



Case Study: UC Davis Medical Center, Sacramento, California

The Capacity to See. The Power to Change

Key Results

Improved OR capacity by over 5500 annual hours—10% over the project target.

The freed-up OR capacity translates into a potential \$55 million increase in contribution margin.

Reduced average first case start delays by over 70%.

Improved first case on-time starts by over 400% ("zero tolerance" for on-time starts).

5-Star National Excellence in Healthcare Award.

Reduced average OR turnover time by more than 33%.

"We have tried for 30 years to achieve on-time starts and were not able to get any improvement until now."

Dr. J. Goodnight,
Associate Dean



UC Davis Medical Center, located in Sacramento, California is a 645 bed hospital with 28 operating rooms in the new perioperative Pavilion and Children's Surgery Center. Their foremost objectives in hiring Renoir were to improve OR capacity and patient, employee and physician satisfaction while ensuring that the move to the new facility was smooth and effective.

THE ASSESSMENT

Pre-Operative:

Essential procedures for processing patients were not well defined and poorly coordinated between different departments and staff groups.

Procedure Scheduling:

The schedule was unstable and the scheduling process was labor-intensive, highly manual, complex and involved rework due to constant changes.

OR Throughput:

All though many parties were working hard, roles and responsibilities did not always seem clear and teamwork was a missing component.

Support Services:

Incomplete and outdated surgeon preference cards together with poor quality assurance practices led to unacceptably high case cart error rates.

PROJECT APPROACH

A 40 week project called the Perioperative Review and Optimization Project (PROP) was kicked-off with 3 full-time Renoir Consultants and a 4 person full time "taskforce" of UC Davis hospital employees. The taskforce was trained by Renoir and left in place to sustain the changes made during the project and to continue to apply the Renoir methodology to achieve further improvement in additional areas.

Four Management Action Teams (MATs) were assembled to improve the key implementation areas reviewed during the assessment.

1. Pre-Op
2. Procedure Scheduling
3. OR Utilization and
4. Support Services

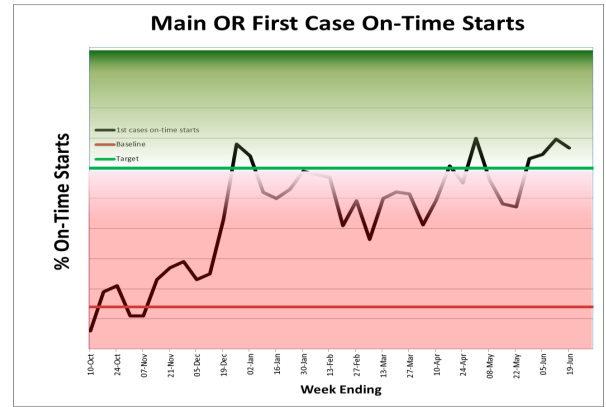
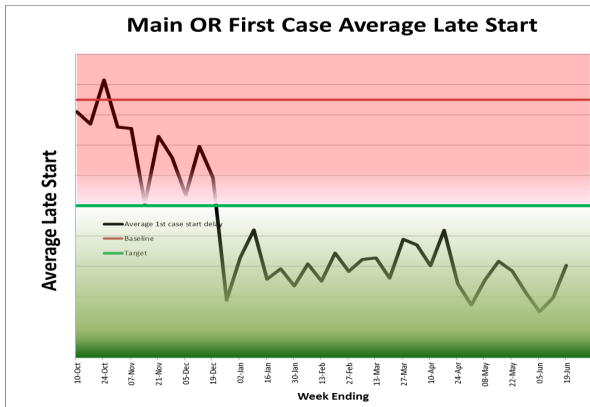
Cross-functional teams, which included a Renoir and taskforce member were assembled for each area. Each MAT, led by a UCDCM line manager, developed and owned the solutions for their area, including a formal commitment to hospital management that the identified benefits would be achieved.

PROJECT OUTCOMES

Each team was successful in achieving their key objective and all project goals were either met or exceeded.

Pre-Op

A new patient check-in and admissions process was implemented to eliminate long lines, patient wait time and decrease delays. A scheduled patient check-in time was rolled out for all necessary parties – surgeons, anesthesiologist, pre-op and OR circulating nurse. This helped ensure all parties properly documented their process and greatly improved on-time starts in the Operating Room. These changes led to a 400% increase in on-time starts and reduced the average late start by over 70%. Preop as awarded the 5 Star PRC National Excellence in Healthcare Award for Patient Perception.

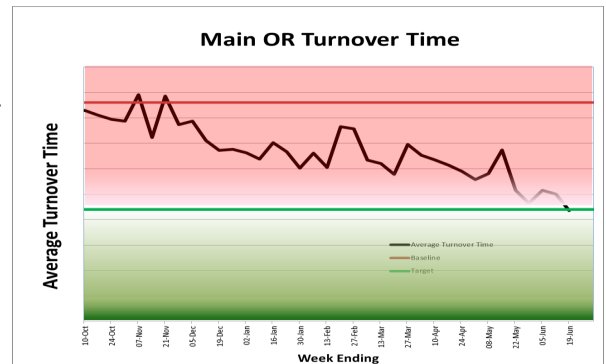


Procedure Scheduling

Reviewed and revised the UCDMC Policies and Procedures, "Scheduling Surgical Procedures." Implemented an on-line scheduling request form and provided training to all parties. Initiated monthly coordination meetings with clinic schedulers and nurse practice managers to review issues and concerns and to provide additional education on new scheduling processes. Implemented a tip of the week that was sent to surgeons and clinic personnel to highlight scheduling "do's and don'ts" to continuously improve the process. A 50% reduction in cancellations was achieved through these improvements.

OR Turnover Time

Designed new OR room turnover process with strong emphasis on teamwork and clearly defined roles for each staff group. Implemented checklist for key turnover activities. Developed 3 person "pit stop teams" to clean the rooms in the most efficient manner and clearly defined their roles and responsibilities. Arranged equipment rooms and added racks in the hallway to store items needed in each area and make them easy to find. Achieved over 30% reduction in average room turnover time.



Support Services

Implemented a process to update surgeons' preference cards in a timely manner and as a routine part of the OR processes. Created a map and clearly marked shelves and parts for the case pickers to ensure fast and efficient picking of carts. Improved case carts picking processes, staff training and quality audits led to a more than 22% improvement in case cart accuracy.