators are correctly administered (route, dose and frequency) by spacer or nebulizer as per the national guideline  Children with asthma who are discharged have follow-up treatment prescribed and explained to parents (as per the national guideline)		
Neonatal and child health car Asper IMNCI recommendation	e Standard 5:Evidence based care is provided for a child presenting ons	ng with initial	symptom of <b>DIARRHEA</b>
NCH 5.1 Comprehensive evaluation was done to reach to a diagnosis	Pertinent history and physical finding is documented to guide the type of diarrhea (acute watery/dysentery/persistent) and level Of dehydration ( <i>See PB 2016, PP 189-191</i> )  The degree of dehydration is assessed and correctly classified in all patients with diarrhea as per the national guideline ( <i>See PB 2016, P192</i> )	10	CHARTREVIEW  Select 10 charts with an initial symptom of DIARRHEA from IMNCI/ HMIS register  NA for each chart if no adequate
NCH 5.2 Appropriate	LA / Appropriate   7 inc is given according to the national guideline   1 iii   1	case with initial symptom of diarrhea	
management was given based on	All children are assessed for their nutritional status and managed accordingly (See PB 2016, PP 280-281)	10	diarrilea
recommendations	Children with severe malnutrition and dysentery and young infants with dysentery are properly assessed and admitted	NA if both clinical conditions are absent	
	The correct rehydration plan is chosen based on the assessment of dehydration (Plan A, Plan B, Plan C)	10	
	Rehydration fluid type and dose is correctly prescribed (for plan B and C);and administered appropriately (See PB 2016, PP 193-199)	10 NA if plan A	
	Signs of dehydration are monitored during rehydration, and fluid intake and rate of infusion are monitored and adjusted accordingly		

	Antibiotics are given only based on indications and if indicated, the type, dose, route, frequency and duration is correct (See PB 2016, PP 194 and 209)  Anti-diarrheal & antiemetic drugs are not given  Feeding (breast milk and/or other food)is continued and encouraged and frequent small feeds are offered for children with diarrhea	10	
	re Standard 6:Evidence based care is provided for a child presenting w	ith initial	symptom of FEBRILE ILLNESS
nch 6.1 Comprehensive evaluation was done to reach to a diagnosis (see PB 2016, PP 214-215)	Appropriate assessment (History, Examination)isundertakentoruleinorruleOutcommoncauses(differe ntials)offever and legible document is written	10	CHARTREVIEW Select 10 charts with an initial symptom of FEVER from IMNCI/ HMIS register
,	Appropriate lab examinations are undertaken and interpreted correctly to establish a diagnosis (LP, blood film for malaria, urine examination, chest x-ray)	10	NA for each chart if no adequate case with initial symptom of FEVER
	All lab tests were done in the same facility Established final diagnosis is correct as per the documented finding in the history, physical examination or laboratory tests	10 10	
NCH 6.2 Appropriate management was given	Outlined management is correct as per the final diagnosis	10	
based on Recommendations	Prescribed drugs were availed in the same facility	10	
	Nutritional assessment is done as per protocol and managed accordingly	10	
Neonatal and child health ca Recommendations	re Standard 7: Evidence based care is provided for a child suspected w	ith <b>MEN</b> I	NGITIS as per IMNCI
NCH7.1Comprehensiveev aluation	Appropriate and legible history and physical findings are documented	5	CHARTREVIEW

(See PB 2016, P236)			Select 5chartswithaninitial
	Lumbar puncture is per formed without delay when meningitis is suspected	5	suspected diagnosis of MENINGITIS from IMNCI /
	CSF was analyzed in the same facility	5	HMIS register (Trace every 6th
	CSF result was interpreted correctly and management outlined accordingly	5	day)
NCH 7.2 Appropriate management was given based on	Adequate antibiotic treatment is started without delay when bacterial meningitis is suspected.	5	NA for each chart if no adequate case with initial diagnosis of Meningitis
Recommendations (See PB 2016, PP 238 and 243)	Drugs were availed in the same facility	5	
,	Complications of meningitis (Convulsions, Hypoglycemia) are diagnosed and treated appropriately	5	
	Appropriate patient monitoring is performed and charted (Neurosign chart, State of consciousness, RR, Pupil size) and correct management decisions were made accordingly	5	
	Nutritional assessment is done as per protocol and managed accordingly	5	
Neonatal and child healthcar Recommendations	e Standard 8:Evidence based care is provided for a child suspected wit	h MALA	RIA as per IMNCI
NCH 8.1 Comprehensive evaluation was done to	Legible and appropriate history and physical findings are documented	5	CHARTREVIEW Select 5 charts with an initial
reach to a diagnosis (See PP 2016, PP 223-225)	Malaria diagnosis is confirmed by microscopy	5	suspected diagnosis of MALARIA from IMNCI/HMIS register(Trace
,,	For possible cerebral malaria and malaria associated respiratory distress, alternative diagnoses are ruled out (LP for meningitis, x-ray for pneumonia)	5	every 6 <sup>th</sup> day)  NA for each chart if no adequate
			case with initial diagnosis of
NCH 8.2 Appropriate	Correct antimalarial treatment is given based on national malaria guideline	5	Malaria

management was given	Patients are monitored adequately, and complications such as	5	
based on	hypo-glycaemia are prevented (See PP 2016, P232)		
recommendations			

	Complications (Coma, Severe anemia, Hypoglycemia, Acidosis, Aspiration pneumonia) are correctly diagnosed and treated (See PB 2016, PP 229-232)		
	All lab tests were done in the same facility  Nutritional assessment is done as per protocol and managed accordingly (See PP 2016, PP 280-281)	5	
Neonatal and child health car Recommendations	e Standard 9: Evidence based care is provided for a child suspected w	ith <b>MEA</b>	SLES as per IMNCI
NCH 9.1 Comprehensive evaluation was done to reach to a diagnosis and appropriate management was given Based on recommendations	Legible and appropriate history and physical findings are documented  Measles cases are assessed for complications and treated appropriately (See PB 2016, P246)  Vitamin A is given to all patients with measles	5 5	CHARTREVIEW Select 5 charts with an initial suspected diagnosis of MEASLES from IMNCI / HMIS register(Traceevery6th day)  NA for each chart if no adequate
	Nutritional assessment is done as per protocol and nutritional status is documented (See PP 2016, PP 280-281)	5	case with initial diagnosis of Measles
	Appropriate nutritional support is given as per the diagnosis  Public health measures (Isolation, Patients and staff are checked for immunization status and Immunized if necessary, reporting for disease surveillance as per FMOH guideline) are taken when a child is admitted with measles		

	Differential diagnosis of fever considered, appropriate investigations undertaken and Treatment given (See PB 2016, 214-215)	5	
Neonatal and child healthcare Recommendations	e Standard 10: Evidence based care is provided for a child with MAL	NUTRITI	ON as per IMNCI
NCH 10.1 Evaluation equipment is available and comprehensive evaluation was available to reach at a diagnosis	Weighing Scale (calibrated regularly) length/Height measuring board and MUAC tape available, calibrated regularly	1 if 0 if one missed	CHARTREVIEW Select5chartswithaninitial diagnosis of MALNUTRITION

An appropriate history is taken, appetite test done, and laboratory exams (RBS and Hgb) performed	5	from IMNCI / HMIS register (Traceevery6thday)
Weight, Height, MUAC measured correctly; And Weight for height calculated correctly	5	NA for each chart if no adequate case with initial diagnosis of
Clinical examination for: wasting, edema, skin changes, signs of dehydration, eye signs of Vitamin A deficiency, severe palmar pallor, localizing signs of infection, mouth ulcers, fever/hypothermiais performed	5	Measles
Admission of severely malnourished children are admitted as per national guideline	5 NA if admissi on was not	
Differential diagnosis considered for severe malnutrition, if doubt about protein-energy malnutrition as likely cause (rule out TB, malabsorption, nephrotic syndrome, etc.) (See PB 2016, PP 277-279)	5	

NCH 10.2 Appropriate management was given	Broad spectrum antibiotics are administered to all severely malnourished patients as per national guideline	5
	Vitamin A and Folic Acid administered as per national guideline	5
	Deworming is performed as per national guideline	5
	Iron only given in the recovery phase	5
	Appropriate follow up was done as per recommendation	5
	Nutritional shift was decided as per recommendation (See PB 2016, PP 300-310)	5 5

Neonatal and child health care Standard 11:The hospital has established **NICU** setup with adequate resources (personnel, equipment, infrastructure, guidelines)

NCH 11.1 Management guidelines and job aids are	Neonatal problems management guideline present	1	Observation
present	Written guidelines and other necessary job aids as wall chart, checklist, flowchart) for resuscitation and care of the new born are available (See Annex 3)		Observation
NCH 11.2 All the necessary infrastructure	There is a resuscitation place with heating (newborn corner) in the delivery room	1	Observation
and equipment is present	There is resuscitation corner or bed in NICU Which will be used when there is need in the NICU	1	Observation

	A newborn size functioning self-inflating bag with newborn + premature size masks is available	2 See annex	2 if all are available 1 if only one is missed/not functional 0 if two or more are missed/not functional
NCH 11.3 Trained personnel are present	Staff working there should have the necessary knowledge and skill in basic and advanced neonatal resuscitation (See PB 2016, PP 65-71)		STAFF INTERVIEW AND SKILL DEMONESTRATION Interview 4 HCWs (2 midwives Working in labor ward and 2 Nurses working in NICU)
Neonatal and child health care	Standard 12: Evidence based essential newborn care is provided	l	
NCH 12.1 Immediate essential newborn care is	Newborns are cleaned with dry/warm cloth, no bathing or washing for 24 hours	10	CHART REVIEW and observation
given to all neonates	Eye prophylaxis given at birth	10	
	Vitamin K given at birth	10	
	Immunizations are given according to national policy (See National EPI Guideline)	10	
	Newborns are kept in a warm room, with no draught and there is wall thermometer to monitor the temperature	10	
	Body temperature is monitored	10	
NCH 12.2 The facility ensures	Nothing is applied to the cord except 4%	10	CLIENT INTERVIEW
Harmful practices are not happening	Chlorhexidine solution applied for 7 days based on the current recommendation and		Interview 5 mothers – EXIT interview

	Mother is counseled not to apply anything on the cord		
	A newborn has prolonged skin contact with the mother starting from birth	10	
	Mothers stay with their infants in the same room day and night	10	
NCH 12.3 EBF is practiced and encouraged	Mothers are assisted with the first breastfeeding: correct attachment and positioning is demonstrated	10	
	There is no promotion of infant formula in the ward or distributed to mothers/staff	10	
	Mothers encouraged to breastfeed the infant day and night on demand	10	
	Midwives working in the labor ward have the necessary skill to demonstrate correct attachment for mothers	8	STAFF SKILL DEMONESTRATION Ask 4 midwives randomly to demonstrate
Neonatal and child health care SEPSIS	Standard 13: Evidence based care is given for neonates with SU	SPECTEDOR	CONFIRMED NEONATAL
NCH 13.1 Comprehensive evaluation was done to reach the diagnosis	Legible and pertinent history and physical findings are documented as per the format for neonatal evaluation (See NICU Management Protocol 2014, P 16)	10	CHARTREVIEW Review 10 charts with suspected or confirmed neonatal sepsis from the HMIS register(every 3 <sup>rd</sup> day)
	Neonatal sepsis is suspected in neonates with signs such as fever or difficulty feeding and appropriately investigated (e.g. Blood culture, urine microscopy, foci of infection) (See PB 2016, P 77-78)	10	NA for each chart if no adequate cases with suspected or confirmed diagnosis of Neonatal Sepsis
	All lab tests were done in the same facility  Lumbar puncture is done to rule out/confirm meningitis	10 10	
NCH13.2Appropriatemana gement was given	Effective antibiotics are given according to age and weight of the baby	10	

(See PB 2016, P 80)	
	Page   44

	Drugs were availed from the same facility	10	
	The response to treatment is monitored (See PB 2016, PP 77-78)		
Neonatal and child health	care Standard 14: Evidence based care is given for LB'	W&/or PRE	MATURE NEONATES
NCH 14.1 Appropriate management was given	Legible and pertinent history and physical findings are documented as per the neonatal evaluation format (See PB 2016, PP 88-90)		CHARTREVIEW Select 10 charts from the delivery register(every 3 <sup>rd</sup> day)
	Newborns get oxygen if cyanosed or in severe respiratory distress	NA if no indication	NA for each chart if no adequate cases with LBW and/ or
	CPAP used for premature babies with respiratory distress	NA if no indication	prematurity
	All efforts are made to give mother's milk to LBW babies	10	
	Frequent feedings(atleast8xperday)are provided to LBW-babies and intake is monitored	10	
	To newborn unable to feed expressed breast milk is given by cup and spoon or fed by naso-gastric tube in adequate amounts according to age.		
	If IV-fluids are given, they are recorded and precautions are in place to prevent fluid over-load (See PB 2016, P86)	10 NA if no indication	
	Kangaroo mother room is available with a minimum of 2,5 and 8 beds for primary, general and referral hospitals	2	
	In LBW-babies, heat loss is minimized by kangaroo-care and a cap on the head	1	
	care Standard 15:Evidence based is given for neonates		RBILIRUBINEMIA
NCH15.1Comprehensive evaluation was done to reach a diagnosis	Legible and pertinent history and physical findings are documented based on the neonatal evaluation format (See PB 2016, PP 99-100)		CHARTREVIEW

	Procedures (Lab. facility) are in place to check the bilirubin	10	Select 10charts from the delivery
NCH 15.2 Appropriate management was given	level (See PB 2016, P 102)  Adequate hydration is ensured as per protocol	10	register (every 3rd day)  NA for each chart if no adequate
	Phototherapy started when indicated (See PB 2016, PP 102-108)	10	case with neonatal hyperbilirubinemia
	Exchange transfusion is performed when indicated (for general and referral hospitals) and referred to next General or referral hospital(for primary hospitals) (See PB 2016, PP 102-108)		
	At least 2, 3, or 4 functional phototherapy machines are available in primary, general or referral hospitals respectively	2	
	Facilities for exchange transfusion are available (for general and referral hospitals)	2	
	care Standard 16:The facility implements safe and com	prehensive l	EPI programme
NCH 16.1 All the	There is separate room for EPI	2	
necessary structures to provide safe and comprehensive EPI	There is an up-to-date cold chain training manual, Immunization implementation policy guideline that is accessible to all staff	2	
service is available	The refrigerator is specialized for the storage of vaccine only	2	
	The refrigerator is of adequate size to store correctly The volume of vaccines required, including during times of increased demand like campaign	2	
	The electricity supply is safe, e.g. switchless plugs or cautionary notices and stabilizer in place	2	

	there is backup generator for power interruptions	2
NCH 16.2 Vaccines are stored and monitored for safety	Anything other than vaccines is not stored in the refrigerator, including specimens, food & Drink	2

	The refrigerator is either lockable or locked in a locked room	2	
	The refrigerator is properly ventilated and there is space between each vaccine not to be over-crowded and not located near any heat source, e.g. radiator, window		
	There is contingency plan in place in the event of a refrigerator failure or power cut including backup facilities or cold box	2	
	There is an approved cool box with appropriate temperature monitoring or ice Packs OR Alternative refrigerator available to store vaccines during servicing/maintenance, defrosting, cleaning etc.	2	
	There is fridge tag in the refrigerators or kept with vaccine	2	
	There is refrigerator regular preventive and curative maintenance system	2	
	Thermometers are reset according to the manufacturer's guidance	2	
NCH 16.3 Adequately trained personnel are	There are at least two up to date trained individuals on EPI responsible for the Cold chain, temperatures monitoring, recording and storage of vaccines	2	

assigned and Processes are established to ensure	The expiry dates and VVM of vaccines is monitored and those close to expiry stock are clearly labeled	2
Vaccines safety	out-of-date stock are clearly labeled, removed from the refrigerator and destroyed promptly	2
	vaccines stored on the appropriate compartment of refrigerators based on freeze sensitivity and heat sensitivity	2
	There is a procedure for recording the date and time at which vaccine types, brands,	2
	quantities, batch numbers and expiry dates were received	
	Vaccine stocks monitored prior to ordering- Ordered when(25%) remained in the stock	2
	Records of regular servicing, defrosting and cleaning are as per manufacturers recommendations	2
	The temperature is continually monitored with a maximum—minimum thermometer/ Fridge tag every 6 hours	2
	Temperature records are readily accessible and retained until the next audit	2
	high alarm or low alarm readings are recorded with the date	2
	the fridge tag readings are transported to computer base every two months	2
	The health facility. has defaulter tracing mechanism in place for those who discontinued the vaccination	2

NCH 16.4 (	Counselling and	The Health facilities provide Health education to the patient	6	EXIT INTERVIEW
education is	s provided for	or client (has HE manual and educates clients on type of		
clients		vaccination, any side effect that may arise after vaccination,		
		appointment date of the next vaccination).		

### NCH Annex 1 Pediatric Emergency drug list

Glucose 40-50% IV
Glucose10% IV
Glucose 5% IV (DW5%)
Normal saline IV
Ringer's lactate IV
Epinephrine (Adrenaline)
Salbutamol Inhalation (aerosol)
Furosemide IV
Hydrocortisone IV
Dexamethasone IV
Diazepam IV
Phenobarbital PO/IM/IV
Phenytoin PO/IV
ORS
ReSoMal

# NCH Annex 2 List of Essential Equipment and Supplies

Equipment	Emergency area	Ward	Pedi OPD	Pharmacy/ Store	NICU	Comments
Resuscitation table/area						
Torch						
Examination light source						
Otoscope						
Infant Weighing Scales						
Weighing Scales for children						
Measuring board to measure length (lying)						
Measuring board to measure height (standing)						
Stethoscopes						
Pediatric BP apparatus (different sizes)						
Thermometers						
Heat source						
Oxygen Source						
Oxygen cylinder						
Oxygen concentrator						
Central supply	(	Check cent	ral supply	of oxygen		

Flow-meters for						
oxygen Oxygen Administration	Equipment			_		
Nasal prongs						
Nasal catheters						
Masks						
Self-inflating bags for resuscitation						
Masks						
Infant size						
Child size						
Adult size						
IV giving sets with chambers for paediatric use						
Cannulas of paediatric size						
NG-tubes, paediatric size						
Equipment for intra- osseous fluid administration						
Suction equipment						
Electricity Driven						
Foot pump driven		-				
Chest tubes						
	Nebulisers and other equipment for administration of salbutamol					
Electricity driven Nebuliser						

Oxygen driven Nebuliser			
Foot pump driven Nebuliser			
Spacers with masks for administration of metered doses (spray) of salbutamol			
Pulse oximeter			
Oral airways (paediatric size)			
Tongue depressors			

#### NCH Annex 3: List of Guidelines and Job Aids for Pediatric Use

Job Aids
Airway
Breathing
Circulation
Coma
Convulsion
Dehydration
Guidelines
IMNCI chart booklet
Pediatric pocket book
National HIV Care/ART Guideline
National TB Guideline
National nutrition Guideline
ETAT manuals
NICU treatment protocol
Essential NB care Guideline
National EPI Guideline
National malaria Guideline

### NCH Annex 4: Pediatric size anesthesia & equipment

Pediatric size equipment
Tracheal tubes
Face masks
Laryngoscope blades
Oro-pharyngeal airways
Breathing valves(pediatric breathing circuit)
Resuscitation bags
Blood pressure-cuffs, pulse oximeter

#### NCH Annex 5 List of essential lab tests for children

Blood glucose
Hemoglobin
Hematocrit (Hct)
Microscopy for malaria parasites
Rapid diagnostic test(RDT) for malaria parasites
CSF microscopy
Gram stain
Urine microscopy
Urine dip-stick (albumin, glucose, nitrite, leukocytes,please indicate)
Stool microscopy
AFB stain
Culture facility
VDRL
HIV-serology
HIV virology (DNAPCR)
Blood grouping and cross match
Bilirubin
CD4 counts or HIV plasma viral loads according to national guidelines

## HEALTH SERVICE QUALITY STANDARDS FOR COMMUNICABLE DISEASES CARE

#### **HEALTH SERVICE QUALITY STANDARDS FOR HIV / AIDS CARE**

Quality statements	Quality measures	SCORE 1 IF MET 0 IF UNMET	REMARK/verification criteria
	cilities with HIV services also provides risk redu		
	d associated materials. Condoms have at least of	one month	of shelf life before expiration, and be
displayed so that they are easily		1	1
HC1.1 Risk reduction interventions are in place	non-expired 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		Observation AND Document review 1 for each of the following bullets in they are met and 0 if they are unmet
	The facility routinely provides risk reduction counseling (e.g., condom use and other safer sex practices, alcohol and other drug reduction counseling, etc.)	10	Penile model for demonstration     CLIENT INTERVIEW     Interview 5 patients on what the risks are

