

Kaizen For Small Hospital

-Aaditya Koshe (Director, Anantavi Enterprises Pvt.Ltd.)

Kaizen simply means, “Continuous Improvement”, a technique used by the Japanese to improve their process of production or efficiency of a system. In Japanese "Kai" means "to take apart " and "Zen" means “to make it good”. This method works on simple scientific principles so is widely popular in any kind of industry from automobile service to health. The basics steps of Kaizen are **Identify, Analyze, Improve and Implement**.

There is an old saying "Rome was not build in a day”. Kaizen works on the same principle. Small improvement everyday will lead to the total improvement of hospital. The reason why this method for process improvement is widely accepted is because it does not bring dramatic changes in the hospital which usually cause a lot of resistance.

There are numerous studies and paper that are published on Kaizen. Studies have been done for applying Kaizen techniques in healthcare, but there are very few studies that are focused on small and medium hospitals. Kaizen when applied in big medical setup consume a lot of time and monetary resources which isn't available for smaller set ups. In this article we will focus on tricks that you can do to apply Kaizen techniques in Smaller hospitals. To get to a stage to focus on Kaizen for small hospital we have to understand what is kaizen and how do you apply it.

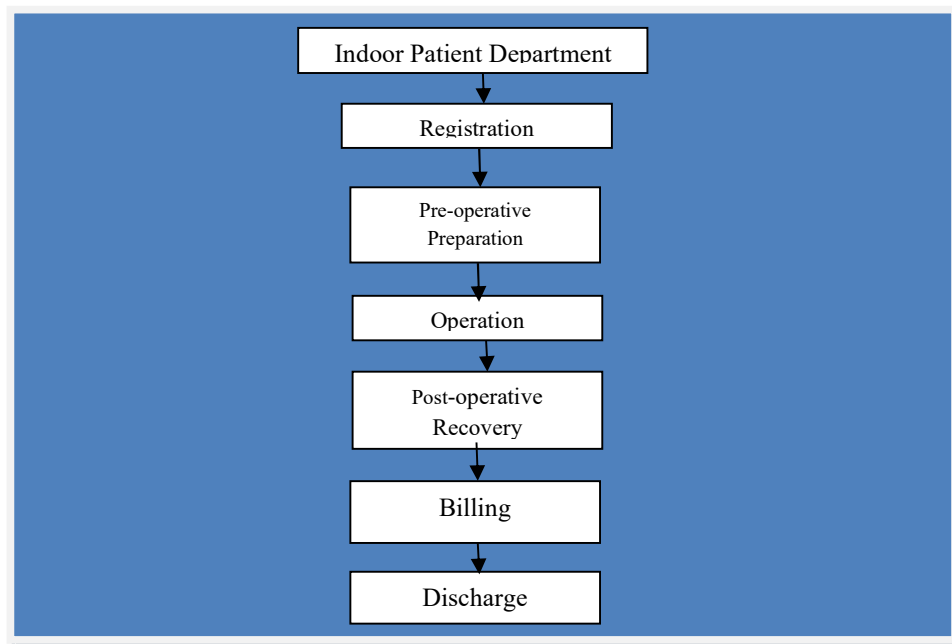
What is Kaizen?

To reemphasize Kaizen simply means, continuous improvement of a process of different functions of a hospital. But we need to dig deeper to understand what is a process in healthcare. Healthcare process is transforming a patient from Unhealthy to a healthy state. By definition "Process is a sequence of cycles of work called operations". "An operation is a work

cycle defined by a sequence of specific task". A process for a hospital is illustrated in figure 1, for a day care patient.

Day care patient Process

Fig 1



If you breakdown each step in the process it is an operation. Preoperative preparation is an Operation and each operation can be broken down into further Tasks. In kaizen you don't have to modify the process you have to identify a task and then work on it. For example, in Preoperative preparation of a patient, cleaning of the operating area of the patient is task. You have to observe this task for multiple patients and note it for further studies and improvements. To implement Kaizen in the hospital you need to identify a specific task which is critical to your process of transforming a patient form unhealthy to healthy.

Steps In Kaizen

Kaizen is broken into simple 4 scientific steps. Any Kaizen process is an iterative process. The more you do it the better results it gives. The Steps in Kaizen are called Deming's Cycle.

- **Plan:**

This step is to identify the task you are going to focus and improve. Then Analyze it and plan what would you do to improve it further.

