Improving a Core Measure at an Acute Care Facility

by Melissa Davies & David Smith

Tales from the Field, a monthly column, consists of reports of evidence-based performance improvement practice and advice, presented by graduate students, alumni, and faculty of Boise State University's Instructional and Performance Technology department.

Performance Improvement at St. Luke's Regional Medical Center
The Performance Improvement Department at St. Luke's Boise/Meridian Medical Centers, headquartered in Boise, Idaho, is charged with the task of defining, planning, designing, prioritizing, measuring, assessing, implementing, and reporting performance improvement efforts for the organization. St. Luke's participates in public reporting of core measures as stipulated by the Joint Commission, a healthcare accreditation organization. Performing assessments and providing vaccinations for Pneumococcal and Influenza are part of the Pneumonia Core Measure Set. This article describes how the involvement of the Performance Improvement Department helped to produce positive changes in the results.

Understanding Needs with Kaufman's Organizational Elements Model (OEM)
The overall relationship among multiple layers of end-results regarding the stated part of the Pneumonia Core Measure Set can be better understood by using Kaufman's OEM (1983):

- **The Mega-Level** - Each year in the United States, an estimated 175,000 people are hospitalized due to Pneumococcal pneumonia. Additionally, complications due to influenza are estimated to hospitalize over 200,000 people and kill 36,000 annually (National Foundation of Infectious Disease, 2008).

- **The Macro-Level** - Organizationally, St. Luke's chose to aggressively pursue immunization screening and administration levels within the 90th percentile for the Pneumonia Core Measure Set. This achievement will place them in the top 10% of hospitals nationally for this quality measure.

- **The Micro-Level** - All patients should be screened and/or vaccinated prior to discharge from the facility.

With a goal of improving the end-results, the hospital's Clinical Practice Council collaborated, established, and distributed a new nursing protocol for screening and immunizing patients in November of 2007. Disappointingly, five months later, this resulted in no discernable improvement in the screening and immunizing of patients. At this point, the Council engaged the Performance Improvement Department who then established an interdisciplinary "Immunization Team." The team's first task was to identify barriers hindering 100% compliance and establish a process to screen and/or vaccinate 100% of patients prior to discharge from the facility.

Analyzing Barriers with Affinity Diagram and Fishbone Diagram
The Immunization Team began their work with a brainstorming session using sticky notes to capture their ideas. From these notes, they created an affinity diagram, re-evaluated the information, and organized it into a fishbone diagram (see Figure 1).

The diagram categorized barriers to compliance which consisted of: process, people, policy, and IT/Documentation.

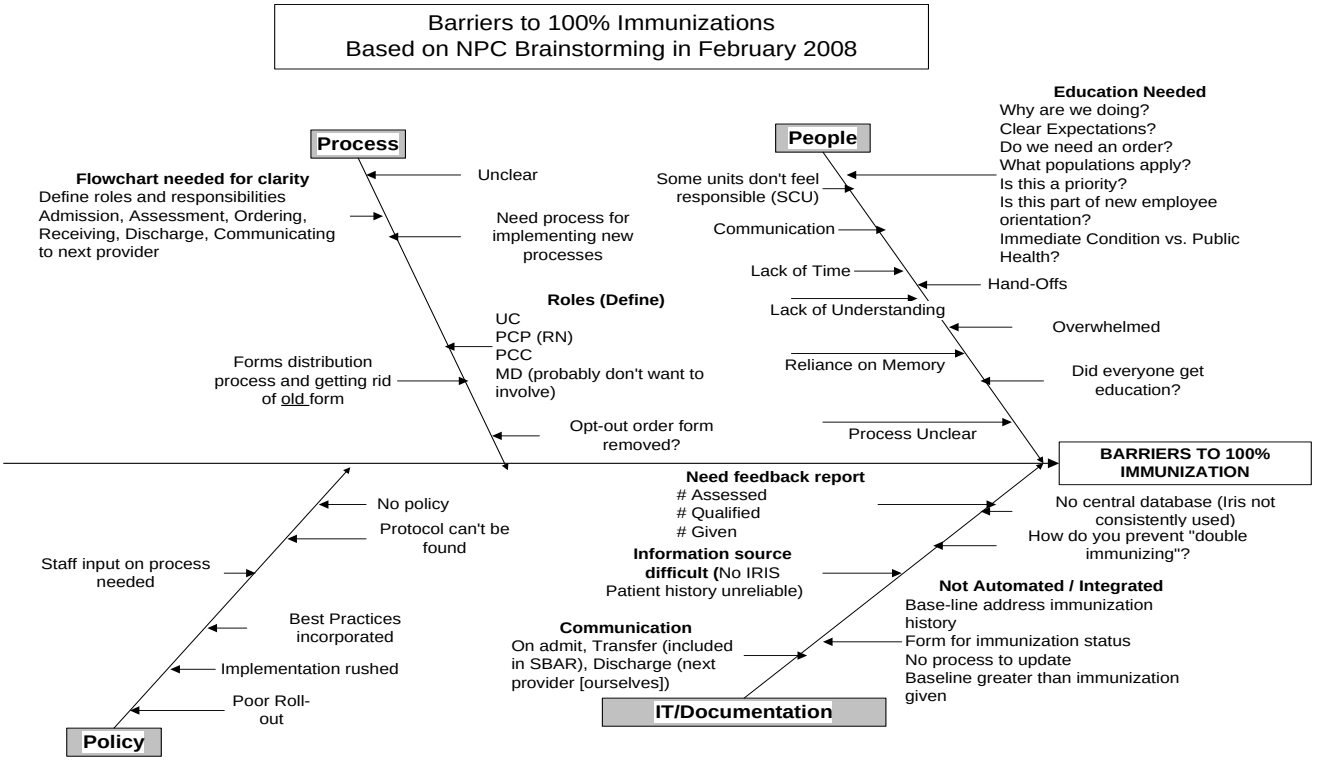

Figure 1. A fishbone diagram, analyzing barriers to 100% immunizations.

Reflecting on the Performance Improvement Process

- **OEM Levels -** Although St Luke's cannot make changes to completely eradicate the impact of pneumonia and influenza (mega-level), they can make changes and improvements within their facilities (macro-level). The lack of a formal organizational process for screening patients and providing the necessary immunizations when indicated caused less than desirable performance in screening and vaccinating patients (micro-level). This is where the deficiency was found, and a new process for those assessing patients for immunizations was needed.

- **Means to Ends** - The Performance Improvement Department focused St. Luke's efforts on creating a process for screening and immunizing patients. Establishing this process created the avenue (means) necessary to achieve 100% compliance. Educating the direct care-givers assured that they would initially and permanently follow the newly established process. This supported achievement of the 90th Percentile for the Pneumonia Core Measure Set (ends).

- **Collaboration with the Performance Improvement Department** - The Council first distributed its new protocol in November of 2007. Five months later and showing no noticeable improvement, the Immunization Team was formed with the help of the Performance Improvement Department in March of 2008. This resulted in the achievement of 100% compliance by May of 2008. Engaging the Performance Improvement Department earlier in the process may have

resulted in achieving the desired results more quickly. Collaboration with the Performance Improvement Department provided a more global perspective that is closely aligned with OEM. This allowed for identification of the gap and the benefits to both the organization and society when closing the gap.

References

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