HIV CARE STANDARD 2: Each facility has a reliable supply of HIV test kits and adult ARVs				
HC2.1 HIV test kits and ARV drugs supply management is ensured	The facility has no stock-out of ARVs (1st line or 2nd line in the last month		Review Bin card (drug store) / stock management system Review ART register in last month and verify no delay in ART initiation no substitution of specific ARVs no appointment at short interval due to decrease ARV supply	
	The facility had no stock-out of rapid test kits in the last month	2	Review Bin card (drug store) / stock management system Review register in VCT room if there is interruption	
<b>HIV CARE STANDARD 3:</b>	For every HIV patient, competent and motiv	ated staff	are consistently available to provide	
routine care and manage com			•	
HC 3.1 Every HIV patient has access at all times to at least one skilled provider and support staff for routine care and	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	1	Observation	
management of complications	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	
	All HIV patients were satisfied with thehealth-	10	CLIENT INTERVIEW	
	care received all HIV patients were satisfied with the care and support from the facility staff	10	Satisfied/Not satisfied 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	8	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	8	STAFF INTERVIEW Select 4 HCWs randomly and verify	

HC 3.2 Every health facility	Action plan is developed and implemented /	10	Document review
has managerial and clinical	implementation in progress for the gaps		
leadership that is collectively	identified from the patient and provider		
responsible for creating and	satisfaction surveys		
implementing appropriate	monthly meeting is conducted to review data,	5	Verify if it was done in the previous
policies and fosters an	monitor QI performance and make		month
environment that supports	recommendations to address		
facility staff to undertake	Problems identified, and to celebrate those who		
continuous quality	have performed and encourage staff who are		
improvement	struggling to improve.		
	all HIV department heads are trained in QI	5	
	and leading change (use of information,		
	enabling behavior, continuous learning)		
	Quarterly meetings conducted with HIV	1	Verify if the last quarter before this
	patients to review its performance, identify		month is conducted
	problems and make recommendations for joint		
	actions for quality improvement		
	Action plan is developed and implemented /	10	<b>Document Review</b>
	implementation in progress for the gaps		
	identified from stakeholders forum		
	health facility leaders communicated through	5	See last month's report and
	established mechanisms (e.g. a dashboard of		management meeting minute
	key metrics) that track the performance of the		
	facility to all relevant staff		
HIV care standard 4: The	e health information system enables the	use of d	ata for early and appropriate
action to improve care for	r HIV/AIDS patients		
HC 4.1 All HIV/AIDS have a	The health facility has registers, data-collection	1	Observation
complete and accurate	forms, clinical and observation charts in place at		
standardized medical record	all times, designed to routinely record and track		
	all key care processes for HIV/AIDS clients		
	The health facility has a system to classify	10	CHART REVIEW
	diseases in alignment with ICD codes at all times		Verify if the diagnosis written in the
			client chart is documented in the HMIS
			register in alignment with the ICD
			codes

	11 11111/ATDG 1	10	CVI I DE DEVIZENT
	all HIV/AIDS patients who were seen within	10	CHART REVIEW
	thefacility in the previous month have complete		Verify if all information is recorded in
	record of all information in the client chart and		the client chart is registered on the
	registered on the HMIS register in alignment with		HMIS register
	ICD code		
HC 4.2 Every health facility has a mechanism in place for data collection, analysis and feedback, as part of its	ART clinic working HCWs regularly conducts reviews of <b>maternal care and their data</b> every month AND develops and implements a QI project for all the gaps identified	40	40 (10 for each bulleted criteria's) if the following were done in the previous month  • maternal care assessment was
monitoring and performance improvement activities	project for all the gaps identified		done the previous month Gaps were identified
			QUALITY PLANNING for the gap
			<ul> <li>Implementation and follow up in progress</li> </ul>
	The health facility implements standard operating	5	Check previous month minutes if the
	procedures and protocols in place at all times for		ART clinic staff evaluated their data
	checking, validating and reporting data		before reporting
HC 4.3 Each facility retains	ART registers are in use and all the necessary	1 if all	Review all pages of register which
accurate, complete, and updated	information are filled as appropriate	are met	were used in the past month and verify
patient ART registers that are		0 if either	if ART patient registers meet ALL the
regularly reviewed.		of the	following criteria
		four are unmet or	National or IP standard versions in use
		no	
		register	• Entries are legible and ≥90% of
		register	fields Complete
			<ul> <li>Updated daily/weekly (per guidelines)</li> </ul>
			Reviewed regularly
HIV CARE STANDARD 5: For adults with HIV/AIDS, evidence based HIV care and treatment is			
provided			
HC5.1 Patients not on ART have	Initial evaluation was done comprehensively for	10	CHART REVIEW
Hd WHO staging or CD4 count	all HIV patients (History, P/E, CD4 count, WHO		
1		1	I and the second
at each clinical assessment,	staging)		

monitored for drug toxicity and cotrimoxazole was prescribed if indicated	ART patients were initiated on correct ART regimen as per the national guideline	10	CHART REVIEW
	Patients on ART are monitored for drug toxicity as per the national guideline	10	CHART REVIEW
	In each clinical assessment, patient eligibility for cotrimoxazole eligibility is assessed and prescribed if indicated based on the national guideline	10	CHART REVIEW
HC5.2 Each facility that provides ART has an adherence support system	a written procedure or algorithm is available that addresses all the adherence support elements	1	Observation
	The facility implemented all three adherence support elements (pre-ART counseling, routine adherence assessment, and intervention counseling)	10	CHART REVIEW Verify if each of them in their last assessment have documentation of adherence assessment at the
HC5.3 Patients on antiretroviral therapy (ART) receive routine monitoring for treatment failure through assessment of CD4	a written procedure or algorithm is available for monitoring patients on ART and responding to results of CD4 and/or viral load tests	1	Observation
and/or viral load per national guidelines, and results are documented in the medical record.	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 safe disclosure of their HIV status to their sex partner(s) and the	The facility provides partner HIV testing and counseling onsite	10	Review 10 adult ART charts for ≥12 months and were seen in the past month.
importance of partner testing for HIV.	PLHIV are provided with syndromic STI screening at each clinical assessment and offered treatment when indicated	10	Review 10 adult ART charts for ≥12 months and were seen in the past month.

HC5.5 All facilities that provide services to People Living with HIV (PLHIV) 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.	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	1	Document Review
HC5.6 Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments	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.
(BMI or MUAC) per national guidelines and managed accordingly	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.
HC5.7 All facilities have a protocol for performing and documenting screening for	A written procedures or algorithms for TB screening is available	1	Document Review
active tuberculosis (TB) on intake and at each clinical visit for all HIV-infected patients.	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	A written procedures or algorithms for IPT per national guidelines is available	1	
receive IPT per national guidelines	HIV-infected clients who screen negative for active TB receive IPT per national guidelines	10	CHART REVIEW Review 10 adult ART charts for ≥12 months and were seen in the past month.

HC5.9 All health facilities treating adult and child PLHIV document and track referrals of ART patients to community	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)	1	Document Review
services.	The referral system include follow-up and documentation to determine if the patient accessed the referral services	1	Document Review
	The hospital provide documentation showing that facility staff review the referrals logbook routinely to optimize linkages to community services	1	Document Review
HC5.10 All clients attending HIV services have access to high quality voluntary family	All options of FP methods are available in the facility including COC, injectable, implants, IUCD, BTL, vasectomy	1	Document Review
planning counseling and services, including safer pregnancy counseling and contraceptives, depending upon	Education materials (IEC) about contraception and safe conception on display or available to clients (e.g., pamphlets, posters, brochures, inserts, etc.)	1	Document Review
their fertility intentions.	FP education and/or counseling is routinely offered onsite to clients who wish to delay or prevent pregnancy	10	CLIENT INTERVIEW
	A written procedure or algorithm is available for identifying and tracking defaulters	1	Document Review
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.	There are standard procedures for identifying and tracking adult and pediatric ART patients who have defaulted on their appointments	1	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	1	Document Review
	Tracking results are used to update facility indicators (e.g., Lost-to-Follow-Up [LTFU] rates)	1	Document Review

HIV CARE STANDARD 6: For adults with HIV/AIDS, evidence based PMTCT service is provided in ANC, L&D and			
postnatal  HC6.1 Each facility retains accurate, complete, and updated patient registers that are	ART patient tracking documentation is complete and shows evidence of defaulted ART patients brought back into care	1	Document Review
regularly reviewed	ANC registers exist, used properly and reviewed regularly	1 if all are met 0 if either of the four are unmet or no register	Review the last 10 pages of register and verify if it meets ALL the following criteria National current versions in use Entries are legible and ≥90% of fields complete Updated daily/weekly (per guidelines) Reviewed regularly
	PMTCT cohort register exist, used properly and reviewed regularly	1 if all are met 0 if either of the four are unmet or no register	Review the last 10 pages of register and verify if it meets ALL the following criteria National current versions in use Entries are legible and ≥90% of fields complete Updated daily/weekly (per guidelines) Reviewed regularly
HC6.2 All HIV-infected MCH clients have documented prescription of ART within 2 months of diagnosis of HIV/1st visit	All HIV-infected MCH clients have documented prescription of ART within 2 months of diagnosis of HIV/1st visit	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 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
HC6.4 Each facility that provides ART has an adherence	A written procedure or algorithm is available for identifying and tracking defaulters	1	
support system	There are standard procedures for identifying and tracking HIV positive pregnant women on ART who have defaulted on their appointments	1	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 HIV positive pregnant women brought back into care	1	
	Tracking results are used to update facility indicators (e.g., Lost-to-Follow-Up [LTFU] rates)	1	
	a written procedure or algorithm is available that addresses all the adherence support elements	1	
	The facility implemented all three adherence support elements (pre-ART counseling, routine adherence assessment, and intervention counseling)	10	Review 10 adult charts on ART for ≥12 months and were seen in the past month.

HC6.5 All health facilities treating adult and child PLHIV document and track referrals of pre-ART and ART patients to community services.	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	1	Document Review  Document Review
community services.	documentation to determine if the patient accessed the referral services	1	Bocument Neview
	The hospital provide documentation showing that facility staff review the referrals logbook routinely to optimize linkages to community services	1	Document Review
HC6.6 All HIV-infected clients receive counseling on safe disclosure of their HIV status to their sex partner(s) and the	The facility provides partner HIV testing and counseling onsite	10	Review 10 ART charts of HIV positive women in PMTCT/MCH care > 3 months.
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 ensure routine testing of all children of ART patients at MCH clinics	10	Review 10 ART charts of HIV positive women in PMTCT/MCH care > 3 months.
HC6.7 Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments (BMI or MUAC) per national guidelines, nutrition status	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	1	
categorized and managed accordingly	Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments (BMI or MUAC) per national guidelines	10	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care 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 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.

HC6.8 All facilities have a protocol for performing and	A written procedures or algorithms for TB screening is available	1	Observation
documenting screening for active tuberculosis (TB) on intake and at each clinical visit for all HIV-infected patients	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 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.
. HC6.9 All HIV-infected clients who screen negative for active	A written procedures or algorithms for IPT per national guidelines is available	1	Observation
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 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	Review 10 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.
HC6.11 All patients on antiretroviral therapy (ART) receive routine monitoring for	a written procedure or algorithm is available for monitoring patients on ART and responding to results of CD4 and/or viral load tests	1	Document Review
treatment failure through assessment of CD4 and/or viral load per national guidelines, and results are documented in the medical record.	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 ART charts of HIV positive women enrolled in PMTCT/MCH care and were seen in the past month.
HC6.12 Each care/treatment facility has a standard procedure for identifying and tracking HIV	A written procedure or algorithm is available for identifying and tracking defaulters	1	Document Review

positive breastfeeding women on ART who have defaulted on their appointments.	tracking HIV+ women after delivery who have defaulted on their appointments	1	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	1	Register review
	Tracking results are used to update facility indicators (e.g., Lost-to-Follow-Up [LTFU] rates)	1	Document Review
HC6.13 All clients attending HIV services have access to high quality voluntary family	All options of FP methods are available in the facility including COC, injectable, implants, IUCD, BTL, vasectomy	1	
planning counseling and services, including safer pregnancy counseling and contraceptives, depending upon	Education materials (IEC) about contraception and safe conception on display or available to clients (e.g., pamphlets, posters, brochures, inserts, etc.)	1	Observation
their fertility intentions.	FP education and/or counseling is routinely offered onsite to clients who wish to delay or prevent pregnancy	10	CLIENT INTERVIEW
	Education materials (IEC) about contraception and safe conception on display or available to clients (e.g., pamphlets, posters, brochures, inserts, etc.)	1	
	7: Evidence based care is provided for	HIV EX	
HC7.1 All HIV-exposed infants (HEIs) receive DNA PCR or other virology testing for early infant diagnosis, with a	Routine collection of dried blood spots (DBS) is done in the facility for PCR testing for HEIs	10	Review registers' entries of 10 HEIs born 3 or more months prior to this last month (up to one year prior)
documented final HIV status at the end of breastfeeding and documented return of HIV results to caregivers	There is a system in place for tracking HEIs through the end of breastfeeding and documenting final HIV status	10	

	T	I	T =
	There is a system for documenting return of HIV	10	Review registers' entries of 10 HEIs
	results to a caregiver		born 3 or more months prior to this last
	The facility has a standardized practice of	10	month (up to one year prior)
	tracking the linkage of HEIs to DBS collection		
	services		Document review
	The facility provide documentation showing that	1	
	facility staffs review the referrals logbook		
	routinely to optimize linkages to DBS collection		
HC7.2 All HEIs initiate CTX by	A written procedure or algorithm for provision of	1	
8 weeks of age.	CTX to HEIs is available	_	
o weeks of age.	The facility initiate CTX for all HEIs by 8 weeks	10	Review registers' entries of 10 HEIs
	of age	10	born 3 or more months prior to this last
	of age		month (up to one year prior)
HC7.3 Each facility caring for	A written procedure or algorithm is available for	1	month (up to one year prior)
HIV-exposed infants (HEIshas a		1	
	identifying and tracking defaulters	1	The section of the fellowing
standard procedure for	There are standard procedures for identifying and	1	The system contains the following core
identifying and tracking HIV-	tracking HIV-exposed infants who have defaulted		elements:
exposed infants that have	on their appointments		defined staff roles/responsibilities
defaulted on their appointments.			procedures for patient identification and
It contains the following core			tracking
elements: defined staff			standardized documentation that
roles/responsibilities, procedures			includes updating of relevant facility
for patient identification and			indicators
tracking, and standardized			
documentation that includes			
updating of relevant facility			
indicators.has a standard			
procedure for identifying and			
tracking HIV-exposed infants			
that have defaulted on their			
appointments.			
T. F.			

HC7.4 Each facility retains accurate, complete, and update-to-date patient registers (HEI follow up card and PMTCT cohort register) that are regularly	There is a mother-infant appointment book or register for mother baby pairs (i.e., HIV-positive mothers and their HIV-exposed infants) which is used as part of the defaulter tracking program	1	Register or appointment book review
reviewed.	Tracking results are used to update facility indicators (e.g., Lost-to-Follow-Up [LTFU] rates)	1	
	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)
HC7.5 Each PMTCT facility has a reliable supply of Early Infant Diagnosis (EID) dried blood	The facility has not stock-out of EID supplies in the last month resulting in an interruption of HIV testing for infants	1	Review stock management
spot (DBS) supplies which consist of: a collection card, alcohol swabs, gauze, lancets and latex gloves (or a DBS	EID supplies are distributed to testing points in the facility as standardized bundles to ensure that all components are consistently available	1	Document review
bundle)	There is a standardized practice of documenting enrollment into ART services of HIV-infected infants identified through EID services	10	Review registers' entries of 10 HEIs born 3 or more months prior to this last month (up to one year prior) 1 if enrollement documented 0 if not documented NA for each chart not identified
HC7.6 ALL HIV infected infants identified through EID services should be linked to ART services and have documents	HIV-exposed infant/EID register documents all linkages to treatment (such as by including date of enrollment, ART number, or ART regimen)?	10	Review registers' entries of 10 HEIs born 3 or more months prior to this last month (up to one year prior)  1 for each chart if registered  0 for each chart if not registered  NA for each chart not identified
	There is a standardized practice of documenting enrollment into ART services of HIV-infected infants identified through EID services	10	Review registers' entries of 10 HEIs born 3 or more months prior to this last month (up to one year prior) 1 if enrollement documented 0 if not documented NA for each chart not identified

HIV CARE STANDARD	8: For adults with HIV/AIDS, evidence	ce based	PMTCT service is provided in
L&D room	,		-
HC8.1 Routine PITC is provided to all eligible women attending	a written procedure or algorithm is available for provision of PITC in maternity	1	
maternity for labor and delivery.	There is routine provision of PITC for eligible pregnant women attending maternity	10	Review delivery register entries of 10 women attending labor ward in the past month.
HC8.2 ART for HIV –infected women and ARV prophylaxis	a written procedure or algorithm is available for provision of ARVs to mother-infant pairs in L&D	1	
for their exposed infants at maternity /L&D	Is there routine provision of ART for mothers and ARV prophylaxis for infants at L&D	5	Review delivery register entries from 5 most recently seen HIV-infected women in maternity in the last month
	a written procedure or algorithm is available for provision of ARVs to mother-infant pairs in L&D	1	
HIV CARE STANDARD	9: For children with HIV/AIDS, evi-	dence ba	sed HIV care and treatment is
given			
HC9.1 All eligible pediatric patients have documented prescription of Cotrimoxazole (CTX), according to national guidelines.	All eligible pediatric children are prescribed with CTX as per national guideline	10	Review 10 charts of children on ART ≥12 months who had clinical assessment in the last month.
HC9.2 Each facility performs and documents screening for	a written procedure or algorithm for pediatric TB screening is available	1	
active TB on intake and at each clinical visit for all HIV-infected children	there is a standardized practice for pediatric TB screening and documentation at each visit		Review 10 charts of children on ART ≥12 months who had clinical assessment in the last 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	10	Review 10 pediatric ART chartswho were seen in the past month.

