

## "Top 20" USA HOSPITAL AND CLINIC

### Operating Rooms and Cardiac Cath Culture Change

The client is a large Academic Medical Center, known worldwide for advanced patient care provided by its physicians and staff, particularly for the treatment of rare, complex disorders in areas such as: Cardiac care, Cancer treatment, Neurosciences, Surgery and Organ transplants. Ranked in the top 20 on the U.S. News & World Report's "America's Best Hospitals" list, it is internationally recognized for translating medical breakthroughs into the care of patients.

Their desire to improve the efficiency and throughput of their multi site, high volume operating room suites came as a result of pressure from increasing volume and complexity of cases

"I have worked with many consultants for many years. They come, we spend a lot of money, they tell us what is wrong that we already know and then they leave. We have never had a consultancy like Renoir where the problems are reviewed, studied, a plan is organized and then you stay with us and provide the on-going ideas and logical solutions."

**Walter B. Cannon MD**  
**Co-Medical Director**

#### Key Results

Annual \$13million Revenue  
Increase potential from  
increased capacity availability  
in the Main Operating Room  
and Ambulatory Centers

1st case starts in the  
Ambulatory Center improved  
by 775%

1st case starts Main Operating  
Rooms improved by over 140%

#### ANALYSIS

Renoir's initial analysis identified the following:

#### Performance Management issues

- Lack of Short Interval Control Rounding by management, operational Key Performance Indicators, systematic performance review, root cause analyses and resolution

#### Process

- Processes were not efficient and robust, limited understanding of key patient throughput bottlenecks, detailed turnover activities not mapped nor clearly assigned to staff, 1st case start process not fully understood or managed

#### Planning

- Scheduling inaccuracies, incorrect utilization methodology

#### Support Department

- Materials management not in control of Main OR inventory storage areas
- No lean techniques utilized to manage inventory

- High rate of materials returns from Main OR

#### Patient Throughput

- Lack of clarity for responsibility of OR throughput
- Root causes impacting OR throughput not fully known nor addressed,

#### Patient/Employee Satisfaction

- Patients' perceptions were not properly managed

#### Data

- Lack of operational data, (1st case starts, turnarounds, utilization, inventory, room readiness, etc)
- Data not reliable nor easy to obtain

#### Renoir's Project Commitment

- 1st case on-time starts to 80%
- Reduce turnovers by 25%
- Reduce OR inventory by \$640K
- Increase case cart accuracy to 90%

## World Leaders in Sustainable Change

© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.

## FOCUS PROCESS™ & IMPLEMENTATION

Renoir's Focus Process™ provided the required framework and with guidance and coaching from full time Renoir consultants, a client 'taskforce' team was created to jointly lead multifunctional Management Action Teams (MATs). The MATs consisted of stakeholders from key areas, headed by administrators or clinicians. They were charged with achieving higher efficiencies, with a focus on improved processes, systems and performance management.

The Teams mapped all key processes to identify opportunities through studies which exposed root causes of delays and inefficiencies. They then examined, agreed and prioritized the issues, developed action plans to implement permanent fixes and installed ways to measure progress and success.

Less than 3 months into the Project, each MAT presented to senior leaders, their understanding of the issues, plans and timelines to address the issues and the operational and financial results. Critically, each Team made a public commitment to achieving specific results, a clear message that a significant change in the organization's culture had occurred - from one of blame and disinterest to ownership of the problems and involvement in solution implementation.

### Main OR, Pre-Op/Post-Op and Cath/Angio MATs:

- The key focus for these MATs was to improve the amount of 'value added time' in every room. Data was extracted from EPIC (software) into a custom built performance management tool to understand where the main delays occurred. As a result, daily rounding and huddles were implemented to manage patient flow to the OR's, logging the main reasons for every delay. This contributed to the culture change, resulting in major efficiency improvements.
- Example: Room turnaround times were dramatically reduced through detailed understanding of activity flows using "lean" techniques such as SMED (single minute exchange of die). This provided a platform to effect process changes, review and revise roles and responsibilities, implement effective management rounding and set targets by service/procedure.

### Planning & Scheduling MAT:

The was to ensure the accuracy and stability of daily scheduling. Among other basic and more complex reasons for the plan's instability, the MAT found that:

- Procedure times in EPIC were not accurate. An OR analytics tool was used to define and obtain service specific turnover times and set-up/tear down times. EPIC was adjusted, accordingly.
- An incorrect methodology was used to measure surgeon/block utilization hiding the true opportunities for increasing utilization. The methodology was improved and the analytics tool deployed to report performance trends for each block, allowing effective adjustment and block changes.

