

**Republic of Malawi**



**Ministry of Health**

# **5S BASIC MANUAL**

**1<sup>st</sup> Edition**

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# **5S BASIC MANUAL**

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## ACRONYMS

CQI	Continuous Quality Improvement (KAIZEN)
DHMT	District Health Management Team
DHO	District Health Officer
HMT	Hospital Management Team
IPC	Infection Prevention Control
ISO	International Organization for Standardization
JICA	Japan Overseas Cooperation Agency
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MT	Management Team
OPD	Outpatient Department
PDCA Cycle	Plan Do Check and Act Cycle
QA	Quality Assurance
QAP	Quality Assurance Program
QATWG	Quality Assurance Technical Working Group
QC	Quality Control
QIST	Quality Improvement Support Team
SOP	Standard Operational Procedures
SWAPs	Sector Wide Approach Programs
TQM	Total Quality Management
TOT	Training for Trainers
WIT	Work Improvement Team



# Introduction

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## 1. Background

Since the establishment of a healthcare services quality improvement workshop in 2004, the Ministry of Health (MOH) has been striving for the improvement under the initiative of chiefs of relevant agencies. Several Quality Assurance Programs (QAPs) are introduced to the health sector in Malawi. To overcome the situation, MOH has established “Quality Assurance Technical Working Group (QATWG)” recommended by Sector Wide Approach Programs (SWAPs) and integration of the Quality Assurance (QA) has been going on.

However, quality improvement in the health sector in Malawi is hindered by poor facilities, lack of equipment, lack of qualified human resources and weak management.

Meanwhile, Japan International Cooperation Agency (JICA), has made efforts to strategically familiarize to African countries including Malawi, Japanese style quality management methodology “5S-KAIZEN-Total Quality Management (TQM)” that was commenced in 2000 at a maternal hospital in Sri Lanka by one genius director and formulated by the director and technical advisors from Japan.

5S-KAIZEN was selected as one of the core targets for harmonization of QA by QATWG.

## 2. Definitions

5S: It is to implement Sort (S1): to eliminate what is unnecessary, Set (S2): to align in the position easy to use, Shine (S3): to make things clean without trash or dust, and Standardize (S4): to maintain S1 to S3, and Sustain (S5): to voluntarily continue S1 to S4. Its original purpose is to delete the defect from finished goods with defect or dirt, and later utilized in the various purposes such as improving the work environment, organizational revitalization and management system improvement.

KAIZEN: In most cases, indicating Continuous Quality Improvement (CQI) activities by Quality Control (QC) circles, but it also includes KAIZEN recommendations and field improvement activities (GEMBA KAIZEN). It is generally conducted through PDCA cycle, so that it can be called problem solving through participation by service providers. TOYOTA production method (such as automation and Kanban-placard

method, etc.) fits in this category.

TQM: It is sometimes defined as the implementation of QC circle activities across the organization; it is essential approach aiming at comprehensive quality management that utilizes capacity throughout the organization at maximum (aggregation of systemized methods). Constraint theory and Six Sigma are one of TQM approaches, and International Organization for Standardization (ISO) implementation is one example of its practice.

‘Implementing’ these three management methods ‘in phases’ is a characteristic of ‘5S-KAIZEN-TQM approach’, and within this approach, each step is defined as follows.

Step1: ‘5S’: improvement of work environment, rethinking of the staff, understanding their business processes

Step2: ‘KAIZEN’: constructive understanding of the systematic problem resolution and business process improvement

Step3: ‘TQM’: implementation of hospital management, realizing value co-creative organization

# Part I

## Phases and steps for 5S implementation

### 1. Four phases of 5S implementation process

5S is usually implemented gradually, often over one or two years period of time toward Sustain.5S implementation procedures can be categorized into the following four phases.

- (1) Preparatory Phase
- (2) Introductory Phase
- (3) Implementation Phase
- (4) Maintenance Phase

External interventions, several trainings and supportive supervision shall be provided by Zonal Health Office or MOH in each phase

The duration of each phase are recommended for effective and efficient implementation of 5S-KAIZEN activities. The details are shown in the diagram below.

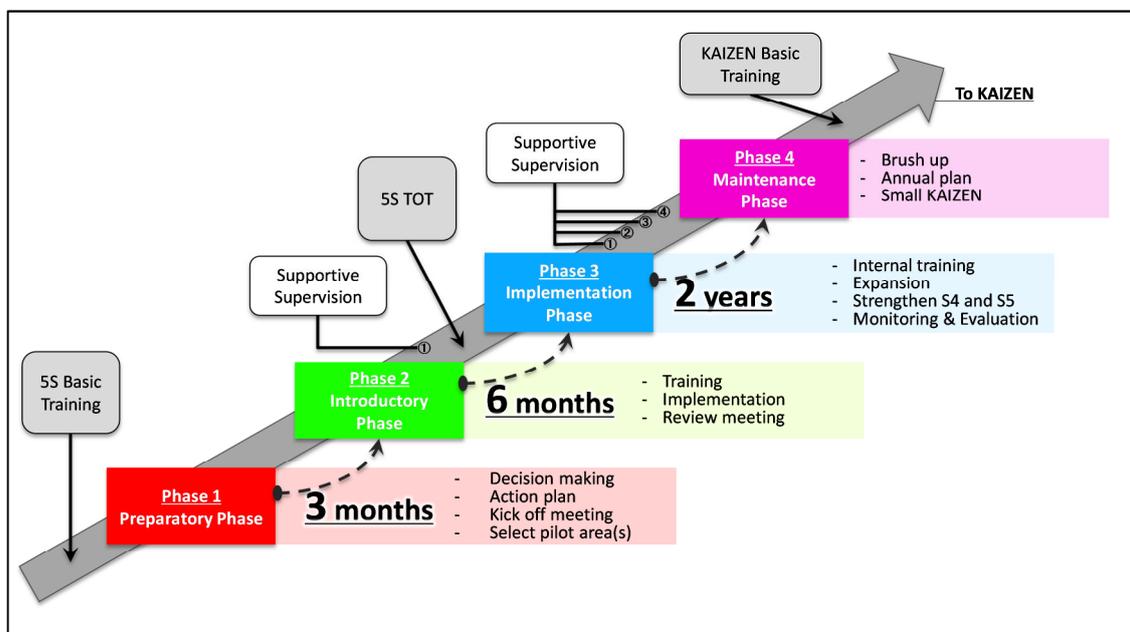


Diagram 1-1: Phases of 5S Implementation

## **Phase 0: 5S Basic Training**

When a management team of a health facility considers installing 5S activities, top management (e.g. District Health Officer) and a focal person for QA in the facility shall attend “**5S Basic Training**” designated by Zonal Health Office or DHMT (for Health Centres) supported by MOH. The top management and the focal person should understand 5S principles and implementation procedures.

## **Phase 1: Preparatory Phase**

Recommended duration for preparatory phase is approximately three months. The top management shall decide the installation of 5S officially. It is declared during “kick off meeting”. Pilot areas to install 5S are selected after “Situation Analysis” which is one of components of the kick off meeting.

In preparatory phase, it is important to convince management team to install 5S based on the deep understanding the concept of 5S and strong commitment. Since activities by hospital staff cannot be sustained (can be behind), the understanding and commitment towards 5S-KAIZEN-TQM of a Hospital Management Team (HMT) is crucial for installation at a facility. The participants of 5S Basic Training are responsible to convince the management team.

## **Phase 2: Introductory Phase**

Recommended duration for introductory phase is six months. In this phase, Sort, Set and Shine activities are carried out in selected pilot areas supported by the focal person.

After the six months from 5S Basic Training, Zonal Health Office or MOH will conduct “**Supportive Supervision**” at participant’s health facilities of 5S basic training, observe progress of 5S installation and providing technical advices. Based on the achievement in the pilot areas and results of supportive supervision, the management shall decide how to expand 5S to all departments in the hospital.

In introductory phase, Work Improvement Teams (WITs) in the pilot areas and a focal person of 5S have to learn 5S deeply from the practice in work places and accumulate their experience for expanding 5S into the whole hospital. Moreover, it is necessary to be aware that “5S is not Cleaning Campaign” but that “5S can be management tools for improvement of working place by the staff”.

Before the expansion of 5S, top management shall send a focal person and another person in-charge for 5S to “**5S Training of Trainers (TOT)**” designated by Zonal Health Office and supported by MOH. They have to understand how to conduct internal training of 5S.

### **Phase 3: Implementation Phase**

Recommended duration for implementation phase is approximately two years. Beginning of implementation phase, Quality Improvement Support Team (QIST) and WITs shall be established officially. Internal training of 5S shall be also conducted to all staff. Standardize and Sustain activities are developed by QIST and practiced in all the pilot areas. New departments to install 5S activities will introduce Sort, Set and Shine activities based on the standardized procedures.

In implementation phase, activate areas of 5S shall be commenced from small number of areas. Since the capacity of QIST and WIT is not enough to expand to the whole hospital at same time, 5S shall be expanded step by step continuously.

### **Phase 4: Maintenance Phase**

This phase is an on-going phase hence has no time limit. However, it is expected that within three years of entering this phase, all the necessary structures and accountability systems shall be in place. All health workers (staff) will be shaped to follow workplace rules and habits. Sort, Set, Shine and Standardize activities will be the culture of all staff of the health facility.

In maintenance phase, external supportive supervision will be conducted several times by Zonal Health Office or MOH. The facility will brush up 5S activities gradually and also enhance sensitivities of risks and problems as pre-condition of KAIZEN. It means that maintenance phase is an entry point to KAIZEN activities. Of course, it is possible to try “Small KAIZEN” in implementation phase. However it is recommendable that KAIZEN activities shall be started after conducting “**KAIZEN Basic Training**”.

## 2. Ten Steps for 5S installation

The phases of 5S-KAIZEN-TQM activities are also divided into total of ten (10) steps as the diagram below.

- Preparatory phase has three (3) steps
- Introductory phase has two (2) steps
- Implementation phase has four (4) steps
- Maintenance phase has one (1) step

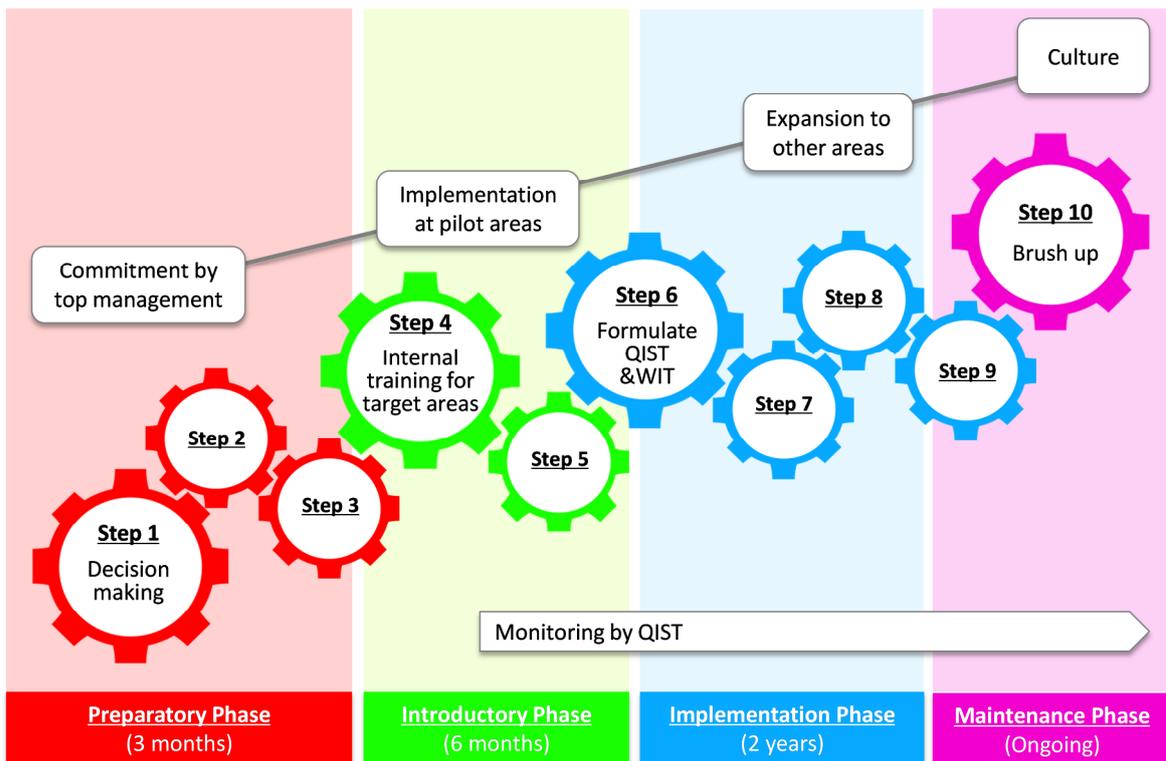


Diagram 1-2: Implementation flow chart

In the above diagram, each step has many activities that need to be done to accomplish it.

