

5S HAND BOOK

Practical Hints for 5S in Health Care Facilities



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Providing quality Health Services in a resource constrained developing country like Uganda can be a very big challenge. It requires a lot of initiatives and new approaches to address them. Furthermore the work environment for the few Health workers in the Health System also poses an additional burden on health service delivery.

The Government of Uganda through the Ministry of Health (MoH) with the assistance of Government of Japan (JICA) technical support through a “Project on improvement of Health Service through Health Infrastructure management” has initiated a work place improvement action oriented approach of 5S principles namely; Sort, Set, Shine, Standardize and Sustain. The purpose is to improve the work environment and working conditions of the Health care service deliverers.

At the same time, the health and safety of the health workers and their clients is ensured by reducing all the possible risks at their work place. Previous similar pilot activities carried out in some target Health units have demonstrated that it is possible to improve the quality of health care at the same time reducing risks by having environmentally friendly situations in Health units that formally were classified as very poor.

The 5S-CQI approach is therefore based on direct interaction at the workplace level, enhancing productivity and work quality while at the same time reducing risks at work for both the health workers and their clients. It is essential that all the 5S-CQI measures are initiated and appreciated by all members of the health unit. That is, the supervisors

(managers) and the rest of the staff of the health units involved working as a team. The best way to practice the same approach is to have a guiding tool that is simple and easy to assimilate.

Therefore the development of the 5S handbook “Practical hints for 5S in health care facilities” is very welcome and timely. The handbook is written in very simple language and with very good practical illustrations that can be appreciated by all shades of health workers including non-professional health workers.

All Managers, Supervisors, in Charges and their staff are strongly encouraged to use this manual faithfully if they are to be committed to improving quality health care services while reducing risks at work place.

The MoH looks forward to improved workplace, reduced risks and improved quality of health care at all Health units in the country once the programme is rolled out throughout the country in line with the second National Health Policy and Health Sector Strategic and Investment Plan 2010/11–2014/15 that focuses on achieving universal coverage with quality health services thereby contributing to good quality of life and well being at all levels of health care.



Dr. Jane Ruth Aceng
Director General Health Services

Workplace improvement applying participatory action-oriented approach is gaining importance in the health care industry in Uganda. 5S is a sequence of activities which include Sort, Set, Shine, Standardize and Sustain to improve the work environment and working conditions and make them as convenient as possible. Continuous Quality Improvement (CQI), called “KAIZEN” in Japanese, is the essential method in workplace improvement.

As a means of “fitting work to people,” 5S-CQI (workplace improvement) methods are increasingly adapted in different sectors with the aim of ensuring quality health care as well as safety and health at work. The 5S-CQI approach is based on direct intervention at the workplace level and helps enhance productivity and work quality while at the same time reducing risks at work. Field surveys by the MoHin Uganda confirm that a broad range of 5S-CQI measures can be applied at the initiative of managers and health care staff members.

Within the Health Sector Quality Improvement Framework 2010/11 – 2014/15 and the JICA Project on improvement of Health Service through Health Infrastructure management, a new training package for implementing low-cost 5S-CQI-TQM improvement in the health care workplace has been developed. This package makes use of a “Workplace improvement checklist for health care facilities” comprising 30 typical low-cost actions in SETTING, SORTING, SHINING and other quality improvements in health care settings. This handbook has been prepared as part of this training package. The manual explains useful “checkpoints” that can be considered in improving existing conditions in

terms of the action items in the checklist. The 5S-CQI Handbook, including the 30 items in the checklist (Appendix 1), explains practical low-cost ideas and contains illustrations showing typical options for 5S-CQI improvement. Each of the checkpoints also contains pictures taken in health care facilities in Africa including Uganda in order to show real low-cost examples of 5S-CQI activities.

The best way to use this Handbook is to use the “Workplace improvement checklist” to examine the situation of each workplace and organize group discussions of the checklist results so as to agree on new proposals for improving this situation. The options and examples shown in the checkpoints of this manual will help people identify low-cost improvements applicable to health care facilities.

We sincerely hope that the practical examples achieved at low cost in the Ugandan situation, will be useful for sustained participatory 5S-CQI activities in health care facilities.

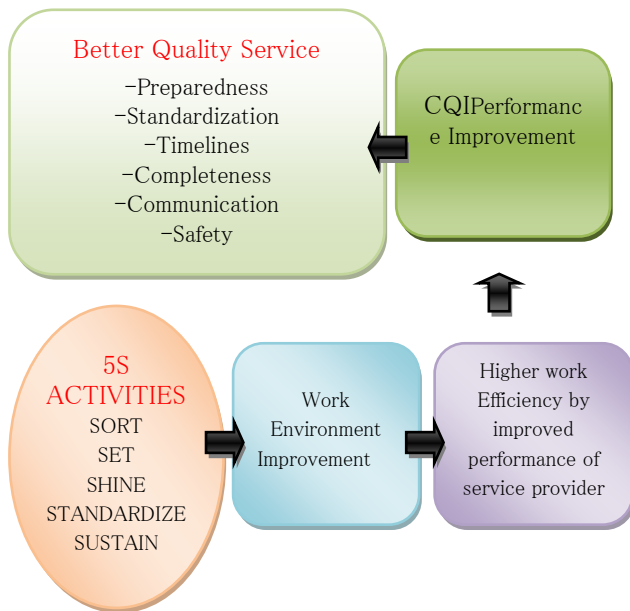
JICA Experts
The Project on Improvement of
Health Service through
Health Infrastructure Management