HC9.3 Each ART facility performs routine monitoring of nutrition status through regular anthropometric assessments (i.e., weight and length or height, BMI, MUAC, or growth plot curve) per national guidelines.	Each patient's nutrition status is categorized and Nutrition counseling and treatment / referrals is provided based on assessment results.	10	
HC9.4 All children 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.	a written procedure or algorithm is available for monitoring children on ART and responding to results of CD4 and/or viral load tests  ART children have access to CD4 and/or viral load testing (either on-site or by referral) to monitor for treatment failure	1 10	Review 10 adult charts on ART for ≥12 months and were seen in the past month.
HC9.5 Assessing a child's weight and prescribing ARV medications accordingly using	There is a pediatric ARV dosing tool (e.g., table, wheel, brochure) with weight bands available to the ARV provider	1	
weight band dosing is essential to ensure children are adequately	the dosing tool provide weight band dosing for all ARVs in the nationally recommended regimens	1	
treated during ongoing growth and development. Each ART facility providing treatment	the dosing tool provide weight band dosing for fixed dose combination formulations	1	
services to children is equipped with current pediatric ARV weight band dosing tools at the point of care.			
HC9.6 Adolescent-friendly	the facility have the following:	6	1 for each criterias if they are present

		ı	
clinical services are provided to cater to the specific treatment, support and general health needs of adolescents living with HIV.	<ul> <li>A written policy for disclosure of HIV status to adolescents</li> <li>A written policy for consent for HIV testing and treatment for adolescents, including provisions for testing of emancipated minors without consent from parent, guardian or spouse</li> <li>Adolescent-specific peer leaders or support groups</li> <li>Extended/weekend hours for adolescents to receive clinical services</li> <li>Sexual and reproductive health services, including education and family planning, offered to adolescents.</li> <li>Services reaching out to adolescent boys and girls in gender-specific ways to help</li> </ul>		0 for each in their absence
TTTT C4 1 1 1 0	enhance patient engagement and retention	4 • 66	
	Communication with HIV/AIDS patier	its is effe	ective and in response to their
needs and preferences			
HC10.1 All HIV/AIDS patients	HIV/AIDS patients and their families are given	10	CLIENT INTERVIEW
and their families receive	the opportunity to discuss their concerns and		
information about their care and	preferences		
experience effective interactions	health-care staffsdemonstrate the following skills:	10	CLIENT INTERVIEW
with staff	active listening, asking questions, responding to		
	questions, verifying client's and their families		
	questions, verifying client's and their families understanding, and supporting client's in		
	questions, verifying client's and their families understanding, and supporting client's in problem- solving	10	
	questions, verifying client's and their families understanding, and supporting client's in problem- solving  HIV/AIDS patients and their families cared in	10	OF HENCE INCREDICATION
	questions, verifying client's and their families understanding, and supporting client's in problem- solving  HIV/AIDS patients and their families cared in the facility felt they were adequately informed by	10	CLIENT INTERVIEW
	questions, verifying client's and their families understanding, and supporting client's in problem- solving  HIV/AIDS patients and their families cared in the facility felt they were adequately informed by the attending care provider(s) regarding	10	CLIENT INTERVIEW
	questions, verifying client's and their families understanding, and supporting client's in problem- solving  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	10	CLIENT INTERVIEW
	questions, verifying client's and their families understanding, and supporting client's in problem- solving  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		
	questions, verifying client's and their families understanding, and supporting client's in problem- solving  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	10	CLIENT INTERVIEW  CLIENT INTERVIEW

	HIV/AIDS patients and their families cared in the facilityreported that they were satisfied with the health education and information they received from the care providers.	10	CLIENT INTERVIEW			
HIV care Standard 11: HIV/AIDS patients receive care with respect and dignity						
HC11.1 All women have privacy around the time of clinical evaluation, and their confidentiality is respected	The physical environment of the health facility facilitates privacy and provision of respectful care, confidential care including the availability of curtains, screens	10	CLIENT INTERVIEW			
	The health facility has written, up-to-date, protocols to ensure privacy and confidentiality for all clients throughout all aspects of care					
HC11.2 No woman is subjected to mistreatment such as physical,	The health facility has written, up-to-date, zero- tolerance, non-discriminatory policies relating to the mistreatment of clients	1				
sexual or verbal abuse, discrimination, neglect, detainment, extortion or denial of services	Any client who reported physical, verbal or sexual abuse, to themselves or their families during clinical evaluation	20	Select and verify 5 clients exiting from the chronic care / specialty clinic 4 for each client if they are protected 0 for each client if report of abuse			
	The health facility has written accountability mechanisms for redress in an event of mistreatment	1				
	The health facility has a written, up-to-date policy and protocols outlining clients right to make a complaint about the care received and has an easily accessible mechanism (box) for handing in complaints and is periodically emptied and reviewed	4	4 if present AND periodically emptied and reviewed 1 if only present			
	All clients were satisfied with the facility meeting their religious and cultural needs	10	CLIENT INTERVIEW			
	All clients reported to be treated with respect and dignity	10	CLIENT INTERVIEW			

	The health facility has a written, up-to-date,	1	Document review
HC11.3 All clients have	policy in place to promote for obtaining informed		
informed choices in the services	consent from clients prior to examinations and		
they receive, and the reasons for	procedures		
intervention or outcomes are	HCW take informed consent from clients prior to	10	CLIENT INTERVIEW
clearly explained	examinations and procedures		

### HEALTH SERVICE QUALITY STANDARDS FOR TB DIAGNOSTIC AND TREATMENT SERVICES

<b>Quality</b> statements	Quality measures	Score Weight	Remark / verification criterias		
	TB Standard 1: The health facility has an appropriate working system AND physical environment with adequate working guidelines, utilities, medicines, supplies and equipment for diagnosis and management of TB patients				
TB1.1 The health facility is designed, organized and	The health facility has a separate TB clinic with visible signage open waiting area	1	1 if all three are present		
maintained so that all clients with TB can be cared for, according to their needs, in privacy, facilitating continuity of care	The TB clinic is clean well illuminated cross ventilated allows privacy (screen/curtain) maintained (no breaks on the door, window, wall, roof, floor) The central triage has a cough corner AND cough triage should be	1	1 if all are met		
TB1.2 Water, sanitation, hand- washing and waste- disposal facilities are available, functional,	practiced in the central triage  The TB clinic has leak-proof covered and labelled waste bins and impermeable sharps containers available in the room, to segregate waste into 3 categories namely- sharps, non-sharps infectious waste, general non-infectious waste (e.g. food, packaging materials)  The TB clinic has at least one functioning hand hygiene station with soap	1	1 if all three are present		
reliable and safe a to meet the needs of staff, clients and their families	and water or alcohol based hand rubs  The TB clinic has awareness raising materials (posters) on hand hygiene and waste segregation and these are visible in the areas where the activities should be completed	1			
TB1.3 An adequate stock of medicines, supplies and equipment is available for the care	The TB clinic has the necessary furnitures and examination beds used in the evaluation and management of TB patients	1	A table, three chairs Curtain/screen an examination couch 1 if all are present 0 if one is missed		

of TB patients (in the clinic and laboratory)	The TB clinic has functional essential equipment and supplies for routine care, follow up of TB patients in sufficient quantities, at all times	2	Different Formats (clinical assessment, laboratory requests, prescription pads, referral, appointment cards, HMIS register) Stethoscope Blood pressure Apparatus Thermometer Weighing scale (both adult and pediatric) PPE especially mask 2 if all are present 1 if only 1 is missed 0 if two or more are missed
	The health facility has essential laboratory supplies and tests AND imaging tests to support the management of TB patients	2	Complete blood count ESR HIV CXR Sputum examination for AFB – fluorescent microscope 2 if all present 1 if one missed 0 if two or more missed
	The hospital laboratory should have separate waiting area and sputum collection window for TB suspected cases	1	
	The health facility implement anti TB drug kit	1	See annex 1
	TB drugs are stored in lockable cabinet	1	
	Stock out management is in place Bin card is updated Copy of IFFR is present in the TB clinic	1	1 if both are met

	The health facility uses endorsed &/or customized National guideline or protocol for managing TB and their complications AND is/are available in the TB clinic to be used as a reference.  Guidelines for clinical and programmatic management of TB, TB/HIV and leprosy in Ethiopia TB/HIV treatment manual Guideline on programmatic management of drug resistance TB in Ethiopia IPPS national manual Cough triage protocol	1	1 if all 5 are present
	r every TB patient, competent and motivated staff are consiste	ently availab	ole to provide the necessary
<u> </u>	nd manage complications early	1	
TB2.1 Every TB patient has access at all times to at least	The health facility has a roster that is accessibly displayed at the gate of TB clinic, detailing the names of staff assigned and their specific roles and responsibilities.	1	
one trained TB officer for the necessary care, follow up and early diagnosis and management of complications	The TB clinic has a written, up-to-date, staffing policy, indicating the numbers, types and competencies of staff working in the clinic	1	Policy has to describe at least the needed competency to work in the TB clinic including registration capability Certificates of training attendance
	A trained lab personnel on sputum AFB microscopy is present in the facility and engaged in doing the examination	1	View certificate and lab register
TB2.2 Health care providers working in the clinic have appropriate competencies and skills mix to meet	The health facility provides an enabling supportive environment for professional staff development, through regular (every month) supportive supervision and mentoring	1	Document review (training materials, SSV reports and feedbacks) Interview the working HCP 1 if both document AND interview evidences present
needs of TB patients	the health facility provides in- service training, a refresher session or mentoring at least every quarter	1	Document review (training materials, SSV reports and feedbacks) Interview the working HCP 1 if both document AND interview evidences present

	Staffs working in the TB clinic engage in quality-improvement team meetings and activities	5	Document review ( assessment tool, project proposal, attendance sheets etc) 5 if previous month TB quality score is done and QI activities are started by Quality unit (participating TB clinic workers)
	health facility performs performance evaluation of staffs working in the TB clinic in the previous month and the staffs got satisfactory performance	2	2 if performance evaluation was done AND the staffs got satisfactory performance 1 if performance evaluation was done but the staffs did not get satisfactory performance 0 if performance evaluation was not done
TB2.3 Every health facility has managerial and clinical leadership that is collectively responsible for creating and implementing appropriate policies and fosters an	staff are allowed and supported to provide feedback to hospital management on quality improvement and their performance.	15	Interview 2 staffs working in the TB clinic  5 for each staff if allowed and supported 0 for each staff if not allowed and supported NA for each less number of staffs working
environment that supports facility staff to undertake continuous quality improvement	At least one QI project is done in TB clinic every quarter	5	5 if QI project is done in the immediate past quarter

TB Standard 3: Th	ne health information system enables the use of data for early and	appropriat	e action to improve care for
TB3.1 Every TB patient has a complete and accurate	The health facility has registers, data-collection forms, clinical and observation charts in place at all times, designed to routinely record and track all key care processes for TB patients	1	Observation
standardized medical record	The health facility has a system to classify diseases in alignment with ICD codes at all times	10	CHART REVIEW Verify if the diagnosis written in the client chart is documented in the HMIS register in alignment with the ICD codes 1 for each chart if aligned 0 for each chart if not aligned
	For all TB patient, all important information should be properly registered in to UNIT TB register	10	CHART REVIEW Verify if all information is fully recorded
	All anti TB drug dosages indicated on the unit TB register for each registered Case	3	UNIT TB REGISTER REVIEW Review the previous month newly registered cases 3 if indicated for all 1 if one is missed 0 if two or more is missed
	The treatment outcome recorded for all TB case at the end of treatment course	3	UNIT TB REGISTER REVIEW Review the previous month treatment completed or defaulted cases 3 if outcome recorded for all 1 if one is missed 0 if two or more is missed

TB3.2 Every health facility has a mechanism in place for data collection, analysis and feedback, as part of its monitoring and performance improvement activities	OPD case managers/ Directors and health-care workers in the TB clinic regularly conducts reviews of TB care and their data every month AND develops and implements a QI project for all the gaps identified		40 (10 for each bulleted criteria's) if the following were done in the previous month TB care assessment was done 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		Check previous month minutes if the TB clinic staff evaluated their data before reporting
TB Standard 4: Co	mmunication with TB patients is effective and in response to thei	r needs and	preferences
TB4.1 All TB patients and their families receive	For all TB patients, easily understood health-education materials, in an accessible written or pictorial format, are available in the languages of the communities served by the health facility	2	
information about their care and experience effective interactions with staff	The hospital provides regular health education and communication sessions on TB (prevention & control, symptoms, treatment etc.) s in local languages - Print, audiovisual	8	3 if TB is included in the previous month Health education programme of the hospital 5 if the health education materials are prepared in local language and are always available for distribution to clients, families and visitor of the hospital
	Patient education should be given on importance of isolation, proper use of masks and it should be documented.	10	CLIENT INTERVIEW
	TB patients are given the opportunity to discuss their concerns and preferences	10	CLIENT INTERVIEW
	health-care staffs demonstrate the following skills: active listening, asking questions, responding to questions, verifying client's and their families understanding, and supporting client's in problem-solving	10	CLIENT INTERVIEW

	TB patients cared in the facility felt they were adequately informed by the attending care provider(s) regarding examinations, any actions and	10	CLIENT INTERVIEW
	decisions taken about their care		
	TB patients cared in the facility expressed overall satisfaction with the health services	10	CLIENT INTERVIEW
	TB patients cared in the facility reported that they were satisfied with the health education and information they received from the care providers.	10	
TB4.2 TB patients and their families	health-care staff introduced themselves and showed good knowledge of the clients history and the care that had been undertaken to date	10	CLIENT INTERVIEW
experience coordinated care with clear and accurate information	The physical environment of the health facility facilitates privacy and provision of respectful care, confidential care including the availability of curtains, screens to promote adherence, improve quality of life, and relieve suffering.	10	CLIENT INTERVIEW
exchange between relevant health and social care professionals	The facility send sputum samples to the nearby diagnostic/EQA facility through postal service regularly	1	
TB Standard 5: '	TB patients receive care with respect and dignity		
TB5.1All TB patients have privacy	The health facility has accountability mechanisms for redress in the event of violations of privacy, confidentiality and consent	1	
around the time of clinical evaluation,	The health facility has written, up-to-date, zero-tolerance, non-discriminatory policies relating to the mistreatment of clients	1	
and their confidentiality is respected	All clients should be protected from physical, verbal or sexual abuse, to themselves or their families during clinical evaluation	20	Select and verify 5 clients exiting from the TB clinic 4 for each client if they are protected 0 for each client if a report of abuse
TB5.2No client is	All TB patient must receive treatment services for free	10	CLIENT INTERVIEW
subjected to mistreatment such as	The health facility has written accountability mechanisms for redress in an event of mistreatment	1	
physical, sexual or verbal abuse, discrimination, neglect, detainment,	The health facility has a written, up-to-date policy and protocols outlining clients right to make a complaint about the care received and has an easily accessible mechanism (box) for handing in complaints and is periodically emptied and reviewed	4	4 if present AND periodically emptied and reviewed 1 if only present

extortion or denial of services	All clients were satisfied with the facility meeting their religious and cultural needs	10	CLIENT INTERVIEW
	All clients reported to be treated with respect and dignity	10	CLIENT INTERVIEW
TB5.3All clients have informed choices in the	The health facility has a written, up-to-date, policy in place to promote for obtaining informed consent from clients prior to examinations and procedures		Document review
services they receive, and the reasons for intervention or outcomes are clearly explained	HCW take informed consent from clients prior to examinations and procedures	10	CLIENT INTERVIEW
TB Standard 6 all patients comi	: Every TB patient receives evidence-based care AND ng to the facility	TB scree	ening should be done for
	protocol for routine TB screening in the facility	1	
provides routine TB screening for all clients visiting the facility	All clients are screened for TB	10	DATA SOURCE – use the previous month HMIS register of 5 different adult OPDS Select 2 MRNs from the HMIS register of the different OPDS (one MRN every 3rd day of Day 1-30 though they are from different register) If the day is weekend / holiday, select the MRN from the next working day Trace the charts from the medical record room Verify if clients are screened for TB symptoms AND registered also in the HMIS register 1 for each chart

TB 6.2 TB clients	For all TB patients, pertinent history and physical examination is taken to	10	CHART REVIEW
are evaluated	rule in or rule out the diagnosis of TB, its anatomic involvement and		For clients on follow up, trace
comprehensively and	complications		the first time the client was
essential tests are			registered in the facility
done as per the	Essential lab and imaging tests were done during the first evaluation and	10	CHART REVIEW
national guideline	subsequent follow ups if needed		
	Complete blood count		
	ESR		
	HIV		
	CXR		
	Sputum examination for AFB – fluorescent microscope		
	Additional indicated lab and imaging tests for extra pulmonary TB		
	Lab and imaging tests were done in the same facility	10	CHART REVIEW
TB6.3 Proper	All TB patients are properly classified AND registered as per the national		See annex for classification
classification and	GL		
management is	All TB patients have their treatment supporters' (contact person) details	10	CHART REVIEW
provided for all TB	recorded on unit TB register		
patients as per	All TB patients should put on standardized regimen according to their	10	CHART REVIEW
national guideline	diagnosis as per national guideline		
	All TB treatment dosing should be correct	10	CHART REVIEW
	All TB patients have their sputum examination and the result registered		CHART REVIEW
	on Unit TB register		
	the daily DOT section of the unit register is properly recorded	10	CHART REVIEW
	All bacteriologically confirmed PTB have follow up sputum examination	10	CHART REVIEW
			Select 5 smear positive clients
			who are on follow up from
			previous month unit TB
			register
			Verify if follow up sputum
			examination was done when
			indicated (at end of intensive
			phase, five month and at the
			end of treatment)
			1 if done when indicated
			0 if it was not done when
			indicated

			NA if not indicated
	The facility provides HIV screening for all TB patients	10	CHART AND TB UINT
			REGISTER REVIEW
TB6.4 The facility	Nutritional status assessment and appropriate management is given for all	10	CHART REVIEW
provides Nutritional	TB patients, at all visits - see annex		1 if assessed , correct
Assessment,			interpretation and
counseling and			management
support for all			0 if either of the three are not
Tuberculosis patients			done or incorrect
	All TB patients are counselled to	10	CLIENT INTERVIEW
	Eat more and a variety of food stuffs		1 for each client if counselled
	Maintain a high level of hygiene and sanitation		AND able to demonstrate the
	Drink plenty of clean and safe (boiled or treated) water		knowledge in all bullets
	Maintain a healthy lifestyle and practice infection control at home		
	Take your medicines properly and on time under DOT		
	Seek early treatment for adverse drug reactions		

## Communicable Diseases Annex 1.TB Treatment Regimen and drugs

TB patient type		Recommended TB Treatment	Additional Action(s)
		regimen	
New	Low risk to DR-TB	Treatment as new: 2(RHZE)/4RH	Do rapid DST if the case is from high TB
			risk settings
	known contact of known/presumed DR-	Do rapid DST before making	If patient is too sick to wait for DST
	TB case	decision on the appropriate regimen	result, refer the patient to MDRTB
			treatment center
	INH resistant TB case	9RHZE	Do rapid DST, if sputum smear remains
			positive after end of second months of
			treatment or smear revert back to positive
			(after negativity).
	Relapse	Treat as retreatment:	Do rapid DST for all in this group.
	Treatment after Loss to follow up	2S (RHZE) ,1(RHZE)/5(RH)E	If DST confirms RR-/M-/XDR-TB,
Previously treated	Treatment after failure of New regimen		STOP Retreatment and refer/link MDR-
			TB treatment center
	Other previously treated		
	Treatment after failure of Retreatment,	Do rapid DST before making	If patient is too sick to wait for DST
	Relapse after two or more courses of treatment	decision on the appropriate regimen	result, refer the patient to MDRTB treatment center

TB patient type		Recommended TB Treatment regimen	Additional Action(s)
DR-TB	RR-/M-/XDR-TB cases	Treat with full course of Second-line treatment	Link/Refer the patient to MDRTB treatment center
Transfer in		Continue same treatment regimen	Assess the treatment response to decide on the need for DST

#### Communicable Diseases Annex2.TB PATIENT KITS SYSTEM IN ETHIOPIA

The national TB control program has implemented the use of "TB patient kits" for the treatment of Adult TB patients considering it additional benefits: contributing to efficient procurement, simplifying drug quantification, promoting rational drug use, promoting the DOTS strategy, and facilitating drug management.

A TB patient kit is a pre-packed container that contains the full course of Anti-TB drugs needed to treat a single patient. The kit helps limit confusion and wastage, and makes it easier to monitor the regularity of treatment; avoiding stock-outs and maintainsa patient confidence in the health system.

#### TB patient kit formulations

- TB patient kit is available in two preparations for treatment of New TB and previously treated TB patients. It contains all the drugs needed to treat one adult patient of the middle weight band (from 40 kg to 54 kg).
- TB patient kit for New TB patients
  - o Treatment consists of Intensive Phase of 56 daily doses (2 months) and Continuation Phase of 112 daily doses (4 months).
  - o A kit for New TB patients contains two separate boxes:
    - One for the Intensive Phase: 4 drug fixed-dose combination tablets (FDC-4) (RHZE 150/75/400/275 mg).

- One for the Continuation Phase: 2 drug fixed-dose combination tablets (FDC-2) (RH 150/75 mg)
- o NB on blister pack contains 28 tables packed in blister sheets of 4 rows of 7 tablets.
- TB patient kit for Previously treated patients
  - Treatment consists of Intensive Phase of 84 daily doses (3 months) and Continuation Phase of 140 daily doses (5 months). The kit contains all the drugs needed to treat 1 patient of the middle weight band (from 40 to 54 kg).
  - o A kit for previously treated Tb patients contains three separate boxes:
    - for the Intensive Phase:
      - 4 drug fixed-dose combination tablets (FDC-4) (RHZE 150/75/400/275 mg).
      - Streptomycin, water syringes and needles (S 1 g).
    - for the Continuation Phase:
      - 3 drug fixed-dose combination tablets (FDC-3) (RHE 150/75/275 mg). or
      - 2 drug fixed-dose combination tablets (FDC-2) (RH 150/75 mg) plus E 400mg

#### Dose Adjustment for using patient kits

Dosage according to the patient's weight is essential in tuberculosis control. Patient's kits contain all the drugs needed for the most common weight band of patients 40-54 kg. Kits are easily adjustable by health workers at the start of the treatment by removing or adding blister sheets to accommodate other standard weight bands. One blister pack contains 28 tables of FDC.