## Part II

# Implementation steps of 5S activities

### Preparatory Phase (Step 1, 2 and 3)

#### Step 1: Decision making to install 5S

After the attending “5S Basic Training”, HMT shall decide whether 5S shall be installed or not into respective hospital. Top management and a focal person of 5S has to build consensus for installation.

##### (1) Proper timing to conduct “briefing meeting”

It is suggested that “briefing meeting” should be conducted within two weeks after attending “5S Basic Training”. Agendas will be “Explanation of 5S principles and effectiveness” and “Discussion for making decision”. The focal person has to convince Management Team if he/she would like to succeed the improvement of the health facility by 5S. Commitment of top management is priming to passionate 5S installation, fuel to move engine of 5S continuously and also deterrence against opponents for 5S.

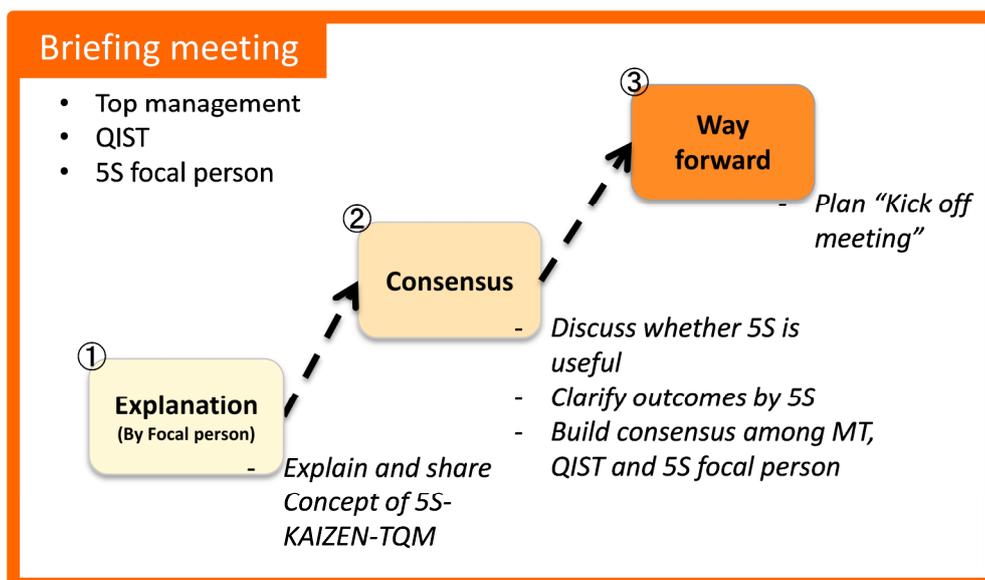


Diagram 2-1: The contents of “briefing meeting”

(2) Explanation of basic concepts and effectiveness of 5S activities

The focal persons will explain “What 5S principles are” and “How 5S is effective for working improvement” with materials provided at “5S Basic Training”. Awareness of importance of 5S activities shall be increased among HMT members. The table below shows an example of briefing meeting.

Table 2-1: Example of briefing meeting

Time allocation	Activities	Purpose	Responsible person
20 min	“Explanation of 5S-KAIZEN-TQM Approaches”	Develop/Increase awareness of importance of 5S-KAIZEN-TQM Approaches among HMT members	Focal persons
20 min	“Discussion”	Build consensus to install 5S-KAIZEN-TQM Approaches	Focal person, HMT members
10 min	“Way forward”	Confirm/Share next step, Develop schedule	HMT members

(3) Building consensus

After explanation by the focal person, HMT shall discuss whether 5S-KAIZEN-TQM Approaches are useful for improving working environment or not. At the discussion, effectiveness and expected outcomes by installing 5S should be clarified concretely.

- How 5S can contribute to improve working process/procedure such as administrative procedure, clinical/treatment procedure, nursing procedure, service delivery procedure and so on
- How 5S can contribute to reduce cost, time burden in working procedures
- How 5S can contribute to prevent dangers, incidents and accidents in working place

(4) Necessary preparation for next steps

If HMT decides to install 5S in its own health facility, next step is to develop action plan by a focal person and conduct “Kick off meeting”. It is important to develop a schedule for those activities in the end of the meeting.

## Step 2: Drafting action plan

The focal person and HMT members shall prepare action plan for 5S implementation and the plan should be authorized by HMT. The action plan is the first draft (Version 0) for the health facility and the plan should be revised and be elaborated in implementation phase. An example form of action plan is attached in Chapter V. In Kick off meeting, HMT and staff have to know the contents of the action plan.

Following contents shall be described and explained clearly in an action plan.

(1) Issues and challenges of a health facility

- Basic information of a health facility/section/department
- Issues that a health facility/section/department are facing
- Challenges that a health facility/section/department will tackle

(2) Institutional analysis (Overall situation of the facility)

Problems that hospital workers have recognized currently and service users' needs/expectations need to be described concretely. Through discussing those matters, "Gap" between current situation and ideal situation are identified.

(3) Problem statement

Necessity to implement 5S activities in the health facility should be described.

A well-defined problem statement should be "short and precise words", "clear words" and "measurable" ideally.

(4) Goal

"Goal" should be achievable and consistent with the existing QA policy and organizational goal.

(5) Objectives

Objectives means "achievements after implementation of the action plan" and shall be described into three contents, "Outputs", "Indicators" and "Means of verification"

- Outputs: statements or products for achieving objectives
- Indicators: measures for evaluation of achievement
- Means of verification: Methods or tools for evaluating the indicators
- 

(6) Pilot area(s) for implementation of 5S

Number of pilot areas is two or three as initiation and selected pilot areas will be "Showcase" of 5S activities.

(7) Action plan timeframe

Detailed activities in each phase for 5S implementation shall be described. Also followings are described on each activity.

- Target (Targeted person/committee)
- Resources input (Necessary items/resources)
- Time frame (Time to conduct)
- Responsibility (Responsible person/committee)
- Means of verification: Methods or tools for evaluating the activity

### Step3: Kick off meeting

(1) What is “Kick off meeting”?

Kick off meeting is an event for announcement to begin 5S activities officially. In short, it is an important initial event that HMT shows commitment of installing 5S activities into own health facility to hospital staff. At the same time, it is necessary to sensitize 5S activities to hospital staff and to select pilot areas for 5S installation. Focal persons and HMT will arrange and conduct this kick off meeting. There are three events in the meeting; “Exposure Seminar”, “Situation Analysis” and “Selection of Pilot Areas”.

(2) Proper timing to conduct the meeting

It is recommendable to conduct the kick off meeting within one or two weeks after decision making by HMT to install 5S into own health facility.

(3) Methods

There are four events in the meeting; “Exposure Seminar”, “Situation Analysis”, “Selection of Pilot Area” and “Way forward”. The table below shows an example of timetable for the meeting.

Table 2-2: Example of timetable for Kick off meeting

Time Allocation	Activities	Methods	Responsible person
10 min	Opening remarks	Plenary	Top of the facility
60 min	<b>“Exposure Seminar”</b> : 5S Principle, 5S tools	Lecture	Focal persons
90 min	<b>“Situation Analysis”</b>	Group work	Focal persons
40 min	Results of situation analysis	Group presentation	Focal persons
15 min	<b>“Selection of Pilot Areas”</b>	-	Top management
15 min	<b>“Way forward”</b>	Plenary	Focal persons
10 min	Closing ceremony	-	Top management

**“Exposure seminar”**

Beginning of the kick off meeting, “What 5S is” and “How 5S is effective” will be explained at the exposure seminar. All staff in the health facility can participate to be exposed to 5S concepts. In the exposure seminar, true meaning of 5S must be conveyed to the staff. 5S is often incorrectly characterized as “standardized cleanup”, however it is meaningful much more than cleanup. 5S is a philosophy and a way of organizing and managing workspace and workflow with focused intention to improve efficiency by eliminating waste, improving workflow and reducing process unreasonableness. The following points should be emphasized during the exposure seminar:

- We choose a facility which provides quality of service as customers. Then we hope to be chosen by patients as good service facility.
- If employees are not satisfied with own work, customers cannot be satisfied.
- “You can do it” because other hospitals can do it.
- 5S activities help to improve working environment for smooth implementation of quality improving activities (foundation of all QAPs).
- 5S activities do not create conflict against other QAPs because of target of 5S is to change “Work”.
- 5S activities are not a onetime event. It should be practiced day by day and make 5S as a culture of the health facility. Periodical training is necessary for both management and department/section level for sustainability.

### **“Situation Analysis”**

Purpose of Situation Analysis is to understand baseline status before 5S implementation by results of the check sheet and interview and photos. “Situation Analysis Check Sheet” is utilized for the implementation.

- 1) Procedures of the analysis
  - i) Select members for the analysis (after the exposure seminar)
  - ii) Explain how to use the check sheet
  - iii) Make sub-groups for hospital round
  - iv) Set routes and time allocation for each sub group
  - v) Go hospital round by the sub groups with the check sheet
  - vi) Collect the check sheet
  - vii) Summarize the results of the check sheet and interview, and photos
  - viii) Feedback the results
  
- 2) Points for checking current status of working environment
  - Condition of physical facility: ceilings, walls, floors, windows and so on.
  - Unnecessary items
  - Damaged items / Broken items
  - Orderliness of furniture, equipment, files, machines and so on
  - Clutters / Dust / Rust / Corrosion
  - Markings / Scribbling / Old posters / Wall paints
  
- 3) Photo taking
 

During situation analysis, one of the members in the sub group must equip with a digital camera, and photographs of work place must be taken to record current situation prior to 5S implementation. These are useful for comparing and measuring the progress (Before-After) of 5S activities.

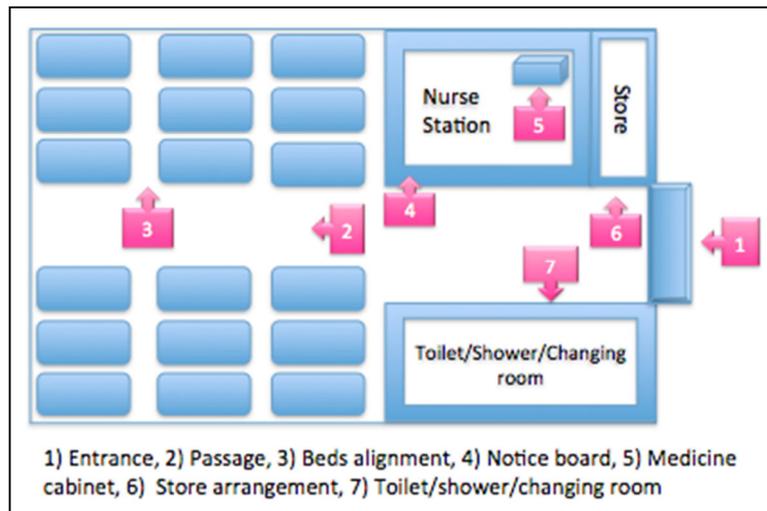


Diagram 2-2: Example of photographing record

Note that positions of photo taking must be recorded for the next visit to monitor progress of 5S activities like the above diagram. It is important not to take photos so closely

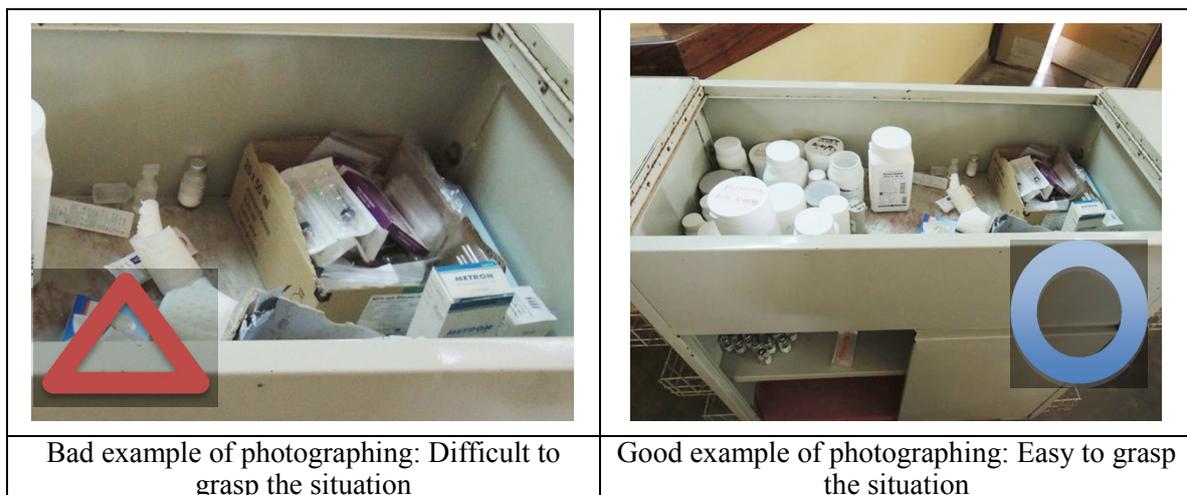


Diagram 2-3: Bad and good example of photographing for Situation Analysis

All pictures should be shared with management and department staff. This can help understanding “how working environments can be improved”.

