University of Connecticut Hospital, USA
Performance Improvement Project

The 224 bed John Dempsey Hospital, part of the University of Connecticut Health Center, has long been regarded as the premier facility in the region for neonatal intensive care and high-risk maternity. It is also widely recognized for its comprehensive cardiovascular, cancer and musculoskeletal services. In 2005, the Health Center was named a “Top 100 Hospitals®: Performance Improvement Leader”, compared with more than 6,000 U.S. hospitals. In 2004, the Renoir Corporation carried out a key project to improve its operating room performance.

ANALYSIS
Renoir carried out an initial 3 week Assessment for Perioperative Services (Operating Room) and Materials Management. Issues identified included:

- Scheduling process was not used to effectively manage resources
- Staffing levels were flat despite considerable volume movements
- Many OR cases were not taking place because of internal problems
- Preference items in OR's resulted in significant cost variations
- Charging process inconsistent
- Planning systems not mod

PROJECT APPROACH
The project's duration was 30 weeks, with one full time Renoir employee and three internal full time taskforce members. In addition, four Management Action Teams (MAT's) – Purchasing and Inventory, Pre OR, Intra OR and Post OR were set up. The combined team – Task Force, MAT's, & Renoir then planned the necessary changes to meet or exceed Renoir's original commitment. Using this approach, internal ownership was high and sustainability assured.

PROJECT RESULTS
Reduction of OR inventory levels from $1.28 mill to $0.9 mill achieved through system and process changes, a redesign of the Materials Management organizational structure, implementation of a sound Materials Management Control System, renegotiations with Vendors and a more robust Vendor Management System.

The new Vendor Management approach enabled more accurate and relevant data to be shared with the physicians allowing better dialog leading to cost reductions, both from changes in preference items and better vendor leverage.

The number of OR procedure cancellations was reduced from 20/wk to 7/wk through improved systems and processes. In addition, a 10% Increase in OR capacity was achieved by reviewing the scheduled standard time per case vs. the actual time, and having the schedulers book cases using the CPT code therefore creating an accurate time for each procedure.

Key Results
Ongoing cost reduction of $750,000 per annum
One time inventory reduction of $250,000
OR cancellation rate from 20 per week to 7 per week
10% improvement in OR utilization
Ownership & accountability of key stakeholders
30% improvement in reference Card accuracy

“The essential deliverables of the project were delivered on time and within budget. The project resulted in better work flow processes in both the Operating Room and Materials Management that should benefit the organization for many years.”

James H. Thornton
Chief Financial Officer
A daily scheduling meeting covering equipment & supply availability contributed to improvements in cancellations and OR availability. A 30% improvement in Preference Card accuracy was achieved through better communication and interaction between the nurses and physicians. Through better systems, processes and patient education and communication, a dramatic improvement in targeted discharge time was achieved. Scorecards for each of the MAT’s were developed to measure performance and to highlight areas for further action. The project projected savings of $1,000,000 was achieved before the project completion, and improvements continue to grow.