

The Challenge

The Thoracic Surgery Division in this healthcare organization struggled with inefficient and wasteful processes. As a result, non-operative times were frequently enormous.

The issues were complex, such as:

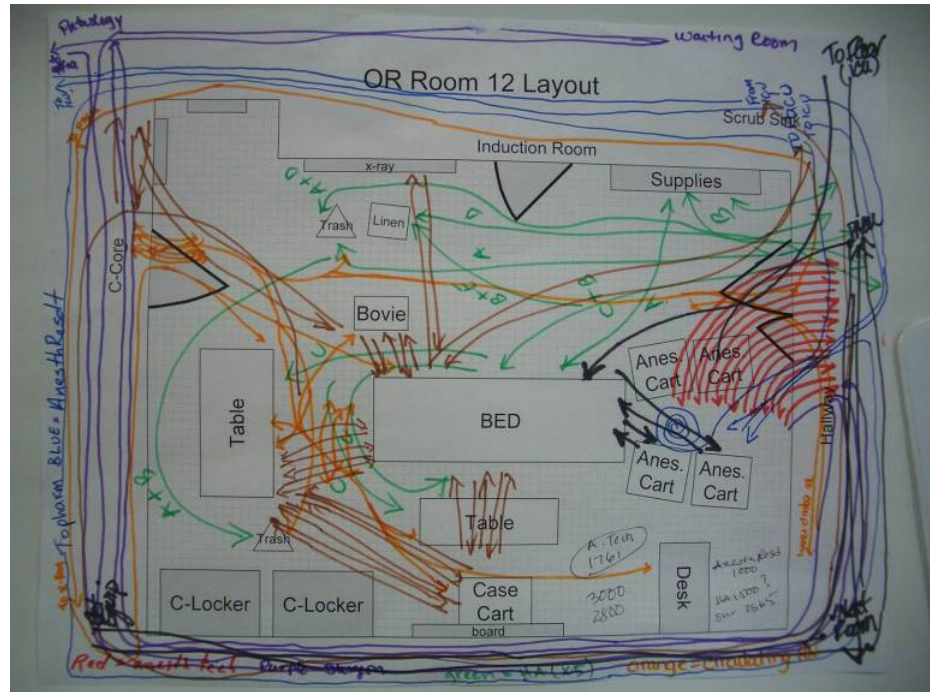
- Physical layout was poorly planned
- Anesthesia didn't "meet" the patient until the previous case was completed
- Searching for equipment and patient data was frequent
- Waiting for the resident or attending surgeon was common
- Patient records were not always readily available
- Roles and responsibilities were not clearly defined
- Communication was sparse and often conflicting

Targets

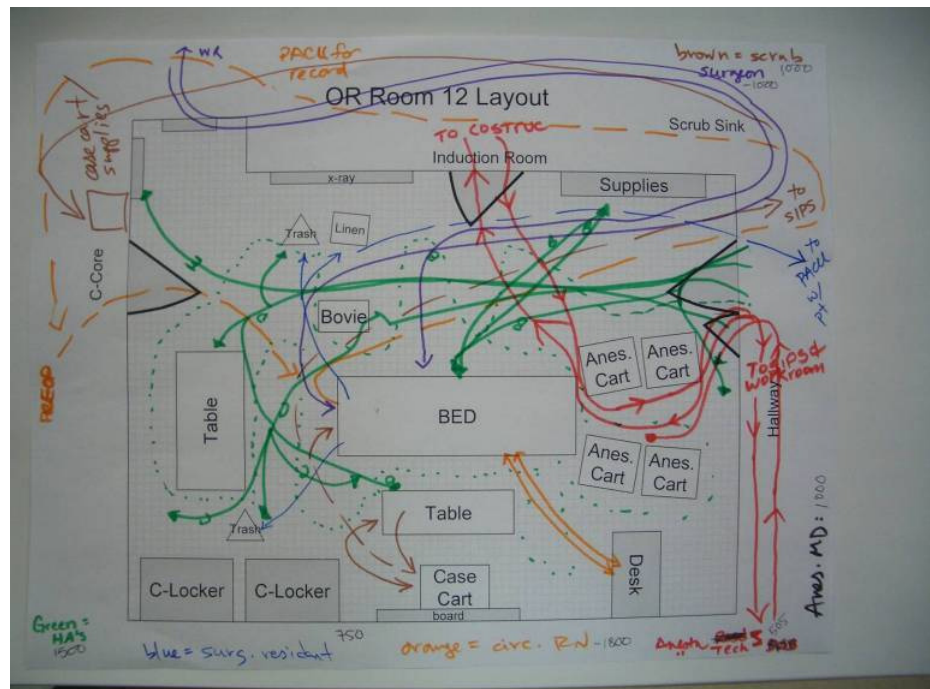
A six-member Team was brought together for a week-long Rapid Process Improvement (RPI) workshop to address the Thoracic Surgery issues. Targets for the workshop included:

- Reducing non-operative time by 30%
- Implementing standard work and work balance
- Engaging staff in the turnover process

Process Map Before:



Process Map After (46% Improvement):



Areas of Focus

While the primary focus was on Thoracic Surgery operative times, several other areas/processes were addressed in order to achieve the targets. For example: Hospital Assistant job duties, OR Team procedures, Anesthesiologist protocols, condition of actual operating rooms, Induction Rooms, Equipment Rooms, Workstations and all related areas.

Workshop Actions

The Lean Consultant led the Team through the structured RPI process which supported accomplishing the majority of the actions during the actual workshop week. Here are the highlights of the actions taken:

- Balanced non-operative time tasks across functions
- Developed standard procedures
- Installed an Anesthesia costruc in the Induction Room
- Improved room layout and design
- Developed a turnover process map
- Created and implemented a “Plan for the Day” template
- Established a “room ready” condition and revised job responsibilities to support this new standard
- Attached chart holders to bottom of stretchers
- Developed new protocol for rapid turnover
- Established guidelines for picking up patients
- Developed a communication plan
- Developed a metrics to monitor success
- Created an audit plan

Outcomes

The outcomes were incredible!

- Process steps were decreased
- Prep time was reduced
- Travel distance was lessened
- Turnovers were standardized
- Work balanced was improved
- Hand-Offs were reduced
- Communication increased
- Visual systems were applied
- Roles were clarified
- Space was organized
- Search times diminished

Results

Metric	Pre Workshop	Post Workshop	% Change
Number of Steps	66	10 (external) 47 (internal)	15%
Total Process Time	1:30 (all cases)	Trial 1: 50 (0 delay) Trial 2: 64 (30 delay) Trial 3: 55 (25 delay) Trial 4: 58 (28 delay)	50% achievable
Distance	12,626 = 2.4 miles	1.3 miles	46%
Work Balance Efficiency	55%	69%	14%

The Team achieved great success with this RPI event. But, they did not stop at the end of the workshop. A follow-up plan was developed to address remaining issues, such as: conducting 5S Events in identified areas, installing new workstations, assigning Anesthesia coverage in the pre-op area and training staff on the new procedures and protocols. This organization is well into their Lean journey!