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Save the Children

Quality of Nutrition Services Improvement: For Health Workers

Participant's Manual

ENGINE

July 1, 2014

List of Handouts:

- Handout 1 Pre-test for Quality Improvement Course
- Handout 2 Health Care Quality
- Handout 3 Continuous Quality Improvement (CQI)/Model for Improvement (MFI)
- Handout 4 Lot Quality Assessment Sampling (LQAS) Technique
- Handout 5 Data Quality
- Handout 6 Nutrition Quality Indicators
- Handout 7 Team Building for Quality Improvement
- Handout 8 Quality of Nutrition Assessment Forms
- Handout 9 Post-test and Evaluation of Training and Course Evaluation Form

List of Annexes:

- Annex 1: Nutrition indicators
- Annex 2: Quality assessment forms
- Annex 3: Exercises
- Annex 4: References

Abbreviations and Acronyms

ANC	Antenatal Care
CF	Complementary Feeding
CQI	Continuous Quality Improvement
EBF	Exclusively Breastfed
GA	Gestational Age
HH	Household
HMIS	Health Management Information System
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
ICCM	Integrated Community Case Management
ISO	International Standards Organization
LQAS	Lot Quality Assurance Sampling
MFI	Model for Improvement
MIYCN	Maternal, Infant and Young Child Nutrition
MUAC	Mid-Upper Arm Circumference
MRN	Medical Record Number
PDSA	Plan Do Study Act
PM	Performance Monitoring
QI	Quality Improvement
TQM	Total Quality Management
WASH	Water, Sanitation and Hygiene for All

Table of Contents

List of Handouts	i
List of Annexes	i
Abbreviations and Acronyms.....	ii
Table of Contents.....	iii
Introduction	1
Handout 1: Participant Introduction, Expectations and Objectives	8
Handout 2: Health Care Quality.....	11
Handout 3: Continuous Quality Improvement/Model for Improvement	16
Handout 4: Lot Quality Assurance Sampling Technique.....	27
Handout 5: Data Quality	32
Handout 6: Nutrition Indicators	35
Handout 7: Team Building for Quality Improvement	36
Handout 8: Quality of Nutrition Services Assessment Forms	41
Handout 9: Post-test and Evaluation of Training.....	44
References:	74

Course description

This two-day quality improvement training is designed to create a comprehensive knowledge of the concept of quality and prepare the participants to measure, analyze and improve the quality of nutrition services in health centers and health posts.

Goal: To provide participants with the knowledge and skills necessary to improve nutrition service quality.

Course objective: After completing this training participants will be able to measure, analyze and improve the quality of nutrition services.

Learning objectives of participants

By the end of the training course participants will be able to:

- Explain what quality means in a health care setting
- Introduce CQI/MFI as a quality improvement approach in a health care setting
- Introduce LQAS as a quality improvement technique in a health care setting
- Analyze the seven dimensions of data quality
- Describe nutrition indicators in a health care setting
- Explain team building as a quality improvement in a health care setting
- Identify quality assessment forms for nutrition services using the LQAS technique/chart review, observation, interview and 24-hours recall method.

Training methods

- Illustrated lectures
- Small group discussions
- Individual and group exercises

Training materials

- Course handouts for participants and course notebooks for trainers
- A flipchart

- Slides

Participant selection criteria

- Participants on the course should be health workers who are currently working in nutrition-related activities at facility, *woreda* (third-level administrative divisions in Ethiopia) and regional levels.

Methods of evaluation

Participants

- Pre- and post-course questionnaires
- Daily evaluation
- Training course evaluation

Course duration

- Nine handouts in a two-day sequence

Quality Improvement Training Course Outline (2 days, 9 sessions)			
Time	Activities	Training/learning methods	Resources/materials
Day 1			
10 minutes	Handout 1: Introduction, objectives, pre-course assessment and participant's expectations Activity: Welcome	Welcome by representative of ENGINE project	Course equipment : LCD and laptop
20 minutes	Activity: Introduction	Participants divide into pairs, interview one another, and then introduce each other—share their partner's name, position and discuss something of human interest (e.g. favorite food, hobbies, likes, dislikes).	Container of pieces of paper with numbers from 1 to 26
10 minutes	Activity: Provide an overview of the course (goal, objective, schedule)	Review the course syllabus and schedule	Quality improvement handout: Syllabus and schedule
30 minutes	Activity: Assess participants' pre-course knowledge	Complete pre-course questionnaire for quality improvement	Pre-course questionnaire
15 minutes	Activity: Identify participants' expectations	Ask participants to share their expectations of the course and record responses on the flipchart. Attach the flipchart page to the wall for reference throughout the course	Presentation Game for Introductions and Expectations
25 minutes	Handout 2: Health Care Quality Objective: Define health care quality	Brainstorming; Ask participants to tell you what they understand by quality (how they would define quality)	Quality improvement handout, flipchart
45 minutes	Objective: Identify three elements of health service quality	Divide the entire group into three smaller groups. Assign each group to one of the three health care quality elements. Assign Group 1 to discuss the structure; Group 2 to discuss the process; and Group 3 to discuss the	

		outcome. Ask each group to share their results.	
20 minutes	Handout 3: CQI and MFI Objective: Describe the principles of CQI and MFI	Presentation and discussion	Quality improvement handout, flipchart
1hr and 45 minutes	Objective: Identify key QI steps	Presentation and discussion	Quality improvement handout, flipchart
10 minutes	Activity: Summary	Review Energizer: Form a circle together with the participants, throw a ball to a participant, when he/she catches it, ask him/her a question about the key points and concepts presented in the session	Ball
10 minutes	Handout 4: LQAS Technique Objective: Define LQAS technique	Presentation and discussion	
10 minutes	Objective: Explain LQAS application (use/concept)	Presentation and discussion	Quality improvement handout, flipchart
30 minutes	Objective: Describe LQAS process/limitations	Presentation and discussion	Quality improvement handout, flipchart
10 minutes	Activity: Summary	Review Energizer: Form a circle together with the participants, throw a ball to a participant, when he/she catches it, ask him/her a question about the key points and concepts presented in the session	Ball
Day 2			
20 minutes	Handout 5: Data Quality Objective: Identify seven dimensions of data quality	Presentation and discussion	Quality improvement handout, flipchart
10	Objective: Describe use of quality data for	Presentation and discussion	

minutes	health care improvement		
10 minutes	Activity: Summary	Review Energizer: Form a circle together with the participants, throw a ball to a participant, when he/she catches it, ask him/her a question about the key points and concepts presented in the session	Ball
20 minutes	Handout 6: Nutrition Indicators Objective: Explain characteristics of good quality indicator	Divide the entire group into four smaller groups. Each small group should discuss the characteristics of good quality indicators. Ask each group to share their results	Quality improvement handout, flipchart
20 minutes	Objective: Identify nutrition quality indicators	Presentation and discussion	
10 minutes	Activity: Summary	Review Energizer: Form a circle together with the participants, throw a ball to a participant, when he/she catches it, ask him/her a question about the key points and concepts presented in the session	Ball
20 minutes	Handout 7: Team building for quality improvement Objective: Explain the importance of team building and describe the characteristics of effective PM and QI teams	Presentation and discussion	Quality improvement handout, flipchart
10 minutes	Activity: Summary	Review Energizer: Form a circle together with the participants, throw a ball to a participant, when he/she catches it, ask him/her a question about the key points and concepts presented in the session	Ball
1hr30 minutes	Session 8: Quality assessment forms. Objective: Identify nutrition services assessment forms	Presentation and discussion	Quality improvement handout
30	Objective: Describe data collection steps	Presentation and discussion	Quality improvement

minutes			handout and flipchart
2 hrs 10 minutes	Objective: Develop QI implementation plan	Exercise and Discussion: Ask the participants to remain in their groups of four. Give each group a completed LQAS form. Ask the groups to study the findings and identify inadequate performance. Ask the groups to apply the CQI model and develop a quality improvement action plan. Ask the groups to discuss the quality improvement steps. Ask each group to present the results of their discussions to the larger group	Flipchart
10 minutes	Activity: Summary	Review Energizer: Form a circle together with the participants, throw a ball to a participant, when he/she catches it, ask him/her a question about the key points and concepts presented in the session	Ball
15 minutes	Handout 9: Post course and evaluation of training Activity: Assess participants' post course knowledge	Complete post course questionnaire for quality improvement	Post course questionnaire
5 minutes	Activity: Evaluate quality improvement training	Complete course evaluation questionnaire for quality improvement	Course evaluation questionnaire

Quality Improvement Guide for health workers: Timetable for Two-Day Training

	Topic	Duration	
Day 1			
Registration			08h30–09h30
Handout 1	Introduction, Expectation, Objectives, Pre-test	1 hr 30 min	09h30–10h30
Tea break			10h30–10h50
Handout 2	Health Care Quality	1 hr 40 min	10h50–12h30
Lunch			12h30–13h30
Handout 3	CQI/MFI	2 hrs15 min	13h30–15h45
Tea break			15h45–16h00
Handout 4	Lot Quality Assurance Sampling Technique	1 hr 20 min	16h00–17h20
Daily Evaluation			17h20–17h30
Day 2			
Recap day 1			8:30 - 9:00
Handout 5	Data Quality	40 min	08h30–09h00
Handout 6	Quality indicators	50 min	09h40–10h30
Tea Break			10h30–10h50
Handout 7	Team Building for Quality Improvement	30 min	10h50–11h20
Handout 8	Quality Assessment Forms	1 hr 10 min	11h20–12h30
Lunch			12h30–13h30
Handout 8	Quality Assessment Forms	2 hrs	13h30–15h30
Tea Break			15h30–16h00
Handout 8	Quality Assessment Forms	1 hr 10 min	16h00–17h10
Handout 9	Post-test, Evaluation and Closing of the Training	20 min	17h10–17h30

HANDOUT 1: INTRODUCTIONS, EXPECTATIONS and OBJECTIVES

Pre-test

Code: _____

Instruction: For each of the following statements print a capital **T** in the space to the right of the number if the statement is true or a capital **F** if the statement is false. You will earn five points for each correct answer.

1. ____ Quality depends on who is defining it and how it is measured.
2. ____ Root causes and symptoms both should be removed.
3. ____ The self-assessment method is not a comprehensive method for reviewing an organization's activities and results.
4. ____ Every change is improvement.
5. ____ The accurate way to measure patient data is by means of percentages.
6. ____ The outcome of the quality of the service is affected by the process of the service.
7. ____ Patient satisfaction is one of the outcomes of health care quality
8. ____ Total Quality Management in health care is adopted from the industrial scenario.
9. ____ The quality of data can be affected by its integrity
10. ____ Good quality teamwork is the foundation of success in an organization.

Instruction: Select the best response for each of the following questions. Indicate your answer by circling the appropriate letter. Each correct response is worth five points.

11. Which of the following terms is used to assess quality?
 - a) Outcome
 - b) Process
 - c) Impact
12. Which of the following terms is used when data is measured and collected consistently?
 - a) Reliable

- b) Valid
 - c) Precise
13. A healthcare organization evaluates the quality of the service to ensure _____.
- a) Reputation
 - b) Cost
 - c) Patient satisfaction
14. Quality _____ are used to determine and monitor the quality of a healthcare performance.
- a) Data
 - b) Standards
 - c) Indicators
15. Which of the following is not part of quality measurement?
- a) Identification of diagnoses/gaps
 - b) Selection of indicators to track progress
 - c) Supportive supervision
16. Which of the following describes good quality data?
- a) Accuracy, reliability and integrity
 - b) Monitoring and evaluation
 - c) Standards and indicators
17. Implementation of a specific quality improvement action, at any specific setup will have passed which of the following steps?
- a) Plan
 - b) Do
 - c) Supervise
 - d) Act
18. Which of the following is true for Lot Quality Assurance Sampling (LQAS) technique?
- a) Rapid
 - b) Identifies the cause of the problems
 - c) Prioritizes the greatest problems first
19. Which of the following is true about the LQAS technique?
- a) LQAS is complex technique

- b) LQAS does not measure inadequate performance
 - c) LQAS can detect all problems equally sensitively
20. Quality is more of a function of _____ rather than a number.
- a) Cost
 - b) Access
 - c) Positive perception

HANDOUT 2: HEALTH CARE QUALITY

Definition:

“Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

IOM. Medicare: A Strategy for Quality Assurance. Vol. 1 (1990).