- **Do:**

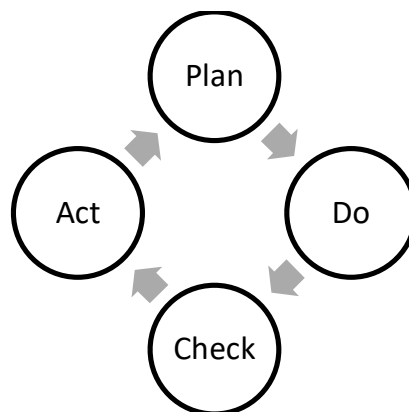
Implement your ideas that you have generated in the previous step and monitor to see that they are implemented properly.

- **Check:**

Check if the process improvement that you have implemented have actually shown results. If you see that there is a need of any minor tweaks than modify them and observe the process again. If the process improvement is not showing any results which happens a lot of time, go back to Step 1.

- **Act:**

Develop awareness among your staff and Stake holders of the improvements that you have made. Make these process changes a permanent habit. People tend to resist changing old habits as soon as monitoring reduces.



Deming Cycle

Fig 2

It is necessary that this cycle is repeated on a particular task to keep on improving it further. Each iteration is going to bring in small changes which are easy to

implement. The advantage of such a system is that you would not face a lot less resistance compared to bringing in radical changes from your staff.

What Operations do you chose for Kaizen Implementation?

In Kaizen you focus on a process, or a every task in that process. The aim of Kaizen is to add value and eliminate waste, it maybe any kind of improvement, may it be people training, equipment usage technique, path of travel of patient and staff or lighting of a room.

The aim of Kaizen is to focus on two main points, "Add value " & "eliminate waste". So, what are these two terms, let us dig deeper and understand these two terms.

Value

"Value " is the worth of the process or the task that delivers to the patient needs or he desires. It also includes, quality, usefulness, functionality, availability, prices, Safety and so on. Value added refers to any operation in a hospital that changes information about the patient, medical know how, and supplies value to patient or the staff. All that Kaizen needs to do is to concentrate on these areas which are patient's touch points.

Waste

Waste is any operation that adds cost or time but does not add value, there are 6 basic types of waste which the Kaizen process needs to eliminate. Let us look at the different types of wastes.

- **Excess production:** Doing task before hand or sooner than needed by the patient.
- **Waiting.:** The ideal time in the process, or the waiting time the patient is doing nothing.
- **Over processing:** Doing what is not needed.
- **Inventory or excess inventory.:** Inventory is a cost, the minimum inventory you have, the maximum you save.

- **Motion.:** Unnecessary movement is a cost and should be minimum. The movement can be of any thing patient, equipment or records.
- **Defect and Rework.:** Do a task perfect the first time so no rework is needed. Errors in hospital can be very damaging to the reputation of the hospital.

How do you implement Kaizen in small and medium Hospitals?

Normally in larger set-ups Kaizen is implemented through Kaizen Workshop, which includes at least 6 people, done at a span over 6 to 7 days dedicating at least 6 to 7 hours a day. This process is very time and resource consuming. Such resources are not possible in small set-ups where there is one doctor and others are the support staff. So, we have come up with some tips to implement Kaizen in a small hospital.

1. The First and the basic step to start Kaizen, is to Plot a Process map of your hospital. Identify each task that is taken up by your staff and the staff needed for each process, sub- process and task. You the head doctor can do it independently without the help of the staff.
2. Ask your Staff to write down their problems on a piece of paper and put it in a box, which will help you to identify the area you need to implement Kaizen.
Note: Ask your Staff not to complain about any other staff.
3. Make team of maximum 2-3 people in your Kaizen group. Especially chose one person from the process you are going to improve and chose the other person from the other area of work.
4. Do not dedicate time from hospital hours for brain storming. Ask your staff to note down on a piece of paper their ideas when they are not on work. collect these notes and compile them to get ideas for process improvement.
5. Always document every idea of all your staff, no matter how silly or irrelevant it may sound. Document all the improvements, that you have improved and modify your

process accordingly. Always credit your staff for any improvement that is achieved to boost their moral.

6. In regular kaizen workshop the Kaizen team implements the new ideas, but in small hospitals it is difficult to do so. The best way is to empower your available staff and ask them to implements your ideas. Make them accountable and responsible towards the idea.
7. If you have difficulty in Identifying process for improvement. Just begin with applying "5S" technique in your key operational areas like OPD OT etc. (5s stands for **Sort, Set in order, Shine, Sustain**). This is another Japanese technique for process improvement. You can get a lot of information on it on the Net). Applying 5S to your process will help you identify areas where you can implement Kaizen.

Kaizen should be done without spending any new money, adding full time employees or adding new equipment. The key to implement Kaizen in small hospital is maximum Staff participation with minimum supervision of the doctors.