The analysed results should be reflected to revise the action plan (version 0) for proper understanding of situation and development of action plan (version 1) to start 5S in pilot areas.

### **“Selection of Pilot Areas”**

Based on identified current hospital situation, proper pilot areas shall be selected with consensus among the selected members for situation analysis, HMT members and the focal persons. Criteria for the selection are followings.

- The leader of the area has good leadership.
- The leader is interested in 5S.
- The area is not so dirty but not so clean.
- The area has enough staff for 5S implementation.
- The area might achieve good results of 5S.

The pilot areas shall be chosen as the areas for successful implementation of 5S activities. The hospital has to learn the lessons from the successful achievement in the pilot areas to expand to the other departments. Proper implementation of 5S activities at targeted area(s) is to make “showcase” (model of 5S), which helps to make staff understand “what is 5S about” (Seeing is believing!) When select the target(s), DO NOT select sections or departments that are facing lots of problems as it will take long time to solve the problems and difficult to make them as a “showcase”. For example, the area which is so dirty shall not be chosen because it takes long time to be sorted and set successfully, and staff might be bored or give up. From experiences of pilot hospitals for 5S-AKIZEN-TQM Approach in Malawi, recommended number of pilot is 23 with consideration of the capacity of HMT, the focal persons and the staff of selected areas.

### **“Way forward”**

At the end of the kick off meeting, way forward shall be showed to participants. Necessary information is 1) the focal persons and HMT will revise action plan based on the results of Situation Analysis and show it to all hospital workers as soon, and 2) the training on S1-S3 activities for the pilot areas will be held by the hospital as next step for 5S activities.

#### **(4) Procedure and preparation of “Kick off meeting”**

The following activities are necessary for smooth implementation of kick off meeting.

- 1) Fix schedule and venue
- 2) Inform the fixed schedule and venue to all sections and hospital workers
- 3) Assign roles to HMT members and the focal persons as follow;
  - Moderator
  - Lecturers
  - Facilitators for Situation Analysis
  - Persons who can prepare the meeting

- 4) Prepare necessary items/materials
- Timetable of the meeting
  - Attendant list
  - Presentations (5S principle & 5S tools)
  - Situation Analysis Check Sheet
  - Lunch or refreshment
  - Digital camera
  - Laptop, Extension code and Projector if necessary
  - Stationery (Pens, Flip chart and Notepads) if necessary

## Introductory Phase (Step 4 and 5)

### Step 4-1: Training for S1-S3 activities

Based on the selected members during Situation Analysis, the members for 5S implementation in the pilot areas shall be selected. To start 5S activities, formal training for the implementing members is necessary. The training is conducted by the focal persons. HMT members had better to attend the training if available, because one of the key factors for successful 5S implementation is “strong leadership and commitment”.

#### Outline of the training

(1) Expected outcome

Selected members for 5S implementation at the pilot areas will be able to understand “What 5S is”, “How 5S is effective” and “How to practice S1, S2 and S3 activities”.

(2) Methodology and necessary topics

It is advisable that it takes one day to train the members. If it is difficult to do so, training curriculum can be divided into four days as the table below shows. Methods of the training are lectures and practical sessions. Training materials provided during 5S Basic Training can be used for the training.

Table 2-3: Methodology and necessary topics for S1 – S3 Training

Day	Time	Topics	Method
Day 1	60 min	5S Principle	Lecture
Day 2	60 min	How to practice Sort, Set and Shine activities	Lecture
Day 3	60 min	5S tools	Lecture, Practical session
Day 4	60 min	Monitoring and self-evaluation	Lecture, Practical session

(3) Participants

Members for 5S implementation from the pilot areas

(4) Facilitators

The focal person for 5S activities and HMT members

(5) Support by Ministry of Health and Zonal Health Office

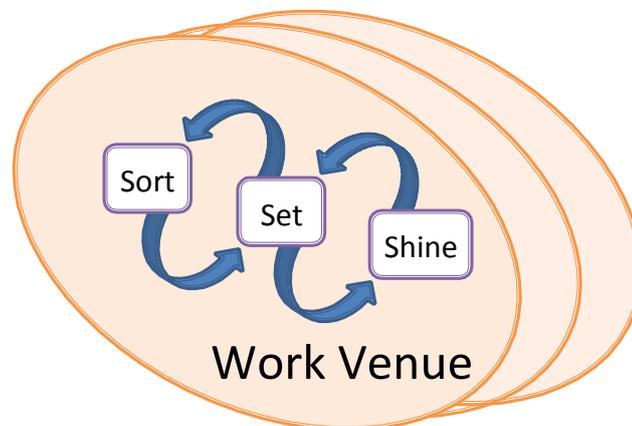
The focal persons and HMT can request Zonal or National trainers to support the training, such as lecturing and facilitating if necessary.

(6) Preparing process for the training

- 1) Fix schedule and venue
- 2) Inform fixed schedule and venue to all members for 5S implementation
- 3) Assign roles to HMT members and the focal persons as follows
  - Moderator
  - Lecturers
  - Facilitators
  - Person who can prepare the training
- 4) Prepare needed items/materials
  - Timetable of the meeting
  - Attendant list
  - Presentations
  - Lunch or refreshment
  - Digital camera, Laptop, Extension code and Projector if necessary
  - Stationery (Pens, Flip chart and Notepads) if necessary

## Step 4-2: Practice Sort, Set and Shine activities

After the training on S1-S3 activities, the members for 5S implementation at the pilot areas shall practice S1-S3 activities continuously.

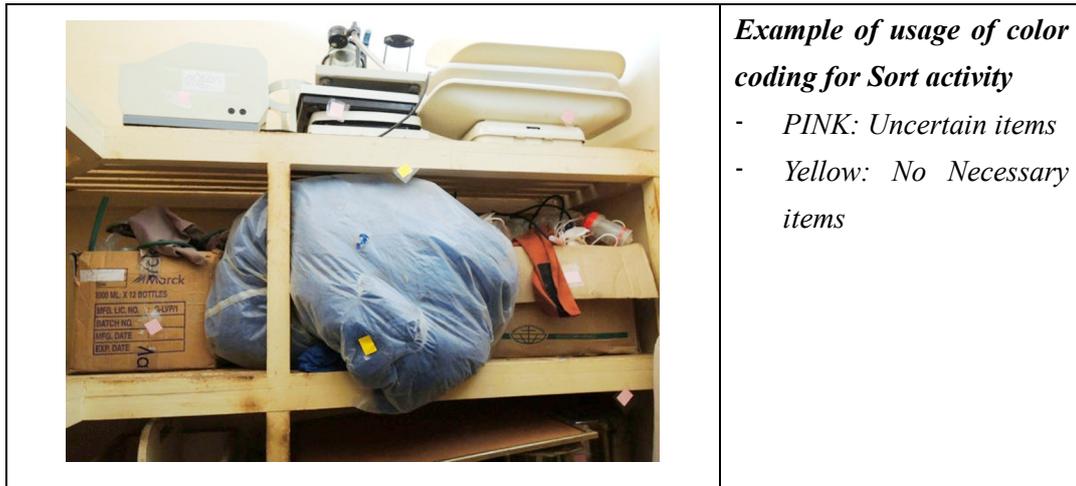


### **Sort (Sankhulani, Seiri)**

Practice of Sort is starting from identification of unnecessary items in the work place. It has to be initiated by disposing all that are no longer needed after identification of unnecessary items through putting Red Tag and colour coding. Through Sort activity, we can create spaces and categorize all items in departments/sections clearly.

A simple way of Sorting is to categorize all equipment, machines and furniture into three (3) categories by using colours. These categories are; Unnecessary (not need it), May/May

not be necessary (Uncertain), and Necessary (Need it) as depicted.



i) Unnecessary (Not need it)

Unnecessary items should be discarded if the item is not repairable. If the item is repairable, repair it and store as it may be needed by other departments/sections or other hospitals. Since the unnecessary items are property of the government, it might be difficult to discard immediately. Official audit procedures are necessary before disposal. Some valuable items might be sold to recycle agents. The items should be segregated for necessary disposal.

ii) Uncertain items (May be necessary/May not be necessary)

May/May Not Necessary items mean that the items are not used often (probably only once a month) or it is functioning but not used in current workflow. This kind of items should be stored in sub-store of departments /sections so that it can take out quickly when it is needed.

iii) Necessary (Need it)

Necessary items should be organized properly based upon current workflow. This will be explained in “setting” activities

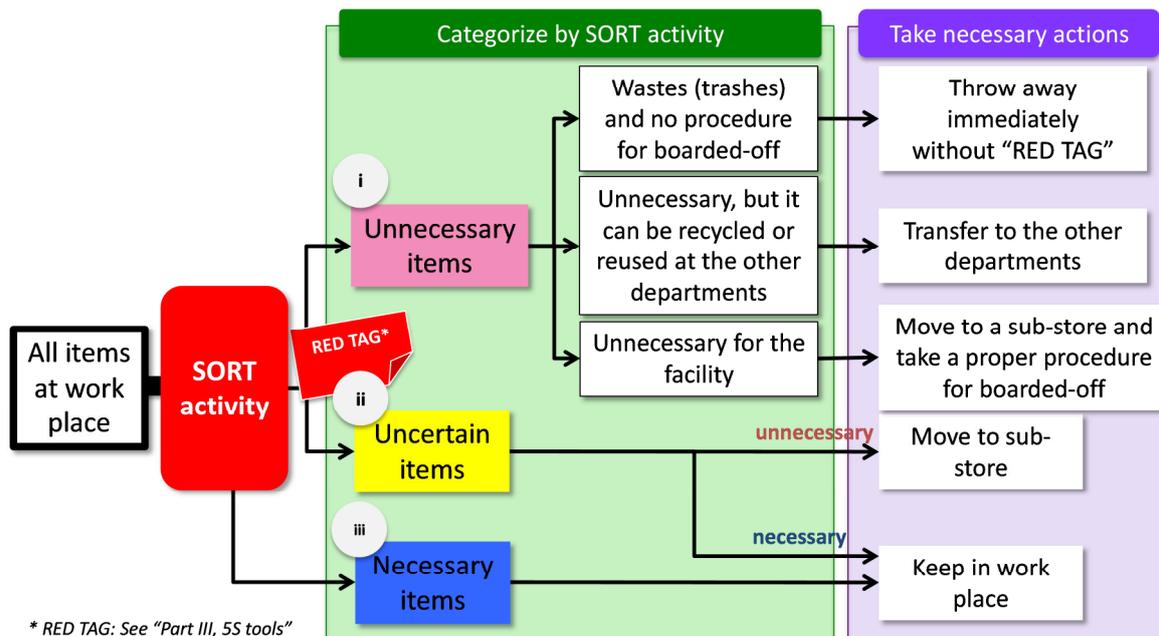


Diagram 2-4: How to Sort materials/items/tools

When unnecessary items are collected from various departments/sections, the followings must be recorded and filed for smooth discarding procedures:

- Name of items
- Inventory number
- Where it was
- Where it will be stored

“*Unnecessary item store*” should be established and all unnecessary items properly stored until discarding process is completed. If sizes of unnecessary items are large and not repairable, space for unnecessary items should be created within the hospital compound with safe storing measures. Rules for regular disposal have to be established.

### **Set (Sanjani, Seiton)**

After Sort activity, remaining items have to be arranged and stored according to frequency of use. All areas including floors, cupboards and table tops have to be organized. Through Set activity, we can access needed items easily and immediately, do stock control of medical supplies and medicines easily, and keep workplace to look organized. Therefore, the changes have to work to be done more efficiently than before.

Practice of Set emphasizes on proper orderliness of things in the work place. Items are placed to facilitate easy access and to optimize workflow. For example;

- Signboards are set at the entrance to access easily for various services locations in the health facility.

- All locations are named or numbered.
- Every item has to be labelled with an inventory number (discretely) and assigned a location. The assigned location is marked on the item and at the location.
- Visual controls including colour coding are practiced.
- Files and cupboards are indexed.
- X-axis-Y-axis alignment is practiced in the positioning of items.

### **Shine (Salalitsani, Seiso)**

Practice of Shine is the cleaning stage.

- All the items including floors, walls, windows, ceilings and equipment are cleaned.
- Appropriate cleaning tools, methods and materials are identified and practiced.
- Waste bins are available at required places.
- Cleaning maps and schedules are developed and displayed for continuous practice of cleaning.
- Waste bins colour coding must follow Infection Prevention Control (IPC) Guidelines and Control Guidelines of MOH.

Shine activity also means not only “Cleaning” but also “Maintenance”.

- Medical equipment shall be check whether it is working well or not.
- Hospital facility must be checked broken or not, such as windows, doors, sinks, toilets and ceilings.
- Cleaning equipment is broken or not.

If there are any sign of troubles it must be reported to HMT or maintenance department through person in charge of the department/section.

### **Step 5: Feedback of achievement of 5S activities**

According to the National Rollout Plan, “External Supportive Supervision” will be conducted by Zonal Health Office or MOH to monitor progress of 5S activities in the pilot areas within 6 months after 5S Basic Training. Components of External Supportive Supervision are followings.