## **Communicable Diseases Annex** 2.1 Pre-packed TB kit for NEW TB Patient contains:

Drugs Name	Daily FDC tablets	Duration of	Total tabs	Number of	Total of Blister packs
	per day	treatment in	required per	tablets in one	required for a kit
	(A)	Months	phase	Blister pack (D)	(=C/D)
		(B)	(C=A x B)		
RHZE 150/75/400/275mg	3	2	168	28	6
RH 150/75 mg	3	4	336	28	12

Patient weight	RHZE FDC blisters needed	Adjustment	RH blisters needed for	Adjustment (from the pre-
	in Intensive Phase	(from the pre-packed)	continuation phase	packed)
20-29	3	Remove 3 blister	6	Remove 6 blister
30-39	4	Remove 2 blister	8	Remove 4 blister
40-54	6	None	12	None
≥55	8	Add 2 blister	16	Add 4 blister

Adjustment to be made to the kit based of patient weight band for NEW TB Patient:

### **Communicable Diseases Annex** 2.2 Pre-packed TB kit for previously treated TB contains:

Drugs Name	Total number of tablets for one PK (A)		Total number of blisters for one patient (=A/B)
RHZE 150+75+400+275mg	252	28	9
Streptomycin 1gm inj.	56	1	56
Water for Inj. 5ml	56	1	56
Disposable syringe 5ml	56	1	56
RH 150 +75mg	420	28	15
Ethambutol 400mg tab	280	28	10

### **Communicable Diseases Annex** 2.3 Adjustment to be made to TB kit based of patient weight band for Previously Treated TB:

Patient	RHZE Blister	Adjustment	RH Blister needed	Adjustment	Ethambutol blister	Adjustment
weight	needed for intensive phase	(from the pre- packed)	for continuation phase	(from the pre- packed)	needed for continuation phase	(from the pre- packed)
20 – 29kg	4 <sup>1/2</sup>	Remove 4 <sup>1/2</sup>	$7^{1/2}$	Remove 7 <sup>1/2</sup>	$7^{1/2}$	Remove 2 <sup>1/2</sup> blister
		blister				
30-39 kg	6	Remove 3 blister	10	Remove 5	$7^{1/2}$	Remove 2 <sup>1/2</sup> blister
40- 54 kg	9	None	15	0	10	None
≥55 kg	12	Add 3 blister	20	Add 5	15	Add 5 blister

#### Note that

- Streptomycin needs no adjustment for all weight bands as one vial is to be used for one day making the total required 56 doses.
- TB patient kit is only for adults and adolescents
- A kit is pre-prepared only for weight band range of 40-54kg
- Patients weighing either below 40kg or exceeding 54kg kit needs to be adjusted before initiation of treatment
- If patient interrupt treatment before completion of full course, readjust the kit to be used by another patient.
- one blister pack contains FDC 28 tabs
- Always level the patients details on the outer cover of the patient kit

<16	Severe Malnutrition		
$\geq 16.0 \text{ and } < 17.0$	Moderate Malnutrition		
$\geq$ 17.0 and <18.5	Mild Malnutrition		
$\geq$ 18.5 and $\leq$ 25.0	Normal		
Source: WHO.1999. Management of Severe Malnutrition: A manual for physicians and other senior health workers. Geneva. WHO			

A	Severe acute malnutrition (SAM)	Ready to Use Therapeutic Foods (RUTF) or Plumpy nut*
В	Moderate acute malnutrition (MAM)	Ready to Use Supplementary Foods (RUSF) or Plumpy sup <sup>#</sup>
С	Mild or no acute malnutrition	Nutritional counseling on essential elements
*D1		

<sup>\*</sup>Plumpy nut is an energy dense fortified therapeutic food designed for the treatment of SAM.

#### **Duration of Intervention:**

If a TB patient has SAM, RUTF is given for 3 months (or less if patient comes out of SAM before completion of 3 months). Treatment is then continued with RUSF for 3 months.

If a TB/HIV co-infected or MDR-TB patient has MAM at initial time of assessment, RUSF is given for 3 months.

<sup>\*</sup>Plumy sup is an energy dense fortified supplementary food designed for treatment of MAM.

# HEALTH SERVICE QUALITY STANDARDS FOR MALARIA DIAGNOSIS AND TREATMENT

Quality statements	Quality measures	Score	Remark/verification criteria
Malaria Standard 1: The	le health facility has adequate working guidelin	 	
equipment for diagnosis and	• •	ies, unimes	s, medicines, supplies and
ML1.1 All the necessary	The Hospital laboratory should have a 24 hours and 7	1	
diagnostic and therapeutic	days functional service for blood film microscopy and	1	
supplies are available	RDT		
	All types of drugs needed for malaria treatment are	1	
	available		
	national guideline is available in the OPD and inpatients	1	
	with job aids posted in the wall		
	The health Facility classified itself based on the malaria	1	
	epidemiologic classification as endemic, meso-endemic,		
	moderate to high transmission area or hyper endemic		
	area		
ML1.2 Trained HCW on	HCWs are able to describe the different species of	8	STAFF INTERVIEW
malaria diagnosis and treatment	malaria		
is available	HCWs are able to describe the clinical features and	8	STAFF INTERVIEW
	diagnosis methods of malaria		
	HCWs are able to describe the management of different	8	STAFF INTERVIEW
	species of malaria		
	HCWs are able to describe the malaria severity features	8	STAFF INTERVIEW
	and their diagnostic methods		
	pased care is given to all malaria patients	T 40	
2.1 comprehensive evaluation is	Legible and pertinent history and physical examination	10	CHART REVIEW
done to all patients	guided to diagnosis is documented	10	NA 16 1
	All essential laboratories to diagnose malaria is done	10	NA if adequate cases cannot
	(B/F, RDT – optional)	10	be traced
	All symptoms suggesting severity are elicited from the	10	
	history and physical examination		

All symptoms needed to rule in or rule out other caused of fever are elicited.	10	
All lab tests to rule in or rule out complications are done as per national guideline	10	
All lab tests were done in the same facility	10	
Diagnosis is labeled either as uncomplicated or complicated malaria documented including malaria species	10	
Appropriate management is outlined for uncomplicated or complicated malaria	10	
Appropriate follow up plan was outlined as per recommendation	10	

# HEALTH SERVICE QUALITY STANDARDS FOR NON COMMUNICABLE DISEASES

	h facility has an appropriate working system s, supplies and equipment for diagnosis and man		
NCD1.1 The health facility is designed, organized and maintained so that all clients with NCD can be cared for, according to their needs, in privacy, facilitating continuity of care (as per national standard)	The health facility has a dedicated area for caring major NCDs	1	One dedicated integrated chronic care clinic for primary and General hospitals  Separate specialty clinics for Comprehensive Specialized Hospitals (0 if either of the following are lacking) Cardiac/Cardiovascular clinic Chest/Respiratory clinic Endocrine clinic Neurologic clinic
	The chronic / specialty clinic room is clean, appropriately illuminated, well-ventilated and allows for privacy, and are adequately equipped, regularly cleaned and maintained* (as per FMHACA standards)	1	Observation Visit all specialty clinics in Comprehensive Specialized Hospitals and give 1 if all specialty clinics fulfill the criteria
NCD1.2 Water, sanitation, hand-washing and wastedisposal facilities are available, functional, reliable and safe a to meet the needs of staff, clients and their families(as per national	The chronic / specialty clinic room has leak- proof covered and labeled waste bins and impermeable sharps containers available in every treatment area, to segregate waste into 3 categories namely- sharps, non-sharps infectious waste, general non-infectious waste (e.g. food, packaging materials)	1	Visit all specialty clinics in Comprehensive Specialized Hospitals and give 1 if all specialty clinics fulfill the criteria
standard)	The chronic / specialty clinic room has at least one functioning hand hygiene station with soap and water or alcohol based hand rubs	1	Visit all specialty clinics in Comprehensive Specialized Hospitals and give 1 if all specialty clinics fulfill the criteria
	The chronic / specialty clinic room has awareness raising materials (posters) on hand hygiene and waste segregation and these are visible in the areas where the activities should be completed	1	Visit all specialty clinics in Comprehensive Specialized Hospitals and give 1 if all specialty clinics fulfill the criteria

NCD1.3 An adequate stock of medicines, supplies and equipment is available for the care of NCD clients (in the clinic and laboratory)	The chronic / specialty clinic room has the necessary furniture and examination beds used in the evaluation and management of NCD client	1	A table, three chairs Curtain/screen an examination couch 1 if all are present 0 if one is missed
	The chronic / specialty clinic room has functional essential equipment and supplies for routine care, follow up and detection of complications in NCD clients in sufficient quantities, at all times	2	Different Formats (clinical assessment, laboratory requests, prescription pads, referral, appointment cards, HMIS register) Stethoscope Blood pressure Apparatus Thermometer Weighing scale Height scale Otoscope Ophthalmoscope Glucometer Glucometer test strips Blood lancet Reflex patellar hammer Tuning fork 10 gram Monofilament for fine touch testing or cotton pads 2 if all are present 1 if only 1 is missed 0 if two or more are missed

T		<u></u>
The health facility has essential laboratory	2	Complete blood count
supplies and tests AND imaging tests to		Blood film
support the management of NCD clients		FBS/RBS
		HBA1C
		RFT (Creatinine, Urea)
		LFT(ALT, AST, ALP)
		Lipid Profile
		Serum electrolytes (K+, Na+, Ca2+)
		U/A for Ketone, protein, Microscopy
		Stool exam
		VDRL/RPR
		ESR
		HIV
		Pregnancy test
		CXR
		EKG
		Echocardiography or US with cardiac
		probe (for Comprehensive Specialized
		Hospitals )
		2 if all present
		1 if one missed
		0 if two or more missed
The health facility has essential drug and	2	CCB,
supplies in sufficient quantities available at all		Diuretics, Hydrochlorothiazide, Furosemide,
times for management of NCD and their		Beta blockers, ACEIs, Statins, Aspirin,
complications (as per the FMHACA drug list		Metformin, Glibenclamide or Glimepiride,
for the respective levels of health facilities)		NPH Insulin, regular insulin, Insulin
		syringe, Salbutamol tablets, Salbutamol
		inhaler, Steroid inhalers, Aminophylline
		injection, Prednisolone, Hydrocortisone
		injection, NSAIDs, TCAs, Carbamazepine,
		Phenytoin, Valproic acid, phenobarbitone,
		Clonazepam, Diazepam injection,
		MgSO4,IV fluids, IV cannula, 40%

			dantasas
			dextrose
			2 if all present
			1 if one missed
			0 if two or more missed
	The health facility uses endorsed &/or	1	Document review
	customized standard treatment guideline or		
	protocol for managing NCDs and their		
	complications AND is/are available in the		
	Chronic care/specialty clinic to be used as a		
	reference.		
NCD1.4 The health facility	The health facility has established appointment	5	CHART REVIEW
implements the EHSTG	system (with appointment protocol)		Trace the charts from the medical record
facilitating the care of clients			room and look for the date of appointment
with NCD			•
			Verify if the client appointment is
			registered in the appointment book (in the
			clinic / liaison office)
			0.5 for each chart if specific appointment
			date was recorded both in the client chart
			AND the appointment book
			0 for each chart if specific appointment
			date was not recorded either in the client
			chart OR the appointment book
	The health facility has established AND	5	CLIENT INTERVIEW
	The health facility has established AND	3	
	functional appointment system (with		Select 5 clients waiting evaluation / exiting
	appointment protocol)		from the Chronic care / specialty clinic and
			verify if they reached the clinic directly
			guided by a reception worker without
			visiting the triage and medical record room
			1 for each client if the criteria is met

NCD standard 2: For every client with NCD, competent and motivated staff are consistently available to provide the necessary					
care and diagnose and manage complications early					
NCD2.1 Every client with NCD a has access at all times to at least one Full-time Internist or trained GP for the necessary care and early diagnosis and management of complications	The health facility has a roster that is accessibly displayed at the gate of chronic care / specialty clinic, detailing the names of staff assigned and their specific roles and responsibilities.	1	Trained GP in primary hospitals and internist for General/ Comprehensive Specialized Hospitals  Trained GP – Short term training of NCD management including skill of ophthalmic evaluation (document and certificate review)		
	written, up-to-date, staffing policy, indicating the numbers, types and competencies of staff, that is reviewed on an ongoing basis according to the workload	1	Teview)		
	The proportion of available posts in the health facility that were filled by GP/ internist to provide 24h service	1	1 if there are unfilled posts by GP/internist as per the FMHACA standard		
NCD2.2 Health care providers working in the clinic have appropriate competencies and skills mix to meet needs of clients with NCD	The health facility provides an enabling supportive environment for professional staff development, through regular (every month) supportive supervision and mentoring	1	Document review (training materials, SSV reports and feedbacks) Interview the working HCP 1 if both document AND interview evidences present		
	the health facility provides in- service training, a refresher session or mentoring at least every quarter	1	Document review (training materials, SSV reports and feedbacks) Interview the working HCP 1 if both document AND interview evidences present		
	Staffs working in the chronic care / specialty clinic engage in quality-improvement team meetings and activities	5	Document review (assessment tool, project proposal, attendance sheets etc) 5 if previous month NCD quality score is done and QI activities are started by Quality unit (participating the chronic care / specialty care unit workers)		

	health facility performs performance evaluation	2	2 if performance evaluation was done AND
	of staffs working in the chronic care / specialty		the staffs got satisfactory performance
	clinic in the previous month and the staffs got		1 if performance evaluation was done but
	satisfactory performance		the staffs did not get satisfactory
			performance
			0 if performance evaluation was not done
NCD2.3 Every health facility	Staff are allowed and supported to provide	15	Interview 3 staffs working in the chronic
has managerial and clinical	feedback to hospital management on quality		care / specialty clinic
leadership that is collectively	improvement and their performance.		The construction of the co
responsible for creating and	improvement and their performance.		5 for each staff if allowed and supported
implementing appropriate			0 for each staff if not allowed and
policies and fosters an			supported
•			* *
environment that supports	At 1 CY 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	~	NA for each less number of staffs working
facility staff to undertake	At least one QI project is done in chronic care /	5	5 if QI project is done in the immediate
continuous quality	specialty clinic every quarter		past quarter
improvement			
	n information system enables the use of data t	for early and	d appropriate action to improve care for
clients with NCD			
NCD3.1 Every client with	The health facility has registers, data-collection	1	Observation
NCD has a complete and	forms, clinical and observation charts in place		
accurate standardized medical	at all times, designed to routinely record and		
record	track all key care processes for NCD clients		
	F		
	The health facility has a system to classify	10	CHART REVIEW
	diseases in alignment with ICD codes at all	10	CHARTREVIEW
	times		
	times		
	-11 NCD -12	10	CHART DEVIEW
	all NCD clients who were seen within the	10	CHART REVIEW
	Chronic care / specialty clinic 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		

NCD3.2 Every health facility has a mechanism in place for data collection, analysis and feedback, as part of its monitoring and performance improvement activities	OPD case managers/ Directors and health-care workers in the chronic care / specialty clinic regularly conducts reviews of NCD care and their data every month AND develops and implements a QI project for all the gaps identified	40	<ul> <li>40 (10 for each bulleted criteria's) if the following were done in the previous month</li> <li>NCD care assessment was done the previous month</li> <li>Gaps were identified</li> <li>QUALITY PLANNING for the gap</li> <li>Implementation and follow up in progress</li> </ul>
	The health facility implements standard operating procedures and protocols in place at all times for checking, validating and reporting data	5	Check previous month minutes if the chronic care / specialty clinic staff evaluated their data before reporting
NCD 3.3 Each care/	A written procedure or algorithm is available		
treatment facility has a	for identifying and tracking defaulters		
standard procedure for	There are standard procedures for identifying		
identifying and tracking patients who have defaulted	and tracking patients who have defaulted on their appointments		
on their appointments.	then appointments		
on their appointments.	NCD patient tracking documentation is		
	complete and shows evidence of defaulted		
	NCD patients brought back into care.		
	Tracking results are used to update facility		
	indicators (e.g., Lost-to-Follow-Up [LTFU]		
	rates)		
NCD Standard 4: Commun	nication with NCD clients is effective and in	response to	their needs and preferences
NCD4.1 All NCD clients and	For all NCDs, easily understood health-	10	2.5 for each of CVS diseases, DM, chronic
their families receive	education materials, in an accessible written or		Respiratory tract diseases, Epilepsy
information about their care	pictorial format, are available in the languages		
and experience effective	of the communities served by the health facility		
interactions with staff	The hospital provides regular health education	8	3 if NCD risk reduction topic is included
	and communication sessions on behavioral risk		in the previous month Health education
	reduction of NCDs in local languages - Print,		programme of the hospital
	audiovisual		5 if the health education materials are
	(Tobacco, harmful use of alcohol, unhealthy		prepared in local language and are always
	diet and physical inactivity, Khat use)		available for distribution to clients, families

	T		
			and visitor of the hospital
	NCD clients are given the opportunity to	10	CLIENT INTERVIEW
	discuss their concerns and preferences		
	health-care staffs demonstrate the following	10	CLIENT INTERVIEW
	skills: active listening, asking questions,		
	responding to questions, verifying client's and		
	their families understanding, and supporting		
	client's in problem- solving		
	NCD client's cared in the facility felt they were	10	
	adequately informed by the attending care	10	CLIENT INTERVIEW
	provider(s) regarding examinations, any		CELETT INTERVIEW
	actions and decisions taken about their care		
		10	CLIENT INTERVIEW
	NCD client's cared in the facility expressed	10	CLIENT INTERVIEW
	overall satisfaction with the health services	10	-
	NCD client's cared in the facility reported that	10	
	they were satisfied with the health education		
	and information they received from the care		
	providers.		
NCD4.2 NCD clients and	The health facility uses a standard form for	10	CHART REVIEW
their families experience	clinical progress notes during each visit to		Verify if standard form used and clinical
coordinated care with clear	facilitate information exchange		progress (pertinent history, physical finding
and accurate information			and laboratory tests) were done and
exchange between relevant			documented
health and social care			1 if all are legibly documented, interpreted
professionals			correctly and managed accordingly
•	health-care staff introduced themselves and	10	CLIENT INTERVIEW
	showed good knowledge of the clients history		
	and the care that had been undertaken to date		
	and the that had been undertaken to date		
NCD Standard 5: NCD clie	ents receive care with respect and dignity		1
NCD5.1 All NCD clients	The physical environment of the health facility	10	CLIENT INTERVIEW
have privacy around the time	facilitates privacy and provision of respectful		
of clinical evaluation, and	care, confidential care including the availability		
their confidentiality is	of curtains, screens		
respected	of curtains, screens		
respected			

	The health facility has written, up-to-date, protocols to ensure privacy and confidentiality for all clients throughout all aspects of care	1	Document review
	The health facility has accountability mechanisms for redress in the event of violations of privacy, confidentiality and consent	1	Document review
NCD5.2 No client is subjected to mistreatment such as physical, sexual or	The health facility has written, up-to-date, zero-tolerance, non-discriminatory policies relating to the mistreatment of clients	1	Document review
verbal abuse, discrimination, neglect, detainment, extortion or denial of services	Any client who reported physical, verbal or sexual abuse, to themselves or their families during clinical evaluation	20	Select and verify 5 clients exiting from the chronic care / specialty clinic 4 for each client if they are protected 0 for each client if report of abuse
	The fee structures in place for NCD care is equitable and affordable and was clearly displayed	10	CLIENT INTERVIEW
	The health facility has written accountability mechanisms for redress in an event of mistreatment	1	Document review
	policy and protocols outlining clients right to make a complaint about the care received and has an easily accessible mechanism (box) for handing in complaints and is periodically emptied and reviewed		4 if present AND periodically emptied and reviewed 1 if only present
	All clients were satisfied with the facility meeting their religious and cultural needs  All clients reported to be treated with respect	10	CLIENT INTERVIEW  CLIENT INTERVIEW
	and dignity	10	
NCD5.3 All clients have informed choices in the services they receive, and the reasons for intervention or	The health facility has a written, up-to-date, policy in place to promote for obtaining informed consent from clients prior to examinations and procedures	1	Document review
outcomes are clearly explained	HCW take informed consent from clients prior to examinations and procedures	10	CLIENT INTERVIEW

NCD Standard 6 : Every client with HYPERTENSION receives evidence-based care AND all at risk groups should be				
NCD6.1 The health facility has a hypertension management protocol and maintains competency of	The health facility has written, up-to-date, clinical protocols for management of hypertension (can be endorsed/customized National STG)	1	Document review	
HCWs	Health-care staff in the facility receive in- service training or regular refresher sessions	1	Training / refresher session should be given at least quarterly 1 if the training was given in the previous quarter Document review HCW interview	
NCD6.2 At risk clients are routinely screened for	The facility has a protocol for routine screening of hypertension for a high risk groups	1	Document review	
Hypertension as per the national guideline for any visit they had in the facility	Routine Screening for hypertension is done for eligible clients (e.g. Age>18) at OPDs (based on USA Task force on prevention recommendations and Ethiopian NCD STEPS Survey)		DATA SOURCE – use the previous month HMIS register 5 different adult OPDS Select 2 MRNs from the HMIS register of the different OPDS (one MRN every 3rd day of Day 1-30 though they are from different register)  If the day is weekend / holiday, select the MRN from the next working day  Trace the charts from the medical record room  Verify if BP is measured in each of the charts, interpreted correctly and appropriately managed if needed  1 for each chart if BP measured AND interpreted correctly AND managed if needed	
NCD6.3 Diagnosis of Hypertension is made based on standard criteria and all evidences are documented in legible handwriting	Diagnosis is based on repeated BP measurements	10	CHART REVIEW  Verify if two measures of ≥ 140/90for patients aged ≤ 60 yrs and ≥ 150/90 for patients aged >60 yrs mmHg at least 4-6 hours apart is used for diagnosis.  For clients on follow up, trace the first time the client was registered in the facility	