1. Overview of the 5S Method

Background

In order to set the best stage for health care personnel to make maximum use of their skills and knowledge, the Ministry of Health of Uganda (MoH) recommends the 5S method as the foundation for all quality improvement initiatives in the country. The 5S method was developed in the mid-1980s by the automobile industry in Japan. 5S is a sequence of activities which include:- Sort- Set- Shine- Standardize- Sustain to improve the work environment and working conditions and make them as convenient as possible, and thereby improve with regards to preparedness, standardization and timeliness.

Figure 1: Workplace Improvement through 5S-CQI steps for better quality services

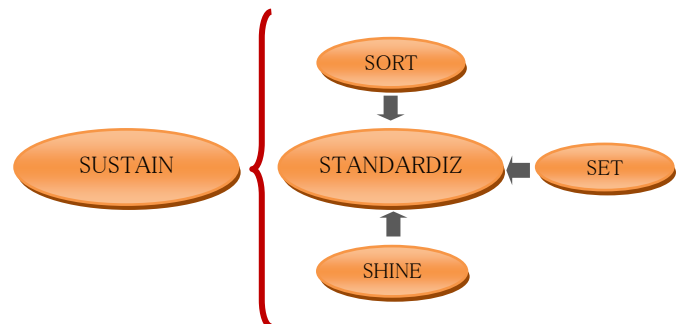


Implementation Modalities of 5S Activities

- 5S activities will be used as tools to prepare the obtainable best stage for health care personnel to make maximal use of their knowledge and skills.
- The 5S principles will be implemented starting with a few targeted areas and use the results from these areas to win support from the remaining areas to implement them.
- The following steps will be followed in the implementation of 5S

- **Sort**
Remove unnecessary items from your workplace.
- **Set**
Organize everything needed in proper order for easy operation.
- **Shine**
Maintain a high standard of cleanness.
- **Standardize**
Establish the above three Ss as the norm in every workplace.
- **Sustain**
Train and maintain the discipline of the personnel engaged.

Figure 2: Forms of 5S Implementation



Objectives of 5S

The objectives of 5S are:

1. Improved health care quality and productivity
2. Improved infrastructure maintenance
3. Improved health and safety

1) Improved health care quality and productivity

Health Care Workers (HCWs) being diverted from service delivery to look for equipment, medicines, registers and medical records, and so on is the most frustrating form of lost time in any health care facility. With 5S, often-needed items are stored in the most accessible location and correct adoption of the standardization approach means that they are returned to the correct location after use.



2) Improved infrastructure maintenance

HCWs take responsibility for keeping the workplace clean and tidy so that they can take ownership for highlighting potential problems before they have an impact on performance and preventive maintenance of all equipment and instruments for use in medicine and health care.



3) Improved health and safety

Clearing pathways between workbenches and storage racks can minimize accidents and injuries, as can properly-swept floors. An environment in which the workforce has pride in their workplace can contribute to a considerable extent in a number of ways including customer service. Improving the layout of the facility merges with the concept of visual management. If health workers can see the status of their unit and of work in the facility, it removes the need for complex tracking and communication systems, and benefits will accrue. 5S activities also have the concept of continuous improvement in health services for patients and occupational safety and health for health workers. 5S can also be a valuable marketing tool when potential customers visit. A well-organized, clean and tidy facility gives the image of a professional and well-organized service provider.



2.

Practical Hints for the Workplace Improvement Checklist

In applying 5S checkpoints to a particular workplace, it is advisable to select a certain number of checkpoint items considered important for the workplace. Usually, around 20–30 items are suited for a practical application of the manual. Copies of the corresponding pages of the selected checkpoints may be distributed for use in introductory sessions of workplace improvement applying the 5S measures.

Based on the selected items, a short checklist may be formed by using the format of the checklist contained in the manual. Such a checklist is suitable for initial introductory sessions especially when the checklist is used together with the copies of the selected pages of the manual.

In applying these selected checkpoints or using them for training purposes, it is useful to organize worksite walkthroughs. The short checklist can greatly help these walkthroughs, as it helps participants take a fresh look at the visited workplaces and find practical improvement points. Do not forget to encourage health workers to also find existing good points as this can greatly facilitate subsequent discussions.

The results of the workplace visits should be discussed in small groups and then examined in a meeting of all the participants or group representatives. The group work of people using the selected checkpoints items is essential for identifying locally practicable improvements.