Terms within the definition

Health services: Refers to a wide array of services that affect health, including those for physical and mental illnesses. It applies to many types of health care practitioners and to all settings for the provision of health care.

Increase the likelihood: Quality is not identical with a good outcome. Poor outcomes occur despite the best possible health care because a disease often defeats the best efforts of health care professionals.

Populations and individuals: There is concern with the quality of care that individual organizations, health plans, and clinicians deliver. Attention must be paid to the quality of care across the entire system.

Current professional knowledge: Emphasizes that health professionals must stay abreast of the rapidly expanding and changing knowledge base and use such knowledge appropriately. No matter how good the understanding or measures of quality are today, health care professionals must always be prepared to revise them as new knowledge is generated about what works and what does not work effectively in health care to produce good outcomes for patients.

“The application of medical science and technology in a way that maximizes its benefits to health without correspondingly increasing its risks for the degree of quality is, therefore, the extent to which the care provided is expected to achieve the most favorable balance of risks and benefits.”

Avedis Donabedian, 1982.

“Proper performance (according to standards) of interventions that are known to be safe, that are affordable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability, and malnutrition.”

M.I. Roemer and C. Montoya Aguilar, WHO, 1983.

“Everything that is not money.” **Weiner, 1982.**

“Quality is the totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs.” **ISO 8402.**

Important concepts within the definition:

- Quality is about components of care that can impact outcomes of care.
- Quality is about the execution of components of care in compliance with recommendations of scientific grounds.

How people know that they are getting quality health care:

- Health care fits your needs and preferences
- Health care doesn't cause harm
- Health care is right for your illness
- Health care is given without unnecessary delays
- Health care is fair and not affected by such things as your gender, language, color, age or income that shows you are getting quality health.

Quality of care is central to several domains:

- Basic research and development
- Research to set policy agendas
- Program management/improvement
- Program impact evaluation

Clinical Quality Improvement: Is an interdisciplinary process designed to raise the standards of the delivery of preventive, diagnostic, therapeutic, and rehabilitative measures, in order to maintain, restore and improve health outcomes of individuals and populations.

Dimensions of Health Service Quality: Health service quality has the following six dimensions.

1. **Safe:** Patients should not be harmed by the care intended to help them. Patients might be harmed by medication errors including wrong drugs, wrong dosage, wrong route of administration and wrong site surgery.

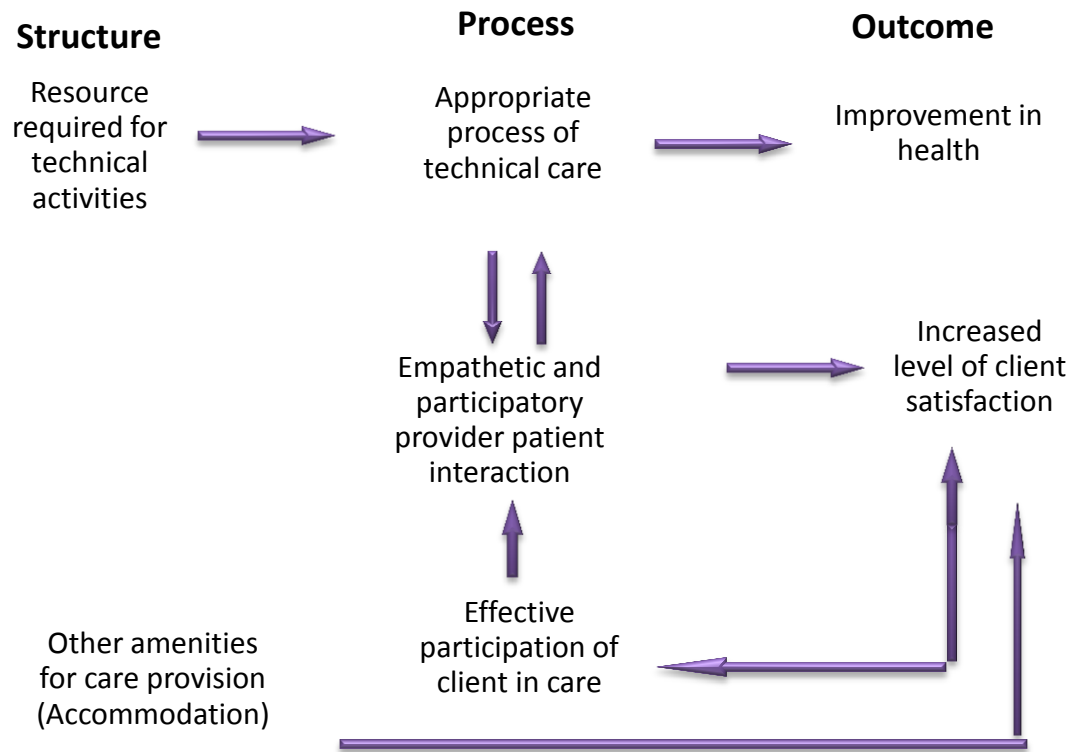
2. **Timely:** Lifesaving versus life losing events as a result of time only. Emergency departments are the places where most delays become evident.
3. **Effective:** Care should be based on evidence and should match science. The best available techniques should not be:
 - **Under-use of services:** When people do not receive necessary care and suffer needless complications that add to the cost and reduce the productivity of health care services.
 - **Over-use of services:** When people receive health care services that are unnecessary, increase costs, and may even endanger their health. Examples of overuse include the excessive or unnecessary use of X-ray and other diagnostic tests, unnecessary surgical procedures, and the over prescription of antibiotics. Over-use also wastes money and resources that could be put to more effective use.
 - **Misuse:** Shortcomings in technical and interpersonal aspects of care, e.g. when people are injured during the course of their treatment and may die prematurely as a result.
4. **Efficient:** Care should be taken to avoid waste of equipment, supplies, ideas and energy.
5. **Equitable:** Care should not vary based on the patient's personal characteristics, e.g. gender, ethnicity, geographic location and socio-economic status.
6. **Patient centered:** Care should be responsive to the preferences and needs of patients. All clinical decisions should be guided by patient values.

Health Care Quality Elements

Health care quality, as stated by the father of health care quality—Avedis Donabedian—has three elements: structure, process and outcome.

Table 1: Health Care Quality Elements

S.no	Element	Description
1	<p>Structure: Competence of providers to provide health care</p>	<p>Availability of technically competent health workers Availability of quality assured medical supplies Capability of the structure to implement designed functions of care provision Physical environment</p>
2	<p>Process: Technical quality (the degree of expertise with which processes of care are executed, to what extent scientific knowledge is applied in care, etc.)</p>	<p>Compliance of practice with scientific knowledge and recommendations Level of risk and preparedness to manage risks</p>
3	<p>Outcomes: The level of achievement of expected outcomes</p>	<p>Clients' perspective Providers' perspective</p>



(Adapted from A. Donabedian, *An Introduction to Quality Assurance in Health Care*, 2003.)

Figure 1: Health care quality elements

HANDOUT 3: CONTINUOUS QUALITY IMPROVEMENT/MODEL FOR IMPROVEMENT

Continuous Quality Improvement (CQI)

Total Quality Management (TQM) is defined as creating an organizational culture committed to the continuous improvement of skills, teamwork, processes, product and service quality, and customer satisfaction.

CQI is the equivalent of TQM but designed specifically for the health care industry. It is an ongoing effort to improve health care services or processes. These efforts can seek ‘incremental’ improvement over time or ‘breakthrough’ improvement all at once. CQI comprises two entwined categories of activities: Measurement and Improvement. It is about growing better apples rather than weeding out the bad apples.

Improvement is a positive change that increases the likelihood of achieving desired outcomes.

Data provides the evidence to verify that changes are positive.

Principles of CQI

1. **Client Focus:** Focuses first and foremost on meeting the needs and expectations of clients/patients. Patients and service users are the main focus of quality assurance programs.
2. **Systems and processes:** Systems comprise various aspects of service delivery that must operate together, as a unit in a facility, to deliver quality health care. Processes are driven by the understanding that if the process is right, the outcome will be right.

“If you can’t describe what you are doing as a process,
you don’t know what you are doing.”

W. Edwards Deming

3. **Teamwork:** Work is accomplished through processes and systems in which different people are responsible for different functions. Leadership and collaborative teamwork are the two focal points of CQI. Improvement can be achieved through the on-going participation of all

employees in problem-solving efforts and the breaking down of barriers between staff areas. The performances of the team must be assessed and feedback must be provided periodically.

4. **Data:** Data provides the foundation for problem identification and further improvement measures. We must analyze data and use it locally to improve services. Organizations need a commitment to excellence and a means of evaluation for the outcomes.
5. **Effective Communication:** Communication is a process by which messages are passed from a sender to a receiver, with feedback to the sender. In health delivery there is communication between: the health worker and the patient/client; the health worker and the community; and health worker and health worker. A system of daily monitoring meetings for staff members should be established.

Model for Improvement

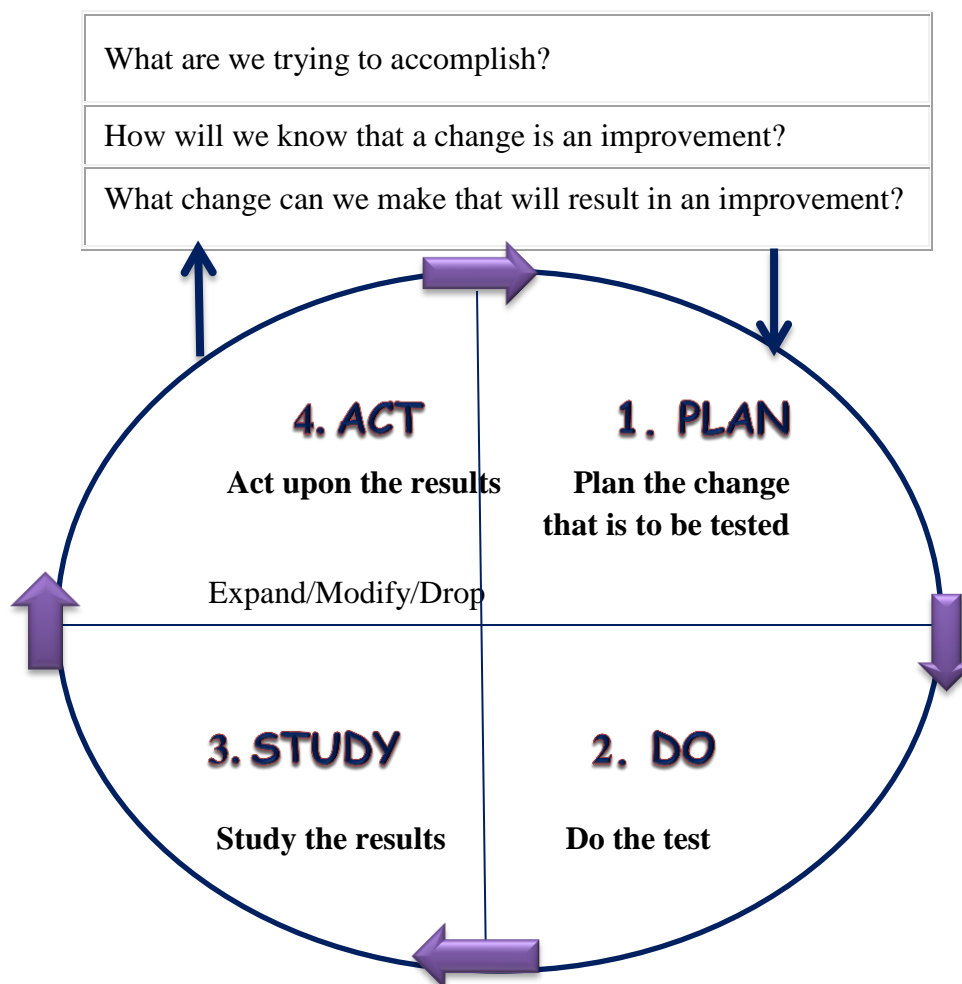


Figure 2: The Model for Improvement was developed by Associates in Process Improvement