- (1) **Interview** HMT members and the focal persons in order to know progress of 5S activities
- (2) **Field Observation** in the pilot areas in order to monitor and evaluate progress of 5S activities, and provide technical advices
- (3) **Feedback session** to HMT members, the focal persons and staff of the pilot areas in order to share the results of the observation and the achievements and considering way forward

HMT members and the focal persons shall conduct “**Internal Supportive Supervision**”. Components of Internal Supportive Supervision are followings.

- (1) **Interview** to the focal persons and members for 5S implementation in the pilot areas in order to know progress of 5S activities
- (2) **Field Observation** in the pilot areas in order to monitor and evaluate progress of 5S activities and provide technical advices
- (3) **Feedback session** to the staff of the pilot areas in order to share the results of the observation and the achievements and considering way forward

The achievements and results of the supervision need to be shared with all hospital staff through Feedback session and meetings of several levels in a hospital (e.g. Morning report, Departmental meetings), and by putting the achievements on notice boards.

Results of Internal/External Supportive Supervision are useful when HMT decides whether 5S has to be installed into all the areas of the health facility or not. If so, HMT selects persons who attend “5S Training of Trainers” designated by Zonal Health Office and supported by MOH.

## Implementation Phase (Step 6 – 9)

### Step 6: Formulate QIST and WIT

After 5S TOT, it is necessary to formulate “Quality Improvement Support Team (QIST)” and “Working Improvement Team (WIT)” shall be established officially. At the same time, roles and responsibilities of QIST and WIT need to be defined among HMT members, QIST members and WIT members, and also shared with all hospital workers.

#### QIST

QIST is a team taking lead to implement quality improvement activities. Members of QIST should be the focal persons and the trained persons in 5S TOT and also selected persons from HMT and staff from the pilot areas. The team that includes top and middle management has to coordinate internal training, revising action plan and implementing 5S activities. QIST helps to fasten the decision-making and increase commitment for quality improvement in the hospital. Main roles of QIST are as follows.

- To train hospital staff on 5S-KAIZEN-TQM Approaches
- To implement 5S-KAIZEN activities for common problems of a hospital
- To conduct periodical supportive supervisions
- To monitor progress of 5S-KAIZEN activities and provide technical advices to WITs
- To record all quality improvement activities conducted in a hospital
- To review hospital action plan
- To provide necessary inputs for 5S-KAIZEN-TQM activities
- To report progress of 5S-KAIZEN activities to MT
- To conduct QIST meeting periodically

#### Roles and responsibility of QIST

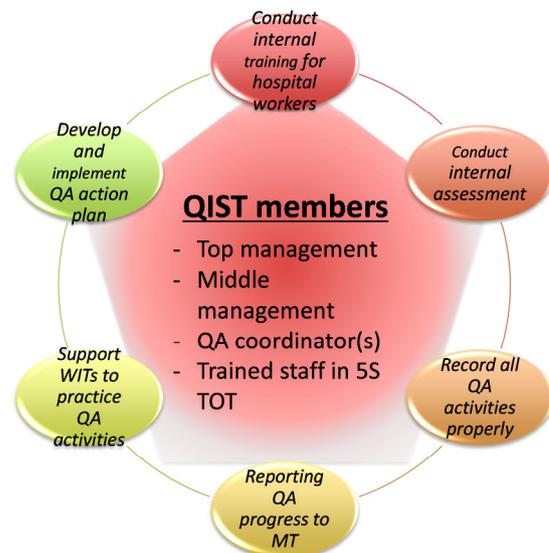


Diagram 2-5: Roles and responsibility of QIST

## WIT

WIT is an essential employees-based small group for 5S activities. Its aim is to provide staff with opportunities for meaningful involvement and contribution in solving problems and challenges. WIT members shall meet regularly to identify, analyse, solve problems and improve their outputs of their work unit. WIT also implements improvement measures or recommend to management.

Roles and responsibilities of WIT are as follows.

- To train department/section staff on 5S-KAIZEN-TQM Approaches
- To practice 5S-KAIZEN activities at respective department/section
- To conduct periodical monitoring of 5S activities
- To record quality improvement activities practiced by WIT
- To review departmental/sectional action plan
- To report progress to QIST periodically
- To conduct WIT meetings periodically

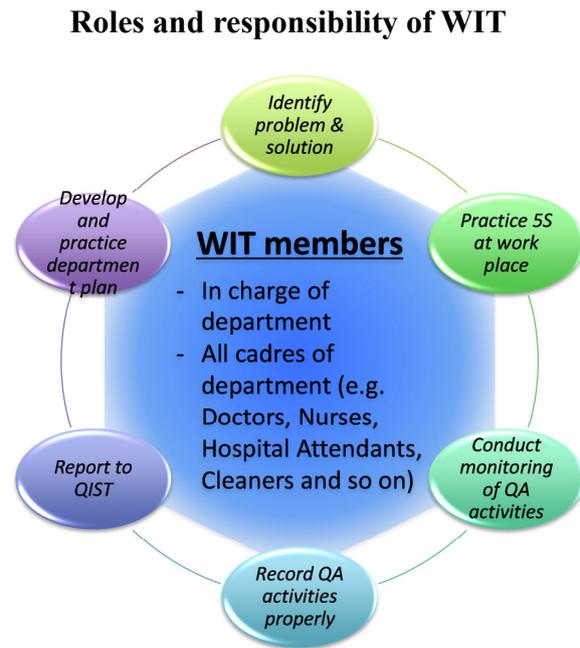


Diagram 2-6: Roles and responsibility of WIT

The norms of WIT generally consist of:

- Close relationships developed and the team demonstrating cohesiveness
- Team group rules and boundaries agreed
- Cooperation
- A team is identified and the member enjoy camaraderie (fellowship/peer consciousness) with one another and
- Commitment to work out differences and giving constructive feedback

“WIT meeting” should be conducted regularly as schedule. Files for WIT meetings must be prepared and kept in a department/section respectively. Meeting minutes including the attendance record of the participants should also be kept properly in the file. Effective meeting take into account: meeting agenda prepared in time and distributed to the members, time management and maintain focused discussion, encourage and support participation of all members.

The roles of management team, QIST and WIT are followings.

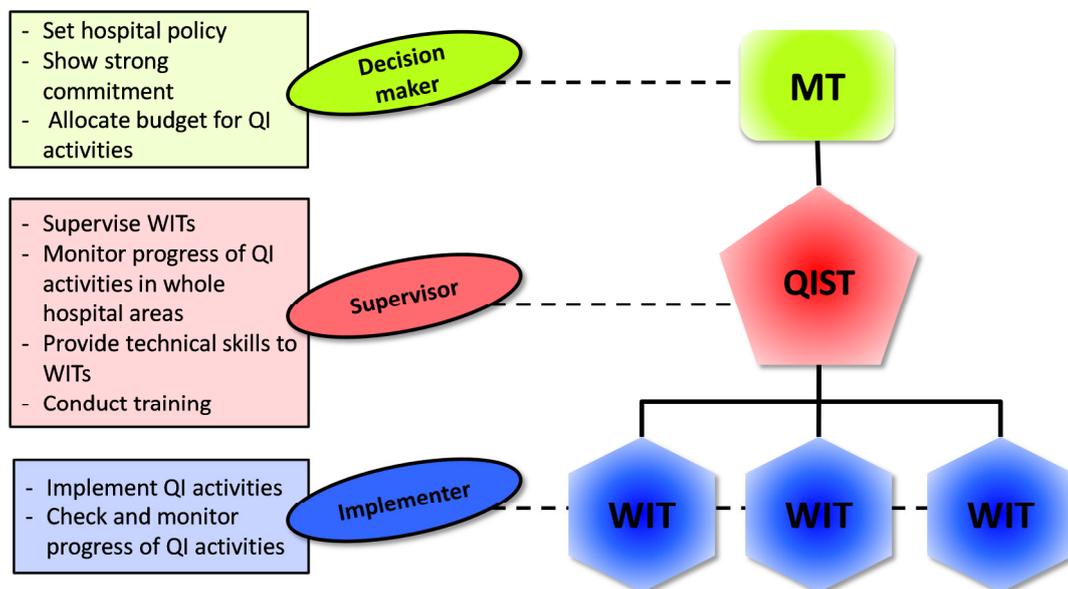


Diagram 2-7 Organization structure for 5S implementation

### (1) Proper record keeping

Records of all activities and information concerning with 5S-KAIZEN activities should be kept properly in a particular file. Hence, all members of QIST/WIT and other hospital staff can refer to it. Also the records will be useful for external/internal supportive supervision by QIST/Zonal Health Office (MOH) and self-monitoring by WIT. Activities and information that should be kept are followings.

- 1) File of QIST activities
  - Hospital action plan
  - List of QIST members
  - Meeting minutes including the attendance record of the participants
  - Training minutes including the attendance record of the participants
  - Results of internal supportive supervision by QIST
  - Results of external supportive supervision by Zonal Health Office (MOH)
  - Good practices, Photo evidences of 5S activities
- 2) File of WIT activities
  - Departmental action plan
  - List of WIT members
  - Meeting minutes including the attendance record of the participants
  - Results of internal supportive supervision conducted by QIST
  - Results of external supportive supervision by Zonal Health Office (MOH)
  - Good practices, Photo evidences of 5S activities

## **(2) Team and Teamwork**

Benefits of working as a team comprise sharing of the knowledge, skills and experiences of different members which builds confidence among the members and collective decision making, sharing responsibility, tackle issues in synergistic manner and there is also mutual support and cooperation among team members thus in the end accomplishes quality improvement.

Teamwork is vital in achieving continuous quality improvement and is at the heart to improve quality. Usually the teams take a problem as an opportunity and the team members' support each other. One big tree does not make a forest!

## **Step 7: Internal training**

One of key factors for successful 5S implementation is “everyone’s participation”. Therefore, training of all staff is essential.

QIST shall conduct “Internal 5S Basic Training” for hospital staff under supporting by HMT.

### **Outline of 5S Basic Training**

#### **(1) Objectives**

- To make participants understand 5S principles and necessity/importance of improving working environment
- To make participants understand how to practice Sort, Set and Shine activities

#### **(2) Participants: Hospital workers**

#### **(3) Facilitators: QIST and MT members**

#### **(4) Methodology of the training**

In case of internal training, it is not necessary that all hospital staff participates for one training course and training is not conducted in a day. Based on the capacity of QIST and facility, the contents of internal training shall be arranged freely. For example, training conducts every afternoon from 3:00 PM to 4:30 PM for 4 days. For the internal training, QIST is able to ask to support Zonal Health Office or MOH. Even though QIST asks support for the objectives and schedule of the training shall be planned by the hospital. Training materials at 5S Basic Training and 5S TOT can be useful for the training.

Table 2-4: Example timetable of internal 5S Basic Training

Time	Topics	Method
20 min	Pre-course assessment	Paper assessment
30 min	Objectives of 5S-KAIZEN-TQM Approach at health facilities in Malawi	Lecture
60 min	5S Principle	Lecture
60 min	How to practice Sort, Set and Shine activities	Lecture, Practical session
60 min	5S tools	Lecture, Practical session
30 min	Building and maintaining positive attitude	Lecture
30 min	Role of QIST and WIT	Lecture
90 min	Field observation	Practical session
60 min	Supportive supervision (especially "Self-monitoring")	Lecture, Practical session
90 min	Developing an action plan	Lecture, Practical session
20 min	Post-course assessment	Paper assessment
15 min	Statement by HMT (Way forward)	Plenary

(5) Preparation process for 5S Basic Training

The following preparation is necessary for smooth implementation of 5S Basic Training.

- 1) Fix schedule and venue
- 2) Inform fixed schedule and venue to expected members for 5S implementation
- 3) Assign roles with HMT members and the focal persons as follow
  - Moderator
  - Lecturers
  - Facilitators
  - Person who can prepare the training
- 4) Prepare needed items/materials
  - Timetable of the meeting
  - Pre / Post test
  - Attendant list
  - Presentations
  - Lunch or refreshment if necessary
  - Digital camera, Laptop, Extension code and Projector if necessary
  - Stationery (Pens, Flip chart and Notepads) if necessary

**Step 8-1: Formulate action plan of WIT activities**

After the internal training, the members of WIT shall have enough capacity to implement 5S at a respective department. In the next step, the members have to formulate their action plan for smooth and effective implementation at workplace. QIST shall support WITs to

formulate action plan with necessary stakeholders. Moreover, the top management team has to be committed that WITs are able to tackle 5S activities and to promote that all stakeholders shall be involved in the activities.

Finalized the action plan needs to submit to QIST. QIST shall confirm achievements of the plan through periodical internal supportive supervision.