(1) SORTING/Elimination

Three basic actions for sorting

1. Create a chaos free environment.
2. Clean the walls and notice boards.
3. Use “Red Tags.”

How?

- Dispose off unnecessary materials on tables, in drawers, in cabinets and on the floor.
- Remove unnecessary instructions and posters on the walls and on notice boards.
- Attach Red Tags for undecided items for disposal and determine whether the item “may be necessary” or is “unnecessary.”

Hints for actions

- Eliminate all unnecessary items from workplace and reduce clutter.
- Go through all tools, materials, and so forth in the work area.
- Keep only essential items and eliminate what is not required, prioritizing things as per requirements and keeping them in easily-accessible places.
- Everything else should be stored or discarded.

		
<p>Dispose off unnecessary materials on tables, in drawers, in cabinets and on the floor.</p>	<p>The walls and notice boards use X-Y line.</p>	<p>Attach “Red Tags” for undecided items for disposal and determine whether the item “may be necessary” or is “unnecessary.”</p>
		
<p>Good example of chaos free environment at the office desk.</p>	<p>The walls and notice boards use X-Y line.</p>	<p>Remove unnecessary instructions and posters on the wall and on the notice boards.</p>

Point to remember

Check for unnecessary materials at the workplace. Remove and dispose them off.

(2-1)SETTING: Material handling

Four basic points for setting material handling



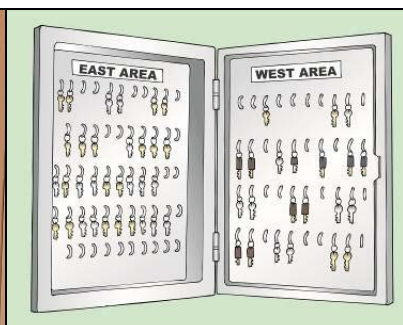



1. Zone/area, clear transport routes;
2. Multi-level shelves and containers;
3. Home for each tool;
4. Use carts for efficient heavy load lifting;

How?

- Secure transport routes without obstacles that are even and not slippery.
- Provide multi-level shelves or storage racks near the work area for medical charts and drugs.
- Provide a “home” for medical equipment and work items and mark their position clearly.
- Use carts, hand-trucks and other wheeled devices when moving materials.

Hints for actions

- Organize everything needed in proper order for ease of operation.
- There should be a place for everything and everything should be in its place.
- The place for each item should be clearly labeled or demarcated.
- Items should be arranged in a manner that promotes efficient work flow, with equipment used most often being the most easily accessible.

		
<p>Clear transport routes with clear mark.</p>	<p>Provide multi-level shelves or storage racks near the work area for medical drugs.</p>	<p>Provide a “home” for each piece of medical equipment.</p>
		
<p>Use carts, hand-trucks and other wheeled devices when moving materials.</p>	<p>Secure transport routes without obstacles that are even and not slippery.</p>	<p>Provide multi-level shelves for medical charts in the record unit.</p>

Point to
remember

Ensure efficient material handling for “Find, Use, Return.”

(2-2) SETTING: Workstation changes

Three basic points for setting workstation changes

1. Easy reach
2. Elbow height

3. Comfortable chairs

How?

- Place frequently used tools, controls and materials within easy reach of workers.
- Adjust the working height for each health care worker at elbow level or slightly below it.
- Allow workers to alternate standing and sitting as much as possible and provide good adjustable chairs with good backrests.

Hints for actions

- Items should be arranged in a manner that promotes efficient work flow, with equipment used most often being the most easily accessible.
- Workers should not have to bend repeatedly to access materials.
- Each tool, part, supply, or piece of equipment should be kept close to where it will be used – in other words, straightening the flow path.



Place frequently used tools and materials within easy reach of workers



Adjust the working height for each health care worker at elbow level or slightly below it.



Provide good adjustable chairs with good backrests.



Place frequently used tools within easy reach



Adjust the working height for each health care worker at elbow level or slightly below it to reach.



Set necessary equipment nearby worksite for easy to reach.

Point to
remember

Ensure efficient material handling for “Find, Use, Return.”

(2-3) SETTING: Labels, signs, color coding

Four basic points for setting labels, signs, color coding

1. Labeling
2. Safety signs
3. Color coding/numbering
4. Signboards/mapping

How?

- Make labels, colors and signs easy to see, easy to read and easy to understand.
- Provide clear instructions and information necessary for safe, efficient work.
- Use color coding rules such as for garbage, medical waste and linen by type.
- Use a board with X-Y axis alignment for sharing medical information, a 5-S corner display and a map of work areas for patients.

Hints for actions

- The place for each item should be clearly labeled or demarcated.
- Items should be arranged in a manner that promotes efficient work flow, with equipment used most often being the most easily accessible.

