
**Guideline on Implementation
Of
Quality Assurance System in
Health Facilities**

Quality Assurance & Standardization Division

Ministry of Health

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Foreword

Quality is never due to accident nor is it something that cannot be presented or shown but is a result of concerted planned practices. With the increase in demand for better services from the service users, quality has become a core issue for the health system in Bhutan. And we the service providers should be determined and dedicate ourselves in providing the best care to meet the needs and expectations of the service users within the available resources. This would further strengthen our health services in terms of reliability, efficiency, equity, cost-effective results and thereby achieving consumer satisfaction which would ultimately determine the quality of health services.

Service providers, often referred as “the bridge to quality” should provide professionally patient centered care by employing evidence based practices to ensure safety, reliability, efficiency and proper utilization of products, services and informatics. Our continuous efforts will further lead us to improve the quality of services and thereby be able to achieve clinical excellence. Although the QA survey has shown that majority of the service users are satisfied with the current services provided by the health facilities, we should not be complacent in thinking we provide the best services. We should further emphasize on ensuring quality services on a continuous basis by considering all the dimensions of quality which will have direct or indirect impact on the quality of services. It’s also crucial to know and always keep in mind that QA is a continuous process which has a beginning but no end.

This manual has been developed for the all the health care centers and designed to carry out the initial quality improvement activities in their own facility. Our division is pleased to share this training manual with the health care centers and would urge the QA teams to use the resources available to guide in training your staff and implementing QA activities. This manual can also be used in implementing, assessing, monitoring and further improving the quality of health services on a continuous basis.

(Honorable Secretary, MoH)

(Programme Director, QASD, MoH)

Contents

| | |
|--|-----------|
| Acknowledgements..... | i |
| Foreword..... | ii |
| 1. Introduction..... | 1 |
| 1.1 Objectives..... | 1 |
| 1.2 Background..... | 1 |
| 1.3 QA Process..... | 2 |
| 1.4 QA Roles and Responsibilities..... | 3 |
| 2. Quality Awareness | |
| 2.1 What is Quality?..... | 5 |
| 2.2 What is Quality of Care?..... | 6 |
| 2.3 What is Quality Assurance?..... | 7 |
| 2.4 Quality Cycle..... | 8 |
| 2.5 Dimensions of Quality..... | 10 |
| 2.6 Different perceptions of Quality..... | 11 |
| 2.7 Quality Measures..... | 12 |
| 2.8 Integration of three Models..... | 13 |
| 3. Problem Identification, Analysis and Solution | |
| 3.1 Identifying Problems..... | 15 |
| 3.2 Prioritizing and Defining Problems..... | 17 |
| 3.3 Analyzing Problems..... | 18 |
| 3.4 Implementing Solution..... | 20 |
| 4. Quality Indicators, Monitoring and Action Plan | |
| 4.1 Quality Indicators..... | 21 |
| 4.2 Monitoring Quality Indicators..... | 22 |
| 4.3 Planning for Quality Assurance..... | 24 |
| 4.4 Supervision and Monitoring..... | 25 |
| 4.5 Appendixes..... | 27 |
| 4.6 The 5 “S” Concept..... | 36 |

Introduction to the Quality Assurance Training Manual

This Quality Assurance Training Manual has been specifically developed for training of the health care providers at all levels of the health care settings. The materials have been used during the sensitization workshop in all the hospitals and BHU Grade 1. Therefore this Manual is to be used as a training manual for first hand training and it can also be used as refresher training manual for the health care providers. Since QA implementation needs team effort and should be on a continuous basis, this manual will help the QA members in the health care facility to train and guide all the health care providers in implementing the QA activities. The revised training manual will also be developed at a later stage.

Objective of developing the manual

The objective of developing this training manual is to enable the QA Teams in the hospital to carry on the training of the health care providers in each facility as required. Since the health care providers are often transferred from one facility to another, it is crucial that the QA teams in each facility train the new staff on QA. QA teams are responsible for implementing and sustaining the QA system at all levels of health care settings; to raise awareness about the importance of quality assurance and implement QA in every day work situations.

Background:

The Nation-Wide Quality Assurance (QA) workshop conducted in all the hospitals and BHU level 1 is based on this manual. It describes how to plan and establish QA at facility level so that it becomes part of the routine health care delivery system. This programme of QA training has been purposely designed for institutions, since direct improvements in the quality of patient care can only be realised by the direct providers of care. Therefore by focusing on health care settings, this manual will help promote local ownership for quality assurance and it should have a considerable impact on the quality of health service delivery. Since health care delivery is based on teamwork, this QA approach supports a multi-disciplinary team approach for working on quality related problems (this approach has proved to be highly effective in the pilot programmes in other countries).

This manual is to be used as an aid for the QA teams in organising quality assurance workshops at a facility and can also be used as a management tool for planning and implementing quality improvement activities. This manual can also be used as a guide to QA for those who did not attend any QA training workshops.

The Quality Assurance Process

The main common assumption behind national and international QA initiatives is that QA activities are good for the system; they help to increase effectiveness and efficiency and to control costs. The essence of any QA approach involves the measurement of actual performance and its comparison with expected performance and the implementation of changes to improve the delivery of health services and, consequently of health status. However, there is no single, well experienced answer as to how to institute QA as a routine function in health care delivery organisations. We must develop indicators similar to those developed in other developing countries which are appropriate or adjustable into our context. These would further guide and aid us in setting standards, measuring and improving quality. This process also focuses its attention to internally caused and solvable problems. This mechanism can now be used to initiate the QA process in our context.

This training manual provides all the necessary information and materials to implement QA training programme in the health care facilities. The Nation-wide training has largely been targeted at Referral, District Hospitals and BHU Gr.1. The most crucial part of this manual is that staffs acquire confidence and necessary knowledge and tools to initiate the QA process in their work place. At the end of each stage staff will be able to commence the following activities:

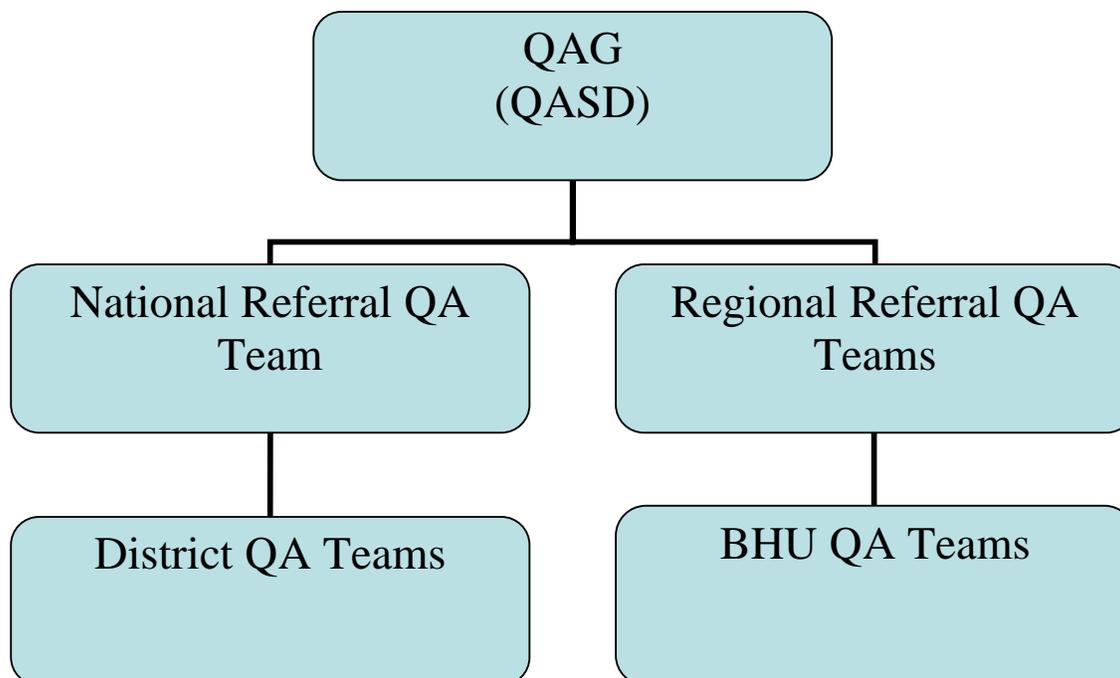
1. establish a multi-disciplinary Quality Action Team in their institution
2. increase staff awareness about the importance of Quality Assurance
3. initiate the process of monitoring patient defined indicators, including data collection, analysis and interpretation
4. use this information as a QA tool to aid local decision making and encourage a multi-disciplinary, teamwork approach in solving problems relating to quality of health service delivery.
5. assess progress made since the initial implementation of the quality checklists
6. incorporate lessons learnt into developing more effective strategies and improve plans for next quality initiatives
7. strengthen skills in problem identification, analysis and solution
8. stimulate QA awareness in other areas of the hospitals and clinics by considering professional quality factors

