Using a Multipronged Approach to Reduce Cardiac Surgery Mortality
Article in new issue of The Joint Commission Journal on Quality and Patient Safety


In 2006, cardiac surgery mortality rates for isolated valve and valve/coronary artery bypass graft procedures at Long Island Jewish Medical Center (LIJMC), New Hyde Park, New York, were significantly higher than the New York State Department of Health’s Cardiac Surgery Reporting System statewide average. In response, senior leadership at LIJMC launched an evaluation of its cardiac surgery program. As a result, the medical center redesigned its cardiac surgery program and implemented a series of interventions in preoperative care, intraoperative monitoring, postoperative care, and the cardiac surgery quality management program, including the following:

• Developing specific criteria, in collaboration with cardiologists, to identify high-risk patients who need a more detailed preoperative assessment.

• Conducting multiple, daily interdisciplinary rounds by surgeons, intensivists, physician assistants/nurse practitioners, nursing leadership, physical therapists and respiratory therapists.
• Establishing the Collaborative Care Model and the Team Strategies and Tools to Enhance Performance and Patient Safety programs to provide a formal infrastructure, promoting teamwork among frontline staff.

• Implementing formal reporting structures and continuous data review to achieve and sustain accountability across all levels of the organization.

As a result of these efforts, LIJMC sustained significantly lower mortality rates compared to the statewide average for the past three cardiac surgery reporting periods. In the most recent reporting period (2009-2011), LIJMC had the lowest risk-adjusted mortality rate in New York state for the cardiac-related procedures.

In an accompanying editorial, “Overhauling the Entire System of Care to Improve Cardiac Surgery Outcomes,” Edward L. Hannan, Ph.D., M.S., FACC, University at Albany, State University of New York, discusses how hospitals have been using mortality data to improve quality and outcomes and notes, “The quality improvement approach by which LIJMC overhauled the entire system of care, should translate well to others types of surgery, and should serve as an outstanding example to cardiac surgery programs throughout the world.”

The remaining articles from the February 2015 issue are:

Performance Improvement
Rethinking Critical Care: Decreasing Sedation, Increasing Delirium Monitoring and Increasing Patient Mobility

Rick Bassett, M.S.N., ACNS-BC, CCRN; Kelly McCutcheon Adams, M.S.W., LICSW; Valerie Danesh, RN, M.H.S.A., CCRP; Patricia M. Groat, B.S., RN; Angie Haugen, RRT; Angi Kiewel, RN, B.S.N.; Cora Small, B.S.N., RN, CCRN; Mark Van-Leuven, B.S.; Sam Venus, M.D.; E. Wesley Ely, M.D., M.P.H.

Implementation of evidence-based guidelines and care bundles regarding sedation management, delirium monitoring and mobility programs in intensive care units (ICUs) remains variable. As critically ill patients occupy higher percentages of hospital beds in the United States and beyond, it is increasingly important to determine mechanisms to deliver better care. In five hospitals/health systems participating in The Institute for Healthcare Improvement’s 33-month (March 2011–November 2013) Rethinking Critical
Care (IHI-RCC) program, improvement in ICU and ventilator lengths of stay between the pre- and post-implementation periods varied from slight to substantial. Changing critical care practices requires an interdisciplinary approach addressing cultural, psychological and practical issues.

**Reporting Systems**

**Using a Quantitative Risk Register to Promote Learning from a Patient Safety Reporting System**

*James G. Mansfield, Ph.D.; Robert A. Caplan, M.D.; John S. Campos, M.A.; David F. Dreis, M.D.; Cathie Furman, RN, M.H.A.*

In response to the challenge of how to quantify and prioritize safety opportunities to address staff-reported risks, a risk register system was developed and implemented at Virginia Mason (Seattle). The risk register uses a comprehensive taxonomy of patient risk and algorithmically assigns each patient safety report to 1 of 27 risk categories in three major domains (Evaluation, Treatment and Critical Interactions). Patient safety reports in the top five categories were analyzed to find recurrent patterns of risk and associated opportunities for improvement. These results were shared with leadership and served as input for planning quality and safety initiatives. The quantitative patient safety risk register serves as one solution to the challenge of extracting valuable safety lessons from large numbers of incident reports and could profitably be adopted by other organizations.

**Editorial: Spending the Coins of Knowledge on Safer Health Care**

*Iain E. Yardley, B.M., M.P.H., FRCS*

**Conference Report**

**Leveraging Evidence Across the Care Continuum**

*David Bates, M.D., M.Sc.; Patricia Flatley Brennan, RN, Ph.D.; Joyce Flory, Ph.D.*

This report summarizes a conference, held in September 2014, which addressed a variety of timely issues: how health care professionals can drive evidence-based innovation across the care continuum; mobilize health information technology, including
mobile health, to enhance patient-clinician engagement and team collaboration; achieve safe care transitions; and apply predictive analytics to big but meaningful data.

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