<p>Labels should be easy to read and easy to understand.</p>	<p>Clear instructions for operation of the fire extinguisher.</p>	<p>Numbering rules of medical charts for proper setting,</p>
<p>5S corner display by X-Y axis alignment.</p>	<p>The place for each item should be clearly labeled or demarcated.</p>	<p>A map of work areas for patients.</p>

Point to remember

Place labels and signs, and use color coding and mapping for “Find, Use, Return” that are easy to understand.

(3) SHINING: Regular maintenance and cleanliness

Basic three points for shining

1. Cleanliness

2. Waste bin, cleaning tool


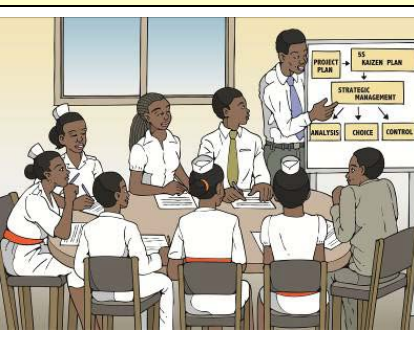
3. Proper maintenance of equipment

How?

- Designate the responsibility for keeping areas clean to staff members and clean regularly.
- Place waste bins and cleaning tools in the appropriate workplace.
- Inspect and maintain medical Instruments, machines and tools regularly.

Hints for actions

- Discuss the placement of waste bins in areas where they are needed at your workplace.
- Regular maintenance keeps your medical equipment productive and safe. Check all machine parts carefully. In particular, special care is needed for rotating parts, detachable guards and electrical wires, etc.
- If you find an inexpensive machine, you should check its safety aspects even more carefully. When accidents occur, costs can be enormous.
- Develop a long-term maintenance plan. For instance, you may check the machine thoroughly every weekend.

		
<p>Designate responsibility for keeping the area clean to staff members.</p>	<p>Place waste bins and cleaning tools in the appropriate workplace location.</p>	<p>Inspect and maintain medical instruments, machines and tools regularly.</p>
		
<p>Cleaning regularly supports daily work tasks.</p>	<p>Place waste bins at every point where HWs undertake procedures.</p>	<p>Discuss establishing a standard of cleanliness with staff members.</p>

Point to remember

Regular cleanliness and preventive maintenance helps safety to both patients and equipment.

(4) STANDARDIZE: Improving quality of care (small KAIZEN)

Basic five points for standardizing

1. Standardized care procedures
2. Procedures of the equipment
3. Ensuring patients' privacy
4. Establishing hand hygiene
5. Reducing patients' waiting time

How?

- Establish the protocols of standardized care procedures about each cure and care, such as maternity, vaccination, medical health checkup.
- Display procedures of the equipment and label clearly what operation is meant.
- Use partitions, curtains and other arrangement for protection privacy of persons cared
- Establish hand hygiene procedures and hygienic washing facilities.
- Reducing waiting time for patients at an outpatient room, a laboratory and a pharmacy.

Hints for actions

- Listing basic clinical procedures makes it easy to find necessary standardized care procedures for documentation.
- Labels and signs are needed for clear instruction for procedures.
- Encouraging collection of patients' opinion is essential for improving quality of care.

<p>STEPS FOR MALARIA DIAGNOSIS</p> <pre> graph TD A[Malaria Suspected] --> B[Malaria Smear Positive] A --> C[Malaria Smear Negative] B --> D[Non Falciparm] B --> E[Falciparm Species] E --> F[Yes] E --> G[NO] D --> H[.....] F --> I[.....] G --> J[.....] C --> K[.....] </pre>		
<p>The protocols of standardized malaria diagnosis as a flowchart</p>	<p>Instructions for procedures for the use of equipment with operations clearly labeled.</p>	<p>Curtains for protection privacy of persons cared.</p>
<p>Proper hand hygiene procedures and hygienic washing facilities.</p>	<p>A suggestion box helps improve the quality of care.</p>	<p>Reducing waiting times for patients at outpatient departments, laboratories and pharmacies.</p>

Point to remember

SETTING, SORTING and SHINING as the norm in every workplace is the first step of standardizing.

(5) SUSTAIN: Teamwork

Three basic points for sustaining

1. Tool box meeting
2. Record of accidents and injuries
3. Work Improvement Team (WIT), 5S Training

How?

- Hold a brief meeting before beginning work to plan assignments and avoid giving excessive workloads to particular staff members.
- Keep records of medical accidents, occupational injuries and diseases for ensuring both patients and workers' safety.
- Encourage Work Improvement Team (WIT) activities and provide adequate participatory 5S and safety/health improvement training to all workers.

Hints for actions

- Record all accidents, absences, sickness, and other health-related events.
- Plan annual work schedules including sufficient training periods.

		
<p>Hold a brief meeting before work</p>	<p>Keep records of both medical accidents and occupational injuries</p>	<p>Visit 5S team regularly at the workplace</p>
		
<p>5S training for all staff members</p>	<p>Holding monthly WIT meetings helps maintain 5S activities</p>	<p>5S facilitators organize engaging 5S workshops.</p>

Point to
remember

SUSTAIN means establishing teamwork environment for improving quality of care.

