

CASE STUDY

Industry: Healthcare

Client: Columbia Regional Hospital

Event: Lean Sigma

50 Words or Less

Columbus Regional Hospital (CRH) successfully used a Lean Sigma approach to improve compliance with Medicare requirements for patient notification. Standard work and action triggers significantly increased performance in a six-day project.

Meeting Regulatory Compliance with Standard Work and Action Triggers in Just Six Days

Project Background

Columbus Regional Hospital (CRH), like other US hospitals, is required by the Centers for Medicare & Medicaid Services (CMS) to provide notices to

Medicare patients. At admission, hospitals “must deliver the ‘Important Message from Medicare’ to inpatients with Medicare to explain their rights as a hospital inpatient.”¹ CRH refers to this as Page 1 of the notice. If the patient stay is greater than 48 hours, “As soon as possible prior to discharge, but no more than 2 days before discharge, the IM, or a follow-up copy of the signed IM, must also be provided to each Medicare Beneficiary.” CRH refers to this as Page 2. Failure to comply can result in a fine of \$50,000 / event and a reduction in Medicare reimbursement.

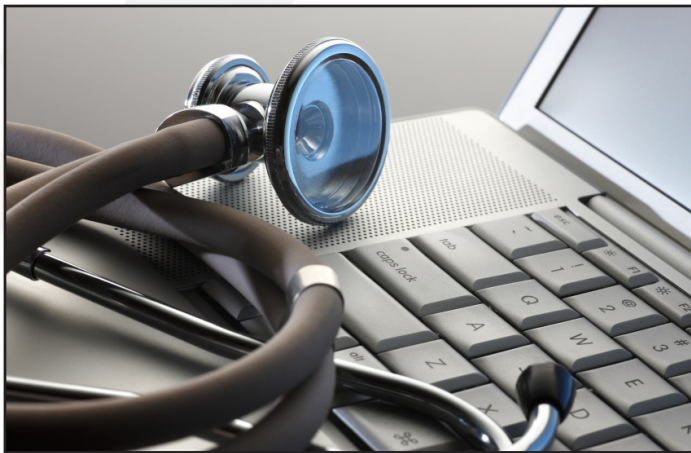
At first, CRH leadership distributed the required notices and assigned nursing staff responsibility for completion. They quickly recognized, however, that, without a systematic approach, compliance was inadequate.

Impediments included the absence of a trigger to alert staff to provide the notices and nurses’ understandable unawareness of a patient’s payor status.

With direction from CRH leadership, the Master Black Belt (MBB) organized a truncated Lean Sigma project, completing the project in six working days. Even in an abbreviated project, the DMAIC format (Define-Measure-Analyze-Improve-Control) provided a roadmap for project completion.

Define – In this phase, the team completed the SIPOC, mapped the high level process, determined customer requirements, and identified the fall down points in the current process using Murphy’s Analysis.

Measure – In the Measure phase, a detailed process map of the current process was completed (Figure 1, below). Baseline performance was also



assessed.

The team found a 72% compliance with Page 1 and 55% compliance for Page 2. The hospital set a 90% compliance target for each with a 95% stretch goal.

Analyze – Analysis of the Value Stream Map (Figure 1) identified an overly complicated process with no value-added steps. The team determined that it could remove delays and streamline the process.

Improve – A new process was developed with visual triggers for action. If the Medicare patient is admitted directly, Registration is responsible for obtaining the signature on Page 1. When the patient arrives on the unit, paperwork includes a sticker for the front of the chart (Figure 2) indicating that Page 1 has been signed.

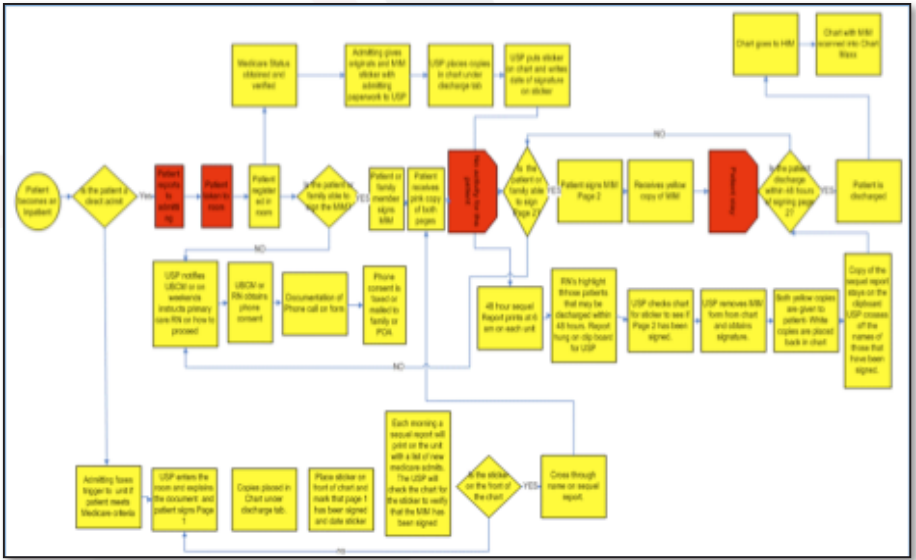


Figure 1: Value Stream Map

If admission is through the Emergency Department, Registration is called for the transfer and an alert is faxed (Figure 3) to the unit, as a trigger to have Page 1 signed. The Unit Secretary (“The Keeper of Medicare Papers”) is responsible for securing the signature and places the Chart Sticker (Figure 2) on the front of the chart.