Activity 3.2 Identify key quality improvement steps (1 hour 45 minutes)

Training Methods: Presentation and discussion (40 minutes)

- Ask the participants to read through the key quality improvement steps
- Review in detail the key quality improvement steps, group exercise and summarize using the information below

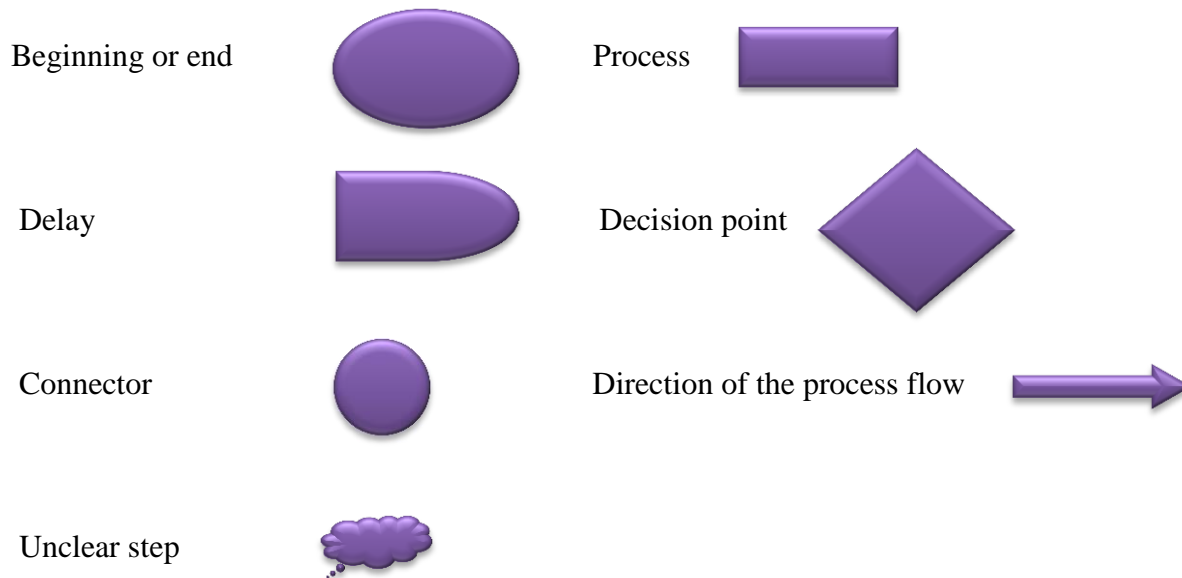
The following are recommended key steps to facilitate quality improvement initiatives

Step 1: Diagnosis/gap identification

The journey begins by identifying an opportunity for improvement. This may come from listening to the voice of the clients, community or providers, or from routine or locally available data generated during the provision of health services, from understanding the process, for example, by conducting needs assessments, by collecting survey results, by observation, or by listening to client complaints.

To understand a process, the first step is to draw a flowchart of the process. Every process will need input to finish the individual tasks and will give an output when the tasks are completed. The advantage of using a flowchart is that the people involved in constructing the flow chart can understand the process better, recognize the areas for improving the process and also realize how the process and the people involved can fit into the overall process. Flowcharts give a visual illustration of the sequence of the operations needed to complete a task.

Key symbols for the construction of a flowchart



Step 2: Priority setting

This step involves narrowing down options through a systematic approach of comparing choices by selecting, weighting and applying criteria. The quality improvement team can develop criteria for prioritization. These might include, for example, the relevance of the area, the urgency of the solution, the cost, the ease of making a difference. Once the criteria for prioritization have been developed, a value for each criterion can be allocated. Team members score each criterion, and the highest score is selected as the first priority, and so on.

Table2: Prioritization tools and technique

Criterion	Relevance	Urgency	Less resistance to change	Easily achievable	Cost	Other	Total
Data quality							
Supply system							
Referral system							

Step 3: Develop a problem statement

Once areas for improvement have been recognized and prioritized, the quality improvement team will work on addressing each of the problems selected. A clear and concise statement that the quality improvement team has discussed and agreed should be used to state the problem. This statement should not include any reference to potential causes or solutions.

Example: “The average proportion of new clients in antenatal care (ANC) who were taking an iron supplement was less than a third (30%) of new ANC attendances, in the months from January to March 2014.”

Step 4: Root-cause analysis

- This is the fundamental instrument used to improve the quality of services. It correctly identifies essential problems rather than provides symptomatic treatment only. Understanding the cause of the problem helps to determine the most appropriate interventions for improvement and also enables sustainability of the improvement effort. Root-cause analysis allows the team to identify the problem and assess the frequency and effects of the obstacle.
- Some tools for root-cause analysis are:
 - Cause-and-Effect Diagram
 - Force Field Analysis
 - Pareto Analysis
 - Check Sheet
 - Control Chart

Cause-and-Effect Diagram

A cause-and-effect diagram is sometimes called a fishbone diagram, because of its appearance, or an Ishikawa diagram, after its inventor. It is a useful tool for the identification of problem causes and sub-causes. A cause-and-effect diagram displays the root-causes of a problem with several related categories and sub-categories. Fishbone diagrams are constructed using other quality

improvement tools, such as brainstorming or surveys. An example of such a diagram is shown in Figure 3.

Cause-and-effect diagrams can be constructed in a few steps by the quality improvement team. A problem is identified and a list of its causes is compiled. The list is refined to reflect realistic and traceable causes for further study. The causes are then classified into categories (and sub-categories) which are nominated by the team, or selected from a standardized list of possible causes of variation by category. A separate list of causes can be generated for each of the following categories: people, process, policy and materials. The categories are displayed on the diagram with arrows directing them towards the main problem (see Figure 3.).

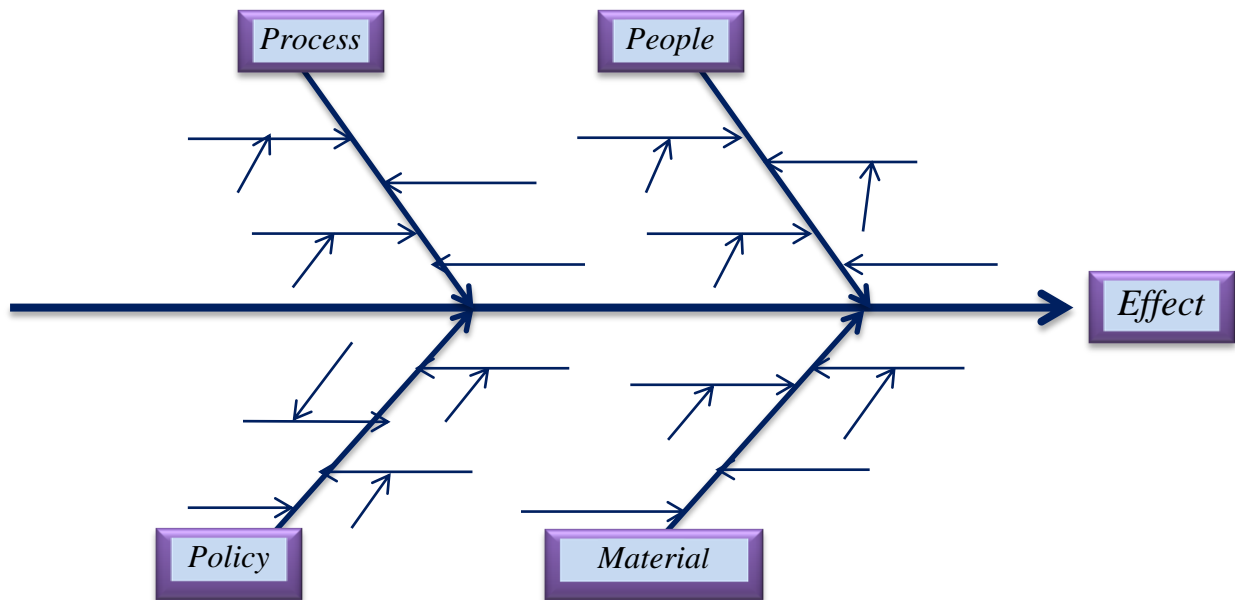


Figure 3. An example of a cause-and-effect diagram

Force Field Analysis

This tool is used to identify the forces and factors in place that support or impede the solution of an issue or problem, facilitating the reinforcement of positive influences and the elimination or reduction of negative constraints.

It enables comparison of the ‘positives’ and ‘negatives’ of a situation; forces people to think together about all the aspects of making the desired change a permanent one; encourages people to agree the relative priority of factors on each side of the ‘balance sheet’; and promotes honest reflection regarding the underlying roots of a problem, together with possible solutions.

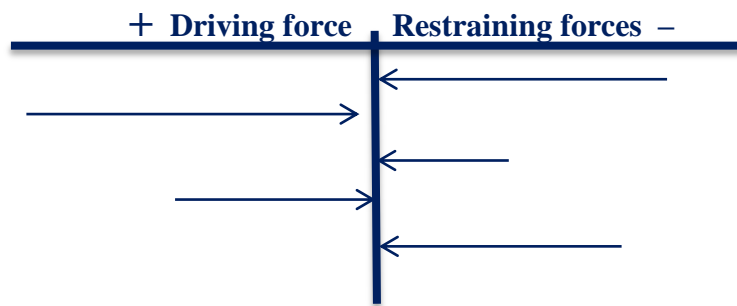


Figure 4. An example of a Force Field Analysis

Pareto analysis

In 1906 Vilfredo Pareto, an Italian economist, developed the concept of the Pareto Chart, a combination of a column chart and a line graph. The bars, representing any given characteristic of the population, are arranged with the longest bars on the left and the shortest on the right, providing a graphic illustration of which situations are more significant. The Pareto Chart is also called the 20–80 rule, which claims that approximately 80% of the effects (problems) arise from 20% of the causes.

No facility will have enough resources to handle every problem and the Pareto Chart can be used to prioritize problems and decide which problems should be addressed. The Pareto diagram can be constructed as follows:

Table 3: Sample data on causes of low coverage of ANC women counseled on maternal feeding.

Causes	# of occurrence	Percentage	Cumulative %
No attention given	77	44.77	44.77
Not included in HMIS	60	34.89	79.66
Not trained	17	9.88	89.54
Lack of supervision	10	5.81	95.35
Workload	6	3.45	98.80
Space	2	1.16	99.96
Total	172	100	

The following example shows the Pareto graph for counseling on maternal feeding. It is based on cumulative data that lists the causes for low coverage of women in antenatal care who received counseling on maternal feeding.