After the implementation process, health facilities will have reached a state whereby the QA system will have become part of the routine health care delivery system. Monitoring and Evaluation will be carried out periodically to improve and sustain the QA activities.

QA Roles at Different Levels in the Health System

The institutionalization of QA requires clear delineation of oversight roles and responsibilities and accountability for the implementation of QA activities. The specific organizational structure for QA can vary greatly from one organization to another, and will evolve over time as the QA program matures. An effective structure for QA may combine many forms, such as a QA unit, QA teams at facilities, or an oversight committee.

A good quality system clearly defines the roles, responsibilities, processes and procedures within the organisation in order to ensure that staffs are able to carry out quality assurance activities. This has been defined from National level down to Institutional level so that every part of the organisation is accountable for and involved in the QA process.



National Level:

The National QA support structure consists of the Quality Assurance Division (QASD) and the Quality Assurance Group (QAG) under the Ministry of Health.

The role of the QAG is to advise on the policy matters and approves the proposals submitted by QASD and QA Teams. The national support structure should be an integrated rather than a vertical structure since QA permeates into every area of the health system. This committee will serve as a resource by:

- coordinating country-wide QA efforts
- producing a broad (flexible) set of QA guidelines
- setting national standards
- monitoring a small set of quality indicators relevant to all regions (e.g. bed occupancy rates, waiting time in OPD, wound infection rates etc)
- allocating QA resources
- rewarding quality work

Regional Level:

Regions have a crucial role in QA. It is this level which will be responsible for the co-ordination and monitoring of QA implementation in the districts and sub-districts. This can be achieved by establishing a QA monitoring team to serve as a resource for institutions by:

- providing co-ordination, guidance and regular feedback to districts and BHUS
- organizing QA workshops
- training and facilitating in conducting workshops
- ensuring supportive supervision to health institutions
- identifying quality problems and drawing up quality action plans
- monitoring institutions
- encouraging high performance by comparing institutions and promoting best practice
- developing regional standards

District (Hospital) Level:

At the hospital level it is vital that each facility establishes a multi-disciplinary quality action team headed by DMOs which will be responsible for implementing QA and will serve as a resource to the hospital by:

- providing co-ordination, guidance and information to the staff
- promoting QA awareness hospital -wide
- monitoring performance of wards and departments
- analyzing and using QA data at facility level
- identifying quality problems and drawing up quality action plans
- developing district standards

Sub-District (BHU) Level:

A BHU quality action team (QAT) comprising of a representative from each BHU, headed by DHSO under a district will be responsible for implementing QA and will serve as a resource to all the facilities by:

- promoting QA awareness
- monitoring & assessment performance of the health centre
- analyzing and using QA data at facility level
- identifying quality problems and drawing up quality action plans

Quality Awareness

Day 1 of this workshop requires good facilitation; participants need to be exposed to the concepts and issues of quality assurance whether they had earlier exposure or not. Your role is to help the participants brainstorm each issue and to produce a broad set of ideas. The only resources required are chart papers, board markers and pens. Make sure that you have already prepared with the necessary prompt questions and that you have sufficient paper to write up all their ideas. As a facilitator you will write up their ideas on a chart paper and encourage discussion on these ideas. Make sure that you have also written down full answers to each prompt question on the flip chart paper. These can be discussed fully after the participants have shared their ideas.

In the first section, this manual attempts to answer commonly asked questions and help iron out some of the confusion associated with the different terms used when discussing quality of care. The following questions are to be discussed in depth:

- *What is quality?*
- *What is quality of care?*
- *Why is it important to be concerned about quality of care?*
- *Who does it benefit?*
- *Who should be involved?*
- *Is it something new?*
- *What is Quality Assurance?*
- *What are the different dimensions of quality?*
- *Whose point of view should we listen to?*
- *Can we measure quality at different points in the health system?*

What is quality?

The difficulty with the word 'quality' is that it is hard to define. When it is defined, it is often defined with other words that are also vague. Response to the question will include excellent, superior, high calibre, best. The reality is we all have a sense of what quality or excellence is, but it is often hard to explain the concept to someone else.

Quality means different things to different people. It might mean reputation, durability of a product, right price, prompt service, high standard, friendly reception, availability of services.

General Definitions

A general definition of quality normally includes the following:

- achievement of a predetermined standard or target
- involvement of clients' requirement in determination of such a target or standard
- consideration of available resources financially and others in determination of such a target or standard

- recognition that there is always room for improvement and that targets and standards must be reviewed.

Defining Quality means developing statements regarding the input, processes and outcome standards that the health care delivery system must meet for its population in order to achieve optimum health gains.

What is quality of care?

"Quality of care does not mean sophisticated or exclusive care, but is concerned with fully meeting the needs of those who need the service most, at the lowest cost to the organisation, within the limits set by higher authorities".

Within the context of the Bhutanese health sector, the “quality of care” provided by the health service refers to:

"The ability of our health service to meet the needs of our service users and providers, in an equitable and acceptable manner, within the resources available and in line with the policies of the Royal Government of Bhutan"

Why is it important to be concerned about quality of care?

The next part of the discussion should be on to the importance of quality in health care.

The patient and visitors point of view has become very important in the quality of care. If we are seriously concerned about quality of care at facility level it will help us achieve many things such as:

- higher standards
- patient satisfaction
- criteria for assessing our output
- better relations between our fellow workers, patients and the communities we serve
- increased patronage of our institutions
- more funds
- staff satisfaction

Poor quality health services can waste money, waste time and even waste lives. Therefore the main reasons for why quality is important are:

- concern for excellence/high standards
- competition
- cost of poor quality (wastage)
- patient satisfaction
- inter-professional staff development

Who benefits?

If we improve the quality of health services in our institutions, both patients and staff will become more satisfied. More patients will be availing our services which will ultimately develop our reputation for high quality services and enable us to improve further. Thus it benefits the:

1. Community
2. Patients
3. Staff
4. Institution

Who should be involved?

High quality health services do not mean luxury or "high-tech" services. As a health care provider giving attention to quality services is very essential for us whatever our resource maybe. A lot of QA change can occur without excess additional resources.

Everyone is responsible for quality, from National down to individual level.

Is it something new?

No, but health professionals' concern with quality has been typically limited to medical care of individual patients based on technical standards set by the professionals themselves - it has not been focused on the patient, but rather the illness. Also what is required is a systematic approach where quality is reviewed continuously and the focus is on the whole of health service delivery - not just parts of it.

What is Quality Assurance?

Quality Assurance is a systematic and planned approach to assessing, monitoring and improving the quality of health services on a continuous basis. It promotes confidence, improves communications and allows clearer understanding of community needs and expectations.

1. Quality Assurance is oriented towards meeting the needs and expectations of the patient and the community
2. Quality Assurance focuses on the way we work, our activities, and processes of health care delivery
3. Quality Assurance employ the use of data to analyze how we are working and delivering health services
4. Quality Assurance involves a multi-disciplinary team approach to problem solving and quality improvement.