(6) SAFETY AND HEALTH: Health care workers and patients

Five basic points for safety and health






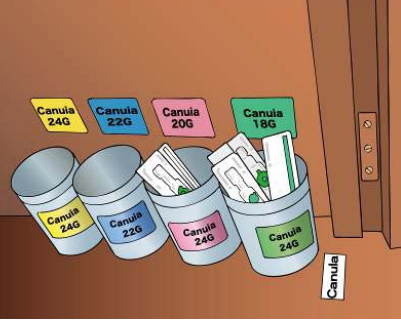
1. Isolate hazardous agents
2. Personal protective equipment (PPE)
3. Sufficient light and clean air
4. Clean water and sanitary toilet
5. Health services and welfare facilities

How?

- Make sure all containers of hazardous chemicals and infectious agents are labeled and sealed properly.
- Ensure proper use and maintenance of personal protective equipment including adequate instructions, adaptation trials and training.
- Add skylights and keep skylights and windows clean, increase natural ventilation by having more openings, windows or open doorways.
- Provide safe drinking water in all workplaces and sanitary toilets.
- Provide health services, first-aid equipment and other welfare facilities for staff members.

Hints for actions

- Safety and health save lives both of health care workers and patients. There are many things that improve occupational safety and health at your workplace. Exchanging positive experiences is a way to improve your workplace.

		
<p>All hazardous chemicals and infectious agents are labeled</p>	<p>Gloves are essential personal protective equipment.</p>	<p>Use of skylights for efficient work.</p>
		
<p>Sanitary drinking water at workplace.</p>	<p>First-aid kits help in emergencies for health care workers.</p>	<p>Ensure the protocols for preventing needle stick injuries at all workplace</p>

Point to
remember

Safety and health are essential for productive and good medical care.

3. Roles of 5S facilitators

1) Who is a 5S Facilitator?

5S Facilitator is a person who takes the initiative to spread the **5S activities throughout his/her workplace** with the conviction that the 5S will significantly contribute to the improvement of the quality of the health facility's services to its customers as well as of its employees' experience in their workplaces.

To sum up in one word, **a 5S Facilitator is a missionary**. A missionary has no doubt in what he/she believes, well understands what he/she believes, and does his/her best to disseminate what they believe. Likewise, a 5S Facilitator is supposed to have a firm belief in 5S, be perfectly knowledgeable in 5S, and devote him/herself in spreading the 5S activities in the workplace.

2) What does a 5S Facilitator do?

There are three basic activities that a 5S Facilitator is expected to do: **(i) 5S Training, (ii) Follow-up activities, and (iii) Monitoring and evaluation.**

(i) 5S Training

In order to spread the theory and practice of 5S throughout workplaces, a 5S Facilitator conducts 5S Training. Although the duration and the participants of the training depend on the situation of each workplace, it might be better **to spend at least a whole day, or a few days** if possible, for the training and **to involve key persons of the workplace** as the participants. For the training program, see Appendix III Examples of Training Program for 5S.



(ii) Follow-up activities

After conducting the 5S Training, the 5S Facilitator initiates a series of follow-up activities to enable participants trained to put into practice what they acquired in the training. The



Facilitator is encouraged to utilize his/her creativity to organize exciting and effective activities. The following are examples of follow-up activities:

– **Follow-up visit** to workplaces of participants who were trained to give them advice.

– **“Achievement Workshop”** in which participants share their progress and achievements of 5S activities and **“5S SIC Contest”** (small, inexpensive and clever contest) in which each



workplace competes over the progress in their 5S activities.

– **Regular collection of 5S best practices** from the participants' workplace to monitor their progress and to accumulate hands-on wisdom of 5S activities.

(iii) Monitoring and evaluation

To ensure the steady implementation of 5S in the workplace and **to let all the stakeholders recognize the positive change** brought by 5S

activities, the 5S Facilitator encourages and supports QIT and WIT to conduct the monitoring and



evaluation of 5S. In most cases, 5S Facilitators are also the members of either QIT or WIT.

3) Stances as a 5S Facilitator

A facilitator is different from a teacher. While conventional teachers mainly provide theory and academic information to their students through lectures, facilitators let their target people acquire knowledge and skills **through their own experiences** with appropriate guidance. To be an effective 5S Facilitator, keep the following stances in mind:

- Focus on experience and practical solutions, not overly on theory.
- Build on strengths and achievements instead of weaknesses and problems.
- Ask fundamental questions that cause people to think deeply and therefore discover practical answers by themselves.
- Be friendly, inclusive, encouraging, and trustful.

4) What kind of skills is a 5S Facilitator required to have?