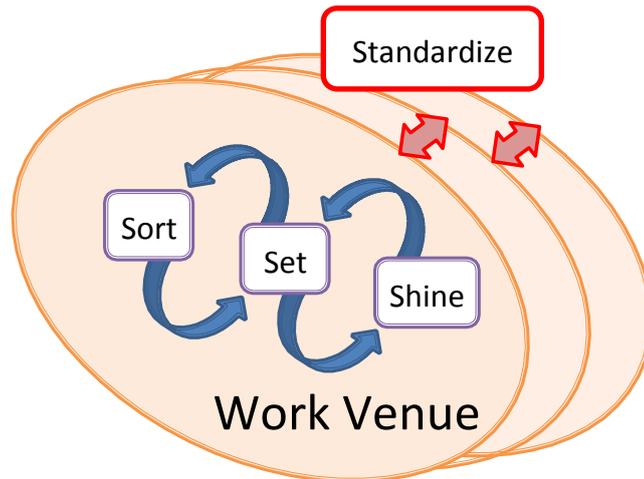
Afterwards, QIST also amends the action plan for the facility based on the action plan of WITs. The progress of the action plan shall be monitored and revised periodically based on the progress report.

## **Step 8-2: Practice Standardize activity**

Activities for Sort, Set and Shine were already mentioned above. Each WIT shall follow the procedures. If QIST does not have enough capacity to install 5S in all departments or some WIT does not have enough capacity, QIST shall install 5s to a few areas only at one time. In pilot areas, WITs have to practice Standardize activity for the hospital.

**Standardize (Samalitsani, Seiketsu)** is activities which establish a regular and continuous practice of maintaining tidiness, orderliness, and cleanliness (first 3-Ss). All processes and procedures of the organization are standardized to reduce the cycle time, to reduce waste, to improve safety and to improve outcome. Thus, the following kinds of activities are implemented in this phase:

- Development of Standard Operational Procedures (SOPs),
- Display marking of safety signs
- Garbage segregation system (infectious/non-infectious, recyclable), following the Infection Prevention and Control / Healthcare Waste Management policy
- Colour coding for linen system
- Zoning for storing/parking equipment



“Checklists” should be developed for each activity/service area and utilize it for the standardization.

Equalization is important to reduce variance of quality. The variability is the cause of creating needless work in the workflow. Therefore, consider equalizing the followings:

Individual capacity:

- Information sharing and development of Standard Operational Procedures

Quality, Productivity and Safety:

- Use of Standard Operational Manual and Standard Operational Procedures

Staff's mind-set towards to KAIZEN activities:

- Fair performance evaluation and awards to good practice, equal opportunity of training to all staff

Information:

- Sharing among staff of policy and strategy for quality improvement and current situation of KAIZEN activities

## **Step 9: Internal supportive supervision**

Although supportive supervision will be conducted periodically by Zonal Health Office or MOH, QIST has to establish internal monitoring mechanism and conduct periodical monitoring. Details of monitoring procedures are mentioned in Part IV.

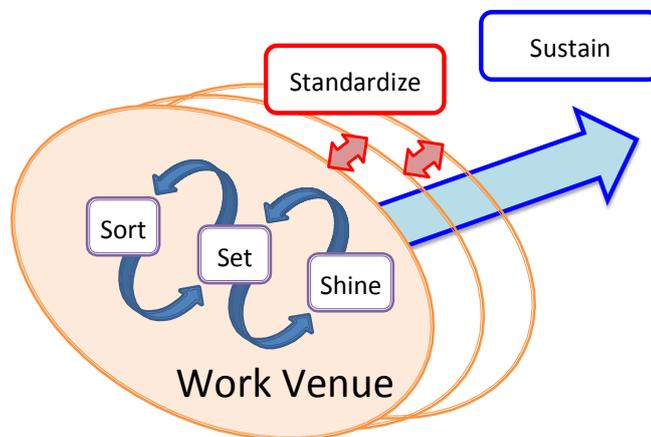
## Maintenance Phase (Step 10)

### Step 10: Brush up practice Sustain activity

It aims to maintain people to follow well work habits and keep workplace rules and regulations. To make 5S activities as a part of your organization culture, it takes long time and need to be repeated. There is no time allocation of Maintenance phase as it is on-going process.

Through brushing up 5S activities, WIT shall be highly motivate team to propel 5S and the concept of 5S shall be understood not only by the staff but also by all visitors in the hospitals and community. For sustaining 5S activities, all participants enjoy 5S and understand that how effective 5S is for us.

**Sustain (Sungitsani, Shitsuke)** is self-discipline to maintain consistent practice of 5S. Training programme is carried out for employees. Competitions are organized and good practices are rewarded. Authoritarian rule is not practiced and employees are motivated to internalize 5S. Trainings should include organization wide meetings where management and employees announce their results. This acts as an incentive to motivate staff and to practice benchmarking.



Care should not be taken to get into a routine with 5S activities. Once again, since 5S tasks appear minor, staff may not concentrate on 5S after the initial implementation. Inspections through QIST and continuous evaluations of all work units are essential to keep track of 5S Programme. The following activities are expected to be conducted in this phase:

- Periodical training of staff
- Refresh training for staff
- Periodical internal supportive supervision by QIST

- Periodical self-monitoring by WIT
- Quality competitions and awarding for good practice
- (Original) 5S poster development and display
- Establishment of 5S corner within department/section and frequency updating
- Display of 5S progress chart, table, and graphs

To establish autonomous organizations toward continuous quality improvement, all professions and management team shall enjoy implementing 5S activities. Reward and award system can motivate staff under healthy competition. Competition of 5S song or 5S dance in a facility also encourages the staff to implement 5S activities in pleasant way.

The staff will consider how to improve the work place or process naturally. It means that the staff is able to manage his / her work.

# Part III

## Practical tools and methods for 5S activities

There are several 5S tools that will help you to practice 5S activities. Those tools are usually used for practice of S1 (Sort), S2 (Set) and S4 (Standardize). 5S tools can be combined for sorting, setting and standardizing practices. All tools require an agreed set of rules. The rules have to be known by all staff in the health facility and everyone must follow the rules.

### 2. 5S tools

#### Red tag

This tool is used for “Sort” activities. When some items are unnecessary, a Red Tag needs to be put on them. Then, these items need to be shifted to their appropriate place such as a sub-store for unnecessary items and other departments. However, some unnecessary items such as trashes shall not be put on a Red Tag, and you can immediately discard according to the National IPC Guideline and the Health Care Waste Management.

Also, a Red Tag needs to be put on some items which are difficult to decide whether those are necessary or unnecessary during Sort practice, and those items shall be observed for a month. If you did not move or use it for a month, it means these items are “may be necessary” or “unnecessary” for the current workflow. You need to decide on its category by ticking on the options on the tag 1) Necessary, 2) Uncertain or 3) Unnecessary, as illustrated right.

These tags are needed to be managed by the person in charge of department/section or WIT members.

5S RED TAG	TAG No.
Put RED TAG on an unnecessary item or an item which is difficult to decide whether it is necessary or unnecessary.	
Department:	
1. Tagged date:	By
<input type="checkbox"/> Uncertain <input type="checkbox"/> Need to repair <input type="checkbox"/> Unnecessary	
Where to keep:	
2. Date of Re-check:	BY
<input type="checkbox"/> Necessary <input type="checkbox"/> May necessary <input type="checkbox"/> Unnecessary	
Where to keep:	
When you use this item, please remove and bring this TAG to WIT!!	



## Alignment

This is used for “Set” activities to organize files, equipment, materials and other things in order to improve orderliness and beautification. The two pictures below give a case example of alignment in one of the hospitals in Malawi implementing 5S.



## Numbering / Alphabetical Cording

This is used for “Set” activity. This is to organize files and other items by numbers / alphabets (see the two pictures below from the hospitals in Malawi implementing 5S activities). It helps users to find necessary things or information quickly and easily. It is very useful for practice of “*Can See, Can Take Out and Can Return*” principle. It requires an agreed set of rules, or a central coordinator to maintain system.



## Safety signs

This tool is used for “Set” and “Standardize” activities. This is used to warn visitors and workers to pay attentions on hazardous items. Majority of hazardous items that are commonly used in health facilities have international/national standardized safety signs. Therefore, it is recommended to use common safety signs. If you may not find or have access to common safety signs, you may develop your own safety design. The pictures below show examples of common safety signs.



## Color coding

This tool is used for “Standardize” activities. It is useful to make facility users to understand the meaning of objects by using different colours. It is often used for collection of garbage, medical waste, and linen by type. It can also be used for categorization of areas/zones, identification of gas cylinders (full or empty) and so on.

You should refer to the National IPC Guideline, and other policy and guidelines for the accepted national colour coding for different types of wastes.





## Symbols

This tool is used for “Set” and “Standardize” activities. This is used for making everyone to understand the meaning of something by marks/symbols without or minimum explanation.



## X-Y Axis

This tool is used for “Set” activities. This is used for improvement of orderliness and beautification; this is especially used for display and poster display. It is important to remove old/outdated posters from notice boards regularly to keep it tidy. Pictures below give examples of well-arranged notice boards following X-Y Axis (and Labelling).



## Zoning

This tool is used for “Set” and “Standardize” activities. This is used to identify or recognize the proper location or storage of items. This helps people to understand “Where it is supposed to be”.



### 3. Effective way for sharing information on 5S activities: “5S Corner”

This is effective for “Sustain” activities especially to give and share information on 5S activities. Utilize existing notice board or establish new notice board apart from existing notice board. There are three type of 5S corner as followings.

**Type 1:** 5S corner for all hospital staff at administration block

**Type 2:** 5S corner for visitors (patients, care taker etc.) at OPD waiting room, corridor and near entrance

**Type 3:** 5S corner for all departments/wards staff at each department/ward

On the 5S corner, the following information is displayed:

- 5S posters
- Pictorial progress report, Good Practice Sheet
- Implementation progress chart/table
- Monitoring and Evaluation information (target areas, schedule and method)
- Training information (target personal, schedule, venue and topics)
- QIST/ and WIT Meeting information (schedule, venue and agenda)
- Mission statement on quality improvement
- Information on colour coding for waste management and type of waste



**Actual example of 5S corner**

The table below clarifies what kind of information should be displayed on which type of 5S corner.

**Recommended information put on 5S corner**

Information on 5S corner	Type of 5S corner		
	Type 1	Type 2	Type 3
5S posters	Y	Y	Y
Pictorial progress report	Y	Y	Y
Implementation progress chart	Y	NA	Y
Monitoring and Evaluation information	Y	NA	Y
Training information	Y	NA	Y
QIST/ and WIT meeting information	Y	NA	Y
Mission statement on quality improvement	Y	Y	Y
Information on waste bin colour coding and type of waste	Y	Y	Y

Y: necessary to display NA: Not applicable

#### **4. 5S tools for enhancement of visual control**

##### **What is Visual control?**

Visual control is means, devices, or mechanisms that were designed to manage or control our operations (process). Implementing visual control in the hospitals would help health workers in exposing abnormalities, problems, deviations, waste, unevenness, and unreasonable to facility users, thus corrective actions can be taken immediately to:

- Correct the problems
- Reduce operational costs
- Reduce possible waste
- Shorten services lead-time and thus keep the delivery of services on time
- Reduce inventory

- Ensure a safe and comfortable working environment
- Display the operating or progress status in the easy to see format
- Provide instruction
- Convey information
- Provide immediate feedback to people

**Example of visual control for waste management**



**Practice of visual control**

The main purpose of visual control is to organize the working area such that facility users can tell whether things are going well or are amiss without the help of expert. Visual control can be implemented using either the actual or analogue items.

Actual items:

- Designate a location (position) for each item
- Indicate quantity (or maximum level of inventory)
- Distinguish item from each other
- Specify form (document)

Analogue items:

- Colour
- Shapes (contour)
- Symbols
- Characters (verbal)
- Numbers
- Graphs/tables

**5S tools for visual control**

The table on the next page shows the example of usage of 5S tools that will help to enhance visual control within a health facility. It is reminded that *all tools require an agreed set of rules.*

Often colour coding and symbols have international rules or regulation that are well

known by people. In that case, it is better to use rules that are adopted by majority of people. All the rules must be informed to all staff in the health facility and everyone must follow the rules.

Display the rules on 5S corner or notice board is helpful for everyone to remind the meaning of colours or symbols.

#### Example of usage of 5-S tools for visual control

Analogue items	5S tools	Example of usage	Actual items
Colours	Colour coding	Waste bin for infectious and general waste	Distinguish item from each other
		Disinfectant containers (IPC guideline)	
		Linen system	
		Oxygen tank storage (full-blue, empty-red)	
Shapes	Zoning	Marking of stretcher/wheel chair parking	Designate a location
		Car parking	
		Position of waste bin	
Symbols	Symbols	Indication of stretcher/wheel chair, medical machines and parking lot	Distinguish item from each other
		Toilet	
		No smoking area	
		Dangerous areas (high voltage, incinerator)	
Characters Numbers	Alphabet coding Labelling Signboard Numbering	File keeping (Open registry, Medical record, Accountant files and other files)	Designate a location
		Store/stock management for medical supplies	
		Direction to facilities in hospital	
		Identification of facilities in hospital	
Graphs, Tables	Checklist X-Y Axis	Progress report, evaluation result	Specify form (Document) and indicate quantity
		Notice, poster display on notice boards/5-S corner	

# Part IV

## Supportive supervision of 5S activities

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### 1. Monitoring and Evaluation under Supportive Supervision

#### (1) Monitoring and Evaluation

Monitoring and Evaluation (M&E) is an integral component of quality improvement in health services. Health managers, in-charges of hospitals/departments, programme managers/staff, and other health workers; they need to know about M&E. In this case they need not to be experts of it but just the basics of M&E are adequate; including data collection, processing, analysis, and use.

