



LEAN CASE STUDY:

SURGERY PREP CENTER CUTS OUT WASTE

Surgery Prep Center faced enormous challenges that included significant growth in demand creating lack of space and rooms, resource variation from procedure to procedure and from surgeon to surgeon.

Surgery Prep Center Day surgery is a busy healthcare work environment at most hospitals. Like many other environments we are working with, the Surgery Prep Center at a hospital was faced with enormous challenges that include significant growth in demand creating lack of space and rooms, in addition to resource variation from procedure to procedure and from surgeon to surgeon. This team, like many other's, saw the benefits of Lean but could not imagine how they could apply it within their own 'unique' environment. The greatest challenge for us was to focus not on why we can't do anything but rather on how we can do it. Once we overcame this hurdle, our team was ready to creatively challenge the status quo and attack waste.

The team was a cross-functional team of healthcare workers and clerical support staff gathered to address the many issues that they faced day to day. As is the case in healthcare, it appeared that no two days were ever the same. There was always a new mix of procedures happening, with a varied mix of surgeons and patient populations. Combined with these ever present issues is the need to help and manage anxious family members. This scenario became our reality, our starting point for introducing Lean in an active Surgical Prep Center. The team created a Current State Map from the initial appointment for surgery to the actual patient arrival, registration, pre-op through to the actual procedure and recovery. The Current State Map was our attempt to try and understand the chaos that the staff works through every day to support the patients and surgeons. The Current State 'Enterprise Value Stream Map'[™] followed two processing streams, the patient flow and the patient information/chart flow. It soon became evident that there were a number of processes that weren't working as effectively as possible. These included:

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- Chart preparation done days in advance of actual surgery that resulted in a number of different people having to touch and update the chart.
 - No one person was responsible for putting together the patients chart. There were at least 3-4 people involved in putting some aspect of information together. Finally, the chart had to be checked by a nurse to ensure everything was present.
 - Patient information was being copied and then constantly updated and corrected at both the Surgery Prep Center and at the scheduling Clinic, because of the early Chart Preparation.
 - Patients showing up or being scheduled to arrive earlier than necessary.
 - Doing Pre Op too early with patients resulting in staff being tied up working with the wrong patient, and tying up the Pre Op rooms.
 - Staff balance was difficult to manage between the different areas of the Surgery Center. At times some staff would be scrambling trying to keep up with the demand of the surgeons while other staff had a less demanding workload.
 - Nurse Manager and the nurse leads spent much of their time trying to re-balance patient load to staff.
 - Time for same procedures varied from patient to patient.
 - Time for one procedure is different than time for another procedure.

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- Nurses were responsible for contacting patients prior to surgery.
 - There appeared to be a wide range of valuable nursing time spent with the patients on the phone that seemed dependent more on who was calling rather than on the patient or nature of the procedure.

The development of a Future State 'Enterprise Value Stream Map'™ focused on improving Flow and or creating Pull from the Surgeons. The team developed an implementation plan. Significant changes were introduced with both the patient process and the patient chart process. The goal was to create a Surgery Prep Center focused on improved patient care and satisfaction with less waste and an improved work environment. The following initiatives were introduced:

- Just in time Chart preparation
- Understanding the Pull from Surgery and setting Prep up to work to this pace
- Breaking Prep into work groups that align with the Surgery schedule
- Determining number of rooms required for each work group
- Assigning staff to support each work group
- Develop standard message for pre surgery patient contact
- Introduce a call type system that brings family into the unit just in time to support patient in recovery and participate in post surgery education

The team had a number of difficult hurdles to overcome in their effort to introduce improved flow through this area. The team learned to involve and communicate to as many stakeholders as possible throughout implementation. The changes introduced positioned the area to meet the greater demands placed on the unit while keeping patient care and patient satisfaction front and center