The four Principles of Quality Assurance

There are four basic principles of Quality Assurance.

1. Client Focus

Services should be designed so as to meet the needs and expectations of clients and community.

2. Understanding Work as Processes and Systems.

Providers must understand the service system and its key service processes in order to improve them.

3. Testing Changes and Emphasizing the Use of Data.

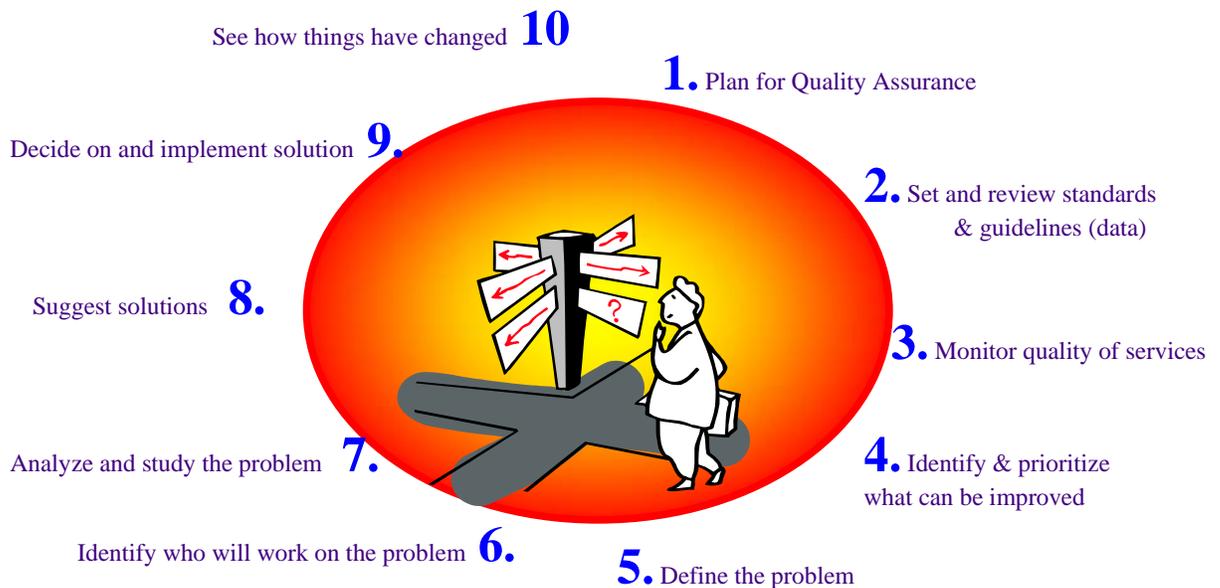
Changes are tested in order to determine whether they yield the required improvement. Data are used to analyze processes, identify problems, and to determine whether the changes have resulted in improvement.

4. Teamwork

Improvement is achieved through the team approach to identifying problem, solving and quality improvement.

In practice Quality Assurance is a continuous process and the quality assurance cycle can be used to guide your activities. There are various different stages in the cycle which are explained.

QUALITY ASSURANCE CYCLE



1. Plan for Quality Assurance

- *Preparing for QA in the institution*
- *Forming a quality of care team*
- *Deciding the focus of your QA plan*

2. Set and review standards and guidelines

- *Statement of the quality that is expected*

3. Monitor quality of services

- *Selecting indicators (indicator = measure of a quality factor)*
- *Selecting information source (clinic records etc.)*
- *Design of data collection system*
- *Implementing monitoring*

4. Identify and prioritise what can be improved

- *Identifying areas for quality improvement using the monitoring information or identifying areas of local collective concern*

5. Define the problem

- *Agree on and state the problem (as a team)*

6. Identify who will work on the problem

- *Assign appropriate people to work on the problem*

7. Analyse and study the problem

- *Understand what is causing the problem*

8. Suggest solutions

- *Suggest ways of correcting the problem*

9. Decide on and implement solution

- *Make an action plan, implement the chosen solution and monitor it*

10. See how things have changed

- *Evaluate to see if it worked*

AND THEN GO BACK TO THE BEGINNING OF THE CYCLE BECAUSE WE MUST CONTINUOUSLY TRY TO IMPROVE THE QUALITY OF HEALTH SERVICES

Different Models

It is important that the participants understand that quality is multi-dimensional. The three models presented in this session will allow you to look at quality and perceive it in different ways. Spend time with participants discussing and defining the different dimensions, perspectives and health system.

1. Dimensions of Quality (Maxwell's)

Quality of care is comprised of different dimensions which vary in importance depending on the problem you are looking at. Quality assurance might look at just one of these dimensions or may look at all of them.

1. Access to Services

Geographic access - availability of transport, distance from home, travel time to health facility

Financial access - can patients afford to pay for the services?

Organisational access - clinic hours, waiting time, human resources.

Linguistic access - can health personnel communicate in the local dialects?

Physical access - user friendly or convenient lay out of facility.

2. Effectiveness of Care

The degree of achieving desirable outcomes, given the correct provision of evidence-based health care services to all who could benefit but not to those who would not benefit.

Are the services we provide (when rendered appropriately) producing the desired results? This dimension is most often presented as part of appropriateness.

3. Safety means the degree to which health care processes avoid, prevent, and amend adverse outcomes or injuries that stem from the processes of health care itself. Safety is a dimension that is closely related to effectiveness, although distinct from it in its emphasis on the prevention of unintentional adverse events for patients.

4. Efficiency of Service Delivery

Efficiency is the system's optimal use of available resources to yield maximum benefits or results. It describes a system's ability to function at lower costs without diminishing attainable and desirable results. It is providing the greatest benefit within the available resources without wasting it needlessly.

5. Continuity of Service addresses the extent to which healthcare for specified users, over time, is coordinated across providers and institutions. While there are clinical continuity measures in use in national health system performance measures, the majority of measures are in patient's experience of care. Therefore, this dimension is most often presented as part of *patient centeredness*.

6. Social Acceptability (sensitivity) is conformity to the realistic wishes, desires and expectations of healthcare users and their families. Since a person's healthcare experiences have a powerful effect on their future utilization of and response to healthcare, responsiveness or patient centeredness and acceptability are fundamental dimensions to effectiveness and other dimensions. This dimension is most often presented as part of *patient centeredness*.

Respect for patient's cultural values, beliefs and attitudes e.g. family planning services may not be accepted if they are offered in a way which is inconsistent with the local culture.

7. Relevance to Need: Do the services that we provide reflect the needs of the individual and the local community?

8. Equity (or equitability) defines the extent to which a system deals fairly with all concerned. Equity, in this context, deals with the distribution of healthcare and its benefits among the people. Are we providing services fairly, and to those who need the services most?

2. Different Perceptions of quality (Ovretveit's)

What does quality of health care mean for the communities and patients that depend on it, the professionals who provide it and the managers and administrators who oversee it?

1. The Patient

It is very important that health services meet the patients perceived needs and expectations. Satisfied patients are more likely to comply with treatment and to continue using the services. But it is important to note that patients do not always know what is best for them.

Patient Quality = What the patient expects from health services

Later on, in this manual you will be introduced to a quality assurance tool for monitoring patient defined quality indicators.

2. The Health Professional

Trained professionals such as doctors, nurses, laboratory technicians, pharmacists and others are expected to provide the best care by virtue of their professional skills. Services rendered by professionals can be defined through professional standards. Professional quality is about technical competence concerning medical issues which our patients may not be technically qualified or too ill to assess.

It is important to note that sometimes professionals may not make the best decisions and may waste resources which could have been used to treat other patients.

Professional Quality = Whether services meet the needs as defined by professional standards

3. The Health Care Manager / Administrator

Health care managers must provide for the needs and demands of both patients and providers. They are responsible for resource allocation, supervision and financial, logistic and human resource management.