The knowledge about M&E helps health workers in the health sector to effectively monitor and evaluate their health facilities or programme; and hence strengthens the performance. This chapter aims at highlighting M&E essentials for the implementation of 5S-KAIZEN-TQM based on Quality Assurance Policy approaches in the health sector in Malawi.

- 1) “Monitoring” refers to an on-going activities to track the progress in implementation of activities in a health facility or programme, against planned tasks. Data are systematically collected, analysed and used to provide information to policy makers, health managers, directors, in-charges, QIST members and others (including stakeholders), for use in reviewing the achievement and adjustment of the activities if necessary.
- 2) “Evaluation” represents a set of procedures and analytical tools to examine how interventions or activities are implemented; their level of performance; and whether they have the impact they were intended to have. Evaluation helps to assess the effectiveness, relevance and impact of an intervention/activities towards achievement of the set goals.

#### (2) Supportive Supervision

M&E is crucial in QAPs as a part of Supportive Supervision. It is particularly so due to the fact that it:

- Assists health managers, directors, in-charges, QIST, staff, and others in the health

sector in performing the day-to-day management of health facilities and programme.

- Provides information for strategic planning, design and implementation of health interventions and programme.
- Assists in making informed decisions on the prudent use of meagre resources available.
- Helps to improve performance by identifying those aspects that are working according to plan, and those aspects, which need a mid-course correction.
- Tracks changes in services provided and in the desired outcomes.
- Assists to better the human condition in terms of safe working environment, and improved health status.
- Puts up a system for transparent accountability.

Although the supportive supervision is conducted in the other QAPs, the procedure of each QAP is different. In future, the supportive supervision will be integrated as implementing at same time to reduce the burden of the facilities.

## **2. Internal Supportive Supervision**

### **(1) Supportive Supervision by QIST**

QIST has responsibility of conducting monitoring, evaluation and support of 5S activities within the hospital. QIST should monitor and evaluate their own performance and visit the sections or departments that are practicing 5S-KAIZEN-TQM activities periodically. These kinds of visit and exchange opinions with WIT are important to find problems and have ideas of solutions. It is also useful to provide technical support, advice, mentoring or coaching if necessary.

Points of supportive supervision are as follows:

- Leadership and ownership of WIT
- Progress of action plan
- Performance of Sort, Set, Shine, Standardize and Sustain activities
- Performance of WITs members

“Monitoring Check Sheet” is useful to measure above points. See “Part V”.

### **(2) Methodology**

#### **1) Methods**

For smooth implementation of supportive supervision, following methods / means shall be utilized properly.

- Field observation at the pilot areas
- The monitoring check sheet for scoring

- An interview to WIT members in each pilot area  
Exchange information and opinion with WIT members is necessary to know their attitude, identify challenges facing and come up with effective solutions.
- Feedback presentation  
Scores of the monitoring sheet, general findings (strengths & challenges) and way forward should be shared with all hospital staff.

## 2) Frequency

It is recommendable to conduct Internal Supportive Supervision at least twice a year. Exchange meeting for monitoring result by WITs shall be also conducted twice a year. QIST is able to monitor the progress of action plans of WITs quarterly when the Internal Supportive Supervision and exchange meeting for monitoring result by WITs are rotated adequately.

## 3) Supervisor

HMT members and QIST members will assign supervisors for the supportive supervision.

### **(3) Implementing steps for the supervision**

#### 1) Formulating supervisory team

HMT and QIST members shall formulate a supervisory team. Depending upon number of 5S implementing areas and capacity of HMT and QIST, necessary number of team will be different.

#### 2) Each team should review the previous results and pictures of external/internal supervision before visiting the pilot area if available.

#### 3) All supervisors shall confirm how to use the monitoring sheet and how to progress the supervision.

#### 4) Field observation

The observation shall be started from the interview at pilot areas.

- To have an interview with WIT members in order to collect/know information on current WIT activities such as regular WIT meetings, self-monitoring, actual 5S activities and current challenges and solutions
- To score on the monitoring sheet
- To provide technical advices
- To photograph

5) Summarization

After the observation, collected information shall be analyzed as follow.

- “Rader Chart” shall be developed based on scores of the monitoring sheet and field observation.
- “Feedback report/presentation” shall be developed. Its components are (1) Strength, (2) Challenges, (3) Comparison Rader Chart”, (4) Comparison pictures and (5) Recommendations.

6) Feedback

Feedback of the supervision must be given to WIT and shall be shared with HMT members, other WIT and other hospital workers. It is better to have “Feedback session (meeting)” with HMT, other QIST members, WIT members and other hospital staff. At the session, QIST shall have a presentation on the results of the supervision. The table below shows an example of timetable of “Feedback session (meeting)”. Also meeting minute needs to be recorded by QIST members and kept in the QIST file properly.

Table 4-1: Time allocation and activities of feedback session

Time	Activities
30 min	Feedback presentation
30 min	Discussion on way forward

7) Report

Reports of the internal supportive supervision shall be communicated to Zonal Health Office within two weeks after conducting the supervision.

**(4) Monitoring by WIT**

WIT has responsibility for conducting monitoring of day-to-day 5S practices and KAIZEN activities that are suggested and executed within their work place, based on the developed action plan. Process of 5S-KAIZEN activities must be documented and the results have to be shared within the department/sections.

WIT will also communicate the results to QIST. WIT should develop “Original Checklist” to suit own work environment. It is recommendable that the exchange meeting will be conducted twice a year in a competitive manner among WITs.

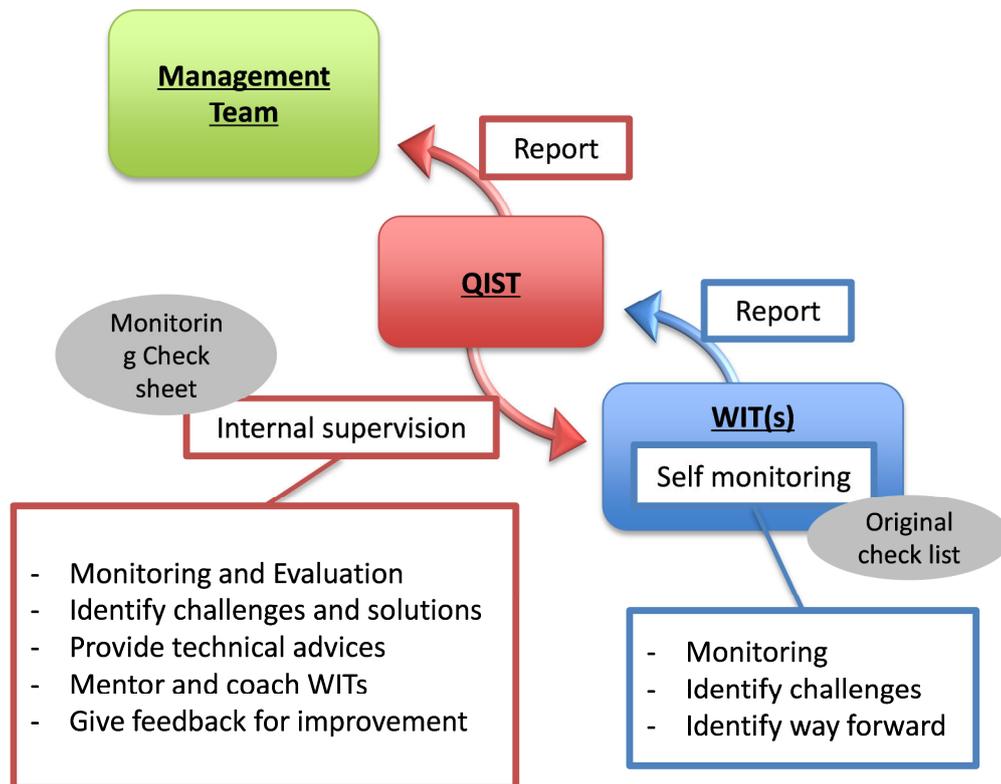


Diagram 4-1: Structure for Internal Supportive Supervision

### 3. External Supportive Supervision

#### (1) Structure

External supportive supervision under QAPs is implemented by National level to Central hospitals, by Zonal level to District Hospitals and by District level (DHMT) to Health Centres. Information sharing is also an essential component of external supportive supervision.

- 1) National level (MOH) has responsible to conduct external supportive supervision to all central hospitals. The national level will also support zonal level to promote monitoring and supervising.
- 2) Zonal Health Office has to be given an important role to proceeding 5S-KAIZEN activities for health facilities in the zone as well as QAPs structure.
- 3) DHMT has responsible for coaching and supervising to the district hospital and health centres in the district.

Report of each level of the supervision shall be sent from lower level to upper level.

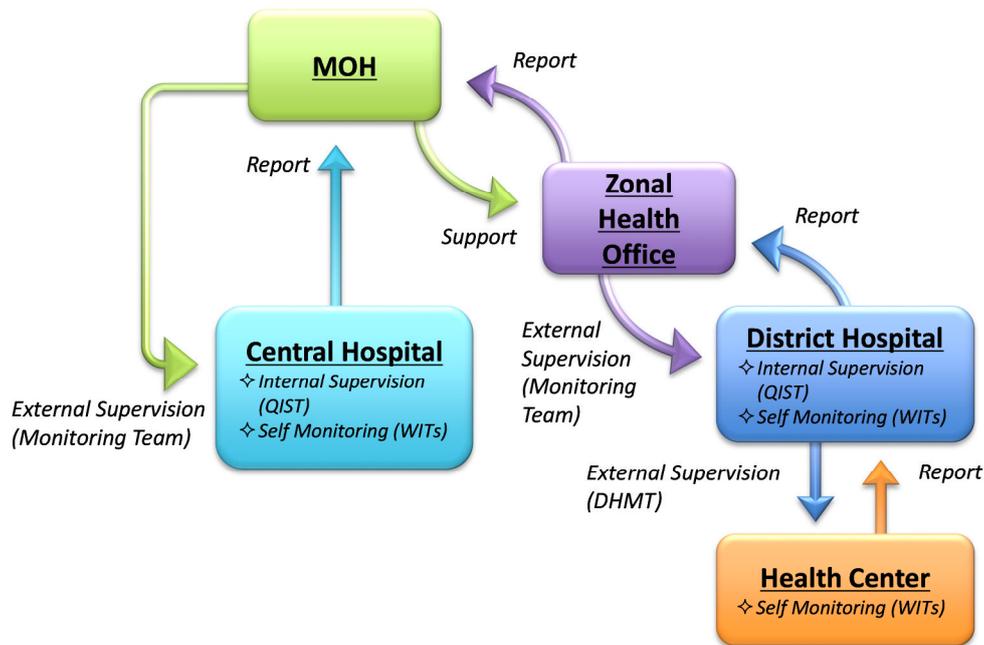


Diagram 4-2: External Supportive Supervision Structure

## (2) Procedure

For the monitoring of DHMT and District Hospital, Zonal Health Office provides “Monitoring Team”. The member of the team will be selected from Zonal Health Office and QIST member of another DHMT in the same zone. Zonal Health Office can also ask MOH to send the monitoring member out of the zone. The monitoring team monitors the progress of the activities based on monitoring check sheet and also review the action plan of the District Hospital. Photos shall be taken in the monitoring procedures. The result of the monitoring has to be feedback to the staff of the hospital and report of the monitoring shall be archived in Zonal Health Office, DHMT and MOH.

Though procedure of the monitoring to health centres is similar to District Hospital, the main actor for the monitoring is DHMT.

The Supportive Supervision shall be conducted twice a year. Additionally, reporting system for 5S-KAIZEN-TQM shall be established and it will be merged into the integrated monitoring system under QAPs in future.

# Annex 1

## Situation Analysis Check sheet

Page: \_\_\_/\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Department 1 (D1): \_\_\_\_\_ Department 2 (D2): \_\_\_\_\_

Department 3 (D3): \_\_\_\_\_ Department 4 (D4): \_\_\_\_\_

Department 5 (D5): \_\_\_\_\_

○ : same as check point

△ : partially same as check point

× : not same as check point

Target	No.	Check Points	D1	D2	D3	D4	D5
<b>Floor</b>	F1	Cart or other materials do Not keep on the pathway.					
	F2	Carton Boxes are Not put on the floor.					
	F3	Broken items are Not kept on the floor.					
	F4	No utilized items are Not kept on the floor					
	F5	Storage area is fixed for each item.					
	F6	The floor is free from clatters.					
	F7	The Floor is Not dirty.					
	F8	The floor is Not bad-smelling.					
	F9	The floor is Not lumpy.					
	F10	The dust box is utilized properly.					
<b>Wall</b>	W1	No utilized poster or paper is Not put up on the wall					
	W2	Name board is provided properly.					
	W3	Sign board is provided properly.					
	W4	Alignment of poster or paper on the wall is fixed properly.					
	W5	Switches are Not Damaged.					
	W6	Unnecessary wires or pegs are Not on the wall					
	W7	Switches are numbered serially.					
	W8	The wall is Not dirty.					
	W9	The wall is Not dusty					
	W10	The wall is Not lumpy.					