A 5S Facilitator is both a trainer of 5S and an organizer of follow-up activities and monitoring and evaluation. Both roles require skills in (i) **designing the activities**, (ii) **involving important stakeholders**, and (iii)

conducting presentation/facilitation of activities. The following are basic components of each skill to be enhanced:



(i) Activity design

- Understand the current situation and the needs.
- Incorporate a good balance of lectures and practice.
- Bring lots of excitement, fun, and intellectual stimulus

(ii) Stakeholders involvement

- Inspire important stakeholders through convincing explanations and strong passion for 5S.
- Keep them motivated through tangible outcomes and continuous communication.

(iii) Presentation/facilitation

- Be succinct. Think twice about what really needs to be presented.
- Be concrete. Use lots of examples and personal stories and minimal helpful theory.
- Be confident, passionate, and inspiring. Believe you have already learned and made significant achievement.

In conclusion, there is no “right answer” to being an effective 5S Facilitator. Try to experiment with whatever you think would be effective, learn from others, and practice, practice, practice!


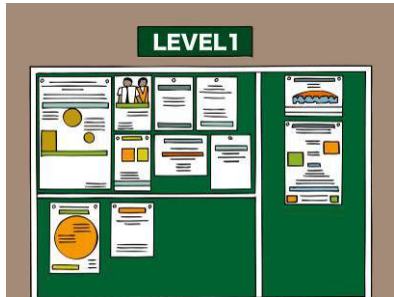
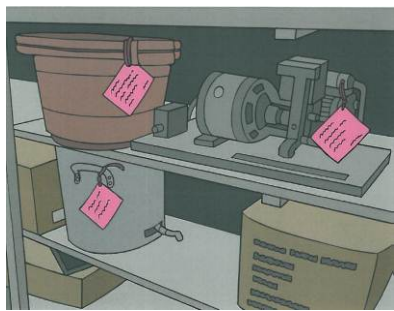
1) Appendix I. Workplace Improvement Checklist

Workplace Improvement Checklist

Name _____ Date _____ Visited workplace _____

- How to use the checklist:
1. Define the work area to be checked.
 2. Spend a few minutes walking around the work area.
 3. For each action, select NO or YES:
 - If the action has already been applied or it is not needed, select NO;
 - if you recommend the action to be applied, select YES.
 4. Choose a few urgent actions, and tick PRIORITY for these actions.
 5. Put your suggestions under COMMENTS.

1. SORTING/*Seiri*

<p><i>(Chaos free environment)</i></p> <p>1. Dispose off unnecessary materials on tables, in drawers, in cabinets and on the floor.</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority Comments:</p>	
<p><i>(Neat notice board)</i></p> <p>2. Remove unnecessary posters and instructions from the wall.</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority Comments:</p>	
<p><i>(Red Tags)</i></p> <p>3. Attach “Red Tags” for undecided items for disposal and determine whether the item “may be necessary” or “is unnecessary.”</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority Comments:</p>	

2. SETTING/Seiton

2-1. Ensure efficient material handling for "Find, Use, Return"

(Zone/area, clear transport way)

4. Secure transport routes without obstacles that are even and not slippery.

Do you recommend this action?

Yes No Priority

Comments:



(Multi-level shelves and containers)

5. Use multi-level shelves or storage racks and small containers in order to minimize manual transport of materials.

Do you recommend this action?

Yes No Priority

Comments:



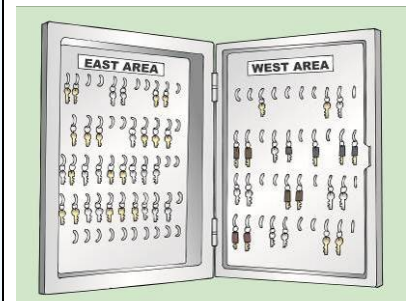
(Home for each tool)

6. Provide a "home" for medical equipment and work items and mark their positions clearly.

Do you recommend this action?

Yes No Priority

Comments:



(Push cart)

7. Use carts, hand-trucks and other wheeled devices when moving materials.

Do you recommend this action?

Yes No Priority

Comments:



memo

2.2 Good workstation for “Find, Use, Return”

(Easy reach)

8. Place frequently used materials, tools and controls within easy reach.

Do you recommend this action?

Yes No Priority

Comments:



(Elbow height)

9. Adjust the working height for each healthcare worker at elbow level or slightly below it.

Do you recommend this action?

Yes No Priority

Comments:



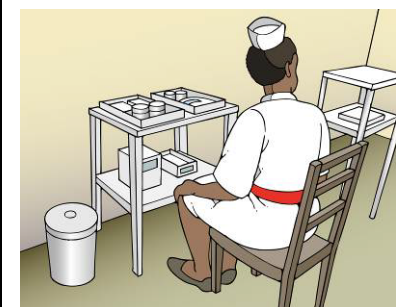
(Comfortable chairs)

10. Allow workers to alternate standing and sitting as much as possible and provide good adjustable chairs with good backrests.

Do you recommend this action?