Management Quality = Most efficient and productive use of resources

By working as a *team* of health professionals we can maximise the quality of service provided to the patient. The responsibility of caring for the patient rests with *everybody* in the team.

3. Quality Measures at different points in the health system (Donabedian's)

Quality of care is also related to different dimensions of the health care system and can be measured at these different points in the system. For example, we can measure the quality of resources, quality of management, quality of health care activities and quality of outcome - all of which constitute quality of care.

1. Structural Quality Measures (Structure)

This is the availability and quality of resources, management systems and policy guidelines. These things are quite easy to measure, but are not always very informative unless they can be related to processes and outcomes.

Structural measures include number of qualified staff, appropriate training programs, available capital facilities (e.g. functioning X-Ray equipment, number of road worthy vehicles, amenities, etc.)

2. Process Quality Measures (Process)

The care given, imparting information and clinical decision making are the actual processes of health care delivery. Even though it is very difficult to measure the services provided, the information obtained is more useful as it tells us what happened to the patient.

Collection of this data depends on the existence of proper monitoring system. Process measures include waiting time, correct diagnosis, proper examination of patients, etc.

3. Outcome Quality Measures (Outcome)

It is the overall end result of health care delivered; the outputs and health status. Outcome measures include such as mortality, morbidity, patient satisfaction, coverage, attendance levels etc.

It is imperative to remember that we should focus our attention on all three quality measures and not on just one aspect. For example, if we want to improve health outcomes, we must understand the processes and structures that contribute to achieving the outcome.

Therefore when we start seriously looking at quality we have to remember that:

- Quality has many dimensions
- Quality can be viewed from different perspectives
- We can measure quality at different points in the health system.

Integration of three Models

The following table shows how these 3 different models in which quality can be integrated into our context.

| Models | Structures | Process | Outcome |
|---|---|--|---|
| Dimensions of Health System (Donabedian) | Policy, Resources, Organization, Management System | Service delivery | Outputs, Health status |
| Dimensions of Quality (Maxwell) | Accessibility, Availability, Affordability, Relevance to need, Equity, Sustainability | Appropriateness, Acceptability, Technical competence, Safety, Goodness of interpersonal relationship | Coverage, Effectiveness, Efficiency, Health impact, User satisfaction |
| Perspective of Quality (Ovreveit) | Client Quality | Professional Quality | Managing Quality |

Group Work 1

Bridging the Gap between Staff and Patient Perceptions of Quality

Dividing the group into three; Group 1 will represent the patient. Group 2 will represent the health professional (health care practitioners). Group 3 will represent the health service manager (managerial/ administrative personnel).

1. Each group will try to identify important quality factors from their perspective. For example;

Group 1 is representing the patients' point of view. You must list what you **as a patient** expect from hospital / clinic out-patient services

Group 2 is representing the health professional point of view. **As a health care provider** you must list your requirements that is necessary in order to provide the highest quality care for your patients.

Group 3 is representing the health service manager. You must list your requirements, **as a manager** that is necessary in order to manage hospital /clinic services efficiently and effectively.

2. Now think about how these important factors could be measured in your facility. For example the information may be obtained through patient interview, using a checklist or from existing data sources (medical records, drug stock register).

3. State whether you think it is a structure, process or outcome measure.

4. State whether this factor may be addressed at facility level (i.e. is it something that you as hospital/clinic staff can do something about).

Group work format;

| Patient quality factor | Measurement | Structure/ Process/ Outcome | Is it within your control? |
|---|---|--|---|
| Prompt service | Patient interview observation | Process | Yes |
| Professional quality factor | | | |
| Wound infections | No. of infected cases length of stay | Outcome | Yes |
| Health care manager quality factor | | | |
| Availability of personnel | Nominal roll | Structure | No |

Each group will present its findings and there will be an open discussion on each presentation.

Problem Identification, Analysis and Solution

Identifying problems and selecting opportunities for improvement can be done by monitoring and evaluating activities e.g. patient surveys which will highlight specific service delivery problems requiring attention. Other means include soliciting suggestions from health workers, performing system process analysis, reviewing patient feedback or complaints and generating ideas through brainstorming or other group techniques. A participatory approach to problem identification offers several advantages because the direct service providers are likely to contribute and cooperate if they are involved in identifying problems.

Refer the QA Cycle (stages 4, 5, 6, 7, 8, 9 & 10) relating to identifying, analyzing and finding solutions for professional and patient defined quality problems.

- Identify and prioritize what needs to be improved
- Define the problem
- Identify who will work on the problem
- Analyze the problem
- Suggest solutions
- Decide on and implement solution
- Evaluate and decide what to do next

QC-STAGE 4 - Identify and prioritize what needs to be improved

One of the simplest ways of identifying problems is to consider the complaints from patients, from friends, relatives and what you usually complain of at work.

Two ways of identifying quality problems are as mentioned below;

1. Using your graph of patient indicators (if you have a report on Patient satisfaction survey)

Interpreting the results is a very important part of the quality assurance cycle. If some of the percentages are very low it suggests that these are priority areas that should be addressed to understand why they received such low scores. You may also feel that some of the areas need improvement even though you scored well. Once you have collected a second set of patient interviews you can also compare your graphs. You will have to look for:

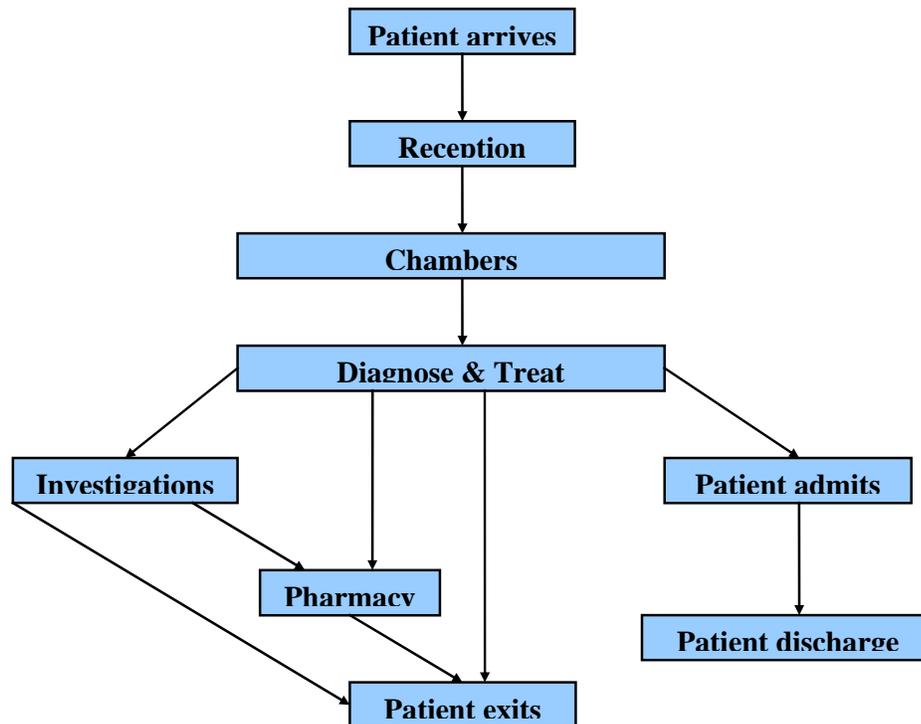
- low scores
- where scores have decreased
- where scores have remained the same
- where you did not achieve the expected improvement

2. Brainstorming

As a QA team you should be feeling confident working with patient defined quality indicators and also professional related problems in the work-place. Try and think about 3 problems that you might have encountered at work over the last few months, focusing at patient defined and professional defined quality indicators. List down the problems and identify factors causing the problem from different perspectives. List all the identified problems and make sure that you all clearly understand what the problem is. You will probably find that many are similar or the same. So as a team, try and group them into similar categories.

Identifying quality problems using the Flow-Chart tool for brain storming.

