



Singapore General Hospital  
SingHealth

# To improve patients' knowledge on surgical procedure for better management of post-surgery care.

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**Background:** The SGH Specialist Outpatient Clinics (SOC) consists of 19 clinics and centers of various disciplines. Specialist Outpatient Clinic G is one of the clinics which are multi-disciplined. When patients are required to be listed for procedures, they are attended to by the nurses at the listing station after the patients' consultation. The nurses schedule these patients for their procedure dates and make the necessary arrangements for patient to have their Pre-assessment tests to ensure that they are fit for the procedure.

At the listing station, the nurses also perform financial counseling and conduct patient education for these patients. During financial counseling, patients are informed of the estimated charges for the procedure and are allocated beds based on their patient status. During patient education, the nurses prepare the patient on what to expect before and after their procedures so that patients will have a better understanding of what their procedure is about and what to do during their recovery period.

With the increase in patient load, the nurses observed a corresponding increase in the number of patients to be listed. As the workload of the listing nurses increased, an analysis was done to improve the work flow of the listing process. From statistical data obtained from the listing station, it was noted that the high number of cancellations of procedures created additional work for the nurses in cancelling all the arrangements made or in rescheduling dates for the patients.

**Aim:** The project aimed to educate patients on their pre and post surgery care. By enhancing patients' knowledge on pre-admission procedures, patients have a better understanding on what to expect and how to prepare themselves before going for their surgery.

**Methodology:** To understand the current situation in Clinic G listing room, the team analyzed the reasons for procedure cancellations over the period from August 2012 – July 2013.

**Findings:** Based on the analysis, the team concluded that 50% of the cancellations were due to patients' fear and lack of knowledge of pre and post procedure care.

**Identifying Root Causes:** The team used the Cause and Effect Diagram to identify the root causes of the problem as illustrated in Figure 2 below.

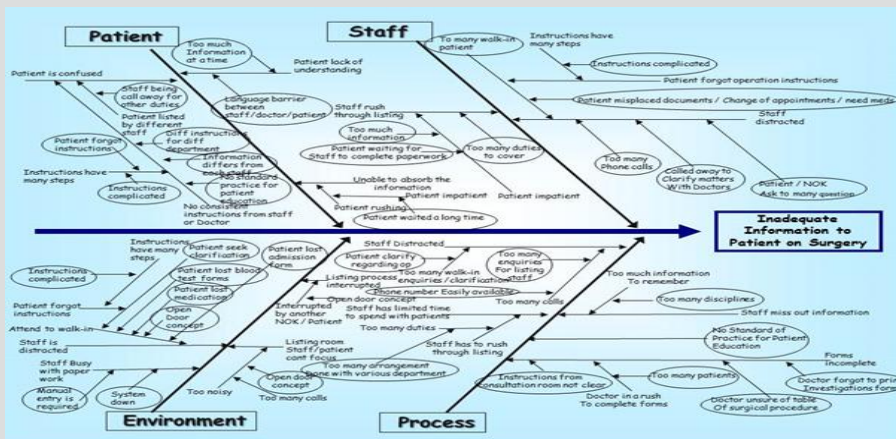


Figure 2: Cause and Effect Diagram to identify the root causes of the problem

Through multi-voting, the team organized the root causes using a Pareto Chart to identify the root causes that contributed to 80% of rescheduled or cancelled procedures as illustrated in Figure 3 below.

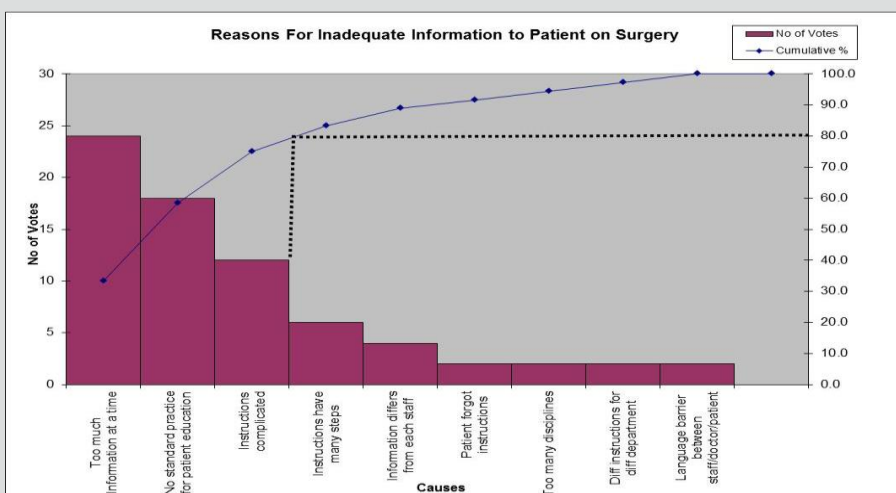


Figure 3: Pareto Chart to identify root causes

**Solution Implementation:** The team listed the 4 verified root causes and used the serendipity and brainstorming techniques to identify actions and develop solutions to solve these root causes. Various alternative solutions identified were evaluated using the Decision Matrix Table. The following solutions were implemented:

1. Create standardized teaching materials, which includes photos of pre and post-surgery - The team created patient education materials using visuals to help patients understand the procedure better and to remember instructions on pre and post surgery care

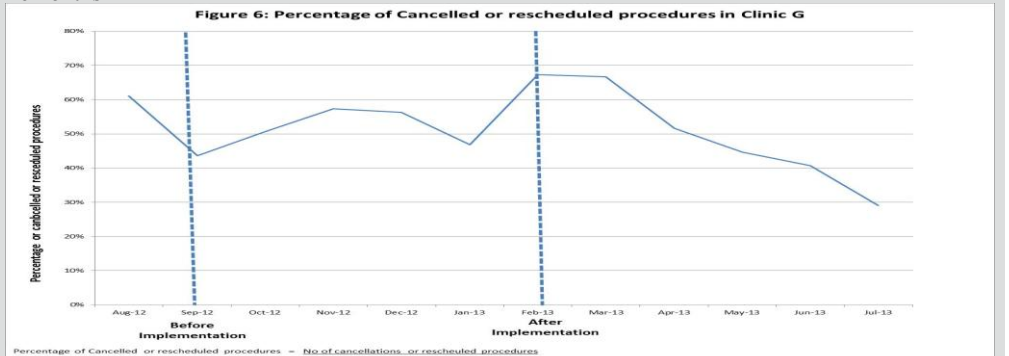


Figure 4: Patient education materials

2. Specialization of job scope - The team simplified the listing process into 2 parts – financial counselling to be down by patient service associates and patient education conducted by nurses.

Figure 5: Survey template to gather patients' feedback

**Results:** The team monitored the implementation for a month and tremendous results were achieved. The total number of cancelled or rescheduled procedures reduced from 67% to 29% in 6months



With staff specialization and a simplified listing workflow, patients now have greater knowledge on what to expect pre and post procedure. This increases patients' confidence and awareness of the procedures and reduces cancellations and rescheduling of procedures. With lesser cancellations, hospital resources are more efficiently utilized. This also improves patients' satisfaction and enhances the image of the organization.

Overall Besides the time saved in answering phone calls, the team also achieved the following:

- 1.Improved patient care
- 2.Increased job satisfaction
- 3.Increased professionalism image
- 4.Enhanced staff morale
- 5.Increased efficiency in utilizing hospital resources

**Project Sustainability:** With the success of the project, the department is in the process of extending the solution to other clinics and is in the process of standardizing the listing process across the other clinics.