



Mercy Medical Center – Cedar Rapids Success Story

Mercy's Lean initiative was begun in February 2005 as an important addition to our continuous improvement efforts in quality, safety, and efficiency. We were introduced to Lean by the collaborative project between the Iowa Hospital Association and the Iowa Business Council, as well as by our business partners at Rockwell. We were sold on Lean's focus on the customer; its high level of staff involvement, and its demonstrated results. We realized that Lean could deliver the quantum-level improvements our stakeholders were demanding, and would also help us develop new ways of delivering health care services in the face of upcoming baby boomer retirements and the resulting serious health care professional shortages.

Our executive team evaluated potential areas for application of Lean using criteria such as strategic importance; the potential for improvement in patient, physician, and employee satisfaction; cost savings potential; and leadership strength. To date, the following value streams have been initiated:

- Emergency Department
- Planned Surgical Admissions
- Patient Care Documentation
- Lab Operations
- Revenue Cycle
- Inpatient Medical-Surgical Care
- Care Coordination

"Do its," projects, and events have successfully been implemented in clinical, support, and office environments, demonstrating the universal application of Lean. As of August 2006, we have completed a total of 31 events. Some of the results in the Emergency Department are as follows:

General x-ray cycle time	Reduced 50%
CT scan cycle time	Reduced 38%
Fast Track patient visit cycle time	Reduced 50%
First pass clean claims	Increased 81%
Patient satisfaction	Increased from 38th to 95th percentile
Staff Distance Traveled	Reduced by 510 feet per triage patient

We have successfully utilized several classic Lean tools in our journey. Kanban systems have been implemented in our OR and our nursing units, reducing inventory levels and decreasing storeroom requisitions by 34%. The implementation of a pull system for IV Pumps decreased monthly rental costs by \$7,500. We have applied "6S" techniques to our Laboratory, freeing up 48 square feet of floor space.

We have had the opportunity to extend the application of Lean beyond the Mercy organization through joint Lean events with Wellmark on the medical record request process. The process improvements developed by this team are being piloted plan-wide. Mercy's medical requests from Wellmark have been reduced from 60 per month to 20 per month. The plan-wide pilot reflected a 56% reduction in the number of medical records requested by Wellmark. Also, Wellmark projects a reduction of 14,000 – 15,000 suspended claims per year as a direct result of these process changes, effectively reducing costs for both providers and Wellmark.

We also have seen benefits beyond quantifiable cost savings and patient satisfaction improvements. Lean is the most effective problem solving technique that we have used in our organization, particularly for issues that cross departments. Selecting processes that have been historically frustrating to employees for improvement efforts validates the importance of their everyday issues. The Lean process has allowed employees from different departments to walk in each others' shoes. Time and time again, misperceptions about the role of employees in other departments were shattered, and true understanding of the impact of

one department's work on another's were realized. The process allows a focus on what's best for the customer, rather than fostering a battle of one department's needs versus another's.

We also have seen the value of Lean as a professional development system. Lean facilitator roles have been created both to increase the capacity of Mercy to implement Lean, as well as to develop leadership skills in the organization's up and coming leaders. These individuals will be trained to apply all of the Lean tools, to effectively use data to guide decisions, and to deal with change management issues needed to hardwire and sustain positive improvements.

As we travel on our Lean journey, we continually realize that health care is overflowing with complex and fragmented processes that too often get in the way of fulfilling our mission to care for the sick and enhance the health of the communities we serve. We owe it to our patients, and to the health professionals that dedicate their lives to serving them, to continue to strive towards perfection.