Flow-Chart



After identifying the problems, you must decide which problems have priority. You can do this by using the Criteria Matrices considering the following:

- Seriousness of the problem
- Resource constraints - financial, manpower, material
- Feasibility - is it a problem you can tackle at facility level?
- Needs - individual, community, population, political pressure

Prioritizing using a criteria matrix

Enter the problems in the table below and each group member rates each problem. The problem with the highest score is the priority.

Criteria matrix

| Problem | “How serious?” Very serious=3 Moderately serious=2 Not serious=1 | “How common?” Very common=3 Moderately common=2 Not common=1 | “How easy?” Very easy=3 Moderately easy=2 Not easy=1 |
|-----------|---|---|---|
| Problem 1 | | | |
| Problem 2 | | | |
| Problem 3 | | | |

As a group discuss and rank them in order of importance and then pick out the three most important problem areas from each.

After you have selected 3 problems you will need to formulate a full statement to clarify the nature of the quality problem. This can be a difficult step and leads us to stage 5 of the QA cycle.

QC-STAGE 5 - Define the problem

Now you must agree on and state the problems in full as a team. Problems should directly relate to specific processes or activities so that the improvement effort is well focused and measurable.

When you define your 3 problem statements remember that the problem statement should be:

- simple
- precise
- quantified

Below are examples of problem statements;

| Poor problem statement | Weakness in problem statement | Improved problem statement |
|-----------------------------|--|---|
| Wound infection rates | Problem statement is too vague for concrete action | 40% of theatre patients suffer from wound infections |
| We do not have a laboratory | Problem statement only contains a cause | At present only those patients willing to travel to the hospital can get laboratory services. |
| We need more doctors | Problem statement contains a premature solution | 30% of OPD patients arriving at the hospital are sent home without receiving care |

QC-STAGE 6 - Identify who will work on the problem

Once the problem has been fully defined, appropriate people should be assigned to work on the problem. The people assigned should be those who are involved with, contribute inputs or resources to, and/or benefit from the activity or activities in which the problem occurs. This ensures the involvement of those who are most knowledgeable about the process.

Normally it will help if it is a multi-disciplinary group of people working on the problem to ensure that all parts of the problem are understood. You will probably find that you will have to co-opt people into working with you on the selected problem areas.

QC-STAGE 7 - Analyze and study the problem

Problem analysis will help you understand what is causing the problem. Most problems are not caused by a single factor but have many underlying causes. You should begin by listing the most important causes you can think of. As you analyze your problems and look at their different causes, you may find that you wish to formulate the problems in a different way. So at this stage it is very important that you are honest with yourselves and that you list all the different causes for why the particular problem is occurring by using the Cause-Effect Diagram or Fish Bone Diagram.

QC-STAGE 9 - Decide on and implement solution

The choice of solution must depend on resources available and what is practical. Once the teams have chosen the solution implementing it requires careful planning, and must be written into the quality action plan along with assigning persons responsible, resources required, monitoring mechanisms, time frame and expected outcome.

So remember the choice of solution or solutions depends on:

- what is practical and feasible
- resources available

The Change Chart

| | Provider/Staff factor to be improved | Changes to be made |
|------|---|------------------------------|
| E.g. | Staff are unfriendly to patients | Greet & welcome each patient |
| | | Smile |
| | | Be responsive |
| | | Listen to them |

QC-STAGE 10 - See how things have changed and decide what to do next

The team should select indicators and set targets to evaluate whether the solution was implemented correctly and whether it resolved the problem it was designed to address. Once the solution has proved to be effective, new problems can then be identified.

Group work – 2

In two groups – Each group selects a priority problem

Using the CED- Analyze the problem and make a change chart each for the most appropriate cause factors.

Quality Indicators / Monitoring and Action Planning

A **Quality Indicator (QI)** is a measure of how well we are doing in providing health services.

It is a way of assessing and monitoring the quality of the particular service. For example, the “percentage of appropriate treatments prescribed” is a QI since it indicates the likely effectiveness of the service.

Quality Indicators should be developed based on the following;

- Those that measure the outcome of health services
- Those that are relevant to the problem you are trying to improve.
- Those that are relevant to the changes you are trying to make to improve the problem.

The quality indicators should focus on the factors affecting the quality of service. It should be valid, reliable, sensitive to variations in quality, and feasible to measure.

The set of indicators should include all factors pertaining to the process of health care delivery identified as important to patients. Therefore, if a health facility performs well on all of these; it will certainly satisfy the patients. This will have important implications in making services more responsive to clients' expectations and improve utilisation.

The indicators should be appropriate for use which can be adapted for preventive as well as curative health care services.

These indicators are tools that can form the basis for introducing a system of Quality Assurance into health care facilities. The advantage of this approach of relying on a small number of selected indicators is that the health personnel responsible for health care at these facilities have the capacity to use them.

Some health care facilities may find that there are other factors relevant to them, so it may be necessary to adapt and add other factors to the ones included.

In the nation wide QA training we have started our quality assurance programme by focusing on the patient perspective and in this section we will describe a tool you can use for such a purpose.

Patient Questionnaire: Questionnaires have been designed for the service users. You will use these forms to interview patients after their medical consultation and after they have collected their drugs. The indoor patients should be interviewed on the day of the discharge. (Appendix 1)

Formula Reference Sheet: This is the list of formulae you will need to refer to when calculating your indicators from the patient questionnaires. It is to be used as a reference. (Appendix 2)

Data Entry Form: Again two forms have been designed; and both are clearly marked. You should complete this form when you want to carry out your analysis and calculate the percentage for each indicator. (Appendix 3)

It is very important that both questionnaires should be read thoroughly and make sure that the interviewee understands every question.

Whilst there appears to be a lot of forms, it is the **patient questionnaire** and the **data form** which are the two most important forms. The formula reference sheet and data entry form serve as an aid for analysis only.

There is a need to impress upon the participants:

1. Accuracy (when completing forms and carrying out analysis)
2. Team conversancy (Each member of the team should be conversant in calculating the percentages and plotting simple bar charts)

Monitoring Patient Defined Quality Indicators

- Data collection - interviewing the patient
- How many?
- How often?
- Whom?
- Supplies checklist
- How often?
- Analyzing data
- Displaying data
- Interpreting data & Identifying areas for quality improvement

How often do I collect the data?

We recommend that you collect this data once every six months and submit the report to the Programme Director, QASD.

(In the first instance we would like all hospitals to collect this data after 6 months)

How many patients do I interview?

In order to obtain an accurate representation 100 patients have to be interviewed for hospitals. Try and collect 5-10 patient interviews per day over a month. If possible try and collect over 2 separate weeks. For example collect 50 interviews over one week and the other 50 interviews two weeks later.

Who do I interview?

Interview OPD patients (those who have come for curative care and **not** for any other reasons such as immunisation, ante-natal care, dressings etc.) and for in-patients, who have been admitted for more than three days. If the patient is a child then interview the adult.

When do I interview them?

Interview patients as they leave the Out-Patient Department, **after** they have collected their drugs and in patients on the day of discharge. Each interview should take 5 minutes or less.

Number the questionnaires in consecutive order each day (starting from 1) and date them.

Interview technique

Ask the patient if you may interview them.

- Explain briefly why you are interviewing them (that we want to try and improve services for our patients)
- Ask the question exactly as it is written
- Make sure the same people interviews all the patients to ensure that the questions are always asked in the same way.
- Ask the questions very clearly as they are written and let the patient decide their response. (Remember that it is the patient's perception of the service that we are measuring and **not** what you **think** their perception is! Do **not** try to influence the patient's answer.)

Analysing Patient indicators and identifying areas for Quality Improvement;

After collecting the information, the forms need to be analyzed and calculate the percentage for each indicator.

Once you have calculated all the percentages, plot the results as a bar graph of all the indicators.

Use the data entry form and formula reference sheet to help you with your analysis.