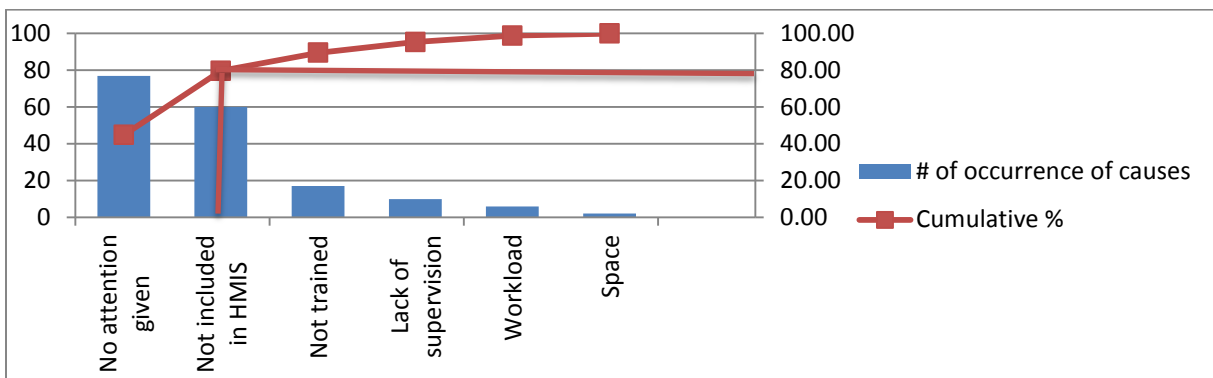


Figure 5: Pareto Graph for causes of low coverage of ANC women counseled regarding maternal feeding.

Step 5: What are we trying to achieve? Setting goals for improvement

Setting goals for quality improvement will help everyone involved in the process to share a common view about the future and to mobilize resources in the same direction. Agreement regarding the goal is crucial, as is allocating the people and resources necessary to accomplish it.

The overall objective should be set according to SMART principles (**S**pecific, **M**easurable, **A**ppropriate, **R**ealistic and **T**ime-bound), and should define the specific population of focus that will be affected.

Examples of good goal-setting statements are:

- By the end of September 2014, we will increase the provision of an iron supplement from 60% to 90% for the new intake of all women receiving ANC; or
- We will improve the ANC nutrition counseling recording system, from the current 30% to 80%, within a three-month period.

Step 6: How we will know that the change is an improvement. Selecting indicators to track progress

Tracking changes towards the achievement of an agreed goal is one of the steps in continuous quality improvement. In order to monitor performance it is crucial to establish quality indicators. Improvement measures can fall into three areas: **Outcome Measures, Process Measures and Balance Measures**. Using three different views allows one to see a better picture of the project.

Outcome Measures: Will tell you whether changes are actually leading to improvement; i.e. helping to achieve the overall aim of reducing stunting and improving the nutrition status of children less than two years of age. Outcome measures attempt to capture the voice of the ‘customer’ by answering the following two questions: How is the system performing? What is the result? Examples include reducing anemia in pregnant women.

Process Measures: Are used to measure aspects of a step or a procedure within a process. For example, a patient suffering from malnutrition undergoes a number of lab tests and physical examinations in a health center.

To affect the outcome measure of reducing stunting, it is necessary to make changes that will improve many core processes, including: nutrition counseling skills, implementing the Water, Sanitation and Hygiene for All (WASH) approach, decision support, the medical record-keeping system and changes to improve the health care organization and the community. Process measures

are often described as the voice of the workings of the system. They aim to answer the question: Are the parts/steps in the system performing as planned?

Balancing Measures: These will look at a system from different directions/dimensions. Are changes that were designed to improve one part of the system causing new problems in other parts of the system? For example, a balance measure will demonstrate whether improvements to nutrition counseling are impacting negatively on the vaccination program.

Step 7: What change can we make that will result in an improvement? Taking specific quality improvement actions

Management should identify the most effective, efficient, ethical and feasible strategies of quality improvement from all the possible options for solving specific problems, as identified in Step 1. The selected strategy will be implemented at each level to produce the desired quality improvement goals. The implementation of specific quality improvement action at any specific setup must pass the Plan-Do-Study-Act (PDSA) cycle.



Figure 6: Deming's PDSA cycle

Step 1: Plan

- What is your change idea?

- Test a change idea
- State the objective of the test
- What data need to be collected?
- Who or what is the target group of the test?
- How many sample sizes must be included and over what time period?
- Make predictions about what will happen and why
- Develop a plan to test the change (Who? What? When? Where?)

Step 2: Do

- Carry out the test
- Document problems and unexpected observations

Step 3: Study

- Analyze the data and study the results
- Compare the data with your predictions
- Summarize and reflect on what has been learned

Step 4: Act

- Expand or modify or drop the change idea, based on lessons learned from the test
- Prepare a plan for the next test

Step 8: Measuring change, communicating findings and recognizing achievements

Along with the implementation of quality improvement strategies, the level of quality of care needs continuous measurement to track changes towards set goals. Measurement should make use of the selected indicators in Step 6. Findings from quality measurements after analysis are the tools for advocacy that will enable further actions for quality improvement. This can mobilize resources; create a competitive environment among health care providers and increase awareness by beneficiaries of the quality of health care.

Barriers to Improvement:

- Confusing departments and processes
- Jumping to causes or solutions
- Subjective presentations
- Instant experts

HANDOUT 4: LOT QUALITY ASSURANCE SAMPLING TECHNIQUE (LQAS)

LQAS background

The LQAS method was first used in the manufacturing industry in the 1920s. It was used to judge the quality of a group (lot) of manufactured items and to identify groups (lots) that did not meet standards of performance. ‘Flags’ indicate a problem needing attention and ‘Looking upstream’ will prevent problems in the future.

LQAS is a sampling strategy designed to guide management decisions and to answer with confidence whether or not a specific performance falls below a determined threshold.

The LQAS method can apply to a malaria prophylactic regime (Malawi), the coverage rate of contraception (Kenya, Senegal), the quality of health care (Costa Rica), Hepatitis B screening (Centers for Disease Control and Prevention [CDC]), quality of health centres (Spain) and neonatal tetanus elimination (Bangladesh, Indonesia, Rajasthan, Zimbabwe, Namibia and Morocco).

LQAS use

- **Rapid** (relative to other quality assessments); small samples are sufficient to make judgments thus allowing immediate verbal and written feedback to the unit.
- **Easy** to use and analyze (a combination sampling-and-analysis technique).
- **Evidence** or data is used to decide where to improve quality, by flagging problems and providing a focus for action. This is often sufficient for day-to-day management and is unlikely to label good performance as bad.
- **Efficient**: LQAS allows managers to decide how best to allocate scarce management resources for quality improvement that are necessary to improve low performance. It does not waste scarce resources by trying to improve performance where it is already adequate.

LQAS concept

- Before conducting an LQAS exercise, it is necessary to decide the level of precision of the potential LQAS results.

- The higher the required level of precision the larger the sample size and the cost of the study.
- The optimal LQAS Decision Rule 16 is a Sample Size of 19 for a Target of 95%.
- If number correct is *below* the decision rule this provides statistical evidence that the performance is inadequate.
- If number correct is *above* the decision rule this provides no statistical evidence that the performance is below the target.
- An LQAS study is based on document review or evidence/data.

Criteria to assess performance indicators

Tools were designed to assess indicators of performance that met the following criteria:

- Reflected practices important for patient/client health and/or data needed to monitor patient progress;
- Sensitive to change; and
- Measurable with limited resources (time, money).

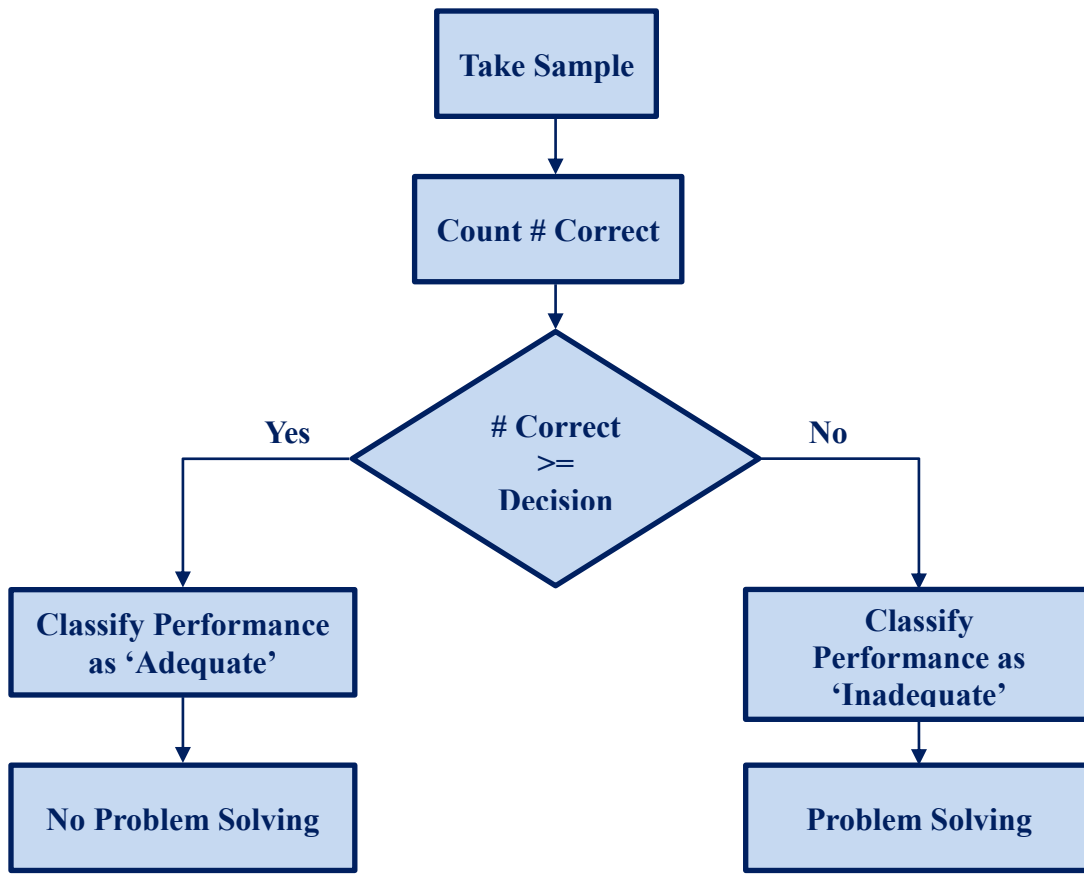


Figure 7: LQAS process

Table 4: Optimal LQAS Decision Rules for Sample Sizes of 12–40 for Targets of 10–95%

Targets (for Monitoring and Evaluation)