Yes No Priority

Comments:



memo

2.3 Affixing labels, signs, color coding and mapping for “Find, Use, Return” and for easier understanding

<p>(Labeling)</p> <p>11. Make labels, colors and signs easy to see, easy to read and easy to understand.</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority</p> <p>Comments:</p>	
<p>(Safety signs)</p> <p>12. Provide clear instructions and information necessary for safe and efficient work.</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority</p> <p>Comments:</p>	
<p>(Color/numbering)</p> <p>13. Use color coding rules, such as for garbage, medical waste and linen.</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority</p> <p>Comments:</p>	
<p>(Signboards/mapping)</p> <p>14. Use a board with X-Y axis alignment for sharing medical information, a 5-S corner display and a map of work areas for patients.</p> <p>Do you recommend this action? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Priority</p> <p>Comments:</p>	

memo

3. SHINING/*Seiso*

(Cleanliness)

15. Designate responsibility for keeping areas clean to staff members and clean regularly.

Do you recommend this action?

Yes No Priority

Comments:



(Waste bins, cleaning tools)

16. Place waste bins and cleaning tools in the appropriate workplace location.

Do you recommend this action?

Yes No Priority

Comments:



(Proper maintenance of equipment)

17. Inspect and maintain medical instruments, machines and tools regularly.

Do you recommend this action?

Yes No Priority

Comments:



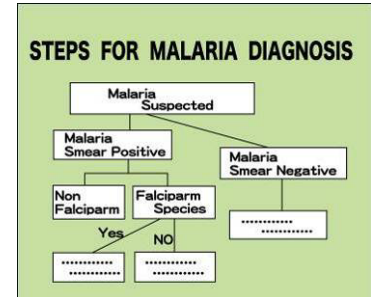
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4. STANDARDIZE/Seiketsu

(Standardized care procedures)

18. Establish protocols for standardized care procedures for maternity care, vaccinations, medical health checkups and other health services at designated care units.

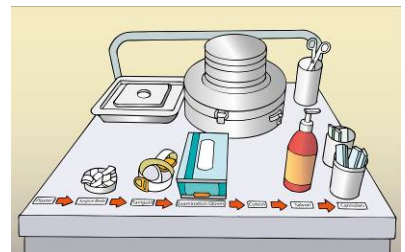
Do you recommend this action?
 Yes No Priority
 Comments:



(Equipment procedures)

19. Display procedures for using the equipment and clearly label what each operation is meant for.

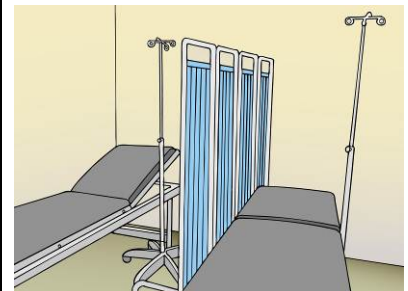
Do you recommend this action?
 Yes No Priority
 Comments:



(Ensuring patient privacy)

20. Use partitions, curtains and other arrangements to protect the privacy of patients.

Do you recommend this action?
 Yes No Priority
 Comments:



(Hand hygiene)

21. Establish hand hygiene procedures and hygienic washing facilities.

Do you recommend this action?
 Yes No Priority
 Comments:



(Patient waiting times)

22. Reduce waiting times for patients at outpatient departments, laboratories and pharmacies.

Do you recommend this action?
 Yes No Priority
 Comments:



5. SUSTAIN/*Shitsuke*

(Tool box meetings)

23. Hold a brief meeting before beginning work to plan work assignments and avoid giving excessive workloads to particular staff members.

Do you recommend this action?

Yes No Priority

Comments:



(Record of accidents and injuries)

24. Keep records of both medical accidents, occupational injuries and diseases for ensuring both patient and workers' safety.

Do you recommend this action?

Yes No Priority

Comments:



(WIT, 5S Training)

25. Encourage work improvement team (WIT) activities and provide adequate participatory 5S and safety/health improvement training to all workers.

Do you recommend this action?

Yes No Priority

Comments:



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6. SAFETY AND HEALTH

(Isolate hazardous agents)

26. Make sure all containers of hazardous chemicals and infectious agents are labeled and sealed properly.

Do you recommend this action?
 Yes No Priority
Comments:



(PPE: Personal protective equipment)

27. Ensure proper use and maintenance of personal protective equipment with adequate instructions, adaptation trials and training.

Do you recommend this action?
 Yes No Priority
Comments:



(Sufficient light and clean air)

28. Add skylights and keep them and windows clean, increase natural ventilation by having more openings, windows or open doorways.