Target	No.	Check Points	D1	D2	D3	D4	D5
<b>Desk Shelves Lockers Cupboards</b>	D1	Non-utilized items are Not kept on the desk or shelves.					
	D2	Broken items are Not kept on the desk or shelves.					

	D3	Tag or label is put on the drawers and shelves.					
	D4	Alignment of desk and shelves is set properly.					
	D5	The desk is not buried by a lot of papers.					
	D6	The shelves are numbered serially.					
	D7	The shelves are sectionalized properly.					
	D8	The desk or shelves is Not damaged.					
	D9	The desk or shelves is Not dirty.					
	D10	The desk or shelves is Not dusty					
<b>Ceiling</b>	C1	The ceiling is Not Broken					
	C2	Fittings and fans are fixed properly.					
	C3	There is No spider web.					
	C4	There is Not a leak in the ceiling.					
	C5	The ceiling is not dusty					
<b>Others</b>	O1	Water supply is working properly.					
	O2	Water drainage is working properly.					
	O3	The electricity is working properly.					
	O4	Fire extinguishing equipment is working properly.					
	O5	There is enough space for work.					
	O6	There is bright enough for work.					
	O7	There is comfortable temperature for work.					
	O8	The Uniform is provided to all staff.					
	O9	SOP is flowed properly.					
	O10	Necessary information is shared in the department.					

## Annex 2

# Form of Action Plan

Name of Health Facility: .....

Developed by:..... Date of issue: .....

### 1. Issues and challenges of a health facility

### 2. Institutional analysis (Overall situation of the facility)

Areas/Sections/Departments	Problems	Expectation of service users

### 3. Problem statement

### 4. Goal

### 5. Objectives

Outputs	Indicators	Means of Verification

### 6. Target/Pilot area(s) for implementation of 5S

7. Action plan

Phase of implem entation	Activity for improvement	Target	Resources input	Time Frame (Quarter)*								Responsibility	Means of Verification												
				20...				20...																	
				1	2	3	4	1	2	3	4														
<b>Preparatory Phase</b> Activities that are implemented in first three months																									
<b>Introduction Phase</b> Activities that are implemented in next six months																									



## Annex 3

# Monitoring and Evaluation Check Sheet

### SHEET TO MONITOR AND EVALUATE THE PROGRESS OF 5-S ACTIVITIES

Date: //  
(D/M/Y)

Ver. 2012-December

HOSPITAL:		DEPARTMENT:					AWARD MARKS Enter the result in this column
DESCRIPTION		Very poorly	Poorly	Fairly	Well	Very well	
<b>1</b>	<b>LEADERSHIP</b> Role & Commitment of Management, Sustainability of 5S activity, Training Programme for Middle Mgmt., Setting up 5S Committees, 5S Campaigns.						
1.1	5S commitment, knowledge, Awareness of Executives & Supervisors	1	2	3	4	5	
1.2	5S progress meeting, evaluation, training conducted by Patrol team and QIST Minutes	1	2	3	4	5	
1.3	5S guideline is available and 5S manual developed with many relevant details	1	2	3	4	5	
1.4	Evidence of training conducted for Managers and health workers	1	2	3	4	5	
<b>TOTAL</b>		<b>Total out of 20</b>					<b>0</b>
		<b>Acquired marks/20 x 100 =</b>					<b>0</b>

<b>SEIRI – (SORTING) “Sankhulani”</b>						
<b>2</b>	Clutter-free Environment in Premises, Offices, Workplaces, etc. Evidence of removal of unwanted items should be evident all around.					
2.1	Unwanted items removed from Premises, Offices and Workplaces, including drawers, cabinets and shelves	1	2	3	4	5
2.2	Walls free of old posters, calendars and pictures	1	2	3	4	5
2.3	Notice Boards – Current Notices with removal instructions	1	2	3	4	5
2.4	Color-coding for waste disposal maintained and standards followed	1	2	3	4	5
<b>TOTAL</b>		<b>Total out of 20</b>				
						<b>Acquired marks/20 x 100 =</b>
						<b>0</b>
						<b>0</b>

<b>SEITON – (SETTING/ORGANISATION) “Sanjani”</b>						
<b>3</b>	Ability to find whatever is required with minimal delay, evidence of eliminating time-wasting throughout the Institute/Organization.					
3.1	Photographic evidence of Pre- and Post- 5S Implementation	1	2	3	4	5
3.2	Visual Control methods adopted to prevent items being mixed up (files, equipment, tools etc.)	1	2	3	4	5
3.3	Directional Boards from hospital entrance to all facilities (offices, wards, laboratory etc.) and corridors are clearly marked	1	2	3	4	5
3.4	All machines/Rooms/Toilets/Switches/fans regulators etc. have identification labels	1	2	3	4	5
3.5	All items are arranged according to the 'Can See', 'Can Take Out' & 'Can Return' principle	1	2	3	4	5
3.6	Alignment of X- and Y-axis is evident everywhere	1	2	3	4	5
3.7	Maintenance methods of SETTING established and maintained	1	2	3	4	5
<b>TOTAL</b>		<b>Total out of 35</b>				
						<b>Acquired marks/35 x 100 =</b>
						<b>0</b>
						<b>0</b>

<b>SEISO – (SHINING/CLEANLINESS) “Salaitisani”</b>						
<b>4</b>	Cleanliness all round the Institution should be maintained according to the 5S Concepts.					
4.1	Floors, Walls, Windows, Toilets and Changing Rooms clean and in working order	1	2	3	4	5
4.2	Daily self arrangement (3/5 min.) is practiced	1	2	3	4	5
4.3	Cleaning responsibility Maps and Schedules displayed	1	2	3	4	5
4.4	A waste bin strategy is implemented	1	2	3	4	5
4.5	Use of adequate cleaning tools is evident	1	2	3	4	5
4.6	Storage of cleaning tools – Brooms/Mops/Other equipment	1	2	3	4	5
4.7	Machines/Equipment/Tools/Furniture with a high level of Cleanliness & maintenance schedules displayed	1	2	3	4	5
<b>TOTAL</b>		<b>Total out of 35</b>				
		<b>Acquired marks/35 x 100 =</b>				
		<b>0</b>				
		<b>0</b>				

<b>SEIKETSU – (STANDARDIZATION) “Samaitisani”</b>						
<b>5</b>	A high level of Standardization in all SEIRI, SEITON and SEISO activities and evidence of such standards being implemented all around.					
5.1	5S procedures adopted & standardized via Checklists, Labels in Corridors/Aisles & Gangways	1	2	3	4	5
5.2	Orderliness in the use of Corridors/Aisles/Gangways by Pedestrians	1	2	3	4	5
5.3	Innovative Visual Control methods implemented	1	2	3	4	5
5.4	Standardization of Maintenance/Storage of Files/Records/Orderliness in Keeping Furniture/Equipment in Offices/Workplaces, etc.	1	2	3	4	5
5.5	Standardized checklists for common Administrative Procedures in hospital and department	1	2	3	4	5
<b>TOTAL</b>		<b>Total out of 25</b>				
		<b>Acquired marks/25 x 100 =</b>				
		<b>0</b>				
		<b>0</b>				

<b>SHITSUKE – (SUSTAIN/SELF-DISCIPLINE) “Sungitsani”</b>							
<b>6</b>	Evidence of a disciplined approach to all 5S activities through proper Training & Development, which shows long-term sustainability .						
6.1	Evidence of a regular training program for Employees in all categories in this section	1	2	3	4	5	
6.2	Evidence of 5S group Activities & promotion of KAIZEN Schemes	1	2	3	4	5	
6.3	Evidence of carrying out Internal Audits by QIST	1	2	3	4	5	
6.4	Evidence of Self Discipline among visitors to the Institution	1	2	3	4	5	
6.5	Evidence of Self-Discipline in the overall Institution	1	2	3	4	5	
	<b>TOTAL</b>	<b>Total out of 25</b>					<b>0</b>
		<b>Acquired marks/25 x 100 =</b>					<b>0</b>
	<b>GRAND TOTAL for 5S activities</b>	<b>Full mark 200</b>					<b>0</b>

<b>7</b>	<b>Productivity/Services</b>					
	Measures how efficiently inputs to Output are used to produce goods & services with better management techniques and work methods.					
7.1	Evidence of methods & systems adopted to improve productivity/employee	1	2	3	4	5
7.2	Efficiency and effectiveness, the use of innovative methods to increase and sustain productivity	1	2	3	4	5
7.3	Evidence of the use of the 5S Process to increase Productivity	1	2	3	4	5
	<b>TOTAL</b>	<b>Total out of 15</b>				<b>0</b>
		<b>Acquired marks/15 x 100 =</b>				<b>0</b>

<b>8</b>	<b>Quality</b>					
	The goal is to satisfy customers by doing 100% right work, swiftly responding to requirements every time and thus gaining trust & confidence.					
8.1	Communication plans are evident for the Implementation of Quality Improvement	1	2	3	4	5
8.2	Evidence of fewer rejects, less wastage and less rework through the 5S Process	1	2	3	4	5
8.3	Evidence of Direction & Coordination to improve Quality by the 5S Activity	1	2	3	4	5
8.4	Sustainable Quality in Products or Services evident through the 5S Process	1	2	3	4	5
8.5	The Quality in the Process of the Manufacture/Service by the 5S implementation	1	2	3	4	5
	<b>TOTAL</b>	<b>Total out of 25</b>				<b>0</b>
		<b>Acquired marks/25 x 100 =</b>				<b>0</b>

<b>9</b>	<b>Cost</b>					
	The intrinsic cost of providing products/services to declared standards by a given specified process right first time and every time					
9.1	Evidence of a reduction in the cost of materials, Labor, Energy, Overheads and lowering of defects etc. by introducing the 5S concept	1	2	3	4	5
9.2	Tangible cost advantages through the use of 5S methods in waste control	1	2	3	4	5
9.3	Evidence of lowering Inventory Cost by using 5S Methods	1	2	3	4	5
9.4	Lowering the idle time of Workers/Machines by 5S Activity	1	2	3	4	5
	<b>TOTAL</b>	<b>Total out of 20</b>				<b>0</b>
		<b>Acquired marks/20 x 100 =</b>				<b>0</b>

<b>10</b>	<b>Safety</b>									
		The overall safety of Employees, Visitors and Property is evidently displayed by using the 5S Process								
10.1	Evidence of the effect of safety measures based on fewer accidents recorded in the year	1	2	3	4	5				
10.2	Methods adopted for Machinery & Equipment safety measures	1	2	3	4	5				
10.3	Methods adopted to protect Employees/Visitors from accidents	1	2	3	4	5				
10.4	Evidence of Safety Measures adopted to provide an excellent Product/Service	1	2	3	4	5				
10.5	Evidence of knowledge and skills among employees concerning safety	1	2	3	4	5				
	<b>TOTAL</b>	<b>Total out of 25</b>								<b>0</b>
		<b>Acquired marks/25 x 100 =</b>							<b>0</b>	

<b>11</b>	<b>Delivery</b>									
		Evidence of a reduction in the delivery time of the Product/Service via the implementation of the 5S Process								
11.1	Evidence of timely delivery of Products/Services	1	2	3	4	5				
11.2	Overall effect on Institution/Organization of the reduced delivery time	1	2	3	4	5				
11.3	Evidence of Employee participation to reduce the delivery time	1	2	3	4	5				
11.4	Evidence of Just in time in the hospital	1	2	3	4	5				
	<b>TOTAL</b>	<b>Total out of 20</b>								<b>0</b>
		<b>Acquired marks/20 x 100 =</b>							<b>0</b>	

<b>12</b>	<b>Morale</b>					
	Evidence within the overall Institution/Organization of improved Morale through the implementation of the 5S Process					
12.1	Level of morale displayed by Executives/Staff & Workers	1	2	3	4	5
12.2	Innovative methods adopted to improve employee morale	1	2	3	4	5
12.3	Evidence of projects carried out by employees to display high levels of Morale	1	2	3	4	5
12.4	Benefits extended by Management to boost the Morale of employees	1	2	3	4	5
12.5	Evidence of a 5S mindset, KAIZEN mindset or TQM culture	1	2	3	4	5
	<b>TOTAL</b>	<b>Total out of 25</b>				
		<b>Acquired marks/25 x 100 =</b>				
		<b>0</b>				
		<b>0</b>				

<b>13</b>	<b>5S Organization, Work Improvement Team (WIT)</b>					
	Role & Activities of WIT					
13.1	Number of actively working members of WIT	1	2	3	4	5
13.2	Frequency of WIT activities	1	2	3	4	5
13.3	Frequency of supervision by the Quality Management Team	1	2	3	4	5
	<b>TOTAL</b>	<b>Total out of 15</b>				
		<b>Acquired marks/15 x 100 =</b>				
		<b>0</b>				
		<b>0</b>				