Once you have plotted all the results, identify areas where the quality score is low or where it could be better and suggest what your actions would be.

Interpreting the results is a very important part of the quality assurance cycle. If some of the percentages are very low, it suggests that these are priority areas that should be addressed to understand why they received such low scores. You may also feel that in some of the areas where you scored well, there is still room for improvement.

The graph can be displayed in the Out Patient Department so that both staff and patients can see the results.

Planning for Quality Assurance

What we have to decide on now is how we will work as a quality action team and how we are going to assign responsibility for monitoring the indicators and find solutions to problem areas identified. The following is a Quality Assurance Checklist which we want you to agree on and complete as a team.

How will we work together as a quality of care team?

1. Elect a chairperson.
2. Decide who will be responsible for:
 - carrying out the patient interviews
 - completing the data forms
 - analyzing the forms
 - plotting the graph
3. Decide how often you are going to meet as a team (you will probably find once per month will be enough although you may need to meet more frequently at the beginning).
4. Decide how you will record your meetings and who will record them.

Suggested way of recording the meeting

1. Date of meeting
2. Attendance
3. Review of minutes from last meeting
4. Problems discussed
5. List of proposed solutions
6. Solution chosen and why
7. Required actions and responsible individuals
8. Time frame
9. Review date

Important Notes

The monitoring of quality indicators have provided you with a method for identifying problem areas. Do not try to tackle too many problems at once instead try to look at problems which are within the control of the group. If you find that some problems are outside your control still record the suggested action. The National QA Team will review it and provide you with feedback. Remember that some of the problems identified can be solved quite easily whilst others will require a long and sustained effort.

Quality Assurance Checklist -Appendix 4: Monitoring of data collection to find out the priority areas for quality improvement.

Monitoring and Supervision

Monitoring visits will be carried out by the National QA support and regular supervision will be done by the hospital QA teams. These monitoring visits are intended to be supportive, highlighting the completion of tasks.

Checklist for Monitoring and Evaluation - Appendix-5 (This M&E format is used by the national QA to monitor and evaluate the QA activities in hospitals. QA Teams in the districts can also use this to monitor their QA system. There will be some changes in the format as we progress and improve our QA system in the hospitals.)

Group Work 3

2 groups: Preparing QA action plans

Group 1 – Patient defined problem.

Group 2 – Professional defined problem.

- Identify and Define the problem
- Analyze and study the problem (Use CED to find the causes)
- List down the causes
- Find solutions
- Prioritize solutions (Use criteria matrix). List of activities
- Make decisions based upon fact, not opinion
- Use the QA format to implement the QA initiatives

Quality Action Plan format;

| | | | | | |
|-----------------------------|-------------------|---------------------------|------------------|-----------------------------|-------------------------|
| Problem Identified : | | | | | |
| Target: | | | | | |
| Solutions | Time frame | Person Responsible | Resources | Monitoring mechanism | Expected Outcome |
| | | | | | |
| | | | | | |
| | | | | | |

Important Note:

You should now be able to present your new quality action plans which will address both **patient and professional perspectives**. We hope that with time it will be possible to construct a list of professional indicators to be monitored on a regular basis as we already have for the patient defined quality indicators.

When you start preparing your quality assurance action plan remember:

- specify clearly the roles and responsibilities for each task
- do not assign all tasks to the same person/s, decide on who is/are the most appropriate person/s
- plan within the limits of your resources and do not attempt to tackle problem areas which are outside your control
- make allowances for unexpected activities that may be imposed on you
- do not let too many unplanned activities interfere or you will not be able to implement your own priority plans
- ensure plans are realistic and flexible

Conclusion:

Institutionalization of QA is an ongoing process in which a set of activities, structures, and values becomes an integral and sustainable part of an organization. It will be institutionalized when it is formally and philosophically incorporated into the structure and functioning of a health system (or organization), consistently implemented, and supported by a culture of quality, as reflected in organizational values and policies that advocate quality care. QA activities will have the most impact when all the fundamental elements and components of QA are implemented in a coordinated fashion. This would ensure success over the long term in achieving quality of care.

Given the profound importance of quality in health care, it is now clear that quality assurance is not a luxury or a marginal activity, but rather a motivating force in every effective organization. And now with these understandings of QA, it should now be part of our daily work and be incorporated into the existing management and information systems in each facility. We the health care providers should dedicate ourselves and make every effort to further improve the quality of services for the benefit of the population as a whole.

- End -

Appendix 1: Patient Questionnaires

A. OUT DOOR; Service Users

Hospital/BHU: _____ Reg. no: _____

Age / sex: _____ Occupation: _____

I. Reception:

1. What was the attitude of the receptionist towards you?

Very good Good Poor

2. How long did you wait before you got the prescription? Hours Mins

3. Was there any unnecessary delay in the reception area? Yes No

II. Clinical:

1. Who examined you today? Doctor ACO HA Others

2. Was there any unnecessary delay before you saw the doctor? Yes No

3. Did the doctor examine you? Yes No

4. Time spent with the doctor: Hours / Mins

5. Did the doctor tell you what was wrong with you? Yes No

6. Did the doctor give you instructions about how to take your treatment? Yes No

7. Did the doctor tell you whether you need to return or not? Yes No

8. Did you have privacy during your consultation? Yes No

9. Are you satisfied with the treatment and the advice given by the doctor? Yes No

III. Diagnostic Services:

III. a. Did you visit the Laboratory unit? (If yes, continue, If No, go to Q.III b)

1. Did you complete all the investigations advised by the doctor? Yes No

i. If Yes: How long did you wait to get your investigations done? Hours / Mins Days

ii. If No: What have not been done and why?

2. What was the attitude of staff (technicians) towards you?

Very good Good Poor

3. Was there any unnecessary delay in this area? Yes No

III. b. Did you visit the Radiology unit? (If yes, continue, If No, go to Q.III c)

1. Did you complete all the investigations advised by the doctor? Yes No

i. If Yes: How long did you wait to get your investigations done? Hours / Mins Days

ii. If No: What have not been done and why?

2. What was the attitude of staff (technicians) towards you?

Very good Good Poor

3. Was there any unnecessary delay in this area? Yes No

III.c. Did you visit the Dental unit? (If yes, continue. If No, go to Q. III.d)

1. Did you complete all the investigations advised by the doctor? Yes No

i. If yes: How long did you wait to get your investigation done? Hours / Mins Days

ii. If No: What have not been done and why?

2. What was the attitude of staff (technicians) towards you?

Very good Good Poor

3. Was there any unnecessary delay in this area? Yes No

III. d. Did you visit the Eye unit? (If yes, continue. If No, go to Q. III.e)

1. Did you complete all the investigations advised by the doctor? Yes No

i. If yes: How long did you wait to get your investigation done? Hours / Mins Days

ii. If No: What have not been done and why?