### OR Supply Chain & Support Services MAT:

Agreement was reached on a future-state preference card change/update process along with a schedule to change cards based on highest

"The Renoir team provided the focus, the energy and the expertise we needed to work through multiple barriers and establish a culture of change and improvement in our ORs.

This is the most effective improvement initiative I have seen here in 30 years."

**B Bohman MD**  
Associate CMO

### Key Results

60% improvement in 1st case room ready in the Main OR

Turnaround times reduced by 75%

Patient throughput time reduced by 25%

1st case starts time delay in the Main Operating Rooms reduced by 75%

Main Operating Rooms inventory reduced by over 22%

56% reduction in materials returns in the Main Operating Rooms

## World Leaders in Sustainable Change

© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.

“I had the honor and opportunity to participate in the STORM project through a committee headed by Dr. Bryan Bohman that has helped us improve efficiency in the operating rooms with start times and turnovers. It has been such an educational process for me to work with the Renoir consulting group”.

**Suma D. Ramzan  
MD, Anesthesiologist**

## THE RENOIR GROUP

Renoir Consulting is a world leader in sustainable, implemented change. Founded in 1994, Renoir has offices located in North and South America, UK, Europe, Turkey, Middle East, Southern Africa, India, Pakistan, China, South East Asia and Australasia. With over 350 fully employed and highly trained consultants, their work across a wide range of industry sectors gives them a broader perspective of the issues facing your business, allowing them to be sensitive to your unique challenges, culture and specific business issues. This cross-pollination ensures truly effective, rapid and sustainable solutions.

Visit Renoir at [www.renoirgroup.com](http://www.renoirgroup.com) for more information and a complete list of regional contacts or send us an e-mail at: [renoir.office@renoirgroup.com](mailto:renoir.office@renoirgroup.com)

volume. Inventory stock usage was analyzed and par levels were re-defined along with new reorder points. Inventory champions were identified within the Main OR to manage the 5s housekeeping changes, control returns and maintain accuracy of the case carts. This was done in conjunction with materials management by opening up communications and partnering between the two departments.

### Data Mining & Query Reports MAT:

The focus was to identify key metrics and develop ways to extract accurate data from EPIC into a performance management tool. Working with other Teams, they assisted in developing better procedure accuracy and block utilization.

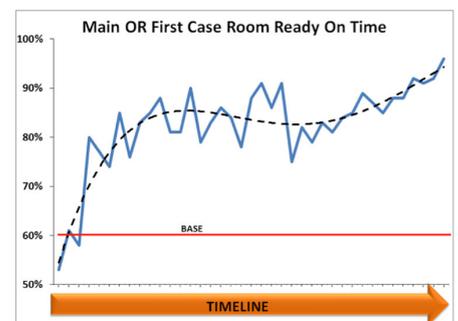
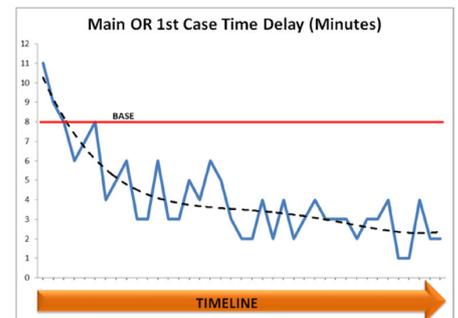
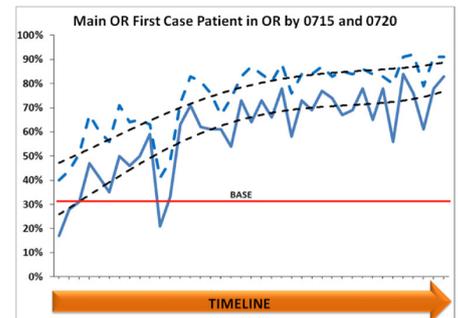
### SUMMARY

The engagement exceeded expectations, realizing additional capacity equivalent to over \$13M in net revenue in just 6 months. Getting buy-in from physicians and clinical staff was critical to the success of the engagement and it was through this that the project was able to achieve the dramatic improvements in operational indicators, including...

- 140% 1st case starts improvement Main OR
- 775% improvement Ambulatory Center
- 418% improvement Out-patient Center
- 115% improvement Cath/Angio department
- 75% reduction in Turnaround time
- 25% reduction in Patient throughput time
- 90% Case cart accuracy
- 56% improvement in Materials returns

The improved efficiency and predictability, along with the change in culture, had a dramatic impact on both staff and patient satisfaction. The improved transparency of operations and results, improvements to management systems, and techniques passed on through coaching and training, ensured that communication throughout the organization improved. This in turn changed the culture of the organization to be more performance improvement focused.

The processes, systems and behaviors continue to improve because of this change in culture and the establishment of an internal, performance improvement team.



## World Leaders in Sustainable Change

© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.