	0 ****** 1 0 11 1 1 1 1	1.0	CVV A DET DET VIEWY
	stage of HTN and Cardiovascular risk	10	CHART REVIEW
	stratification is documented		1 if correct classification and risk
	(See annexed HTN classification and Risk		stratification
	Stratification criteria.)		0 if either of the two are incorrect
	On entry into care a newly diagnosed patient	10	CHART REVIEW
	with hypertension should be assessed using		Verify pertinent history and physical
	relevant history, focused physical exam		findings are documented
	History: age, sex, family history, current		
	symptoms , comorbid conditions and		
	complications, risk factors (smoking, diet,		
	exercise, alcohol use), medication history.		
	Physical Exam: weight, height, BMI, BP,		
	Cardiovascular, neurologic and dilated eye		
	examination		
	For all hypertensive patients, minimum	10	CHART REVIEW
	Laboratory investigation has to be done	10	Verify if all are done, interpreted correctly
	blood glucose level, Urine protein, Urine		and managed accordingly if there is a need
	Microscopy for casts, creatinine, EKG		0 if one of the tests are not done OR not
	Twicroscopy for custs, creatimine, Erro		interpreted correctly OR not
			managed/wrong management when there is
			a need
NCD6.4 Evidence based	For all hypertensive patients, non-	10	CHART REVIEW
management plan and follow	pharmacologic and pharmacologic	10	1 if the plan is complete as per the
up scheme is outlined for all	management plan is given as per		recommendation
hypertensive patients	recommendation		0 if either the non-pharmacologic or
hypertensive patients	recommendation		pharmacologic plans are not documented or
			documented but incomplete
	ATT days are a socilable in the same facility	10	
	ALL drugs were available in the same facility		Prescription pad / sales ticket review
	A minimum of 4 follow up visits are attended	10	CHART REVIEW
	per annum.		1 if visited in the past 3 month and all
	In each visit, the patient is assessed for		assessment areas status (complication,
	presence of complications, treatment response,		ADR, treatment response, lifestyle change
	drug adverse effects and adherence to lifestyle		adherence) is documented
	changes and prescribed medications.		0 if visited more than 3 months ago OR
			either of the four assessment areas are not
			addressed in the last follow up

	4.0	GYV A DET DET YEARY
A minimum of once per year urine albumin, FBS, creatinine, lipid profile and EKG is done.	10	CHART REVIEW  1 if all of the tests were done in the past 1 year, interpreted correctly and managed accordingly if there is a need  0 if one of the five test were not done in the past 1 year OR done but not interpreted correctly or not managed/wrongly managed when there is a need
ALL of the tests were done in the same facility	10	CHART REVIEW 1 if ALL were done in the same facility 0 if one of them were done outside the same facility
Client received basic information on behavioral risk factors( tobacco, unhealthy diet, harmful use of alcohol and physical inactivity)	10	CLIENT INTERVIEW 2 if the client is able to describe all and demonstrates adequate knowledge 0 if either not informed or not able to demonstrate adequate knowledge despite receiving the information
Client's Knowledge and practice on clinical condition and self-management is optimal Hypertension is raised blood pressure It can harm your heart, brain and kidney and even may kill you.  Can be treated and controlled Lifestyle changes and medications are both important in controlling hypertension (Healthy diet /Low salt, low sugar, low fat. Add regular vegetable and fruits in your diet/, Stop smoking, Regular exercise, Stop or decrease alcohol use)	10	CLIENT INTERVIEW 2 if the client is able to describe all and demonstrates adequate knowledge 0 if either not informed or not able to demonstrate adequate knowledge despite receiving the information

NCD6.5 ALL hypertensive patients do have controlled BP and are satisfied with the care they are receiving in the facility	BP Controlled from review of last three visit records <140/90mmHgfor patients aged ≤ 60 yrs and ≥ 150/90 for patients aged >60 yrs in the absence of comorbid conditions like Renal disease and DM <130/85 mmHg in the presence of comorbid conditions	10	CHART REVIEW 1 if controlled in all of the last 3BP records 0 if uncontrolled in any of the three
	Clients were satisfied with the service provided in terms of Waiting time was acceptable Able to get all lab tests in the same facility Able to get all prescribed drugs in the same facility	15	5 CLIENT INTERVIEW 3 for each client (1 for waiting time and 1 for availability of lab test and 1 for drug availability in the facility)
	nt with CONGESTIVE HEART FAILURE rec	eives eviden	ce-based care
NCD7.1 The health facility has a CHF management protocol and maintains	The health facility has written, up-to-date, clinical protocols for management of CHF (can be endorsed/customized National STG)	1	Document review
competency of HCWs	Health-care staff in the facility receive in- service training or regular refresher sessions	1	Training / refresher session should be given at least quarterly 1 if the training was given in the previous quarter
	D 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
NCD7.2 Diagnosis of CHF is made based on standard criteria and all evidences are documented in legible handwriting	Relevant clinical history with socio- demographic variables documented in patient chart AND Focused Physical examination including weight, height, BMI, BP, Cardiovascular, findings documented		CHART REVIEW Verify pertinent history and physical findings are documented

	Diagnosis is based on clinical symptoms, signs and lab findings and using modified Framingham criteria		if the client came for follow up in the previous month, trace back the first time he/she is registered in the facility 0 if one of the tests are not done OR not interpreted correctly OR not managed/wrong management when there is a need CHART REVIEW
NCD7.3 Evidence based management plan and follow up scheme is outlined for all CHF patients	For all CHF patients, non-pharmacologic and pharmacologic management plan is given as per recommendation	10	CHART REVIEW 1 if the plan is complete as per the recommendation 0 if either the non-pharmacologic or pharmacologic plans are not documented or documented but incomplete
	ALL drugs were available in the same facility	10	Prescription pad / sales ticket review
	A minimum of 4 follow up visits are attended per annum.  In each visit, the patient is assessed for presence of complications, treatment response, drug adverse effects and adherence to lifestyle changes and prescribed medications.	10	CHART REVIEW 1 if visited in the past 3 month and all assessment areas status (complication, ADR, treatment response, lifestyle change adherence) is documented 0 if visited more than 3 months ago OR either of the four assessment areas are not addressed in the last follow up
	A minimum of once per year urine albumin, FBS, creatinine, lipid profile and EKG is done.	10	CHART REVIEW 1 if all of the tests were done in the past 1 year, interpreted correctly and managed accordingly if there is a need 0 if one of the five test were not done in the past 1 year OR done but not interpreted correctly or not managed/wrongly managed when there is a need
	ALL of the tests were done in the same facility	10	CHART REVIEW 1 if ALL were done in the same facility 0 if one of them were done outside the

	T	1	0 111
		1.0	same facility
	Client received basic information on	10	CLIENT INTERVIEW
	behavioral risk factors( tobacco, unhealthy diet,		2 if the client is able to describe all and
	harmful use of alcohol and physical inactivity)		demonstrates adequate knowledge
	clinical condition (congestive heart failure and		0 if either not informed or not able to
	its complications and medications to treat the		demonstrate adequate knowledge despite
	condition)		receiving the information
NCD7.4 ALL CHF patients	CHF status is stable based on NYHA	10	CHART REVIEW
are in a stable clinical	Functional Classification(NYHA Class I or II)		1 if NYHA class I or II
condition and are satisfied	Clients were satisfied with the service provided	15	5 CLIENT INTERVIEW
with the care they are	in terms of		3 for each client (1 for waiting time and 1
receiving in the facility	Waiting time was acceptable		for availability of lab test and 1 for drug
	Able to get all lab tests in the same facility		availability in the facility)
	Able to get all prescribed drugs in the same		
	facility		
NCD Standard 8 : Every clien	nt with DM receives evidence-based care		
NCD8.1 At risk clients are	The facility has a protocol for routine screening	1	Document review
routinely screened for DM as	of DM for a high risk groups		
per the national guideline for	Routine Screening for DM is done for	10	DATA SOURCE – use the previous month
any visit they had in the	population groups at risk of type 2 DM at		HMIS register 5 different adult OPDS
facility	OPDs		Select 2 MRNs from the HMIS register of
	Annex attached		the different OPDS (one MRN every 3rd
			day of Day 1-30 though they are from
			different register)
			If the day is weekend / holiday, select the
			MRN from the next working day
			Trace the charts from the medical record
			room
			Verify if FBS/RBS is measured in each of
			the charts, interpreted correctly and
			appropriately managed if needed
			1 for each chart if FBS/RBS measured
			AND interpreted correctly AND managed
			if needed
NCD8.2 Diagnosis of DM is	Diagnosis is based on Standard criteria using	10	CHART REVIEW
		1	
made based on standard	FBS/RBS + Symptoms/2hr PP sugar level		Verify if it is based on the standard criteria

criteria and all evidences are documented in legible handwriting	Diagnosis well documented classification of DM acute and chronic complications  On entry into care a newly diagnosed patient with DM should be assessed using relevant history, focused physical exam History: age, sex, family history, current symptoms, comorbid conditions and complications, risk factors (smoking, diet, exercise, alcohol use), medication history. Physical Exam: weight, height, waist circumference, BMI, BP, Cardiovascular, neurologic and dilated eye examination	10	For clients on follow up, trace the first time the client was registered in the facility  CHART REVIEW  1 if correct classification and complication screening and documentation  0 if either of the two are incorrect / absent  CHART REVIEW  Verify pertinent history and physical findings are documented
	For all DM patients, minimum Laboratory investigation has to be done blood glucose level &/or HBA1C, Urine protein, Urine Microscopy for casts, Urine ketone, lipid profile, creatinine, EKG	10	CHART REVIEW Verify if all are done, interpreted correctly and managed accordingly if there is a need 0 if one of the tests are not done OR not interpreted correctly OR not managed/wrong management when there is a need
NCD8.3 Evidence based management plan and follow up scheme is outlined for all DM patients	For all DM patients, non-pharmacologic and pharmacologic management plan is given as per recommendation	10	CHART REVIEW  1 if the plan is complete as per the recommendation  0 if either the non-pharmacologic or pharmacologic plans are not documented or documented but incomplete
	ALL drugs were available in the same facility A minimum of 4 follow up visits are attended per annum. In each visit, the patient is assessed for presence of complications, treatment response, drug adverse effects and adherence to lifestyle	10	Prescription pad / sales ticket review CHART REVIEW 1 if visited in the past 3 month and all assessment areas status (complication, ADR, treatment response, lifestyle change adherence) is documented

		1	1
	changes and prescribed medications.		0 if visited more than 3 months ago OR
			either of the four assessment areas are not
			addressed in the last follow up
	A minimum of once per year urine albumin,	10	CHART REVIEW
	FBS, creatinine, lipid profile, dilated retinal		1 if all of the tests were done in the past 1
	examination, comprehensive foot examination		year, interpreted correctly and managed
	and EKG is done.		accordingly if there is a need
			0 if one of the Seven tests/ clinical
			examinations were not done in the past 1
			year OR done but not interpreted correctly
			or not managed/wrongly managed when
			there is a need
	ALL of the tests were done in the same facility	10	CHART REVIEW
			1 if ALL were done in the same facility
			0 if one of them were done outside the
			same facility
	Client received basic information on	10	CLIENT INTERVIEW
	behavioral risk factors( tobacco, unhealthy diet,		2 if the client is able to describe all and
	harmful use of alcohol and physical inactivity)		demonstrates adequate knowledge
	diabetes mellitus (causes, Symptoms and signs,		0 if either not informed or not able to
	Oral Hypoglycemic Agents, insulin use, self-		demonstrate adequate knowledge despite
	blood glucose monitoring, hypoglycemia)		receiving the information
NCD8.4 ALL DM patients	Blood glucose controlled on review of last	10	CHART REVIEW
are in a stable clinical	three visit records	10	1 if controlled in all of the last 3 blood
condition and are satisfied	three visit records		glucose records
with the care they are			0 if uncontrolled in any of the three
receiving in the facility	Clients were satisfied with the service provided	15	5 CLIENT INTERVIEW
receiving in the facility	in terms of	13	3 for each client (1 for waiting time and 1
			,
	Waiting time was acceptable		for availability of lab test and 1 for drug
	Able to get all lab tests in the same facility		availability in the facility)
	Able to get all prescribed drugs in the same		
	facility		
· ·	nt with ASTHMA receives evidence-based car		_
NCD9.1 Diagnosis of	On Initial presentation asthma diagnosis was	10	CHART REVIEW
ASTHMA is made based on	made based on the national algorithm.		Verify if it is based on the standard criteria
standard criteria and all			For clients on follow up, trace the first time

evidences are documented in legible handwriting	Asthma Diagnosis is highly likely when: presence of symptoms earlier in life, recurring episodic symptoms (History of cough, recurrent wheezing, recurrent difficulty breathing, recurrent chest tightness), presence of typical triggers (Symptoms occur or worsen at night or with exercise, viral infection, exposure to allergens and irritants, changes in weather, hard laughing or crying, stress, or other factors) and personal or family history of allergic disease; suggestive physical examination findings (Wheezing)and response to bronchodilators (e.g. after 2 puffs of Salbutamol inhaler)		the client was registered in the facility
	For all asthmatic patients the severity of	10	CHART REVIEW
	asthma classification should be done		1 if correct classification
	intermittent		0 if incorrect /Not documented
	mild persistent moderate persistent or		
	severe persistent		
NCD9.2 Evidence based	A stepwise Asthma Management plan is	10	CHART REVIEW
management plan and follow	designed according to asthma severity		1 if as per guideline
up scheme is outlined for all	classification index		The as per guideline
ASTHMA patients	ALL drugs were available in the same facility	10	Prescription pad / sales ticket review
	A minimum of 4 follow up visits are attended	10	CHART REVIEW
	per annum and patient is assessed for		1 if visited in the past 3 month and all
	frequency and severity of symptoms, adverse		assessment areas status (frequency and
	effects of medications and management of		severity of symptoms, adverse effects of
	triggering factors.		medications and management of triggering
			factors) is documented
			0 if visited more than 3 months ago OR
			either of the four assessment areas are not
		10	addressed in the last follow up
	Client received basic education on asthma	10	CLIENT INTERVIEW

	how to monitor their symptoms what triggers their asthma attacks how to avoid or decrease exposure to these triggers what medicine to take and how to use inhalers properly		2 if the client is able to describe all and demonstrates adequate knowledge 0 if either not informed or not able to demonstrate adequate knowledge despite receiving the information
NCD9.3 ALL ASTHMA patients are in a stable clinical condition and are satisfied with the care they	Decreasing severity and frequency of asthmatic exacerbations Annexed	10	CHART REVIEW  1 if decreased severity and frequency of exacerbations as per criteria  0 if not met crieteria
are receiving in the facility	Clients were satisfied with the service provided in terms of promptness of care especially during exacerbations, rapidity of relief of symptoms Able to get all lab tests in the same facility Able to get all prescribed drugs in the same facility	20	5 CLIENT INTERVIEW 4 for each client (1 for each bullet)
	ent with EPILEPSY receives evidence-based of		
NCD10.1 Diagnosis of EPILEPSY is made based on standard criteria and all evidences are documented in legible handwriting	Epilepsy diagnosis was made based on reports of two or more unprovoked seizures witnessed by another person and exclusion of other causes.	10	CHART REVIEW Verify if it is based on the standard criteria For clients on follow up, trace the first time the client was registered in the facility
	For all Epileptic patients the type of seizure is documented Annexed	10	CHART REVIEW 1 if correct classification 0 if incorrect /Not documented
	Baseline focused laboratory (and imaging studies) are done at initial presentation Baseline tests: CBC, ESR, Blood film, FBS/RBS, Serum electrolytes(Na, K), Stool exam, HIV test, Urinalysis, VDRL/RPR,	10	CHART REVIEW Verify if all are done, interpreted correctly and managed accordingly if there is a need 0 if one of the tests are not done OR not interpreted correctly OR not

	LFT,Cr		managed/wrong management when there is
			a need
NCD10.2 Evidence based management plan and follow	Patient initiated on anticonvulsant (AED) based on seizure type, severity of illness, side	10	CHART REVIEW Verify if done based on criteria
up scheme is outlined for all EPILEPSY patients	effect profile and patient socioeconomic status and dose titration is done based on response.		
	A minimum of 4 follow up visits are attended per annum and patient is assessed for frequency of seizures, adherence to AED and adverse effects of medications	10	CHART REVIEW  1 if visited in the past 3 month and all assessment areas status (frequency of seizures, adherence to AED and adverse effects of medications) is documented  0 if visited more than 3 months ago OR either of the three assessment areas are not addressed in the last follow up
	Client received basic education on Epilepsy and its treatment. The following are key areas: Causes, triggering factors like sleep deprivation, alcohol intake, other drugs and stress. Treatment dose, duration, side effects and need for adherence. Potential harm of herbal medicine. Information to clarify misconceptions about seizure and epilepsy. Driving and other hazardous workself-monitoring of seizure	10	CLIENT INTERVIEW 2 if the client is able to describe all and demonstrates adequate knowledge 0 if either not informed or not able to demonstrate adequate knowledge despite receiving the information
	Client's Knowledge and practice on clinical condition and self-management is optimal.  Epilepsy is a manageable clinical condition  Epilepsy is not contagious  Medicine to control disease available  Medications could be lifelong  Adherence to medication is essential  Discussing with family about epilepsy is helpful  Epileptics can live productive lives(learn,	10	CLIENT INTERVIEW 2 if the client is able to describe all and demonstrates adequate knowledge 0 if either not informed or not able to demonstrate adequate knowledge despite receiving the information

	marry, work, have babies, be part of society)		
NCD10.3 ALL EPILEPSY patients are in a stable clinical condition and are satisfied with the care they are receiving in the facility	Decreasing severity and frequency of seizure attacks.  (This should be based on severity and frequency of seizure at the start of treatment: suggested criteria for controlled seizure is: patient became seizure free, or the frequency and severity of seizure decreased by 75% with the first or second drug anticonvulsant within a year)  client satisfaction(Grade each as 1 or 0)	10	CHART REVIEW  1 if decreased severity and frequency of exacerbations as per criteria  0 if not met crieteria
	Clients were satisfied with the service provided in terms of promptness of care especially during attacks Able to get all lab tests in the same facility Able to get all prescribed drugs in the same facility	15	5 CLIENT INTERVIEW 3 for each client (1 for each bullet)
NCD Standard 11: CERVIC	CAL CANCER and BREAST CANCER screeni	ng is provide	ed for all women with indications
NCD11.1 The hospital provides cervical cancer and	The facility has dedicated room for cervical cancer screening	1	
breast cancer screening services	Trained HCW is present in the facility to perform cervical and breast cancer screening VIA Breast examination	1	
	The hospital has endorsed cervical and breast cancer screening guidelines/protocols and is available in the exam room		
	Routine Screening for Cervical Cancer is offered for women >30years based on national protocol	10	DATA SOURCE – use the previous month HMIS register 5 different adult OPDS Select 2 MRNs of age more than 30 from

		the HMIS register of the different OPDS (one MRN every 3rd day of Day 1-30 though they are from different register) If the day is weekend / holiday, select the MRN from the next working day Trace the charts from the medical record room Verify if cervical cancer screening is done 1 for each chart if cervical cancer screening was done
All women > 30 years are educated on breast self-examination and report to a health care	10	CLIENT INTERVIEW
worker for further work up if they notice any		
abnormality		
The hospital provides regular health education	1	Topic is included in previous month health
and communication sessions on breast and		education schedule
cervical cancer in local language		Leaflet is prepared in local language and
		being distributed at all times to clients

# **Annexes**

# NCD Annex 1.Factors-other than BP-influencing prognosis; used for stratification of total CV risk

Risk factors(RF)	Asymptomatic Organ Damage(OD)	Diabetes Mellitus or; Established CV or Renal disease
<ul> <li>Male sex</li> <li>Age (men ≥55 years; women ≥65 years)</li> <li>Smoking</li> <li>Dyslipidemia: Total cholesterol &gt;190 mg/dL, and/or, LDL &gt;115 mg/dL, and/or HDL in men &lt;40</li> </ul>	<ul> <li>Pulse pressure (in the elderly) ≥60 mmHg</li> <li>Electrocardiographic LVH (Sokolow–Lyon index &gt;3.5 mV; RaVL&gt;1.1 mV; Cornell voltage duration product &gt;244 mV*ms), or</li> <li>Echocardiographic LVH [LVM index: men &gt;115 g/m2; women &gt;95</li> </ul>	<ul> <li>Diabetes Mellitus</li> <li>Cerebrovascular disease: ischaemic stroke; cerebral haemorrhage; TIA</li> </ul>

- mg/dL or in women < 45 mg/dL, and/or Triglycerides > 150 mg/dL
- **Fasting plasma glucose** 100–125 mg/dL.
- **Abnormal glucose tolerance** test (RBS 140-200mg/dl)
- **Obesity** [BMI  $\geq$ 30 kg/m<sup>2</sup>]
- Abdominal obesity (waist circumference: men ≥102 cm; women ≥88 cm)
- Family history of premature CVD (men aged <55 years; women aged <65 years)

- g/m<sup>2</sup> of BSA]
- Carotid wall thickening (IMT >0.9 mm) or plaque
- Carotid–femoral PWV >10 m/s
- Ankle-brachial index <0.9
- CKD with eGFR 30–60 ml/min/1.73 m<sup>2</sup> of BSA.
- Microalbuminuria (30–300 mg/24 h), or albumin–creatinine ratio (30–300 mg/g) (preferentially on morning spot urine)

- peripheral artery disease
- CKD with eGFR<30mL/min/1.73m<sup>2</sup> of BSA; proteinuria >300 mg/24 h.
- Advanced retinopathy: haemorrhages or exudates, papilloedema

## NCD Annex 2.CV risk Prediction Chart based on BP levels and presence of other Risk factors

		Blood Press	ıre (mmHg)		
Other risk factors, asymptomatic organ damage or disease	High normal SBP 130–139 or DBP 85–89	Grade I HT SBP 140–159 or DBP 90–99	Grade 2 HT SBP 160–179 or DBP 100–109	Grade 3 HT SBP≥180 or DBP≥110	
No other RF		Low risk	Moderate risk		
I–2 RF	Low risk	Moderate risk	Moderate to high risk		
≥3 RF	Low to Moderate risk	Moderate to high risk	High Risk		
OD, CKD stage 3 or diabetes	Moderate to high risk	High risk	High risk	High to very high risk	
Symptomatic CVD, CKD stage ≥4 or diabetes with OD/RFs	Very high risk	Very high risk	Very high risk	Very high risk	

# NCD Annex 3.New York Heart Association Functional Heart Failure Classification

New York Heart Association Classification (NYHA) Functional Classification		
Class I	No limitation during ordinary activity	
Class II	Slight limitation during ordinary activity	
Class III	Marked limitation of normal activities without symptoms at rest	
Class IV	Unable to undertake physical activity without symptoms; symp-	
	toms may be present at rest.	