Sample Size	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%
12	Na	na	1	1	2	2	3	4	5	5	6	7	7	8	8	9	10	11
13	Na	na	1	1	2	3	3	4	5	6	6	7	8	8	9	10	11	11
14	Na	na	1	1	2	3	4	4	5	6	7	8	8	9	10	11	11	12
15	Na	na	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13
16	Na	na	1	2	2	3	4	5	6	7	8	9	9	10	11	12	13	14
17	Na	na	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18	Na	na	1	2	2	3	5	6	7	8	9	10	11	11	12	13	14	16
19	Na	na	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
20	Na	na	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17
21	Na	na	1	2	3	4	5	6	8	9	10	11	12	13	14	16	17	18
22	Na	na	1	2	3	4	5	7	8	9	10	12	13	14	15	16	18	19
23	Na	na	1	2	3	4	6	7	8	10	11	12	13	14	16	17	18	20
24	Na	na	1	2	3	4	6	7	9	10	11	13	14	15	16	18	19	21
25	Na	1	2	2	4	5	6	8	9	10	12	13	14	16	17	18	20	21
26	Na	1	2	3	4	5	6	8	9	11	12	14	15	16	18	19	21	22
27	Na	1	2	3	4	5	7	8	10	11	13	14	15	17	18	20	21	23
28	Na	1	2	3	4	5	7	8	10	12	13	15	16	18	19	21	22	24
29	Na	1	2	3	4	5	7	9	10	12	13	15	17	18	20	21	23	25
30	Na	1	2	3	4	5	7	9	11	12	14	16	17	19	20	22	24	26
31	Na	1	2	3	4	6	8	9	11	13	14	16	18	19	21	23	24	26
32	Na	1	2	3	5	6	8	10	11	13	15	17	18	20	22	23	25	27
33	Na	1	2	3	5	6	8	10	12	13	15	17	19	21	22	24	26	28
34	Na	1	2	4	5	6	8	10	12	14	16	18	19	21	23	25	27	29
35	Na	1	3	4	5	6	8	10	12	14	16	18	20	22	24	26	28	30
36	Na	1	3	4	5	6	9	11	13	15	17	19	20	22	24	26	28	31
37	1	2	3	4	6	7	9	11	13	15	17	19	21	23	25	27	29	31
38	1	2	3	4	6	7	9	11	13	15	17	20	22	24	26	28	30	32
39	1	2	3	5	6	7	9	12	14	16	18	20	22	24	26	28	31	33
40	1	2	3	5	6	7	10	12	14	16	18	21	23	25	27	29	32	34

Na: Not applicable, meaning LQAS cannot be used in this assessment because the target is either too low or too high to assess a lot.

Notes: α and β errors < 10% for all decision rules except where noted. Lightly shaded cells indicate where α or β errors are $\geq 10\%$.

Darker cells indicate where α or β errors are $\geq 15\%$.

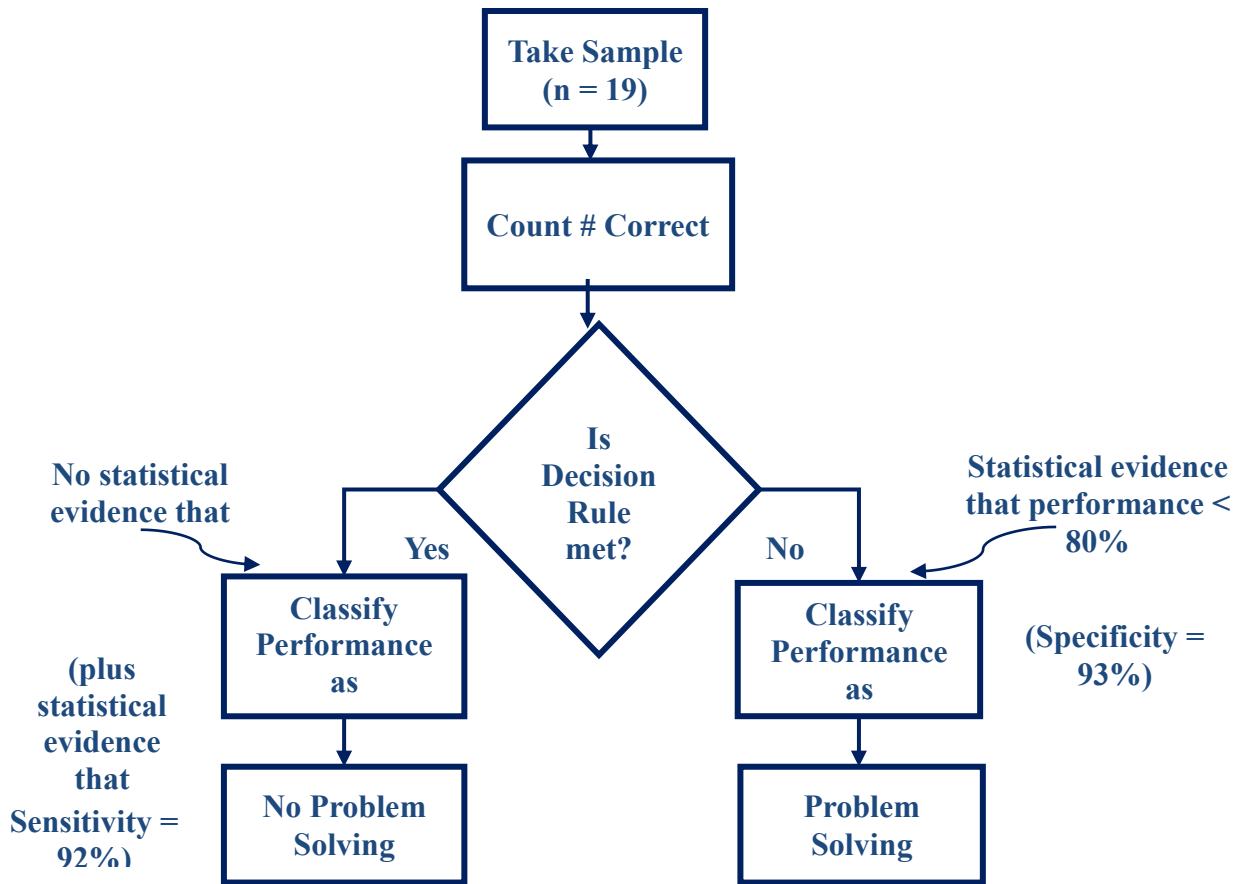


Figure 8: LQAS Example

LQAS: Limitations

- LQAS does not provide a precise performance value (%)
- It is not equally sensitive to detecting all problems
 - The farther performance falls below the target, the more likely it is to be identified as a problem
 - Similar to the triage concept, it prioritizes identifying and addressing the greatest problems first
- The tool does not provide solutions/steps to address/prevent problems
 - It requires follow-up to identify the root-causes of the problem

HANDOUT 5: DATA QUALITY

Data Quality

Data Quality is the state of completeness, timeliness and validity (consistency and accuracy) that makes data appropriate for a specific use.



Figure 9: Data Quality Dimensions

Table 5: Dimensions of Data Quality

Dimensions of data quality	Definition
Accuracy	Accurate data are considered correct: the Data clearly, directly, and adequately represent the result intended to be measured. Have we actually measured what we intended? Accurate data minimize error (e.g. recording or interviewer bias, transcription error and sampling error) a point of being negligible.
Reliability	Data generated by a program’s information system are based on protocols and procedures that do not change according to who is using them and when or how often they are used. The data are reliable because they are measured and collected consistently. Would we get the same results or findings if the procedure was repeated over and over?
Precision	This means that the data have sufficient detail. For example, an indicator requires the number of individuals who received HIV counseling and testing and received their test results by the gender of the individual. An information system lacks precision if it is not designed to record the gender of the individual who received counseling and testing. Measure of any bias or error.
Completeness	Completeness means that an information system from which the results are derived is appropriately inclusive—it represents a <i>complete</i> list of eligible persons or units and not just a fraction of the list.
Timeliness	Data are timely when they are up-to-date (current) and when the information is available on time. Timeliness is affected by: (1) the rate at which the program’s information system is updated; (2) the rate of change of actual program activities; and (3) when the information is actually used or required. The relationship between the time of collection, collation and reporting and the relevance of the data for decision making processes.
Integrity	Data have integrity when the systems used to generate them are protected from deliberate bias or manipulation for political or personal reasons. Measure of ‘truthfulness’ of the data.
Confidentiality	Confidentiality means that clients are assured that their data will be maintained according to national and/or international standards for data. This means that personal data are not disclosed inappropriately, and that data in hard copy and electronic form are treated with appropriate levels of security (e.g. kept in locked cabinets and in password protected files).

Quality data are used for:

- Good decision-making
- Appropriate planning
- Ongoing monitoring and evaluation
- Improvement of coverage and quality of care

Key Success Factors for Data Quality:

1. Functioning information systems
2. Clearly defined indicators used consistently at all levels
3. Description of roles and responsibilities at all levels
4. Specific reporting timelines
5. Standard/compatible data-collection and reporting forms/tools with clear instructions
6. Documented data review procedures to be performed at all levels
7. Steps for addressing data quality challenges (missing data, double-counting)
8. Storage policy and filing practices that allow retrieval of documents for auditing purposes

HANDOUT 6: NUTRITION INDICATORS

A Quality Indicator is a variable that measures one aspect of a program/project or health outcome. It is a retrospectively measurable element of practice performance for which there is evidence or consensus that it can be used to assess the quality of service provided and hence changes it. The indicators could be derived from **standards** of qualities by converting them into measurable terms.

A good indicator has a number of important attributes including those recommended by the

World Health Organization (WHO, 1997c):-

- To be **useful**: an indicator must be able to act as a ‘marker of progress’ towards improved health status, either as a direct or proxy measure of impact or as a measure of progress towards specified process goals.
- To be **scientifically robust**: an indicator must be a **valid, specific, sensitive** and **reliable** reflection of that which it purports to measure. A **valid** indicator must actually measure the issue or factor it is supposed to measure. A **specific** indicator must reflect changes only in the issue or factor under consideration. The **sensitivity** of an indicator depends on its ability to reveal important changes in the factor of interest. A **reliable** indicator is one which would give the same value if its measurement was repeated in the same way on the same population and at almost the same time.
- To be **representative**: an indicator must adequately encompass all the issues or population groups it is expected to cover.
- To be **understandable**: an indicator must be simple to define and its value must be easy to interpret.
- To be **accessible**: the data required for an indicator should be available or relatively easy to acquire by feasible data collection methods that have been validated in field trials.
- To be **ethical**: an indicator requires data which are ethical to collect, process and present while respecting the rights of the individual to confidentiality, freedom of choice in supplying data, and informed consent regarding the nature and implications of the data required.

Nutrition Indicators: See Annex 1

HANDOUT 7: TEAM BUILDING FOR QUALITY IMPROVEMENT

Defining Teams: ‘A small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves accountable.’

Katzenbach and Smith, *Wisdom of Teams.*

Why teams are required

- To address complex systems and rapid technological innovation
- To complement the skills of a wide range of experts and to address multifaceted challenges
- To generate better ideas and solutions for product/service innovations
- To facilitate communication, process improvement and productivity
- To support peer performance and provide motivation
- For the effective utilization of resources
- To enhance cooperation within and between departments

Not all tasks require teams: There are individuals with all the required competencies and skills to perform specific tasks. These individuals are known as Quality Champions.

