

# **Restructuring a Hospital Quality System**

#### **Problem and Opportunity**

The hospital quality system consisted of ad hoc reporting of roughly 50 metrics. Most were high level regulatory compliance metrics; almost none were aimed at monitoring performance for cost, quality, or safety. They were not driving process improvement, and therefore most of the measurement effort was being wasted.

## Gap Analysis

A study of the quality system showed several root causes of ineffective measurement and inadequate process improvement action:

- There was no clear linkage between the metrics used and the hospital's need for meaningful process improvement.
- Metrics were aimed at "counting defects", usually from time consuming audits. The staff didn't understand the linkage between the defects and the process root causes driving the defects.
- Staff had very limited statistical understanding. They often reacted on process noise rather than valid process signals. They also had limited data presentation skills, so even good data was hard to understand.
- There was little benchmarking or goal setting. Staff didn't understand whether "80%" right was good enough. Some processes were running at less than 50% effective.
- There were too many, generally ineffective, process improvement projects in place.

## Lean Sigma Approach

Several parallel approaches were taken to improve effectiveness of the quality system.

- Proposal of and agreement at the Board level for a more effective set of system measures.
- Training of staff in root cause analysis, basic statistics, Six Sigma, Lean, and process benchmarking.
- A shift from defect counting to understanding the process "vital signs" that were leading indicators of defects.
- Development of standard data presentation methods, stop-lighting of metrics, and mandatory root cause analysis of metrics short of goals.
- Mentoring individual department heads in specific data collection and process improvement techniques, with a focus on solving the most critical problems first.
- Facilitating Kaizen or other improvement events to permanently improve processes.

#### Results

After 6 months of training, mentoring, and hands-on work, the quality system showed marked improvement:

- Managers and Directors had clear, understandable presentations and data.
- They had determined benchmarks
- They used stoplights to show problem areas.
- They could triage process performance into buckets of: "stay the course", "watch and wait", or a critical few "process improvement project required/justified"
- For process improvement projects, they had a roadmap and tools to make real progress.
- There was a prioritized process improvement project list for the organization.
- The system became self-sustaining and continuously improving.

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