Figure 2: Chart sticker

As a reminder, an auto-print sequel report arrives at the unit at 8:00am with the names of all admissions in the past 24 hours. A second sequel report arrives on the unit for any patient who has been in the hospital for more than 48 hours. The nurse highlights those that may be discharged that day or within the next 24-48 hours and the Unit Secretary is tasked with securing signatures for Page 2.

Following implementation, a brainstorming session with the Unit Secretaries identified a lingering problem: finding family members. As a result, if the family is unavailable, a sign (Figure 4) is placed on the message board in the patient room. If the patient or family member is still not available to sign, the Unit-Based Case Manager assumes responsibility.



Figure 3: Faxed Prompt



Figure 4: Family Notice

A self-learning module was developed and distributed to all licensed nursing staff and training was provided to Unit Secretaries and all Admitting staff. Policies and procedures were amended to reflect the new process and a “cheat sheet” with process steps was placed on all units.

Control – As displayed in Figures 5 & 6, significant improvements have been observed in both Page 1 and 2, although Page 2 remains below target. Compliance is uneven across nursing units and periodic audits, by unit, continue to be conducted.

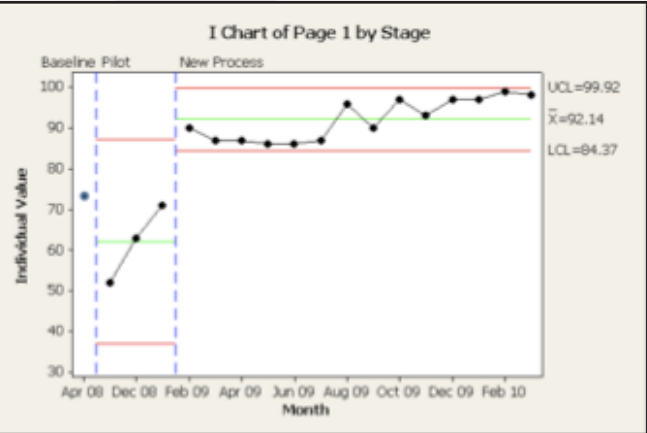


Figure 5: I Chart of Page 1



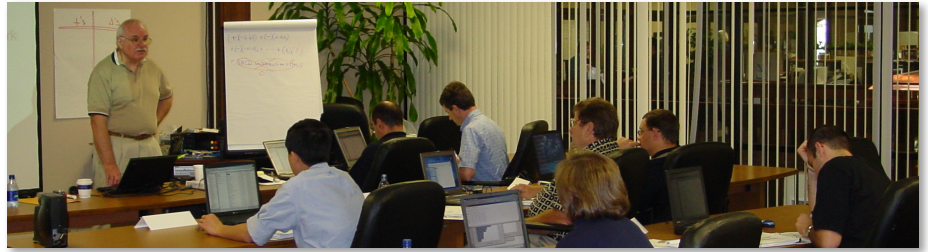
Figure 6: I Chart of Page 2

Conclusion

New regulatory requirements may appear modest (e.g., patient notifications) but are often difficult to implement. Lean Sigma provides the structure and discipline to assure compliance.

References:

1. Medicare Learning Network: MLN Matters Number: MM5622, May 25, 2007.
2. Wedgwood, Ian. *Lean Sigma: A Practitioner's Guide*. Prentice-Hall: Upper Saddle River, NJ, 2006.
3. Zinkgraf, Stephen. *Six Sigma: The First 90 Days*. Prentice-Hall: Upper Saddle River, NJ, 2006.

**Value Proposition**

Recognized as thought leaders and innovators in business process improvements, SBTI is a global management consulting firm specializing in the deployment of Six Sigma and Lean methodologies. SBTI delivers innovative and sustainable business process excellence solutions by developing future leaders with core competencies to drive superior top and bottom line results. We advance our clients with best-in-class results in revenue growth, cost reduction, new product development and process improvement.

Focused on Healthcare

SBTI brings its considerable deployment history to bear on the healthcare industry. We've taken our experience with 70+ major deployments across various industries and modeled a program specifically for Healthcare. By executing dozens of projects and enlisting the expertise of healthcare professionals, SBTI has created the first complete portfolio of tailored process improvement solutions for Healthcare.

What We Provide

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SBTI delivers the fastest and highest return on investment in the industry. Always incorporating a measurement benchmark, most of our clients experience an average of 30X return on investment (ROI) within the first 24 months of engagement.

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Our History

Dr. Stephen Zinkgraf, one of the original Six Sigma developers, founded SBTI in 1997. Beginning with two corporate clients, SBTI has grown to more than 70 global corporate deployments and more than 220 clients using SBTI methodology.

SBTI Executive Directors and Master Consultants have a minimum of 10 years industry experience – some 25 or more. Our international offices provide the same unmatched experience and capabilities as in the states, while offering local language and bilingual instructors. All of SBTI's consultants have lead multiple waves of training, completed numerous projects and continually mentor Black Belts.