Team Structure—Buy-in from top management is CRITICAL

- Leadership: Team leader, facilitator, coach
 - Responsibility for the process
 - Authority to execute recommendations
 - Ability to mobilize resources
- Membership: Key stakeholders in the process
 - Voluntary, have responsibilities
 - Skilled/trained in interpersonal skills
 - Problem solving, data analysis and interpretation

Smaller teams—better management

- Ideal size is 4–7 members
- Avoid large teams; communication is difficult between large groups
- There is a deterioration in quality and productivity with teams of 12–14 members

- Additional members for an existing team must be familiar with the process and progress of the team

Team Composition—Members:

- Must work within the system and understand the process
- Must have control over the process and the authority to institute change
- Must be able to ensure resources

Motivation for Quality Improvement

- Donor Driven
- Introduction of new Program/Project/Service
- Integrating at Province/District/Hospital
- Institutionalizing at the National Level
- Operations Research to test a new product/service
- Demand driven

Common Difficulties

- Selecting a problem that is too big and for which the solution will be slow
- The problem may be part of much bigger problem
- Selecting a problem that is too small and for which the solution will have little impact
- A lack of recognition and reward system
- No organizational support
- A lack of training

No one of us is more important than the rest of us. **Ray Kroc**, Founder, McDonalds

Five Dysfunctions of a team

- Absence of trust
- Fear of conflict
- Lack of commitment
- Avoidance of accountability
- Inattention to results

Role of Teams: Quality Collaboration vs Traditional Continuous Quality Improvement (CQI)

- Multiple teams can work on a single problem area
- Teams make progress more rapidly
- Each team learns from the work of the others—teams do not have to re-invent the wheel
- Peer groups provide motivation for Quality Improvement work
- Teams facilitate the spread of improvements—enable more efficient results

Redefining Quality: ‘Doing the right thing the right way at the right time with the *right attitude*.’

What is the Secret of Quality?

“It is Love; love of knowledge, love of man and love of God.

Let us live and work accordingly.”

Avedis Donabedian—the primary architect of Quality in Health Care.

Performance Monitoring and the Quality Improvement Team

The recommended quality improvement team at the health center

Health Centers need a team that measures and improves the quality of services in a continuous manner. While performance monitoring teams exist in most health centers, they need to be strengthened and restructured through the inclusion of dedicated quality officers and medical records representatives. When the performance monitoring and quality improvement team is fully functional, there will be a further need to establish or revitalize a *quality sub-team*, based on the context of each facility to improve the quality of nutrition services in particular.

Composition of the Performance Monitoring and Quality Improvement Team: Every individual providing nutrition service within the health facility has his/her own contribution to make to the improvement process and should be directly involved in quality improvement activities.

- Head of institution/Deputy head
- Administration and finance representative
- Representatives of main service/program units
- Quality improvement assigned quality officer

- Representatives of the medical records service
- Officer in charge of the Health Management Information System (the HMIS in-charge)

Responsibility and tasks: Performance Monitoring & Quality Improvement Team

- Ensure the involvement of every individual in the team
- Ensure the use of assigned resources for quality measurement and improvement
- Ensure the availability of formats and registers
- Ensure that health service data are properly recorded and collected
- Ensure that tools to assess the quality of nutrition are in place
- Oversee activities concerned with medical records and archives
- Identify areas for improvement, giving special emphasis to the quality of nutrition services
- Develop improvement plans based on identified gaps
- Develop interventions and apply the quality improvement model to these
- Monitor and evaluate the quality improvement program
- Ensure supportive supervision and the dissemination of information
- Convene Performance Monitoring and Quality Improvement meetings to assess core indicators
- Prepare a schedule for review meetings

Head of institution

- Assigns a quality officer
- Calls the team meetings
- Chairs the team meetings
- Confirms (signs) the minutes of team meetings

Representatives of main service/program units/departments

- Maintain standard procedures/formats
- Identify sub-team (2–3 members well-versed in nutrition service delivery) to measure the quality of performance of nutrition services
- Maintain and display charts for monitoring performance and quality improvement

Assigned quality officer

- Is the secretary of the performance monitoring quality improvement team
- Follows the implementation of approved quality improvement actions
- Takes notes at team meetings and records these in the review minute book
- Communicates quality indicators and findings to health facilities

The HMIS in-charge

- Collects, aggregates, analyzes and prepares information for team meetings
- Updates and displays information and monitoring charts
- Files action plans

Administrative units

- Allocate resources for performance monitoring and quality improvement
- Build the capacity of health facilities to measure quality and ensure improvement activities

Recommended frequency of team meetings

- Teams are expected to meet every two weeks or as per the terms of the health center

HANDOUT 8: QUALITY OF NUTRITION SERVICES ASSESSMENT FORMS

Quality Nutrition Services Assessment forms

This assessment tool helps to identify early any problems that require changes, to increase the ownership of problems, to develop solutions and assess the achievement of targets.

Available LQAS Instruments

Chart review:

- Nutrition practices: Using the LQAS technique
 - ANC: 1 page,
 - Postnatal: 1 page
 - <5 children: 1 page
- Data quality: 2 pages
 - Register and Report Review: Completeness and consistency
- Input quality review: 1 page

Observation:

- ANC: 2 pages
- Postnatal: 1 page
- < 5 children: 3 pages
- Exit interview at Health Center: 2 pages
- Nutrition practices and 24-hour recall: 2 pages
- Quality Improvement Work Plan template: 1 page

Quality Assessment forms using the LQAS technique: see Annex 2.

Steps for data collection and follow up

- The following steps should be followed when we collect data using the LQAS technique for the assessment of quality. There will be instructions on each form which serve to provide an overall procedure for the process.
- The sources of data will be explicitly mentioned on each form. After finding the correct source(s) please continue according to the following steps
- Flip through the ANC/Postnatal/IMNCI/ICCM registers to find the name of the person who registered most recently, as per the instructions
- Do this also for the 18 clients/patients who registered directly before the most recent client/patient
- Record the clinic/medical record number in the second column
- Collect the charts for the 19 clients/patients identified above
- Review the information recorded; in addition to the Register, check the data quality as per the instructions
- Record (Y = Yes, N = No) based on the findings
- The LQAS rule for a sample size (SS) of 19 is 16; of 14 is 12.
- YES answers that are below the LQAS rule are considered as inadequate performance; i.e. there is statistical evidence that the performance is below the target
- Follow the continuous quality improvement steps for Inadequate Performance
- Inadequate Performance requires discussion with site staff
- Discussion with site staff aims to identify the root-causes of the observed quality problems
- List the possible solutions for the observed problems
- Prepare an action plan for the most effective and feasible solution to improve quality
- Communicate the action (improvement) plan to relevant others
- The key lies in putting into practice the planned activities
- The involvement of departments/units during performance measurement is necessary; their involvement makes this step appropriate and contributes to the effective implementation of the plan
- Monitor implementation of the plan

- Keep written records of all the findings, the action plan and the achievements

Table 6: Recommended frequency of nutrition quality assessment

Level	Frequency
National/Regional/Zonal	Twice a year
Woreda	Quarterly
Facility	Monthly

Table 7: Quality Improvement Work Plan

Region: _____ Zone: _____ Woreda: _____ Facility type: _____
 Name of health facility: _____ Date: _____ Assessed by: _____

Indicator/variable to be investigated (Inadequate performance)	Possible causes	Implementation Steps/Solution <i>What Will Be Done?</i>	Responsibilities <i>Who Will Do It?</i>	Timeline <i>By When? (Day/Month)</i>	Support required	Evaluation / Lesson learned	Action for the next cycle
							<input type="checkbox"/> Expand <input type="checkbox"/> Modify <input type="checkbox"/> Drop

Goal: To improve the performance of the nutritional services in a continuous manner to enable the delivery of quality of nutrition services

Program objective: To continuously measure and improve performance in an efficient and effective manner that does not judge or directly criticize health staff

Implementation Planning

- Identify what is to be achieved
- Formulate strategies and tasks
- Develop a timetable and mileposts
- Assign necessary resources
- Assign responsibility, authority and accountability
- Monitor and adjust—Plan Do Study Act (PDSA)

HANDOUT 9: POST-TEST AND EVALUATION OF TRAINING

Table 8: Daily Evaluation (Day 1 and 2).

1 = Poor, 2 = Average, 3 = Good

Topic	Time allocated	Relevant to your work	Support from facilitators	Resource	Suggestion
Session 1: Introduction, Expectations, Objectives, Pre-test					
Session 2: Health Care Quality					
Session 3: Continuous Quality Improvement (CQI) / Management for Improvement (MFI)					
Session 4: Lot Quality Assessment Sampling (LQAS)					
Session 5: Data Quality					
Session 6: Quality Indicators					
Session 7: Team Building for Quality Improvement					
Session 8: Quality Assessment Forms					
Session 9: Training Course Evaluation					

Table 9: Course Evaluation Form

1 = Very poor, 2= Poor, 3 = Average, 4 = Very good, 5 = Excellent

Issue to be evaluated	Score (1–5)	Comments/suggestions
Timeliness of invitation letters		
Training venue location		
Training venue conducive to learning		
Adequacy of space for group work		
Usefulness of group exercises and overall methodology		
Daily starting time		
Daily ending time		
Preparedness of facilitators/trainers		
Duration of the course		
Tea/coffee breaks		

Annex 1: Indicators for the quality of nutrition services

Indicator definition

Indicator # 1: Proportion of pregnant women who received iron pills during the review period

Numerator

Number of pregnant women who received iron pills during the review period

Denominator

Number of pregnant women who sought ANC services during the review period

What it measures

This indicator measures the provision of iron pills to pregnant women. It also gives clues regarding the prevention of iron deficiency anemia in pregnant women.

Source of data

Review of ANC registration book

Indicator # 2: Proportion of pregnant women who received counseling regarding infant and maternal nutrition during the review period

Numerator

Number of pregnant women who received counseling regarding infant and maternal nutrition during the review period

Denominator

Number of pregnant women who sought ANCs services during the review period

What it measures

The quality of nutrition counseling at an ANC unit—to help pregnant women understand the importance of: a nutritious diet; micronutrients; Water, Sanitation & Hygiene for All (WASH); and nutrition practices at home

Source of data

Review of the ANC registration book (the remarks column)

Indicator # 3: The proportion of lactating women who received counseling regarding infant and maternal nutrition during the review period

Numerator

The number of lactating women who received counseling regarding infant and maternal nutrition during the review period

Denominator

The number of lactating women who sought postnatal services during the review period

What it measures

The quality of nutrition counseling at a postnatal unit—to help lactating women understand the importance of: a nutritious diet; the concept of Exclusively Breastfed (EBF); Water, Sanitation & Hygiene for All (WASH); and nutrition practices at home.

Source of data

Review of the postnatal registration book (the remarks column)

Indicator # 4: Proportion of children assessed/checked for malnutrition during the review period

Numerator

The number of children and sick babies assessed/checked for malnutrition during the review period

Denominator

The number of children under the age of five who visited a clinic during the review period

What it measures

The Maternal, Infant and Young Child Nutrition (MIYCN) manual for children under five years of age recommends a check for malnutrition during each visit. This indicator measures if sick babies are being appropriately checked for malnutrition.

Source of data

The register for the Integrated Management of Neonatal and Childhood Illnesses (IMNCI)

Indicator # 5: Proportion of children aged 0–59 months with diarrhea who received zinc treatment in the review period

Numerator

The number of children aged 0–59 months with diarrhea who received zinc treatment in the review period

Denominator

The number of children aged 0–59 months diagnosed with diarrhea during the review period

What it measures

This indicator measures if providers are giving zinc pills to children aged 0–59 months with diarrhea. This indicator measures if children aged 0–59 months who have been diagnosed with diarrhea are being appropriately treated with zinc.

Source of data

The register for the Integrated Management of Neonatal and Childhood Illnesses (IMNCI)

Annex 2: Quality of Nutrition Service Assessment Forms

Form1. LQAS ANC Form: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **ANC Register**: Find the name of the woman who registered most recently. Do this also for the 18 women who registered directly before the most recent woman. Record their clinic/medical record numbers. Pull the charts for the 19 women identified according to the above steps.

Check each chart to see if relevant activities were carried out and that the data were recorded on the Register, according to required standards.

Record **Y = Yes or N = No or NA = Not applicable** in columns 4–9, as needed.