#### NCD Annex 4. Criteria for testing for diabetes or prediabetes in asymptomatic adults and children

Testing should be considered in all adults who are overweight (BMI>25 kg/m<sup>2</sup>) and have two or more risk factors:

- physical inactivity
- first-degree relative with diabetes
- women who delivered a baby weighing >4 kg or were diagnosed with GDM
- hypertension (≥140/90 mmHg or on therapy for hypertension)
- HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL(2.82 mmol/L)
- women with Polycystic Ovary Syndrome
- HBA1C >5.7% (39 mmol/mol), IGT, or IFG on previous testing.
- Other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
- History of Cardiovascular Diseases.

For all patients, testing should begin at age 45 years.

For children age 10yrs and above or at onset fo puberty whichever comes first: who are overweight with any two (2) of the following

- DM in first or second degree relative
- Signs of insulin resistance (Acanthosis nigricans, severe obesity)
- Gestational Diabetes Mellitus in mother during child's gestation

If results are normal, testing should be repeated at a minimum of 3-year intervals, with consideration of more frequent testing depending on initial results (e.g., those with prediabetes should be tested yearly) and risk status.

## NCD Annex 5.Assessment of asthma severity using symptoms and PEF in patients presenting for the first time on no treatment

Intermittent Asthma	Chronic persistent Asthma			
	Mild	Moderate	Severe	
I	II	III	IV	
Day time symptoms* ≤2/week	Day time symptoms 3-4/week*	Day time symptoms ≥4/week*	Day time symp- toms continuous*	
Night symptoms≤ 1/ month**	Night symp- toms≤ 2-4/ month**	Night symp- toms≤ ≥4/ month**	Night symptoms frequent**	
PER≥80%	PER≥80	PER 60-80%	PER<60	
Exacerbations <1 per year #	Exacerbations > 1 per year#	Exacerbations > 1per year #	Exacerbations > 1 per year#	

<sup>\*</sup>any cough, tight chest and wheezing

# Exacerbation defined as need for treatment with oral corticosteroids; patient with more than one exacerbation per year should be treated as persistent asthma regardless of severity of symptoms between episodes.

<sup>\*\*</sup>any cough, tight chest, wheezing and night wakening

# NCD Annex 6.Asthma Control Criteria (National NCD Guideline 2016)

Characteristics	Controlled (All of the following)	Partly controlled (Any measure present in any week)	Uncontrolled
Daytime symptoms	≤2/week	>2/week	3 or more fea-
Limitation of activities	None	Any	tures of partly controlled asth-
Nocturnal symp- toms/awakening	None	Any	ma in any week
Need for reliever/ rescue treatment	≤2/week	>2/week	
Lung function (PEF/FEV1)	Normal	<80% predicted or personal best (if known)	
Exacerbations	None	1 or more year	1 in any week

## **NCD Annex 7. Epilepsy Classification**

## 1. Focal seizures

(Can be further described as having motor, sensory, autonomic, cognitive, or other features)

# 2. Generalized seizures

- a. Absence
  - Typical
  - Atypical
- b. Tonic clonic
- c. Clonic
- d. Tonic
- e. Atonic
- f. Myoclonic

# 3. May be focal, generalized, or unclear

Epileptic spasms

#### VISUAL SCREENING METHODS FOR CERVICAL CANCER- EQUIPMENT AND METHODS

In a visual test, the provider applies acetic acid (in VIA) or Lugol's iodine solution (in VILI) to the cervix, and then looks to see if there is any staining.

- VIA test is positive if there are raised and thickened white plaques or acetowhite epithelium;
- VILI test is positive if there are mustard or saffron-yellow coloured areas, usually near the Squamo-columnar Junction. Either test is suspicious for cancer if a cauliflower-like fungating mass or ulcer is noted on the cervix.
- Visual screening results are negative if the cervical lining is smooth, uniform and featureless; it should be pink with acetic acid and dark brown or black with Lugol's iodine.

The following materials and equipment are needed for visual methods:

- soap and water for washing hands;
- a bright light source to examine the cervix;
- a speculum, high-level disinfected (it need not be sterile);
- disposable or high-level disinfected examination gloves (need not be sterile);
- examination table covered by clean paper or cloth;
- cotton-tipped swabs;
- dilute acetic acid solution (3–5%) or white vinegar;
- Lugol's iodine solution;
- 0.5% chlorine solution for decontaminating instruments and gloves;
- recording form.

#### PERFORMING VISUAL SCREENING TESTS FOR CERVICAL CANCER SCREENING

## Note the following:

- Visual methods are not recommended for use in postmenopausal women, because their transition zone is most often inside the
  endocervical canal and not visible on speculum inspection.
- Preparation
  - Explain the procedure, how it is done, and what a positive test means. Ensure that the woman has understood and obtain informed consent.
- Do a speculum examination
- Adjust the light source in order to get the best view of the cervix.
- Use a cotton swab to remove any discharge, blood or mucus from the cervix.
- Identify the SCJ, and the area around it.
- Apply acetic acid or Lugol's iodine to the cervix; wait a minute or two to allow colour changes to develop. Observe any changes in the
  appearance of the cervix. Give special attention to abnormalities close to the transformation zone.
- Inspect the SCJ carefully and be sure you can see all of it. Report if the cervix bleeds easily. Look for any raised and thickened white plaques or acetowhite epithelium if you used acetic acid or saffron-yellow coloured areas after application of Lugol's iodine. Remove any blood or debris appearing during the inspection.
- Use a fresh swab to remove any remaining acetic acid or iodine solution from the cervix and vagina.
- Gently remove the speculum.
- After screening
  - o Record your observations and test result. Draw a map of any abnormal findings on the record form.
  - Discuss the results of the screening test with the patient.

# HEALTH SERVICE QUALITY STANDARDS FOR STG ADHERENCE

Standards	Verification criteria	Score 1 if met 0 if unmet	Remark
STG adherence standard 1: Ev	idence based care is provided for adults with pneu		
STG1.1 Appropriate diagnostic evaluation was done (as per national standard)	Proper patient identification has been written correctly and clearly (patient name, age, sex, MRN number, Date & Time)	10	CHART REVIEW
,	Legible and pertinent history and physical examination are documented	10	
	Adults have a mortality risk assessment using the CRB65 score when they are diagnosed with community-acquired pneumonia in primary care and is documented properly and clearly	10	
	Adults with suspected community-acquired pneumonia in hospital have timely essential lab and imaging studies	10	
	Lab tests were done in the same facility	10	
	Diagnosis correctly recorded and justified by the evidences in the history. P/E and lab tests	10	
	Severity of pneumonia was clearly described and correct	10	
STG1.2 Appropriate management plan was outlined	Correct antibiotic with correct dose, frequency, route and duration was prescribed as per the severity and STG recommendation	10	
	All drugs were availed from the same facility	10	
	Patients with community-acquired pneumonia are discharged with the absence of less than 2 of the	10	
	following findings in the 24 hours prior to discharge:  • temperature higher than 37.5°C	NA if the patient was	

		T	
	• respiratory rate 24 breaths per minute or more	not admitted	
	<ul> <li>heart rate over 100 beats per minute</li> </ul>		
	<ul> <li>systolic blood pressure 90 mmHg or less</li> </ul>		
	<ul> <li>oxygen saturation under 90% on room air</li> </ul>		
	<ul> <li>abnormal mental status</li> </ul>		
	<ul> <li>Inability to eat without assistance.</li> </ul>		
STG adherence standard 2: Evide	nce based care is provided for all patients with UTI		
STG2.1 Appropriate diagnostic	Proper patient identification has been written correctly	10	
evaluation was done	and clearly (patient name, age, sex, MRN number,		CHART REVIEW
	Date & Time)		
	Legible and pertinent history and physical	10	
	examination are documented		
	timely essential diagnostic studies were done	10	
	, c		
	Diagnostic tests were done in the same facility	10	
	Diagnosis correctly recorded and justified by the	10	
	evidences in the history. P/E and lab tests		
	Degree of Severity was clearly described and correct	10	
STG2.2 Appropriate management	Correct antibiotic with correct dose, frequency, route	10	
plan was outlined	and duration was prescribed as per the severity and		
	STG recommendation		
	All drugs were availed from the same facility	10	
	Further workup was done for recurrent UTI	10	
		NA if no	
		recurrent UTI	
STG adherence standard 3	: Evidence based care is provided for all p	atients with	MENINGITS
STG3.1 Appropriate diagnostic	Proper patient identification has been written correctly	10	CHART REVIEW
evaluation was done	and clearly (patient name, age, sex, MRN number,		
	Date & Time)		
	Legible and pertinent history and physical	10	
	examination are documented		
	Lumbar puncture was done for all suspected cases	10	
	timely essential diagnostic studies were done	10	
	Diagnostic tests were done in the same facility	10	

	Diagnosis correctly recorded and justified by the	10
	evidences in the history. P/E and lab tests	
STG3.2 Appropriate management	Correct antibiotic with correct dose, frequency, route	10
plan was outlined	and duration was prescribed as per the severity and	
	STG recommendation	
	All drugs were availed from the same facility	10

## STG Annex 1.CRB65 score for mortality risk assessment in hospitals

CRB65 score is calculated by giving 1 point for each of the following prognostic features:

- confusion (abbreviated Mental Test score 8 or less, or new disorientation in person, place or time)<sup>2</sup>
- raised respiratory rate (30 breaths per minute or more)
- low blood pressure (diastolic 60 mmHg or less, or systolic less than 90 mmHg)
- age 65 years or more.
- raised blood urea nitrogen (over 7 mmol / litre)

When a clinical diagnosis of community-acquired pneumonia is made in primary care, the healthcare professional should assess whether the person is at low, intermediate or high risk of death by calculating the CRB65 score at the initial assessment (box 1).

Patients are stratified for risk of death as follows:

- 0: low risk (less than 1% mortality risk)
- 1 or 2: intermediate risk (1-10% mortality risk)
- 3 or 4: high risk (more than 10% mortality risk).

# **HEALTH SERVICE QUALITY STANDARDS FOR SURGICAL SERVICES**

Quality measure	score	Remark/ verification criteria
NDARD 1: The health facility has an a	ppropriate v	working system AND physical
working guidelines, utilities, medicines, su	applies and	equipment for providing quality
continuous electric supply with backup generator	1	
is available		
	1	
* * *	1	
	1	Tankers, rotos
*		
*	1	
•	1	Central operator or separate lines in
		laboratory, pharmacy etc
	1	Verify in all wards / rooms used for
* *		surgical service
segregate waste into 3 categories		0 if missed / nonfunctional even in
	2	one room
	3	Verify in all wards / rooms used for
		surgical service
nand rubs in all surgical wards		0 if missed / nonfunctional even in
health care staff demonstrate cleaning their	Q	one room STAFF INTERVIEW
	0	Check the skills of 4 HCWs
		Check the skins of 4 He ws
	1	Verify in all wards / rooms used for
· •		surgical service
		0 if missed / nonfunctional even in
• • • • • • • • • • • • • • • • • • • •		one room
	working guidelines, utilities, medicines, succontinuous electric supply with backup generator is available  In case of power cut, generator is automatic or can be started within 5 minute continuous water supply is available adequate backup water source is available when there is interruption from the main source functional telephone is available in Liaison office  Telephone service is available for internal communication leak-proof covered and labelled waste bins and impermeable sharps containers available to segregate waste into 3 categories  at least one functioning hand hygiene station per 10 beds with soap and water or alcohol based hand rubs in all surgical wards  health-care staff demonstrate cleaning their hands correctly as per the WHO 5 moments for hand hygiene (audit tool exists.)  written, up-to-date protocols and awareness raising materials (posters) on cleaning and disinfection, hand hygiene, operating and maintaining water, sanitation and hygiene	NDARD 1: The health facility has an appropriate working guidelines, utilities, medicines, supplies and  continuous electric supply with backup generator is available  In case of power cut, generator is automatic or can be started within 5 minute  continuous water supply is available  adequate backup water source is available when there is interruption from the main source  functional telephone is available in Liaison office  Telephone service is available for internal communication  leak-proof covered and labelled waste bins and impermeable sharps containers available to segregate waste into 3 categories  at least one functioning hand hygiene station per 10 beds with soap and water or alcohol based hand rubs in all surgical wards  health-care staff demonstrate cleaning their hands correctly as per the WHO 5 moments for hand hygiene (audit tool exists.)  written, up-to-date protocols and awareness raising materials (posters) on cleaning and disinfection, hand hygiene, operating and maintaining water, sanitation and hygiene facilities, safe waste management are available at

	sanitation facilities are	6	1 for each bullet
	appropriately illuminated at night		
	accessible to people with limited mobility		
	gender separated for staff and patients		
	hand washing stations with soap and water		
	adequate number (at least 1 latrine per 20 users		
	for inpatient settings)		
	sufficient funds is allocated to support	3	Document review
	rehabilitation, improvements and ongoing		2 3 5 6 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
	operation and maintenance of water, sanitation,		
	hygiene and health-care waste services		
	Curative and preventative risk-management plan	1	
	exists for managing and improving water,	_	
	sanitation and hygiene services		
	suggestion box, register, complaint handling	1	
	office is available for handling compliant of	-	
	clients and their families		
	suggestions and complaints are reviewed in the	5	
	day to day HDA and appropriate measures are		
	taken when needed		
	Clients and families attending the health facility	10	CLIENT INTERVIEW
	were satisfied with the water, sanitation and	10	CELETATI TATERA TE VA
	energy services and would recommend the health		
	facility to friends and family		
	all health-care staff are satisfied with the water,	8	STAFF INTERVIEW
	sanitation and energy services and believed that		2 HCW and 2 Support staffs
	such services contribute positively to providing		2110 ii and 2 Support Starts
	quality care		
	Clients and their families attending the health	10	CLIENT INTERVIEW
	facility were satisfied with the power and	10	
	lighting source and would recommend the health		
	facility to friends and family		
	rooms are well ventilated, illuminated, regularly	1	
	cleaned and maintained	1	
SS1.2 The operation room has	Adequate number of OR tables are present	4	2 for Primary H.
551.2 The operation foolil has	racquate number of OK tables are present	7	2 101 1 11111ai y 11.

adequate rooms for provision of			4 for General H. (1 septic)
essential and emergency surgical		4 if 100%	7 for specialized H. (1 septic)
services (as per national		3 if 50-	7 for specialized H. (1 septic)
standards)		100%	
standards)		0 if < 100%	
	Demonstral 4 some present (restricted somi		
	Demarcated 4 zones present (restricted, semi	1	
	restricted, transitional, non restricted)	1	
	CSR present with a minimum of 2 functional	1	
	autoclaves		
	Changing Rooms with lockers present	1	
	(separated for male and female, for a		
	minimum of 10 persons		
	Scrub area present (direct access, multiple	1	
	sinks)		
	Recovery room is present	1	
	Toilet and showers present	1	
	clean and dirty utility rooms present	1	
	Duty room ,	1	
	Sterile supply store,	1	
	Nurse station,	1	
	Cleaners room,	1	
	Anestesia store present	1	
	equipment store & Mini-store present	1	
SS 1.3 The facility ensures the	safety of electrical	1	
physical safety of the	establishment ensured - no		
infrastructure (as per national	temporary connections		
standards)	and loosely hanging		
	wires		
	Floors of the ward are	1	
	non slippery and even		
	Windows/ ventilators if	1	
	any in the OR are intact	_	
	and sealed		
SS1.4 financial protection given	Overall cost of care is not expensive	10	CLIENT INTERVIEW
from cost of care	Prescribed investigations are available at the	10	CHART REVIEW
TOTAL COST OF CALC	resorroed investigations are available at the	10	CILIKI KLYILW

	facility		
	The facility ensures that drugs prescribed	10	CHART REVIEW
	are available at Pharmacy and wards	10	
Surgical Service Standard 2	: For every surgical patient, competent an	d motivated :	staff are consistently available to
provide routine care and man	• • •	u monvaicu i	stan are consistently available to
SS2.1 Every surgical patient has		5	Primary H. – 1 IESO
access at all times to at least one	on level of hospital	5 if 100%	General H. – 2 General surgeon, 2
skilled provider	on level of hospital	3 if 50-	OB-GY and 1 orthopedician
skined provider		100%	Specialized H. – 3 General surgeon
		2 if 25-50%	(1 subspecialist), 2 orthopedic
		0 if < 25%	surgeon, 3 obstetricians, 1
		0 11 ( 20 / 0	anesthesiologist, 10 anesthetist.
	A clear communication channels is present to	1	
	reach staff on duty at all times		
	a roster is used which is accessibly displayed in	1	
	all areas, detailing the names of staff on duty, the		
	times of their shift and their specific roles and		
	responsibilities		
	All surgical patients were satisfied with the	10	CLIENT INTERVIEW
	health-care received		
SS2.2 surgical staff working in		8	STAFF INTERVIEW
OR and surgical ward have	solution		Select 4 HCWs randomly and verify
appropriate competencies and	C, CC 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0	if they have the knowledge
skills mix to meet needs during labour, childbirth and the early	Staffs know how to process used instruments	8	STAFF INTERVIEW
postnatal period	(instrumental processing)		Select 4 HCWs randomly and verify if they have the knowledge
postnatai period	all Surgical patients were satisfied with the care	10	CLIENT INTERVIEW
	and support from the facility staff	10	CLIENT INTERVIEW
	≥ 80% of OR and Sugical ward Staffs had a	5	
	satisfactory performance appraisal on the	3	
	previous month appraisal		
	all OR and surgical ward staffs reported to be	8	STAFF INTERVIEW
	"highly satisfied" with their job in relation to the		Select 4 HCWs randomly and verify
	working environment and support of hospital		
	management		
	No staff in OR and surgical ward is actively	8	STAFF INTERVIEW

	considering looking for a new job because of		Select 4 HCWs randomly and verify
	poor working environment and poor hospital		Solect 4 He was fandoning and verify
	management support		
		1	
		1	
	improvement plan and patient-safety programme		
	is present in OR and surgical ward	1	
	a written, up-to-date, leadership structure,	1	
	indicating roles and responsibilities with		
	reporting lines of accountability is present in OR		
	and surgical ward		
	a mechanism is in place for regular collection of	1	
	information on patient satisfaction (monthly)		
	and provider satisfaction (quarterly ) in OR and		
	surgical ward		
Surgical staff efficiency is	Major surgeries per FTE surgeon in the facility	10	10 if more than 45 or less than 45 but
monitored	(last month)		0 surgical waiting list
			7 if 30-45
			5 if 20-30
			2 if 10-20
			0 if less than 10
	Delay for elective surgery (last month)	10	10 if less than 1 month
			7 if b/n 1-3 month
			5 if b/n 3-6 month
			2 if b/n 6-9month
			0 if more than 9 month
SS2.3 Every health facility has	monthly meeting is conducted to review data,	5	Verify if it was done in the previous
managerial and clinical	monitor QI performance and make		month
leadership that is collectively	recommendations to address		
responsible for creating and			
implementing appropriate	have performed and encourage staff who are		
policies and fosters an	struggling to improve.		
1	all OR and surgical ward leaders are trained in	5	
environment that supports facility staff to undertake		3	
	QI and leading change (use of information,		
continuous quality improvement	enabling behavior, continuous learning)	10	
	Action plan is developed and implemented /	10	
	implementation in progress for the gaps		