Do you recommend this action?
 Yes No Priority
Comments:



(Clean water and sanitary toilets)

29. Provide safe drinking water in all workplaces and sanitary toilets.

Do you recommend this action?
 Yes No Priority
Comments:



(Health services and welfare facilities)

30. Provide health services, first-aid equipment and other welfare facilities for staff members.

Do you recommend this action?
 Yes No Priority
Comments:



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Appendix II. Good examples of Workplace Improvement

1) Good examples of workplace improvement in health facilities in Uganda



Clear signboard at Hospital entrance



Room layout map at entrance



5S corner in Hospitals



Color coded waste containers placed properly



Chaos free workplace



Color coded power switch for power saving



Home of stretcher with symbol on the wall



Zoning of patient bed



Clear transport route with clear sign



Trolley with clear instructions and information



Multi-level shelves and numbering setting of record



Well organized cupboard



Proper arrangement of medicines tray



Arrangement of procedure tray with labeling.



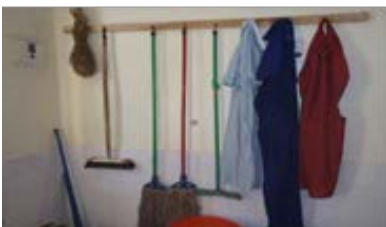
Well organized stock with labels for consumables



Changing room for staffs



Symbol of nurse in changing room



Well organized cleaning materials



Hand washing facility installed in proper place



Stock yard for oxygen gas cylinder

2) Good examples of workplace improvement in hospital in Vietnam



1. small inclination instead of stairways



2. Multi-level Shelves



3. Use mechanical means to reduce the manual lifting



4. Keep the patient close to the body when carrying in short distance



5. Provide a "home" for each medical instrument



6. Provide good medicine cabinet and home for each kind of medicine



7. Improve ventilation systems to ensure workplace air quality



8. Provide sufficient lighting so that health workers can work efficiently and comfortably



9. Use pincer to remove or cover the injection needles



10. Provide personal protective equipment that give adequate protection



11. Adequate disinfected facilities at the washing basin.

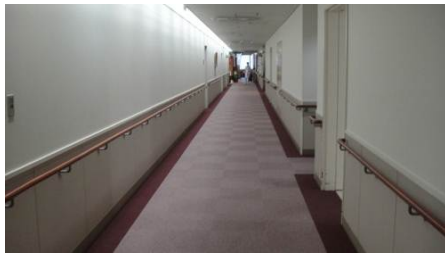


12. Recycle and reuse collected separated waste



13. Ensure electrical circuits are enclosed, insured and properly fused

3) Good examples in Japan



1. Clean and clear passage-ways free of obstruction



2. Clearly marked lines for easy understanding



3. A home with a clearly demarcated area for wheelchairs. Home with clear sign for keeping wheel chairs



4-1. Instructions for medical equipment

注射針	真空管採血用針	真空管採血用ホルダー	動脈血採血キット
ネーム	エアークリッター	フィンガーダイアセンサー	留置針
翼状針		マイクロファイナプラス	
		BDロードーズ	

4-2. Clear instructions and item names for easy identification and storage



5. Small handmade boxes in each ward for storing patient information



6. Specific area for arranging and storing different materials or equipment for easy access



7. Different items clearly labeled and stored in containers small enough to fit in limited space



8. Labels to make it easy to distinguish sizes of the stored contents



9. Keeping the wall uncluttered; remove unnecessary notices



10. Easy-to-empty containers for separating infectious waste



11. Mechanical lifter for moving the patient to and from the bed



12 Creating space in the intensive care unit by removing infrequently used equipment



13. Staff group activities to discuss improvement of patient care. (TQM-Kaizen)



14. Doctors conducting mini-lectures for staff members to share up-to-date information

Appendix III. Examples of training module for 5S-CQI-TQM

1) Three day seminar for Training of core-trainer (TOT)

Day	Subjects	Training methods
Day0	Facilitator meeting Venue preparation	No participants
Day1	Opening Remarks Basic lecture of 5S-CQI-TQM Roles of 5S facilitator Learning from good examples	Game, Lecture, Q&A Group work
Day2	Show Case Hospital tour Trial QIT meeting and developing action plan Health Facility reports of 5S	Game, Lecture, Q&A Hospital visit Group work
Day3	Infection control and 5S Patient Safety and 5S Action plan, Closing	Game, Lecture, Q&A Group work
Day4	Facilitators meeting	No participants

2) One day seminar for Training of trainer (TOT) with 5S tour

09h00-09h15	Opening Remarks Praying	Training method
09h15-09h30	Learning from good examples	Voting to good examples and group work
09h30-10h00	Lecture: Hints for actions of 5S	Game, Lecture, Q&A
10h00-10h30	5S checklist exercise	Health Facility visit
10h30-10h45	Tea break	
10h45-11h45	Group Discussion & Presentation -Three good points at the visited workplace -Three points to be improved at workplace	Group work
11h45-12h30	Guide to Situation Analysis	Lecture and exercise
12h30-14h00	Lunch	
14h00-15h00	History and achievement in Study site	Game, Lecture, Q&A
15h00-16h15	Trial QIT meeting and developing action plan by Study Team.	Group work
16h15-16h30	Q&A, Closing, Photo together	



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