

Key Elements of a Successful Surgical Improvement Collaborative

Abstract ID ACSNSQIP20140086

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ABSTRACT

TITLE:
Key Elements of a Successful Surgical Improvement Collaborative

BACKGROUND:

Efforts at improving surgical outcomes have previously focused on procedure volume, structural and process measures. The advent of the National Surgical Quality Improvement Program (NSQIP), a database of surgical outcome measures for abstracted surgical procedures conducted, has provided a key tool in the operational processes required to facilitate surgical quality improvement. This platform of outcome measures creates an incentive to further develop improvement processes and a framework to leverage improvement.

METHODS:

In order to benefit from the NSQIP postoperative occurrence measurement platform, we established a surgical improvement collaborative through 1) Clear vision and mission statements; 2) An organizational structure that addressed funding, leadership, planning, measurement and analysis, operations and results was developed by recruiting key sponsoring organizations; 3) Adoption of the PDSA operational approach where an improvement cycle was defined encompassing planning horizons, goals and objectives, improvement bundle implementation, results reporting and synthesis. Quarterly meetings of participants with scheduled reporting of complications and mortality were held and PDSA activities adjusted to the new data.

RESULTS:

The Tennessee Surgical Quality Collaborative (TSQC) began with three hospital members, growing to ten hospital members in late 2008 and twenty-two in 2012. By utilizing best practice models throughout the TSQC, the mortality rate has declined by 31.5 percent and postoperative morbidity has declined by 33.3 percent since first quarter 2009 national reporting.

CONCLUSIONS:

The development of a state-wide surgical improvement collaborative has focused efforts, fostered collaboration and resulted in substantial risk-adjusted reductions in surgical patient morbidity and mortality.

BACKGROUND

The National Surgical Quality Improvement Program has provided an excellent platform for surgical care improvement. However, data alone, while important, cannot by itself, create improvement. Error rate levels, trends, comparisons and performance projections must be created from the data platform through appropriate data management, accounting and analytics. The integration of the resultant information into strategic planning as measures of performance success or failure and identification of opportunities for improvement initiatives is a logical and critical requirement of any effective improvement platform. The alignment of estimates of success, failure and opportunity with planning, work processes and work efforts provides a unique opportunity to leverage collaborative-wide findings at the individual hospital and surgeon level.

OBJECTIVE

Our objective was to apply the organizational structure and processes that would facilitate, define and support surgical care improvement.

METHODS



Organizational elements of structure and process were identified by applying the Baldrige criteria for performance excellence model.

Leadership

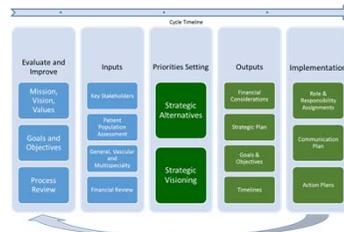
Mission and Vision

- **Mission** - To improve the care of the surgical patient by supporting an open discussion and transfer of information through a collaborative team effort.
- **Vision** - To identify best surgical practices, examine how the surgical team obtains best outcomes and teach other surgical teams how to improve outcomes.

Creating a Sustainable Organization

- **Environment** – Sponsoring organizations: TnACS (leadership), THA (infrastructure), BCBST Foundation (funding).
- **...Governance and Responsibility**

Strategic Planning



The strategic planning process establishes how strategic objectives and action plans are developed, implemented, modified and how to measure progress. Action plans include linking the strategic initiative with the performance measure and methodology in order to assess the effectiveness of the strategic initiative. Performance projections for short and long term planning horizons are an important part of strategy implementation that identify potential gaps in strategic initiative effectiveness.

RESULTS

Hospital specific relative risk for postoperative occurrences

| Postoperative Occurrence | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Mortality | 1.00 | 0.82 | 0.77 | 0.72 | 0.67 | 0.62 | 0.57 | 0.52 | 0.47 | 0.42 | 0.37 | 0.32 | 0.27 | 0.22 | 0.17 | 0.12 | 0.07 | 0.02 | 0.00 | 0.00 |
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