		1	T.
	identified from clients feedbacks, staff		
	feedbacks, data review, clinical audit feedbacks		
	etc		
	Health facility leaders and front line workers	5	See last months report and
	are communicated through established		management meeting minute
	mechanisms (e.g. a dashboard of key metrics)		
	that track the performance of the department		
Surgical service standard	3: Evidence based care is provided for	all surgica	l patients
SS3.1 The facility has defined	Pre-Operative Assessment is done for all surgical	10	CHART REVIEW
and established procedures for	patients (P/E, results of lab		
clinical assessment and	investigation, diagnosis		
reassessment of	and proposed surgery)		
the patients.	Minimum preoperatively needed lab tests are	10	CHART REVIEW
	done		
	All lab tests were done in the same facility	10	CHART REVIEW
SS3.2 Facility has defined and	Protocol for hand-overing and consultation	1	
established procedures for	mechanisms are present		
continuity of care of patient and	Established procedure of	10	CHART REVIEW
referral	handing over is present while receiving patient		
	from OR to Wards and ICU		
	(transfer form documented)		
	Interdepartmental or inter professional	10	CHART REVIEW
	consultations are effected not more than 2 hours		
SS3.3Rational use of drugs is	Antibiotics used for surgical prophylaxis are as	10	CHART REVIEW
practiced	per STG recommendation		
	Drugs are prescribed under generic name only	10	CHART AND PRESCRIPTION
			REVIEW
	Antibiotics used for surgical prophylaxis - Dose,	10	CHART REVIEW
	frequency, route and number of doses, timing of		
	administration are as per STG recommendations		
SS3.4 All the necessary	Anesthetic evaluation was done	10	CHART REVIEW
preoperative preparation are	Cross matched Blood prepared	10	CHART REVIEW
done before surgery	Written consent taken	10	CHART REVIEW
	Patient informed of the clinical condition,	10	CHART REVIEW and CLIENT
	treatment plan and possible outcomes		INTERVIEW
	Date of surgery was preplanned at admission and	10	CLIENT INTERVIEW

	informed to the patient		
	No delay from the preplanned procedure day	10	CLIENT INTERVIEW
	Surgical safety checklist is used	10	CHART REVIEW
SS3.5 Facility has defined and	There is procedure OT Scheduling	1	
established procedures of	Surgical Site is marked before entering into OT	10	CLIENT INTERVIEW
Surgical Services	to prevent wrong site and wrong surgery		
	Sponge and Instrument Count Practice is implemented	10	CHART REVIEW
	Post-operative monitoring is done before	10	CHART REVIEW
	discharging to ward	10	CHART REVIEW
SS3.6 Facility has established procedures for monitoring	Anesthesia plan is documented before entering into OT	10	CHART REVIEW
during anesthesia	Food intake status of Patient is checked	10	CHART REVIEW
	Patients vitals are recorded during anesthesia	10	CHART REVIEW
	Post anesthesia status is monitored and	10	CHART REVIEW
	documented		
Surgical service Standard 4:	The health information system enables the u	se of data for	early and appropriate action to
improve care for surgical pati			
SS 4.1 All surgical patients	The health facility has registers, data-collection	1	Observation
have a complete and accurate	forms, clinical and observation charts in place at		
standardized medical record	all times, designed to routinely record and track		
	all key care processes for surgical patients (see annex)		
	all surgical patients have complete record of all	10	CHART REVIEW
	information in the client chart and registered on		Verify if all information is recorded
	the HMIS register in alignment with ICD code		in the client chart and if the
			diagnosis is registered on the HMIS
			register in alignment with ICD code
		10	
	The health facility has a system to classify	10	CHART REVIEW
	diseases in alignment with ICD codes at all		Verify if the diagnosis written in the
	times		client chart is documented in the
			HMIS register in alignment with the ICD codes
SS4.2 Facility has defined and	Records of intraoperative Monitoring	10	CHART REVIEW
established procedures for	Records of intraoperative Monitoring maintained	10	CHARI KEVIEW
established procedures 101	mamameu		

	10	REGISTER REVIEW
conducts reviews of surgical care and their data every month AND develops and implements a QI project for all the gaps identified		40 (10 for each bulleted criteria's) if the following were done in the previous month surgical care assessment was done the previous month Gaps were identified QUALITY PLANNING (action plan) for the gap Implementation and follow up in progress
operating procedures and protocols in place at all times for checking, validating and reporting data		Check previous month minutes if the OR and surgical ward staff evaluated their data before reporting
Communication with surgical patients and	their familie	es is effective and in response to
Surgical nationts are given the apportunity to	10	CLIENT INTERVIEW
	10	CLIENT INTERVIEW
health-care staffs demonstrate the following skills: active listening, asking questions, responding to questions, verifying client's and their families understanding, and supporting client's in problem-solving	10	CLIENT INTERVIEW
	OR and Surgical ward working HCWs regularly conducts reviews of surgical care and their data every month AND develops and implements a QI project for all the gaps identified  The health facility implements standard operating procedures and protocols in place at all times for checking, validating and reporting data  Communication with surgical patients and Surgical patients are given the opportunity to discuss their concerns and preferences  health-care staffs demonstrate the following skills: active listening, asking questions, responding to questions, verifying client's and their families understanding, and supporting	conducts reviews of surgical care and their data every month AND develops and implements a QI project for all the gaps identified  The health facility implements standard operating procedures and protocols in place at all times for checking, validating and reporting data  Communication with surgical patients and their families  Surgical patients are given the opportunity to discuss their concerns and preferences  health-care staffs demonstrate the following skills: active listening, asking questions, responding to questions, verifying client's and their families understanding, and supporting client's in problem-solving

	facility felt they were adequately informed by the attending care provider(s) regarding examinations, any actions and decisions taken about their care		CLIENT INTERVIEW
	surgical patients and their families cared in the facility expressed overall satisfaction with the health services	10	CLIENT INTERVIEW
	surgical 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
SS5.2 There is established procedures for taking informed consent before treatment and procedures	Written informed consent is taken before any surgical procedure and induction of anesthesia	10	CHART REVIEW
SS5.3 Information about the surgical finding and treatment is shared with patients or attendants, regularly	Patient and / or attendant is informed about clinical condition, surgical finding and treatment been provided	10	CLIENT INTERVIEW
	surgical patients receive care with respect a		
SS6.1 All surgical patients have privacy around the time of clinical evaluation, and their confidentiality is respected	The physical environment of the health facility facilitates privacy and provision of respectful care, confidential care including the availability of curtains, screens	10	CLIENT INTERVIEW
	The health facility has written, up-to-date, protocols to ensure privacy and confidentiality for all clients throughout all aspects of care	1	
SS6.2 No surgical patient is subjected to mistreatment such	The health facility has accountability mechanisms for redress in the event of violations of privacy, confidentiality and consent	1	
as physical, sexual or verbal abuse, discrimination, neglect, detainment, extortion or denial	The health facility has written, up-to-date, zero- tolerance, non-discriminatory policies relating to the mistreatment of clients	1	
of services	Any client who reported physical, verbal or	20	Select and verify 5 clients exiting

	sexual abuse, to themselves or their families during clinical evaluation		from the OR register 4 for each client if they are protected
	The health facility has written accountability mechanisms for redress in an event of mistreatment	1	0 for each client if report of abuse
	The health facility has a written, up-to-date policy and protocols outlining clients right to make a complaint about the care received and has an easily accessible mechanism (box) for handing in complaints and is periodically emptied and reviewed	4	4 if present AND periodically emptied and reviewed 1 if only present
	All clients were satisfied with the facility meeting their religious and cultural needs	10	CLIENT INTERVIEW
SS6.3 All clients have informed	All clients reported to be treated with respect	10	CLIENT INTERVIEW
choices in the services they receive, and the reasons for intervention or outcomes are clearly explained		1	Document review

### **NURSING AND MIDWIFERY SERVICE QUALITY STANDARDS**

<b>Quality statements</b>	Quality measures	score	Remark/verification criteria's
Nursing and midwifery service star	dard 1: Each ward has all the necessary facilities, o	equipments ar	nd supplies needed to provide a
quality nursing service			
NMS1.1 well equipped nursing	Nurses' stations should have visibility of	1	
station is established in each ward	patients and of circulation paths.		

The nurse station has organized and efficient	1	
chart filing systems in to a shelf		
Should have dressing room/corner with	1	
personal lockable locker for all of the nurses		
working in the ward (as per national standard)		
The nursing /midwifery station has Enough	2	0 if all available except
space to accommodate (as per Health facility		functional computer and
regulatory standard)		telephone
• Computers with printer and internet access		
• Telephones		2 if all available
• Shelf for		
➤ Reference books, guidelines and		
policies		
Patient cards and different formats		
• Table		
Comfortable chair		
Access to clean drinking water		

	Hot plates/electrical hot pot		
	medical equipments for nursing diagnosis or	2	0 if two or more are missed
	intervention use — see annex (as per national		1 if only one missed
	standard)		2 if all available
	Medication Preparation Areas with	1	0 if either refrigerator or
	Small under counter refrigerator.		functional hand washing sink is not available
	Hand washing sink with disinfectant.		1 if both are available
	Nursing guidelines are availed	1	0 if one of them is not available
	Nursing process		
	Nursing communication		
	Safe drug administration		
NMS1.2 Medication stores are	Central or room cabinet for medication store	2	Give 0 if any drug or supply is
available for each ward or room	based on the patient bed number		at bedside despite the presence
(ministore- as per national			of central or room cabinet
standard)			
NMS1.3 Skill lab is established	the hospital has skill laboratory for staff and student nurses and all the necessary teaching	2	0 if two or more missed
	student nurses and an are necessary teaching		

	aids are available – see annex		1 if only one missed
			2 if all present
	tandard 2: The hospital has functional Nursing	g midwifery	
NMS2.1 The hospital has a Matron/ Nursing midwifery director and functional nursing/midwifery management	Matron/ nursing director is a member of SMT	1	0 if letter is available but the matron or nurse director is not regularly participate in SMT meeting
	The nursing management has annual operational plan	1	DOCUMENT REVIEW
	Induction or orientation is given for all newly recruited nurses/midwives Regular refreshment training is given for all nurses/midwives at least quarterly	5	DOCUMENT REVIEW Verify if it was done for all in the previous quarter / last month for new ones
NMS2.2 The nursing/midwifery management conducts QI projects for identified nursing midwifery service quality gaps	Nursing management conducts monthly nursing management meeting	2	DOCUMENT REVIEW  Verify if it was done last month
	Nursing midwifery round team established and made at least once nursing round a day	22	See minutes of each working day last month and 1 for each day
	Nursing management develops action plan for identified gaps in each meeting	2	DOCUMENT REVIEW

	Nursing management implemented the action plan developed	2	Verify if it was done last month
NMS3.1 comprehensive nursing midwifery assessment is done for all patients	There is written evidence of a compilation of data based on Gorden's functional model including  • demographic details  • Health Perceptions-Health Management Pattern  • Nutritional-Metabolic Pattern  • Elimination Pattern	10	CHART REVIEW
	<ul> <li>Activity-Exercise Pattern</li> <li>Cognitive-Perceptual Pattern</li> <li>Sleep-Rest Pattern</li> <li>Self-Perception and Self-Concept Pattern</li> <li>Roles and Relationships Pattern</li> <li>Sexuality-Reproductive Pattern</li> <li>Coping and Stress Tolerance Pattern</li> </ul>		

	Values and Belief Pattern		
	Nursing assessment is completed within 8 hours	10	Each ward should be
	patient's arrival		handovering register between
			runners bring admitted patients
			from liaison office and nurses in
			the ward. Time of arrival of
			patient should be registered and
			the nurse and runner both has to
			sign on it. The absence of a
			handovering register or untimed
			nursing assessment will make
			the score 0
	All entries in the nursing process should be legible, dated and signed	10	CHART REVIEW
NMS3.2 correct nursing midwifery	The formulatedactual and/ or potentialnursing	10	CHART REVIEW
diagnosis is made for all patients	diagnosis go with the nursing assessment		
	(subjective and objective data)		
	Problem, Etiology and Signs(PES) for		
	actual problem and		

	Problem and Etiology (PE) for potential or risk nursing diagnosis)		
	Nursing diagnosis is listed based on their priority	10	CHART REVIEW
	The nurses/midwifes formulated nursing diagnosis based on revised NANDA list.	10	CHART REVIEW
	The expected goal/outcomes for each nursing diagnosis are SMART	10	CHART REVIEW
	The expected goal/outcome are consistent with nursing diagnosis	10	CHART REVIEW
	The nursing intervention/nursing order are clear, understandable and consistent with expected goal/outcome	10	CHART REVIEW
	The nursing interventions are prioritized	10	CHART REVIEW
NMS3.3 nursing midwifery interventions are implemented	The interventions are implemented/recorded according to the treatment plan	10	CHART REVIEW
r	Counseling/information given to the patient is recorded according to plan	10	CHART REVIEW
NMS3.4 nursing midwifery evaluation is done after each intervention	The outcome measured at the end of the nursing intervention (all changes of subjective and	10	CHART REVIEW

	objective markers are reviewed and documented on the progress shit)		
	The nursing plan is revised based on clients health status change	10	CHART REVIEW
	The outcome measured at the end of the nursing intervention (all changes of subjective and objective markers are reviewed and documented on the progress shit)	10	CHART REVIEW
NMS3.5 proper communication system is established b/n nurses and nurses/physicians	<ul> <li>All physician order contains,</li> <li>Name of patient</li> <li>Date and time</li> <li>Drug name</li> <li>Drug dose, frequency, duration of treatment</li> </ul>	10 0 if one bullet is absent or incorrect	CHART REVIEW

Doot of administration	I	
Root of administration		
Name and signature of physician		
The physician written orders are dated & timed,	10	CHART REVIEW
and signed by nurse when transcribed and		
administered		
Verbal orders are signed by 2 nurses	10	CHART REVIEW
Verbal orders are signed by physician within 24	10	CHART REVIEW
hours		
There is nursing round for each shift?	10	CHART REVIEW
Does the hospital provide complete uniforms	10	CHART REVIEW
and name badges for nurses/midwives and do		
nurses/midwives comply with the institutions		
dress code?		
Are nurses /midwives in complete uniform and	10	CHART REVIEW
have a name badge at all times at working		
place.		
Patient records conform to the following	10	
requirements:	0 if one bullet is	
• Legible	absent or incorrect	

NMS3.6 All nursing and other formats are put in logical sequence	<ul> <li>Name and signed after each entry/attendance</li> <li>Errors crossed with a single line and errors initialed</li> <li>Patient's name and medical record number on each page</li> <li>Abbreviations are contained within a locally agreed glossary</li> <li>Formats are put in the client chart in logical sequence (V/S sheet, Input output monitor, physician assessment form, nursing diagnosis form, nursing care plan form, nursing intervention and medication administration form, nursing progress/evaluation form, discharge form)</li> </ul>	10	CHART REVIEW
Nursing and midwifery service s	tandard 4: Patient centered nursing midwifery	service is gi	ven to all patients
NMS4.1 All patients are involved in the plan of care	There is a system to involve all patients when changes to nursing/midwifery services are proposed	10	CLIENT INTERVIEW
	All patients are provided with information about arrangements for first contact	10	CLIENT INTERVIEW

	All patients are informed about:	10	CLIENT INTERVIEW
	access to services		
	how to make a complaint		
	• consent to treatment		
	discharge planning		
NMS4.2 All patients were	During treatment sessions, patients are	10	CLIENT INTERVIEW
approached with dignity and respect, addressed by name and	introduced the name of the nurse or midwifes		
encouraged to ask questions	responsible for his/her care and all patients are		
	addressed by their name		
	Staffs are polite and considerate	10	CLIENT INTERVIEW
	All patients are given all the privacy they need	10	CLIENT INTERVIEW
	All patients are given the chance to ask	10	CLIENT INTERVIEW
	questions		
NMS4.3 All patients are informed	All patients felt involved in deciding about	10	CLIENT INTERVIEW
of treatment outcomes and discharge plan	their treatment plan (informed consent) and all		
	are told about what they could achieve at the		
	end of their treatment		
	the results of the assessments/procedures are	10	CLIENT INTERVIEW

explained to all patients		
If patients are left alone during treatment session, they are told how to call for help	10	CLIENT INTERVIEW
During discharge, all patients felt involved in the plans for their discharge and given appointment instruction	10	CLIENT INTERVIEW
During discharge, all patients are given enough advance warning for their discharge and all the plans for their discharge went smoothly	10	CLIENT INTERVIEW

### QUALITY STANDARDS FOR CRC AND PATIENT CENTERED CARE

Quality statement	Quality standards	Score	Remark / verification criteria
CRC-PC standard 1: The	hospital developed and implements CRC a	nd patient center	ed care strategy in the facility
CRC-PC 1.1: The hospital has developed CRC-PC strategy	CRC-PC strategy is developed as per the national CRC framework	2	Document Review
	CRC-PC operational plan is developed	1	Document Review
CRC-PC 1.2: The hospital	TOR is developed	1	Document Review
Functional Ethics Committee	Meetings were conducted as per the TOR	2	2 if available and regular meeting as per TOR 1 if available but no regular meeting as per TOR 0 if not available/no meeting
	Professional ethics promotion activities are conducted regularly (at least quarterly)	1	Verify if it was done in the previous quarter
CRC-PC 2.1 Regular meetings and capacity building trainings are conducted for staff members	The hospital conducts regular (quarterly) meeting with the staff to ensure CRC-PC care	1	DOCUMENT REVIEW Verify if it was conducted in the previous quarter
	The hospital provides regular (quarterly) staff capacity building trainings using innovative approaches  • patients storytelling • Effective ward rounds • Debriefing Sessions	9 Documents-1 Staff interview-8	DOCUMENT REVIEW( Training reports, Training photos, Staff interview – randomly interview 4 staffs in the hospital  Verify if it was done in the last quarter
CRC-PC 2.2 The hospital involves community members on CRC-PC	There is formal and consistent (every quarter) communication with patients, families CRC-PC care	10	COMMUNITY MEMBERS INTERVIEW
initiatives to improve their awareness and collect	Feedbacks are collected and action plan developed	2	DOCUMENT REVIEW
feedbacks	Implements the action plan	2	DOCUMENT REVIEW
CRC-PC 2.3 Governing board are involved on CRC-PC improvement activities	Board members are provided opportunities to interact directly with patients and families (at least quarterly)	4	1 for each quarter work