LQAS No.	Medical Record Number (MRN)	Gestational Age (GA) in Week	Were the following activities carried out?					
			Weight measured	Mid-Upper Arm Circumference (MUAC) measured	Iron folate pills provided	Counseled regarding maternal nutrition	Counseled regarding Exclusively Breastfed (EBF) – in 3rd trimester	Tested for HIV
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								

15.								
16.								
17.								
18.								
19.								
Target % Yes		95	95	95	95	95	95	95
D.R		16	16	16	16	16	16	16
Number Yes								
Adequate								

Major Findings:

Priority Actions:

Form2. LQAS postnatal Form: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **Postnatal Register**. Find the name of the woman who registered most recently. Do this also for the 18 women who registered directly before the most recent woman. Record their clinic/medical record numbers. Collect the charts for the 19 women identified according to the above steps. Check each chart to see if relevant activities were carried out and that the data were recorded on the register, according to required standards.

Record **Y = Yes or N = No or NA = Not applicable** in columns 3–6, as needed.

LQAS No.	Medical Record Number (MRN)	Were the following activities carried out?			
		Child's weight measured	Counseled regarding Exclusively Breastfed (EBF)	Counseled regarding nutrition for lactating women	Tested for HIV
1.					
2.					

3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
Target % Yes	95	95	95	95	95
D.R	16	16	16	16	16
Number Yes					
Adequate					

Major Findings:

Priority Actions:

Form3. LQAS < 5 children Form: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **Integrated Community Case Management (ICCM) Register**. Find the name of the child who was registered most recently. Do this also for the 18 children who were registered directly before the most recent child. Record their clinic/medical record numbers and their ages in months. Collect the charts for the 19 children identified according to the above steps. Check each chart to see if relevant activities were carried out and that the data were recorded on the Register according to the required standards.

Record **Y = Yes or N = No or NA = Not applicable** in columns 4–12, as needed.

LQAS No.	MRN	AGE in months	Were the following activities carried out?								
			Weight	MUAC	Diarrhea managed with Zinc	Nutritional status checked	HIV status checked	Vitamin A – if not given to child at 6 months	Dewormed	Counseling provided regarding feeding	Next visit
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											

Target % Yes	95	95	95	95	95	95	95	95	95	95
D.R	16	16	16	16	16	16	16	16	16	16
Number Yes										
Adequate										

Major Findings:

Priority Actions:

Form4:1-2. ANC Observation: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **ANC Clinic**. Identify the first pregnant woman you see and record her medical number. Observe activities in the clinic to see if she is treated in accordance with standard requirements. Do this also for the next four pregnant women who attend the clinic, until the services provided to a total of five pregnant women have been observed.

Record **Y = Yes** or **N = No** in columns 3–6, as needed.

№	Medical Record Number	Were the following activities carried out?			
		Did staff warmly greet the client	Did staff speak in a language that the mother could understand	Did staff encourage questions	Did staff check for understanding
1.					
2.					
3.					
4.					
5.					
Number Yes					
%					
Adequate					

Major findings:

Priority actions:

Form4:2-2. ANC Observation: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **ANC clinic**. Use the same list of pregnant women as above. Record their medical numbers. Observe activities in the clinic to see if the women are treated in accordance with standard requirements, until the services provided to all five pregnant women have been observed.

Record **Y = Yes** or **N = No** in columns 3–11, as needed.

N ^o	Medical Record Number	Were the following activities carried out?								
		Ask if she			Check for signs of		Provide counseling regarding			
		Is taking an iron supplement	Has bleeding, fever, any other illness	Has difficulty with breast feeding (BF)	Anemia (eyelids and palms)	How breast feeding is going	Two extra meals	Eating diverse foods	Possible iron folate side effects (S/E)	Exclusively Breastfed (EBF)
1.										
2.										
3.										
4.										
5.										
Number Yes										
%										
Adequate										

Major Findings:

Priority Actions:

Form5. Postnatal Observation: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **postnatal clinic**. Identify the first pregnant woman you see and record her medical number. Observe activities in the clinic to see if she is treated in accordance with standard requirements. Do this also for the next four pregnant women who attend the clinic, until the services provided to a total of five pregnant women have been observed.

Record **Y = Yes or N = No** in columns 3–11, as needed.

№	Medical Record Number	Were the following activities carried out?								
		Ask if she			Check for signs of		Provide counseling regarding			
		Is taking an iron supplement	Has bleeding, fever, any other illness	Has difficulty with breast feeding (BF)	Anemia (eyelids and palms)	How breast feeding is going	Two extra meals	Eating diverse foods	Possible iron folate side effects S/E	Exclusively Breastfed (EBF)
1.										
2.										
3.										
4.										
5.										
Number Yes										
%										
Adequate										

Major Findings:

Priority Actions:

Form6:1-3. Under 5 children Observation: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the <5 children clinic. Identify the first child. Record his/her medical record number. Observe participatory provider mother interactions, until the services provided to a total of five children have been observed. Remember to record all their medical record numbers.

Record **Y = Yes or N = No** in columns 3–6, as needed.

N ^o	Medical Record Number	Were the following activities carried out?			
		Did staff warmly greet the client	Did staff speak in a language that the mother could understand	Did staff encourage questions	Did staff check for understanding
1.					
2.					
3.					
4.					
5.					
Number Yes					
%					
Adequate					

Major Findings:

Priority Actions:

Form6:2-3. Under 5 children Observation: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the <5 children clinic. Use the same list of children as above. Record all their medical record numbers. Observe health workers performing the following activities until the services provided to a total of five children have been observed.

Record **Y = Yes or N = No or NA = Not applicable** in columns 3–11, as needed.

Nº	Medical Record Number	Were the following activities carried out?								
		Ask if the child			Ask about					
		Is vomiting	Has diarrhea	Has difficulty being breast fed	Exclusively Breastfed (EBF) if the child is > 6 months	How often the child is breast fed	Complementary feeding (CF) given if the child is 6–23 months	Food preparation and storage	Vitamin A supplement if the child is > 6 months	Deworming status if the child is > 6 months
1.										
2.										
3.										
4.										
5.										
Number Yes										
%										
Adequate										

Major Findings:

Priority Actions:

Form6:3-3. Under 5 children Observation: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the <5 children clinic. Use the same list of children as above. Record all their medical record numbers. Observe the counseling skills of health workers, until the counseling services provided to a total of five children have been observed.

Record **Y = Yes or N = No or NA = Not applicable** in columns 3–11, as needed.

N ^o	Medical Record Number	Were the following activities carried out?								
		Check for signs of		Discuss with mother causes for growth and weight faltering	Provide counseling regarding					
		Illness–i.e. pneumonia and/or diarrhea	Malnutrition using MUAC		Importance of feeding the child often	Exclusively Breastfed (EBF) up to 6 months, continuing up to 2 years	Optimal Complementary Feeding (CF) practice, according to age	Importance of hygiene, and storage of cooked foods	Vitamin A supplement	Deworming
1.										
2.										
3.										
4.										
5.										
Number Yes										
%										
Adequate										

Major Findings:

Priority Actions:

Form7. Report & Input Quality Review: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

M&E 1.2: Report Quality Review

Randomly select a monthly report from the previous quarter and check if the number on the register agrees with the Tally and Report.

Selected month _____

Nº	Indicators	Register	Tally	Report	Y/N
1.	Total number of pregnant women who received Iron Folate				
2.	Total number of children 6–59 months who received Vit A				
3.	Total number of children 2–5 years who received Deworming medication				
4.	Total number of children 0–59 months with diarrhea who received zinc treatment				
5.	Total number of ANC women who were counseled regarding MIYCN				
6.	Total number of lactating women who were counseled regarding maternal and infant feeding				
7.	Number of children and sick babies assessed/checked for malnutrition				

Major Findings:

Priority Actions:

M&E 2.2: Input Quality Review

At each of the clinics indicated below, check nutrition commodity available and functional.

Nº	Availability of equipment, drugs and teaching materials	Y/N	If No, for how many days?	Remark
1.	Pharmacy: No stock out for the last three months?	Iron folate		
2.		Vitamin A		
3.		Zinc		
4.		Deworming pill		
5.		Coartim		
6.		ORS		
7.	Functionality of equipment	Child Weight scale (< 5 children)		
8.		Child Height measurement (< 5 children)		
9.		Adult weight scale (ANC)		
10.	Availability of counseling tools (ANC)	Counseling card		
11.		Quick reference book		
12.		Briefcase		
13.		MUAC		
14.	Availability of counseling tools (< 5 children)	Counseling card		
15.		Quick reference book		
16.		Brief case		
17.		MUAC		
18.	Are all Health Workers working on nutrition trained in respect of nutrition/MIYCN? (For ANC, PNC and < 5 children)		If No, how many are not trained?	
19.	Is there a quality improvement team in the Health Center?			
20.	If yes to No. 19, does the team have a minute writer?			
21.	If yes to No. 19, does the team conduct meetings regularly?			

Major Findings:

Priority Actions:

Form8. Table: Nutrition Quality indicators

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

N ^o	Indicators	Definition	Numerator		Denominator		Achievement
			Definition	Source	Definition	Source	%
1	Iron-folate supplement	Proportion of pregnant women supplemented with iron-folate during the review period	Number of pregnant women supplemented with iron-folate during the review period	ANC register	# of pregnant women who sought ANC service during the review period	ANC register	
2	Counseling on infant feeding and maternal nutrition	Proportion of ANC women counseled on infant & maternal nutrition during the review period	Number of ANC women counseled on infant & maternal nutrition during the review period	ANC remark	# of pregnant women who sought ANC service during the review period	ANC register	
3	Counseling on infant feeding and maternal nutrition	Proportion of lactating women counseled on infant & maternal nutrition during the review period	Number of lactating women counseled on infant & maternal nutrition during the review period	Postnatal register	# of lactating women who sought postnatal service during the review period	Postnatal register	
4	Assessed for malnutrition	Proportion of children assessed or checked for malnutrition during the review period	Number of children and sick babies assessed/checked for malnutrition during the review period =	IMNCI register	# of children who visited the U5 clinic	IMNCI register	
5	Zink Rx	Proportion of children 0-59 months with diarrhea who received zinc treatment in the reviewing period	Number of children 0–59 months with diarrhea who received zinc treatment in the reviewing period	IMNCI register	# of children who were diagnosed with diarrhea during the review period	IMNCI register	

Major Findings:

Priority Actions:

Form9. Exit Interview

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Client Interview Guide for Nutrition Services

Greet the client and introduce yourself:

My name is _____ and I work here. We are trying to improve the services we provide to clients, and we would like to hear your honest opinion of how we are doing and what we need to improve. We would like to know both the good things and the bad things. Your participation in this interview is voluntary. You do not have to take part in the interview at all if you do not want to. If you decide not to participate, you will not be denied any services. Also, you can change your mind during the interview and choose not to participate. This interview is private and confidential. I am not asking for your name, and your name will not be disclosed or used. Your responses to our questions will not affect any services you will receive at this facility in the future. You can also skip any questions that you do not want to answer. This interview will take about 15 minutes. Your ideas are important to us. May I ask you a few questions?

Client 1: Unit/clinic (circle): ANC, Postnatal, <5 children

1. Is this your first visit to this facility, or is it a follow-up visit?

First visit Follow-up visit.....

2. Did you get the services you came for? Yes.... No....

If no: Why not? What happened?

3. How long did you wait before you saw a health worker?

_____ Minutes

4. Were you counseled today? Yes No...

If yes: What type of counseling were you given?

(Check all responses given. Do not read the responses to the client.)