2. What was the attitude of staff (technicians) towards you?

Very good Good Poor

3. Was there any unnecessary delay in this area? Yes No

III. e. Pharmacy:

1. Did you receive all the drugs (medicines/injections) that were prescribed? Yes No
If No, comment:

2. Did you understand your instructions from the pharmacist / pharmacy technicians? Yes No

3. What was the attitude of the staff towards you?
Very good Good Poor

General:

1. Over all, how satisfied are you with your hospital visit?
Very satisfied Satisfied Dissatisfied

2. Are the services justly and effectively provided in this health facility?
Yes No

3. i. Is there a motor-able road to your place? Yes No

ii. How long does it take to reach the health facility from your residence (hrs)?
By foot Hr / Min By vehicle Hr / Min

Did you come by foot or by vehicle?
By foot By vehicle Referred by ambulance

4. Have you attended the hospital in an emergency (including night) during the last six months?
Yes No

i. If yes: were you seen promptly? Yes No

ii. Have you been admitted in Hospital? Yes No

5. Is there name and designation of the prescriber written on the prescription?
Yes No

6. What do you think of the state of cleanliness of the surroundings?
Very clean Clean Dirty

B. INDOOR; Service Users

Hospital/BHU: _____ **Reg. no:** _____ **Age / sex:** _____ **Occupation:** _____

1. How long have you been admitted?

Days Weeks months

2. Were you examined today? Yes No

3. If No, why?

4. Who examined you today? Doctor ACO HA Others

5. Did the doctor tell you what was wrong with you? Yes No

6. Are you satisfied with the treatment and the advice given by the doctor? Yes No

7. What was the attitude and politeness of the staff? Very good Good Poor
Comments if any:

8. The courteousness and sensitivity to your feelings: Very good Good Poor
Comments if any:

9. How competent do you think are the staff in their work: Very good Good Poor
Comments if any:

10. Does he/she attend your calls promptly? Yes No

11. Does the nurse give your medicines/injections in time? Yes No

12. Does she/he provide adequate information about diet, medications, exercises and other instructions?

Yes No

13. Are you advised on any special diet as per your disease? Yes No

i. If yes, is it provided by the hospital? Yes No

14. Over all, how satisfied are you with your hospital stay?

Very satisfied Satisfied Dissatisfied

15. Are the services justly and effectively provided in this health facility?

Yes No

16. What do you think of the state of cleanliness of the hospital?

Very clean Clean Dirty

Appendix 2 -Formula Reference Sheet

| Calculation of Indicators from Patient Questionnaire | |
|--|---|
| INDICATOR 1 | <p>Proportion of patients seen promptly</p> <p>Number of patients saying they were seen in 1 hour or less divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 2 | <p>Proportion of patients seen without an unnecessary delay</p> <p>Number of patients saying they were seen without a delay divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 3 | <p>Proportion of patients examined by the doctor</p> <p>Number of patients examined by the doctor divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 4 | <p>Proportion of patients told the diagnosis</p> <p>Number of patients told diagnosis divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 5 | <p>Proportion of patients given instructions about how to take their treatment</p> <p>Number of patients given instructions by the doctor divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 6 | <p>Proportion of patients told whether to return</p> <p>Number of patients told whether or not to return divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 7 | <p>Proportion of patients having privacy during consultation</p> <p>Number of patients having privacy during consultation divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 8a | <p>Proportion of patients receiving all drugs prescribed</p> <p>Number of patients who received all drugs prescribed divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 9 | <p>Proportion of patients understanding instructions from the pharmacist</p> <p>Number of patients who understood pharmacy instructions divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 10 | <p>Proportion of patients perceiving staff attitude to be very good</p> <p>Number of patients saying staff attitude is very good divided by Number of patients interviewed multiplied by 100</p> |

| | |
|--------------|---|
| INDICATOR 11 | <p>Proportion of patients perceiving clinic to be clean</p> <p>Number of patients saying clinic is very clean divided by Number of patients interviewed multiplied by 100</p> |
| INDICATOR 12 | <p>Proportion of those seeking emergency treatment in previous 6 months who were seen promptly</p> <p>Number of patients saying they were seen promptly during emergency divided by Number of patients who answered Question 11 multiplied by 100</p> |
| INDICATOR 13 | <p>Proportion of patients feeling very satisfied with their visit</p> <p>Number of patients saying they were very satisfied divided by Number of patients interviewed multiplied by 100</p> |

Appendix 3 - Data Entry Format

| Hospital Name: | | | |
|---------------------------------------|--------|--------------|------------|
| Month: | | | |
| Indicator | Number | Total Number | Percentage |
| 1. Seen in 2 hours or less | | | |
| 2. No unnecessary delay | | | |
| 3. Patient examined | | | |
| 4. Told diagnosis | | | |
| 5. Told instructions about illness | | | |
| 6. Told if to return or not | | | |
| 7. Privacy | | | |
| 8a. Received all drugs | | | |
| 8b. Received all drugs (from records) | | | |
| 8c. Drugs in stock (from records) | | | |
| 9. Understood pharmacy instructions | | | |
| 10. Staff attitude very good | | | |
| 11. Clinic very clean | | | |
| 12. Emergency seen quickly | | | |
| 13. Patient very satisfied | | | |

Appendix 4 – QA Checklist

| Name of Hospital: | | | |
|---|--------------------|---------------|--|
| Time Period: | | | |
| Objective: To institutionalise a Quality Assurance System, using patient indicators to improve the quality of care to the clients | | | |
| (Chair person: DMO) | | | |
| Tasks | Person responsible | Deadline date | Achieved (if no, give reason and enter new date) |
| Patient interviews | | | |
| OPD Data entry | | | |
| Calculations and graph plotting | | | |
| Analysis and interpretation of data and graphs | | | |
| Dissemination of findings | | | |

Appendix 5- Monitoring and Evaluation Checklist

Remark: Y = Yes, P = Partial, N = No, NA = Not applicable

| | Hospital Name: | | | | | |
|--------|--|---|---|---|----|---------|
| | Date: | | | | | |
| Sl No. | Quality Activity | Y | P | N | NA | Remarks |
| 1. | Is there a QA team formed by the concerned authorities for the hospital? | | | | | |
| 2. | Is there a QA action plan developed? | | | | | |
| 3. | Are the members of the QA team displayed with delegated responsibility and authority individually? | | | | | |
| 4. | Are the regular QA meetings and reviews being conducted in time? | | | | | |
| 5. | Has the 5 S mechanisms (Sort, Systematize, Sweep, Sanitize, and Self Discipline) implemented in all the units in order to improve and upgrade the work environment and staff morale? | | | | | |
| 6. | Are the issues and problems relating to Quality of service discussed during the QA meeting? | | | | | |
| 7. | Are the guidelines/manuals being used and followed daily? | | | | | |
| 8. | Are the new staffs introduced to the QA aspects of the hospital? | | | | | |
| 9. | Was the patient (service users) satisfaction survey carried out? | | | | | |
| 10. | Has there been any Monitoring and Evaluation from the National level in the last six months? If Yes, specify in the remarks column | | | | | |

5 S Concept

**The Japanese Method of creating a High Quality,
a Highly Productive
and a Safe Working Environment**

The 5 S Quality Instrument

One of the most important QA instrument is the 5 S' Quality Improvement practice in the health care setting. The 5 s quality improvement program is the Japanese technique to upgrade the work environment. It is a simple house cleaning activity; the underlying essence is to improve the work ethic of the employee. Cleaning, sorting, discarding and systematizing physical items.

It is one of the basic and low cost quality improvement programs, which has been proven to be effective in restoring the sagging image of the hospital and uplifting the staff morale. Initially it would be only on the physical aspect of the hospital i.e. cleaning, sorting, discarding, and systematizing physical items. As practices continue, same techniques can be applied in improving processes and personal arrangements.

The basic principle of the 5 S is to regularly assess your own work area, functions and systems and implement the necessary reforms with out the need for constant monitoring and reminders. It is not only to satisfy the requirements of the clients but to improve the way you perform your duties and responsibilities. The 5 S activities are already being practiced in the hospital but it needs to be practiced in an organized and regular manner. The consistent application of the technique will lead to a systematic, internalized practice of maintaining the standards of the hospital.

The committee should supervise and organize a Big Clean-Up Day in their own respective facilities and you can also think of some other ways to generate and sustain interests in activities to improve the hospital's image.

The 5 S techniques will achieve its impact only if the whole hospital implements the activities. The activities should not be isolated in a department or unit since this will not make the organization progress towards a higher level of quality.

Roles and responsibilities should be assigned to each member and regular meetings to be conducted in implementing the 5S and to discuss the quality issues of the hospital and work towards improving the quality of services.

What is 5 S?

It is a systematic 5 step method for organizing a work place.