<b>14</b>	<b>Empowerment of hospital staff through 5S, KAIZEN, TQM</b>					
	Opportunity and environment for empowerment for hospital staff by themselves					
14.1	Learning opportunity for 5S, KAIZEN, TQM	1	2	3	4	5
14.2	Frequency at which seminars conducted for 5S, KAIZEN, TQM	1	2	3	4	5
	<b>TOTAL</b>	<b>Total out of 10</b>				
		<b>Acquired marks/10 x 100 =</b>				
		<b>0</b>				
		<b>0</b>				

## Monitoring and Evaluation Check Sheet (Criteria)

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
1					
1.1	Managers show no involvement/commitment for 5S activities	Managers show little involvement/commitment for 5S activities	Managers have general knowledge of 5S and implement it within a limited scope	Managers have been taking the initiative to implement 5S in the working place and progress has been seen	Managers' strong 5S Involvement & Commitment have been observed with evidence
1.2	No meeting/patrolling is scheduled and conducted	Meeting/patrolling is scheduled but not conducted	Meeting/patrolling is scheduled and irregularly conducted	Meeting/patrolling is scheduled and conducted but record keeping is weak	Meeting/patrolling is scheduled and conducted and records are kept properly
1.3	No 5S manual is found	The need for manuals is understood but the manuals have not yet been developed	References and the necessary documents are already collected for developing manuals	The process involves developing 5S manuals	A 5-S Manual has been already developed with many relevant details
1.4	There is no evidence of training	The 5S concept is disseminated	Training is conducted at an OJT level	All managers have been trained but there is no record or report	All managers have been trained with records and a training mechanism

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
2					
2.1	Many unwanted items were found in workplaces	Unwanted items are often left in workplaces without notice	Unwanted items are occasionally seen at Premises, Offices, Workplaces, etc.	Unwanted items are completely removed from Premises, Offices, Workplaces, etc.	Unwanted items are completely removed from Premises, Offices, Workplaces, etc. and stored in an Unnecessary items store or discarded
2.2	Many old posters, calendars, pictures and stickers are found on the walls	Old posters, calendars, pictures and stickers remain visible on the walls	Old posters, calendars, pictures and stickers are occasionally found on the walls.	Old posters, calendars, pictures and stickers are removed from the walls.	The walls are completely free of old posters, calendars, pictures and display instructions are given
2.3	Many old notices are found and papers are displayed on top of other papers	Old notices found are often seen and papers are displayed on top of other papers	Old notices found are seen occasionally and papers are still displayed on top of other papers	Only current notices are seen on the notice board but no removal instructions are given	Only current notices are seen on the notice board, removal instructions are given and followed
2.4	No rules for the disposal of unnecessary items from	Rules for the disposal of unnecessary items are developed but not followed by staff	Rules for the disposal of unnecessary items are developed and utilized for limited items/areas	Rules for disposal with Red Tags are developed and practiced for all items	Rules for disposal with Red Tags are developed and practiced with proper record keeping

3	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
3.1	No pictures taken before the 5S	Pictures were taken before and after the 5S but sight is not maintained and they are difficult to compare	Pictures were taken before and after the 5S but not updated	Pictures were taken before and after the 5S and regularly updated. Pics are kept in order (time/areas)	
3.2	No knowledge on visual control methods	Little knowledge on visual control methods but not adopted	There is knowledge on visual control methods but it is only applied on a limited scope	Visual control methods are adopted for all areas but not practiced	Visual control methods are practiced and there is evidence of a reduction of mix-up
3.3	No directional board is displayed	Directional boards are displayed in very limited areas	Directional boards to major areas (OPD, Wards, Lab etc.) are displayed	Directional boards to most areas are displayed	Directional Boards to all facilities from the Entrance onwards
3.4	No labels to identify machines/Rooms/Toilets	Limited machines/Rooms/Toilets have identification labels	Most machines/Rooms/Toilets have identification labels	All machines/Rooms/Toilets have identification labels but the label and font sizes are not standardized	All machines/Rooms/Toilets have identification labels with standardized label size and font size
3.5	Equipment/Tools/Files, etc., are NOT arranged	Equipment/Tools/Files, etc., are arranged but there is no consideration of workflow	Equipment/Tools/Files, etc., are arranged but there is only consideration of workflow in limited areas	Equipment/Tools/Files, etc., are arranged properly with consideration of workflow	All Equipment/Tools/Files, etc., arranged according to the 'Can See', 'Can Take Out' & 'Can Return' principle
3.6	Alignment of X- Y-axes is NOT applied	Alignment of X- and Y-axes is applied in limited areas, and often disorganized	Alignment of X- and Y-axes is evident in limited areas (notice boards)	Alignment of X- and Y-axes is evident in major areas	Alignment of X- and Y-axes is evident everywhere and practiced all the time
3.7	NO measures are taken to maintain setting activities	Maintenance methods of SETTING established but not practiced	Maintenance methods of SETTING are established and applied in limited areas	Maintenance methods of SETTING are established and applied in major areas	Maintenance methods of SETTING are established and applied in all areas. Followed by all staff

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
4					
4.1	Most areas of floors, Walls, Windows, Toilets and Changing Rooms not in working order & dirty	Floors, Walls, Windows, Toilets and Changing Rooms are clean in limited areas but not in working order	Floors, Walls, Windows, Toilets and Changing Rooms are clean in major areas but not in working order	Floors, Walls, Windows, Toilets and Changing Rooms are in working order & clean in major areas	Floors, Walls, Windows, Toilets and Changing Rooms are in working order & clean
4.2	No daily cleaning activity is practiced	Self cleaning is planned but not practiced	Self cleaning (3 / 5 min.) is practiced but not on a daily basis	Daily self cleaning (3 / 5 min.) is practiced with all staff participating	Daily self cleaning (3 / 5 min.) is practiced with all staff participating and a checklist is used
4.3	No cleaning responsibility maps or job allocation & schedules displayed	Cleaning responsibility maps or job allocation & schedules are displayed but not followed by staff	Cleaning responsibility maps or job allocation & schedules displayed but followed by limited staff	Cleaning responsibility maps or job allocation & schedules displayed and followed by majority of staff	Cleaning responsibility Maps and Schedules displayed and followed by all staff at all shift
4.4	No waste bin strategy	A waste bin strategy is developed but NOT applied	A waste bin strategy is developed and applied in limited areas	A waste bin strategy is developed and applied in major areas	A waste bin strategy is developed and applied in all areas
4.5	No adequate cleaning tools are placed in the area	Only few cleaning tools are seen and they are not in good working order	Few and proper cleaning tools are placed in the area and they are in working condition	Adequate cleaning tools are placed to clean major areas	Adequate cleaning tools are used to clean all areas and handled properly
4.6	Cleaning tools – Brooms/Mops/Other equipment are NOT stored properly	Cleaning tools – Brooms/Mops/Other equipment are stored in one place but some are out of order	Cleaning tools – Brooms/Mops/Other equipment are stored by tools in one place	Cleaning tools – Brooms/Mops/Other equipment are stored by tools and labeled properly.	Cleaning tools – Brooms/Mops/Other equipment are stored in one place with labels and hangers
4.7	Machines/Equipment/Tools/Furniture are not cleaned, out of order, or in trouble	Only a few machines/equipment/tools/furniture are at a high level of Cleanliness	Some machines/equipment/tools/furniture have a high level of Cleanliness	Most machines/equipment/tools/furniture have a high level of Cleanliness. The maintenance schedule is not displayed yet	Machines/Equipment/Tools/Furniture have a high level of Cleanliness & maintenance schedules are displayed

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
5					
5.1	NO adoption of 5-S procedures & standardization of Checklists & Labels	5-S procedures adopted but NOT standardized on Checklists & Labels	5-S procedures adopted & standardized on Checklists & Labels at limited areas	5-S procedures adopted & standardized on Checklists & Labels at major areas	5-S procedures adopted & standardized on Checklists & Labels at all areas
5.2	No rules/regulations for the usage of Corridors/Aisles/Gangways by Pedestrians	Rules/regulations for the usage of Corridors/Aisles/Gangways are developed but not applied	Rules/regulation for the usage of Corridors/Aisles/Gangways are developed and applied to limited areas to maintain orderliness	Rules/regulation for the usage of Corridors/Aisles/Gangways are developed and applied to major areas to maintain orderliness	Rules/regulation for the usage of Corridors/Aisles/Gangways are developed and applied to all areas to maintain orderliness
5.3	No Innovative Visual Control methods implemented	Innovative Visual Control methods are established but not practiced	Innovative Visual Control methods are established and practiced in limited areas	Innovative Visual Control methods are established and practiced in most areas	Innovative Visual Control methods are implemented
5.4	NO rules/regulations for filing/record keeping	Rules/regulations for filing/record keeping are established but not practiced.	Rules/regulations for filing/record keeping are established and practiced in limited areas	Rules/regulations for filing/record keeping are established and practiced in most areas.	Rules/regulations for filing/record keeping are established and practiced in all areas.
5.5	Checklists are NOT developed	Standardized checklists are developed but not used	Standardized checklists are developed for limited administrative procedures	Standardized checklists are developed for major administrative procedures	Standardized checklists are developed for all administrative procedures and effectively used

6	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
6.1	NO evidence of a regular training Program	A training program is established and has been conducted once or twice. No proper record kept	Training programs for major carders are established, occasionally conducted and records are kept	Training programs for major carders are established, regularly conducted and records are kept	Training programs for all carders are established, regularly conducted and records are kept
6.2	NO evidence of 5S group Activities	A Work Improvement Team is established but no activities	Work Improvement Team is established, meet occasionally	Work Improvement Team is established, meet regularly	Work Improvement Team is established, meet regularly and KAIZEN is promoted
6.3	NO evidence of Internal Audits	A Quality Improvement Team scheduled a periodical evaluation but it was not conducted	A Quality Improvement Team conduct internal evaluations occasionally	A Quality Improvement Team conduct internal evaluations periodically	A Quality Improvement Team conduct internal evaluations periodically with proper records and report/feedback
6.4	NO evidence of Self Discipline among visitors	Instructions/guide are given to visitors but not followed	Instructions/guide are given and adopted by visitors in limited areas/sections	Instructions/guide are given and adopted by visitors in most areas/sections	Evidence of Self Discipline among visitors to the Institution
6.5	Depending on the above	Depending on the above	Depending on the above	Depending on the above	Evidence of Self-Discipline in the overall Institution

7	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
7.1	NO evidence	Method was drafted but not implemented	Method was tried and system was established	Method and system are operated properly	Method and system are fully utilized
7.2	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
7.3	NO evidence	Planning only	Plan and some trial	Introduced	Already operated

8	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
8.1	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
8.2	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
8.3	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
8.4	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
8.5	NO evidence	Planning only	Plan and some trial	Introduced	Already operated

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
9					
9.1	NO evidence	Planning only	Some cost reductions implemented	Many cost reduction activities implemented	Significant cost was reduced
9.2	NO evidence	Planning only	Some cost reductions implemented by reducing waste	Many cost reduction activities implemented by reducing waste	Significant cost was reduced by reducing waste
9.3	NO evidence	Planning only	Some defect cases were reduced	Many defect cases were reduced	Major defects were reduced
9.4	NO evidence	Planning only	Plan and some trial	Idle time was partially shortened	Idle time was shortened

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
10					
10.1	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
10.2	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
10.3	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
10.4	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
10.5	NO evidence	Some people consider the importance of safety	Staff know the importance of safety	Staff understand how to maintain a safe environment	Staff maintain a safe environment

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
11					
11.1	NO evidence	Planning only	Plan and some trial	Introduced	Already delivered on a timely basis
11.2	NO evidence	Planning only	An institution or organization was established	An institution or organization is working	The institution or organization is working well
11.3	NO evidence	Planning only	Plan and some trial	Some staff were involved	Many staff are involved
11.4	NO evidence	Planning only	Plan and some trial	Introduced	Already operated

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
12					
12.1	NO evidence	Planning guideline only	establish guideline	Some staff follow the guideline	Many staff follow the guideline
12.2	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
12.3	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
12.4	NO evidence	Planning only	Plan and some trial	Introduced	Already operated
12.5	NO evidence	Some 5S mind	5S mind	KAIZEN mind	TQM mind

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
13					
13.1	No one works actively in WIT	Only some members work actively	More than half members work actively	Most members work actively	All members work actively and involve non-members
13.2	No activities	Only once after establish the WIT	Monthly	More than twice a month	Weekly
13.3	No supervision	Only once after establish the WIT	Bi-monthly	Monthly	More than twice a month

	Very poorly implemented:	Poorly implemented:	Fairly implemented:	Well implemented	Very well implemented:
14					
14.1	No opportunity	Once after the commencement of 5S	Annually	Bi-monthly	Monthly
14.2	No evidence of Seminar	Once after the commencement of 5S	Annually	Bi-monthly	Monthly









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