< 5 children clinic:

- Counsel on the importance of eating more during illness: importance of feeding child often (for sick baby)
- Counsel on EBF up to 6 months and continuing BF up to 2 years
- Counsel on optimal complementary feeding practices appropriate to age (diversity, consistency, frequency,

amount, active feeding)

- Hygiene: importance of hand washing, safe preparation, storage of cooked foods
- Counsel on Vitamin A supplementation and deworming
- Explain to the caregiver how to make Oral Rehydration Therapy (ORT) at home [for < 5 clinic only]
- Other

Antenatal Care

- Counsel on eating one extra meal during her pregnancy
- Counsel on eating diverse foods available in the household (including iron-rich and/or Vitamin A-rich foods)
- Discuss coping mechanism for possible IFA side effects
- Explain the importance of using iodized salt
- Explain the importance of taking rest and reducing work load
- Counsel on exclusive breastfeeding until 6 months (this counseling should be done during the 3rd trimester)
- Counsel on early initiation within one hour of birth when she gives birth (this counseling should be done during the 3rd trimester)
- Other

Postnatal clinic

- Counsel on eating two extra meals during her breastfeeding
- Counsel on eating diverse foods available in the household (including iron-rich and/or Vitamin A-rich foods)
- Explain the importance of using iodized salt
- Check how breastfeeding is going
- Check the mother's confidence and readiness to breastfeed her infant and counsel her on how to address breastfeeding difficulties
- Counsel on early initiation within one hour of birth
- Counsel the mother on Exclusively Breastfed (EBF) for 6 months
- Other

5. Do you feel that the staff explained information clearly? Yes..... No.....

If no: Please explain

6. Did the service provider give you adequate time to discuss your needs?

Yes..... No.....

If no: Please explain. What else would you like to have discussed with a provider?

7. Were staff members respectful? Yes.... No....

If no: Please explain: _____

8. Would you recommend this clinic to your friends and family? Yes.... No....

9. Which areas do you think need to be improved?

Note to interviewer: The following section is only for clients who have previously visited or used services at the facility.

10. What do you like most about services you receive at this facility?

11. What do you not like about services you receive at this facility?

12. I would like to answer any questions that you may have concerning this interview before you leave. Is there anything that concerns you, or anything that I can help you with?

13. Did your husband come with you? Yes.... No....

14. If Yes, Did he receive counseling on nutrition? Yes.... No....

15. If No, why?

Form10:1-3. Household Visit

Region: _____ Zone: _____ Woreda: _____ Date: _____ Assessed by: _____

Go to the **Household (HH)**. Select a mother with her child aged 6–36 months old. (Anti-helminthes must be given to children > 2 years).

Record the mother’s ID number. Ask her if the following activities were carried out.

Record **Y = Yes** or **N = No** or **NA = Not applicable** in columns 3–13, as needed.

Mother’s Identity Number	Child’s age in months	In the previous 6 months		Have you ever breast-fed?	Ask how long after birth did she first put her baby to the breast			Exclusively Breastfed (EBF) until 6 months?	Started Complementary Feeding at 6 months?	Is she using iodized salt?	Has she observed a cooking demonstration?
		Has the child taken Vitamin A?	Was the child dewormed?		Immediately (< 1 hour)	< 24 hours	Days (24 hours +)				
Number Yes											
%											
Adequate											

Major Findings:

Priority Actions:

Form10:2-3. Household Visit

Region: _____ Zone: _____ Woreda: _____ Mother’s ID _____ Date: _____ Assessed by: _____

24-hour recall

Ask the mother about herself and her child aged 6–36 months.

Nutritional status of	Age	Meal/Snack	Food Item	Drink Item	Description/Recipe
The child		Breakfast			
		Snack			
		Lunch			
		Snack			
		Dinner			
		Breakfast			
The mother		Breakfast			
		Snack			
		Lunch			
		Snack			
		Dinner			
		Breakfast			

Major Findings:

Priority Actions:

Form10:3-3. Household (HH) Visit

Region: _____ Zone: _____ Woreda: _____ Mother's ID _____

Date: _____ Assessed by: _____

Water, Sanitation and Hygiene for All (WASH)

1. Does the household with a child under 2 have a latrine facility? Yes.... No....
If yes, describe the cleanliness and utilization of the facility.

Describe the system for disposal of the child's feces.

2. Does the household with a child under 2 have the hand-washing corner to use at critical periods? Yes.... No....
What about the soap or its substitution?

3. Is the household with a child under 2 provided with a household water filter? Yes.... No....
If yes, describe the utilization of the equipment?

4. Does the household with a child under 2 have a separate room/rooms for humans and livestock? Yes.... No....

Annex: 3

Exercise 1: Form1. LQAS ANC Form: Nutrition Assessment

Region: _____ Zone: _____ Woreda: : _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **ANC Register**. Find the name of the woman who registered most recently. Do this also for the 18 women who registered directly before the most recent woman. Record their clinic/medical record numbers. Collect the charts for the 19 women identified according to the above steps. Check each chart to see if relevant activities were carried out and that the data were recorded on the Register, in accordance with required standards.

Record **Y = Yes or N = No or NA = Not applicable** in columns 3–8, as needed.

LQAS No.	Medical Record Number	Were the following activities carried out?					
		Weight	MUAC	Given iron folate pill	Counseled on maternal nutrition	Counseled on EBF(3 rd trimester)	Test for HIV
1.	4578	Y	Y	N	N	NA	N
2.	4577	Y	Y	N	N	Y	Y
3.	4576	Y	Y	N	Y	NA	Y
4.	4575	Y	Y	N	Y	Y	Y
5.	4574	Y	Y	N	N	Y	Y
6.	4573	Y	Y	N	N	Y	Y
7.	4572	Y	Y	N	N	Y	Y
8.	4571	Y	Y	N	N	Y	Y
9.	4570	Y	Y	Y	N	NA	Y
10.	4569	Y	Y	N	N	N	Y
11.	4568	Y	Y	N	N	Y	Y
12.	4567	Y	Y	N	N	NA	Y
13.	4566	Y	Y	N	N	NA	Y
14.	4565	Y	Y	N	N	Y	Y

15.	4564	Y	Y	N	Y	N	Y
16.	4563	Y	Y	N	Y	Y	Y
17.	4562	Y	N	N	Y	Y	N
18.	4561	Y	N	N	Y	Y	Y
19.	4559	Y	N	N	Y	Y	Y
Target % Yes		95	95	95	95	95	95
D.R							
Number Yes							
Adequate							

Major Findings:

Priority Actions:

Exercise 2: Form2. LQAS < 5 children Form: Nutrition Assessment

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Go to the **IMNCI Register**. Identify the first child. Record his/her medical record number. Do this also for the 18 children who registered directly before the most recent child. Record their clinic/medical record numbers. Collect the charts for the 19 children identified according to the above steps. Check each chart to ensure which activity was carried out and that data were recorded on the Register, according to standard requirements.

Record **Y = Yes** or **N = No** or **NA = Not Applicable** in columns 3–9.

LQAS No.	AGE in months	Were the following activities carried out?						Next visit
		Weight	Management of diarrhea with Zinc	Nutritional status checked	Vitamin A provided – if child has not already received at 6 months	Dewormed	Feeding counseling	
1.	9336	Y	NA	N	Y	NA	Y	Y
2.	9335	Y	NA	Y	Y	NA	Y	Y
3.	9334	Y	NA	Y	Y	Y	Y	Y
4.	9333	Y	Y	Y	N	NA	Y	Y
5.	9332	Y	Y	Y	N	NA	Y	Y
6.	9331	Y	Y	Y	N	Y	Y	Y
7.	9330	Y	Y	Y	N	NA	Y	Y
8.	9329	Y	NA	Y	N	NA	Y	Y
9.	9328	Y	Y	N	N	Y	Y	Y
10.	9327	Y	N	Y	N	NA	Y	Y
11.	9326	Y	NA	Y	N	Y	Y	Y
12.	9325	Y	NA	Y	N	Y	Y	N
13.	9324	Y	NA	Y	N	NA	Y	Y

14.	9323	Y	Y	Y	N	Y	Y	Y
15.	9322	Y	NA	Y	Y	NA	Y	Y
16.	9321	Y	NA	Y	Y	Y	Y	Y
17.	9320	Y	NA	Y	Y	Y	Y	Y
18.	9319	Y	NA	Y	Y	Y	Y	Y
19.	9318	Y	N	Y	NA	NA	Y	Y
Target % Yes		95	95	95	95	95	95	95
D.R								
Number Yes								
Adequate								

Major Findings:

Priority Actions:

Exercise 3:

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Review months: _____

N ^o	Indicators	Definition	Numerator		Denominator		Achieved
			Definition	Source	Definition	Source	%
1	Iron-folate supplement	Proportion of pregnant women supplemented with iron-folate during the review period	Number of pregnant women who received supplements of iron-folate during the review period = 48	ANC register	# of pregnant women who sought ANC service during the review period = 76	ANC register	63
2	Counseling on infant feeding and maternal nutrition	Proportion of ANC women counseled on infant and maternal nutrition during the review period	Number of ANC women who were counseled on infant and maternal nutrition during the review period = 51	ANC remark	# of pregnant women who sought ANC service during the review period = 76	ANC register	67
3	Counseling on infant feeding and maternal nutrition	Proportion of lactating women counseled on infant and maternal nutrition during the review period	Number of lactating women who were counseled on infant and maternal nutrition during the review period = 17	Postnatal register	# of lactating women who sought postnatal service during the review period = 62	Postnatal register	27
4	Assessed for malnutrition	Proportion of children assessed/checked for malnutrition during the review period	Number of children and sick babies who were assessed/ checked for malnutrition during the review period = 118	IMNCI register	# of children who visited the Under5 clinic = 212	IMNCI register	56
5	Zinc Rx	Proportion of children 0–59 months with diarrhea who received zinc treatment in the review period	Number of children 0–59 months with diarrhea who received zinc treatment in the review period = 30	IMNCI register	# of children who were diagnosed with diarrhea during the review period = 30	IMNCI register	100

Major Findings:

Priority Actions:

Exercise 4:

Region: _____ Zone: _____ Woreda: _____ Facility type: _____

Name of health facility: _____ Date: _____ Assessed by: _____

Review months: _____

N ^o	Indicators	Definition	Numerator		Denominator		Achieved
			Definition	Source	Definition	Source	%
1	Iron-folate supplement	Proportion of pregnant women who received supplements of iron-folate during the review period	Number of pregnant women who received supplements of iron-folate during the review period = 28	ANC register	# of pregnant women who sought ANC service during the review period = 82	ANC register	34
2	Counseling on infant feeding and maternal nutrition	Proportion of ANC women who were counseled on infant and maternal nutrition during the review period	Number of ANC women who were counseled on infant and maternal nutrition during the review period = 28	ANC remark	# of pregnant women who sought ANC service during the review period = 82	ANC register	34
3	Counseling on infant feeding and maternal nutrition	Proportion of lactating women who were counseled on infant and maternal nutrition during the review period	Number of lactating women who were counseled on infant and maternal nutrition during the review period = 0	Postnatal register	# of lactating women who sought postnatal service during the review period = 14	Postnatal register	0
4	Assessed for malnutrition	Proportion of children who were assessed/ checked for malnutrition during the review period	Number of children and sick babies who were assessed/checked for malnutrition during the review period = 31	IMNCI register	# of children who visited the Under5 clinia = 137	IMNCI register	23
5	Zink Rx	Proportion of children 0–59 months with diarrhea who received zinc treatment in the review period	Number of children 0–59 months with diarrhea who received zinc treatment in the reviewing period = 0	IMNCI register	# of children who were diagnosed with diarrhea during the review period = 50	IMNCI register	0

Major Findings:

Priority Actions:

Annex: 4

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