Objective of 5S

- To reduce wasted effort
- To reduce wasted time
- To reduce wasted money
- To reduce accidents
- To reduce stress
- To improve customer service

Implementing 5s

- Train and convince
- Create excitement
- Announce competition
- Take "before" photographs
- Implement one "S" at a time
- Top management to regularly inspect
- Reward good performers

“5S” will make your organization a high performance entity

- Make cleaning a habit
- Reward high standards
- Encourage preventive cleaning

5 S stands for five systematic steps of the process. In Japanese all the steps begin with the letter ‘S’.

1. Seiso (Sweep): Clean up the work place. Maintain high standards of cleanliness, dust free and dirt free.
2. Seiri (Sort): Organize the things and then place it in order for easier delivery and handling. Classify all items around you, separate what is wanted from what is not wanted. Reduce clutter
3. Seiton (Systematize): Arrange the physical environment and the systems with in the facility. Organize everything in proper place for easy location. Fix a permanent place for everything and keep everything in its place.
4. Seiketsu (Standardize): Standardize all procedures and make it uniform.
5. Sheitsuke (Self Discipline): The attitude of the health care providers, which includes the dress they wear and the smile they wear when entertaining the patients and the clients. Train and Maintain discipline.

It sounds very simple but there are lots of systematic procedures involved.

Step 1. SEISO (Sweep)

(Cleaning and Checking)

- introduce a self cleaning culture
- Implement cleaning responsibility schedules
- Prepare appropriate cleaning tools, methods and materials
- Implement a ‘garbage bin strategy’
- Introduce a daily ‘5 minutes 5s’ system where everyone participates in cleaning activities
- Investigate sources of dust and grime
- Use the 5 human sense for checking while cleaning
- Dirt and dust prevention is better than always cleaning

All floors, furniture, plant and equipment must be spotlessly clean. This will enable longer cheaper and trouble free wages. It will also ensure a healthier environment

Cleaning

- What to clean
- When to clean
- In which order to clean
- Who is responsible
- How to clean
- What tools to use
- What materials to use
- Storage of cleaning tools
- Cleaning is checking – use the 5 sense

5 Minute Cleaning

- Fixed time or ad-hoc time
- Bell or alarm or music
- Procedure for checking
- Everyone must participate
- Rigidly applied even when on the phone or having visitors

THE 5S PLEDGE

- I will not get things dirty
- I will not spill
- I will not scatter things around
- I will clean things right away
- I will re-write things that have got erased
- I will tape up things that have come down

Step 2. SEIRI (Sort):

- Select a period to identify the unwanted things
- Identifying and red tagging of all unwanted things and slow moving items during the selected period
- Rid your premises, drawers, cupboards all unwanted things on a big clean up day. Total participation is very crucial.
- Formulate rules for regular disposal and thereafter implement preventive SEIRI
- Then separate, store things needed occasionally, needed once in a while and those kept 'just in case'

"A cluttered workplace leads to a cluttered mind."

Where do you start?

- Start with the purse/handbag/diary
- Then with the bunch of keys
- Then with your table tops
- Table drawers
- Cupboards and cabinets and behind them
- Files and docketts
- Computer storage
- Wardrobe, table, bookrack, etc.
- Bed side lockers

Applying the red tags

- Decide the standard for red tagging
- Self, committee or internal audit
- Make the red tags-paper or self adhesive tape, plastic covers, round seals
- Do the tagging during selected period
- Mark details
- Keep exchange period
- Dispose
- Don't delay

Red tag Technique

Look at.....

- Stocks
- Facilities
- Locations
- Documents
- Machines
- Fittings
- Stationary
- Others

Yellow Label method

- When you are not sure
- Mark date
- If label items used, thereafter remove the label.
- Inspect after 6 months-which items still have label, if still not sure, repeat inspection after one year.

Step 3. Seiton (Systematize):

- Implement a sign board strategy from the entrance so that any location could be found easily.
- Implement a floor painting strategy where all aisles, storage places, traffic flow lines etc. are marked.
- Implement a danger marking system
- Label all switches, fans, keys etc.
- Clearly mark 'homes' for all tools trolleys, litter bins, vehicles, stationery items, books and registers, files, kitchen and pantry items etc
- Implement "visual control" for stock and W.I.P etc.
- Implement "visual control" for defects and rework.
- Implement X-axis and Y axis alignment.

Can you find what you want- a register, a pen, a letter you received a week ago, your slippers, a spare part, an item in your stores the correct switch for a light etc in just ten seconds.

Sign Board Strategy

- Factory- work place- line process
- Large and clear signs
- Use Colors to distinguish
- All machines identified by name and number
- All assets to have inventory number but placed discreetly not like the government dept. method.
- All employees to have name tags
- Sizes should be appropriate

Grid System

- Every building to be named A, B etc
- Grid system in large factory buildings and office buildings
- Every room to be labeled

- Every location or office should be able to be located without difficulty
- Label strategy from the entrance

Floor Painting Strategy

- Working areas- green
- Aisles- orange
- Rest areas- Blue
- Warehouses- Grey
- Types of lines and sizes
- Door opening lines
- Storage space lines
- Traffic flow direction lines

Tiger Patterns

- Anything sticking out
- Anything crossing the aisle
- Electric shock warning
- Anything that may knock your head
- Any opening on the floor
- Any where you need to watch your step
- Uneven steps
- Slippery places
- Moving machines etc.

Safety Signs

- “Don’t do “signs
- “Must do “signs
- Warning signs
- Safe way signs
- Different colors
- Prominently displayed

“Homes” for equipments

- Trolleys
- Pallets
- Cans
- Movable storage racks
- Litter bins
- Fork lift trucks
- Vehicles
- Other movable things

Storage of registers and files

- File index displayed
- Color code
- Oblique lines
- Easy to see, easy to get and easy to return
- Identification strips on registers and books

- “Homes” for registers and books
- Index labels
- Tags for important pages

Visual Control

- By color, shape, etc
- Something that hits you in the eye easily
- To easily locate things
- To detect abnormalities
- To easily see current situations
- To easily see current problems

X-Axis, Y- Axis mentality

- Every thing should be aligned along X axis and Y axis
- Notice boards, charts on walls, calendars, paintings etc
- Machines and furniture wherever possible
- Shoe racks etc
- Vehicle parking
- Things on table tops
- No one should be allowed to keep anything out of alignment

Remember the purpose of SEITON is to;

- Reduce or eliminate search time
- Make the work place look neat and inviting

Can you find anything- a file? A tool, a document, a particular letter in a file, the correct switch etc in just a couple of seconds?

All the end of step 3 you should get the same feeling as after an overdue haircut, a shave, a bath, and getting into fresh clothes. You should feel relaxed and happy

Step 4. SEIKETSU (Standardizing)

- Standardize all 5S activities
- Standardize all sizes and shapes
- Standardize all procedures
- Use color coding for pipes, locks etc
- Use checklist

The purpose of standardization is to make sure that the entire organization follows the same rules, the same names, same sizes, shapes, and colors etc.

Standardization may even be extended to other areas

Step 5. SHITSUKE (Training and Disciplining)

- Create a 5S culture where everyone willingly participates
- Carry out awareness program
- Motivate through inter departmental competitions

- Organize 5S petrol Teams
- Reward good practices

5S must become habitual activity.
Implementing 5s

- Train and convince
- Create excitement
- Announce competition
- Take “before” photographs
- Implement one “S” at a time
- Top mgt. to regularly inspect
- Reward good performers

Main factors for a successful implementation

- Select a QA/5-S Team
- Top management involvement/initiative
- Collective Decision
- Genuine and positive approach
- Preparing the mindset of the people
- Introduction of Creative and innovative ideas
- Make a plan with universal appeal
- Display your plan with targets
- Develop a sense of ownership and responsibility
- Systematic step by step implementation
- Invite others and exhibit your work
- Include patients and relatives to participate
- Take pride in your work/achievement

Benefits

- Productivity, quality and safety standards improved
- Gap between the top and bottom levels of employees reduced
- Hidden talents have been surfaced
- Fruitful contributions from everyone
- Become proud of their work places
- Team culture developed
- Transformed many personalities
- More importantly bottom lines improved