CRC-PC 2.4 A recognition	CRC-PC demonstration assessment tool is	1	DOCUMENT REVIEW
mechanism is in place for staff	prepared		
members demonstrating CRC-	Recognition is given for staff members who	10	DOCUMENT REVIEW – 2
PC care	demonstrated compassion and respect (at		STAFF INTERVIEW - 8
	least biannually)		
CRC-PC Standard 2: Patier	nts & their family experience effective interacti	ons with staff who	have demonstrated competency in
relevant communication & cl	inical skills and experience coordinated care v	vith clear and accur	rate information exchange between
relevant health and social car	re professionals		
CRC-PC 2.1 CRC-PC care	Patient-centered behavior expectations are	5	DOCUMENT REVIEW
improvement activities are	included in all job Descriptions and		Verify randomly on personal files of 5
integrated in staffs day to day	performance evaluation tools.		staffs
activity and recognition	Patient-centered behavior expectations are	5	DOCUMENT REVIEW
criteria's	included staff performance evaluation.		
CRC-PC 2.2 Staffs are	Staff at all levels, clinical and non-clinical,	8	STAFF INTERVIEW
encouraged to participate in	have the opportunity to voice their ideas and		
CRC-PC improvement activities	suggestions for improvement on CRC-PC care		
	Patient education materials on CRC-PC	2	
	appropriate for readers of varying literacy		
	levels and for speakers of different native		
	languages are available to the staff		
	Staff is routinely acknowledged and recognized	8	DOCUMENT REVIEW - 1
	quarterly for their good work by leadership, by		STAFF INTERVIEW - 8
	peers and by patients and families related to		
	Patient centered care		
	nts are introduced to all healthcare professiona	ls involved in their	care, and are made aware of the roles
and responsibilities of the me			
CRC-PC 3.1 Patients are aware	Systems are in place to assist patients and	10	CLIENT INTERVIEW
of healthcare professionals	families in knowing who is providing their		
involved in their care	care, and what the role is of each person on		
	the care team.		
	s & their family have opportunities to discuss t	heir health beliefs,	concerns and preferences to inform
their individualized care			
CRC-PC 4.1 Systems are in	TOR for the SMT (leadership) to interact	1	
place to assist patients and	directly with Patients and families (at least		
<u>-</u>	,		<u> </u>

families discuss their concerns,	weekly)		
beliefs and preferences			
	Opportunities exist for leadership to interact directly with Patients and families (at least weekly)	4	1 for each week
	Patients and family members have been invited (at least every month) to share their experiences with your hospital in focus groups (patients, attendants, families forum)	11	1 for document 10 CLIENT INTERVIEW
	Resources are available to staff to educate them on different cultural beliefs/traditions related to health and healing.	1	DOCUMENT REVIEW
	Patients were helped or assisted to control their pain	10	CLIENT INTERVIEW (inpatients)
	Excuse/ apologies to patients or family members in case of shortcoming/limitations	10	CLIENT INTERVIEW
	Patients perceive that health care providers is skillful with equipments and displayed confidence while providing care or treatment	10	CLIENT INTERVIEW
	patients satisfied with the care provided and have developed trust on the Institution as well as Care providers	10	CLIENT INTERVIEW
	tts & their family are supported by healthcare	professionals to un	derstand relevant treatment options,
including benefits, risks and p	-	10	CLUENT NUTED LIEU
CRC-PC 5.1 System is in place to involve patients and their families in treatment planning	Patients and families are encouraged to participate in discharge planning from the beginning of hospitalization.	10	CLIENT INTERVIEW
	Patients & their family are aware of their diagnosis, relevant treatment options,	10	CLIENT INTERVIEW

	including benefits, risks and potential consequences		
	ts, their family and the community are actively take fully informed choices about investigations		
them.		s <b>,</b>	- • • • • • • • • • • • • • • • • • • •
CRC-PC 6.1 Patients, their family and the community are actively involved in shared	Patients and family members participate as members on weekly case team meetings	11	DOCUMENT REVIEW- 4 (1 for each week) CLIENT INTERVIEW – 10
decision making	The input provided by patients and families is used to develop QI action plan	5	DOCUMENT REVIEW
	Patients and families are informed of Drug Information Service in the facility and have access to it when they are in need of it including telephone address of the room	10	CLIENT INTERVIEW

### PATIENT SAFETY QUALITY STANDARDS

<b>Quality statements</b>	Quality measures	score	Remark/verification criteria
Patient safety standard 1	: The hospital has leadership and ma	nagemen	t committed to ensuring patient
safety		8	
PS1.1 there is prepared strategy	The hospital has a strategy to ensure patient safety	1	DOCUMENT REVIEW
	Operational plan is prepared	1	DOCUMENT REVIEW
	Operational plan is implemented	5	DOCUMENT REVIEW Verify if last month plan was performed 5 if fully implemented 3 if partially implemented 0 if not done at all
	The hospital has and follows a code of ethics, for example in relation to research, resuscitation, consent, confidentiality.	1	DOCUMENT REVIEW
PS1.2 Occupation health is practiced	An occupational health programmepolicy is present	1	DOCUMENT REVIEW vaccination, IPPS training and ensuring adequate supplies for the programme, chemical burn prevention and management, PEP service
	Annual plan is prepared for an occupational health	1	
	An occupational health programme is implemented for all staff based on the plan	1	Verify if last month plan was performed DOCUMENT REVIEW from 1 STAFF INTERVIEW – 8 point
Patient safety standard 2	The hospital involves patient, famil	v and con	nmunity in assurance of patient
safety	•		•
PS 2.1 patient safety is part of patients right and awareness	Patient safety is included in the patient rights statement.	1	DOCUMENT REVIEW
creation is done regularly	Patients and their families are briefed about, and aware of, their patient and family rights.	10	CLIENT INTERVIEW
PS2.2 Patient consent is taken in	Before any invasive procedure, a consent is signed	10	CLIENT INTERVIEW

all situations in need of it	by the patient. Informed of all risks, benefits and		
	potential side effects of a procedure in advance.		
	Before any invasive procedure, a consent is signed	10	CHART REVIEW (OR register)
	by the patient. Informed of all risks, benefits and		
	potential side effects of a procedure in advance.		
PS2.3 Medical problems	Every patient obtains from his/her treating	10	CLIENT INTERVIEW
information provision, client	physician complete updated information on his/her		
identification and allergy	diagnosis, treatment.		
identification is practiced	All patients are identified and verified with	1	
1	full name during any procedure (e.g.		
	laboratory, diagnostic or therapeutic		
	procedures), transfer or administration of		
	any medication or blood or blood components		
	with special emphasis on high risk groups e.g.		
	new born babies, patients in coma, senile		
	patients		
		10	CHAPT NITED VIEW
	A system is in place to identify allergies	10	CHART INTERVIEW
	The hospital ensures safe evidence b	ased clinica	al practice is performed
PS3.1 Urgent tests	The hospital maintains clear channels of	1	
communication and patient	communication for urgent critical results &		
handover policy in place	The hospital has systems in place to ensure safe		
	communication of pending test results to		
	patients and care providers after discharge.		
	The hospital has systems in place for safe and	1	
	thorough handover of patients between clinical		
	teams (including shift staff).		
PS3.2 use of safe surgical	The hospital provides regular (at least	1	
checklist, VTE and other risks	quarterly) trainings on use and practice of		
prevention in place	safety surgical checklist, methods to reduce		
	venous thrombo-embolism		
	The hospital implements the use of a surgical	10	CHART REVIEW
	safety checklist and conforms to guidelines		
	Til. 1	10	CHARTREVIEW
	The hospital implements measures to reduce	10	CHART REVIEW
	venous thrombo-embolism (deep venous		
	thrombosis and pulmonary embolism).	1.1	DOCUMENTE DEVIEW 1
	The hospital screens patients to identify those	11	DOCUMENT REVIEW -1
	vulnerable to harm (e.g. falls, pressure ulcers,	1	CHART REVIEW -10

•	<ul> <li>suicide, malnutrition, infection) and acts to reduce risk.</li> <li>guidelines prepared to reduce risk</li> <li>Checklist use to screen patients to identify those vulnerable to harm (e.g. falls, pressure ulcers, suicide, malnutrition, infection)</li> <li>hospital ensures Safe environment, safe bl</li> </ul>	ood transfusi	on and safe injection practice for
patients, staff and visitor	The boundary of the TDDC and and	1	
PS4.1 infection prevention	The hospital adhere to the IPPS national protocol	1	
practice is in place	The hospital uses surgical site infection surveillance checklist which is going to be attached in to all client charts for whom surgical procedure is performed	10	CHART INTERVIEW
	The hospital implements a policy of giving HBV vaccination for all high risk groups working in the hospital (health care providers, cleaners, laundry workers etc.)	10	STAFF INTERVIEW
PS4.2 Rational use of antibiotics is practiced	The hospital conducts regular STG adherence to encourage rational use of antibiotics and reduce the occurrence of antibiotic resistance	10	CHART REVIEW
PS4.3 blood safety is ensured	The hospital implements guidelines on safe blood and blood products.	1	DOCUMENT REVIEW
	Hospital uses more than 95% of blood from blood bank and discourages direct transfusion	1	DOCUMENT REVIEW
	The hospital participates in blood collection campaigns with the local blood bank	5	DOCUMENT REVIEW Verify if it was done in the previous quarter
	The hospital has safe pre-transfusion procedures for extreme emergency cases  • recruitment, selection and retention of voluntary blood donors association members  • Blood screening (minimum for HIV, HBV, HCV, syphilis).  The hospital implements a safe blood	10	1 if policy exist  4 if voluntary blood donors association present with members of at least more than 300 (including hospital staffs)  10 for CHART REVIEW  CHART REVIEW

	transfusion checklist to be used before	1	
	transfusion (safety of the blood) and after		
	transfusion (diagnosis of blood transfusion		
	reaction)		
	The hospital implements effective blood	1	
		1	
	products stock management system	10	CITY DE DESTRESS.
	The hospital complies with guidelines on safe	10	CHART REVIEW
	and appropriate prescribing of blood and		
	blood products, including the use of		
	alternative fluids.	10	CITY DE DESTERNA
	The hospital has a system to audit transfusion	10	CHART REVIEW
DC4.4. C. i.	reactions	1	
PS4.4 safe injection practice is in	The hospital has systems in place to ensure	1	
place	safe injection practice through:		
	• preventing reuse of needles at		
	hospital		
	Ensuring safe sharp disposal  Tractions as a negrecompine sofety.		
	practices e.g. no recapping, safety boxes.		
	The hospital ensures availability of life-saving	2	2 if all available
	medications at all times.	2	
	medications at an times.		1 if only one missed
			0 if two or more missed
	The hospital ensures patient (or career)	10	CLIENT INTERVIEW
	education about medication at discharge.	_	
	The hospital has a process to ensure	8	STAFF INTERVIEW (interview pharmacy
	pharmacist review of medication orders.		technicians and pharmacists)
	The hospital has a policy and procedures to	1	
	manage medication error.		
PS4.5 safe environment policy is	The hospital implements a comprehensive	1	
in place	compound security programme.		
	The hospital implements a fire and smoke	1	
	safety programme with an evacuation plan		
	The hospital displays warning signs marking	1	
	unsafe areas.		
	The hospital supplies appropriate and safe	10	CLIENT INTERVIEW
	food and drinks for patients		
	The hospital has a smoke-free policy and	1	
	1 The hospital has a smoke free policy and	1 *	

	signage		
	The hospital segregates waste according to	10	Observe 10 rooms randomly
	hazard level (and color codes it based on		
	national guidelines)		
Patient safety standard 5:	The hospital ensures Lifelong learni	ng using sta	aff development programs
PS5.1 Capacity building and	All hospital staff are provided with a patient	9	DOCUMENT REVIEW - 1
lifelong learning in place	safety orientation and training programme (at least quarterly)		Verify if it was done in previous quarter STAFF INTERVIEW - 8
	All staff are familiar with the reporting	9	DOCUMENT REVIEW – 1
	procedure for near misses, adverse events and		STAFF INTERVIEW - 8
	sentinel events and steps to be taken during or		
	after an adverse event.		

### **HEALTH CARE DATA QUALITY STANDARDS**

Quality statement	Quality measures	score	Remark/verification criteria's
Health care data quality stand	ard 1: The hospital ensured HMIS implemen	ntation	
DQ1.1 The hospital availed all the necessary resources for HMIS and HPMI implementation	Key M&E and data-management staff are identified and should have clearly assigned responsibilities.	1	
	Majority of key M&E and data-management should receive the required trainings.	9	DOCUMENT REVIEW – 1 STAFF INTERVIEW – 8 (knowledge assessment)
	There is a clear guideline about what is reported to whom, and how and when reporting is required.	9	DOCUMENT REVIEW -1 STAFF INTERVIEW – 8
	There should be enough (defined as HMIS formats adequate for at least 3 months) standardHMIS data collection and reporting forms that are systematically used.	2 See annex	2 if all available 1 if one missed 0 if all missed
DQ1.2 policies and procedures are in place for data quality assurance	There should be operational indicator definitions meeting relevant standards that are systematically followed by all service units.  Data should be recorded with sufficient	9	DOCUMENT REVIEW – 1 STAFF INTERVIEW – 8 (knowledge assessment)
	precision/detail to measure relevant indicators.		
	Data confidentiality should be maintained in accordance with international or national guidelines	1	DOCUMENT REVIEW
	Source documents (e.g. medical records, registers) should be kept and made available in accordance with a written policy.	1	DOCUMENT REVIEW

		ı	,
	Clear documentation of collection, aggregation,	1	DOCUMENT REVIEW
	and data manipulation steps should exist.		
	There should be clearly defined and followed	1	DOCUMENT REVIEW
	procedures to identify and reconcile		
	discrepancies in reports.		
	There should be clearly defined and followed	5	
	procedures to periodically verify source data.		
	Apart from the manual HMIS, the facility	5	
	should implement and sustain an eHMIS.		
	Data quality challenges should be identified and	15	DOCUMENT REVIEW (review last
	there should be mechanisms in place for		month minute)
	addressing them.		5 for gap assessment
			5 for action plan
Health same data anality stan	doud 2. Doculou modical record andit is being		5 for evidence of implementation
	dard 2: Regular medical record audit is being		
DQ2.1 Legible and pertinent documentations are in place	All patient identification data are accurately	50	CHART REVIEW – 50 Review 50 charts (10 charts from each
documentations are in place	recorded on the first sheet of the medical/health		of the following departments HMIS
	record and the patient's name and		register in the past month – OPD,
	medical/health record number are clearly shown		Emergency, IPD, Maternity, OR)
	on subsequent pages.		
	The main condition and other diagnoses,	50	
	problems and procedures are clearly written on		
	the front sheet, along with the signature of the		
	attending health care provider.		
	Summary diagnosis is written for each day of	50	
	evaluation/each admission on the back page of		
	front cover		
	The history of past and present	50	
	illnesses/problems is recorded clearly, and the		
	entry dated and signed.		
	,		

	Consent forms are signed, dated and witnessed.  Progress notes, whether for an inpatient or outpatient, are recorded daily or each time the doctor sees the patient and are clearly written, legible, signed and dated.  For surgical patients, either as an inpatient or at a day surgery, operation forms and notes should be completed with all relevant information, as well as anaesthetic forms and recovery room report, signed and dated.  Nursing notes for inpatients should be completed daily, written clearly, and each entry	50  NA for each chart not needed procedure 50  NA if patient was seen the first time 50  NA for non-operated patients 50	
	dated and signed	NA for non- admitted patients	
	Documents should provide evidence for regular monthly medical records audit in the hospital	10	Document review
	All contents of a medical record are placed in a folder in a chronological order based on the date.	10	Verify for 10 charts randomly
DQ2.2 There is efficient system to locate and protect charts	Locating medical records on a shelf doesn't take more than 3 minutes	5	Verify only for retrieval of the first 5 charts
	Locating medical record for clients who lost their MPI card/index card doesn't take more than 5 minutes.	5	Verify for 5 charts
	Tracer cards are used when medical records are	10	Verify for 10 charts which are taken to

	displaced.		service areas in the same day	
	All displaced medical records are brought back	10	Verify randomly 10 tracer cards	
	to their place within 24 hours.			
	Foldersof medical records show no sign of wear	50	Verify in the above 50 charts	
	and tear and are intact.			
DQ2.3 All medical	All medical records sent from Medical record	10	CHART REVIEW (select MRN from	
records/referrals sent to service	room to OPD are recorded timely(within 24		the medical record room register)	
areas/ other hospitals are timely	hours) and correctly to HMIS registers		Trace the card, look for the diagnosis	
and correctly registered to HMIS	All medical records sent from Medical record	10	and verify if this was registered to	
registers	room to MCH/ANC are recorded timely and		HMIS	
	correctly to HMIS registers  All medical records sent from Medical record	10	-	
	room to Labor and delivery unit are recorded	10		
	timely and correctly to HMIS registers			
	All medical records sent from Medical record	10	-	
	room to EMERGENCY department are			
	recorded timely and correctly to HMIS registers			
	All medical records sent from liaison office to	10		
	INPATIENT department are recorded timely			
	and correctly to HMIS registers			
	All medical records sent from liaison office to	10	DOCUMENT REVIEW	
	OTHER HOSPITALS(referrals) are recorded		Compare referral paper copies in	
	timely and correctly to HMIS registers		record and stamp office vs registered	
			in liaison office HMIS register (Select randomly 10 copies – sampling	
			method will be like chart sampling	
			method)	
Health care data quality standard 3:HMIS registering and reports are done correctly and timely				
DQ3.1 HMIS registering done	HMIS registries and reporting forms should	10	Verify by looking 10 HMIS registers	
correctly and timely	show no sign of severe wear and tear		in 10 different service areas	
	All service delivery units should have their	10	Observation	
	designated HMIS registry.			
	Data should be captured clearly and legibly in	50	Randomly verify in 10 HMIS registers	

	the columns specified.		in different service areas and for each
	The registers should show minimal sign of	50	look for random 5 columns from
	deletion and repeated erasure.		previous month data
	Each column of the register should be filled	50	
	with data based on the name specified on the		
	first row. Data unrelated to the column name		
	should be avoided.		
	Tally sheets should be used to accurately	10	Verify for 10 random days
	capture the number of services delivered before		
	entering it into the register.		
DQ3.2 reports are done correctly	Reports forms should be filled clearly and	5	Verify in 5 previous report forms from
and sent timely	legibly with no signs of repeated erasure.		5 different service areas
	Reporting forms should be complete and if a	1	
	service isn't provided during the month while		
	the service is provided in the facility, it should		
	be labelled (0). If a service isn't provided in the		
	facility, the space should be left empty.		
	Date on reporting forms should demonstrate that	5	Verify in 5 different reports from
	reports are sent to relevant higher bodies with in		different service areas
	the agreed time period.		
	tandard 4: Lots Quality Assurance is o	done regula	
DQ4.1 Monthly HMIS and KPI	Data element 1	5	Randomly Selected Data Elements
reports coincide with raw data in	Data element 2	5	from HMIS and HPMI and verify if
the HMIS registers	Data element 3	5	the previous month HMIS and KPI
	Data element 4	5	reports coincide with the raw data in
	Data element 5	5	the HMIS registers and tallies
	Data element 6	5	
	Data element 7	5	
	Data element 8	5	
	Data element 9	5	
	Data element 10	5	
	Data element 11	5	
	Data element 12	5	

Health care data quality s for identified gaps	tandard 4: The hospital evaluates repo	orted datas	and implements QI projects
DQ4.1 Monthly and Quarterly datas are evaluated by the hospital	Monthly reported data's are evaluated by Quality unit	5	DOCUMENT REVIEW
	Monthly reported data's are evaluated by Senior management team	5	DOCUMENT REVIEW
	Quarterly reported data's are evaluated by Governing Board	5	DOCUMENT REVIEW
DQ4.2 The hospital performs QI projects to improve identified data quality gaps	Quality improvement project is developed for identified gaps during data evaluation by the SMT and Quality unit	5	DOCUMENT REVIEW
	Action plans are implemented	5	DOCUMENT REVIEW
	Run charts are plotted to measure progresses	5	OBSERVATION
DQ4.3 The hospital displays monthly and quarterly performances regularly to facility leaders, staffs and patients	Hospital Quarterly performance (selected KPIs including quality scores) (vs target) in M&E units and Quality unit dashboards	5	OBSERVATION Verify if past quarter performance (vs target) was displayed
	Dash boards are developed for important KPIs including quality scores (plan and performance) and displayed each month to facility leaders, staffs and patients	5	OBSERVATION (see randomly 5 departments and 1 for each department) If each department last month performances were displayed in respective departments dash boards
	Different methods including posters and easily understandable leaflets are using to publicize performance using data. (for each quarter performance)	5	OBSERVATION Verify if past quarter performance (vs target) was publicized

# **Data Quality Annex 1. Registers, tally sheets and reporting forms**

- A. HMIS registers
- 1. Abortion
- 2. ANC register
- 3. ART register
- 4. Delivery register
- 5. EPI Growth Monitoring register
- 6. Family planning register
- 7. HIV Exposed Infant register
- 8. IP register
- 9. Leprosy register
- 10. OPD register
- 11. Operation register
- 12. PNC register
- 13. Pre ART register
- 14. Referral register
- 15. TB register
- 16. VCT register
- B. Tally sheets
  - 1. VCT tally sheet

- 2. PIHCT tally
- 3. Pre ART tally
- 4. ART enrolment tally
- 5. ART regimen tally
- 6. EPI tally
- 7. Growth monitoring tally
- 8. FP methods display tally
- 9. OPD attendance and diagnosis tally
- 10. Repeat attendance tally
- 11. IPD morbidity and mortality tally
- 12. Tracer drug availability tally
- 13. Tracer drugs days out of stock tally

## C. Reporting forms

- 1. IPD reporting form
- 2. OPD reporting form
- 3. Disease reporting form
- 4. Weekly Epidemic reporting forms