In the Literature

STORIES FROM THE SHARP END: CASE STUDIES IN SAFETY IMPROVEMENT

Douglas McCarthy, M.B.A.
David Blumenthal, M.D.

Milbank Quarterly
March 2006
84(1):165–200

An abstract is available at:
http://www.milbank.org/840105.html

For more information about this study, contact:

David Blumenthal, M.D.
Institute for Health Policy
Massachusetts General Hospital
E-MAIL dblumenthal@partners.org

or

Mary Mahon
Public Information Officer
The Commonwealth Fund
TEL 212-606-3853
E-MAIL mm@cmwf.org

This summary was prepared by Linda Prager and Deborah Lorber.

Commonwealth Fund Pub. #906
March 2006

In the Literature presents brief summaries of Commonwealth Fund–supported research recently published in professional journals.

THE COMMONWEALTH FUND
ONE EAST 75TH STREET
NEW YORK, NY 10021-2692
TEL 212.606.3800
FAX 212.606.3500
E-MAIL cmwf@cmwf.org
http://www.cmwf.org

For years, experts have cautioned that improvement in patient safety will hinge as much on significant shifts in the culture of health care as on specific changes in the process of providing care. Yet, there is no blueprint for laying the foundation for a "safety culture."

In the Commonwealth Fund–supported "Stories from the Sharp End: Case Studies in Safety Improvement" (*Milbank Quarterly*, March 2006), Douglas McCarthy, M.B.A., and David Blumenthal, M.D., provide a snapshot of promising techniques for stimulating cultural change within health care organizations. McCarthy, president of Issues Research, Inc., and Blumenthal, director of the Institute for Health Policy at Massachusetts General Hospital, detail initiatives of six pacesetters in the patient safety arena. The case studies demonstrate that patient injuries are not an inevitable side effect of care. A culture of safety does not just evolve; it is actively created.

The Culture of Safety

Much of the theory of safety culture originated within other industries that are viewed as safety pioneers, like nuclear power and aviation. Regardless of the industry, the same interrelated attributes, the authors say, are present in work environments committed to improving safety: they are informed, just, and flexible; inspire individuals to report errors and near misses; and use safety data to learn and reform.

Safety improvement efforts in health care often run up against traditional aspects of medicine's culture: steep hierarchies, tenuous teamwork, reluctance to acknowledge human fallibility, and a punitive approach to errors. Many of the initiatives launched by the case study organizations sought to overcome one or more of these potential barriers and adopt the key safety attributes.

Tracking Promising Initiatives

As part of their safety interventions, Kaiser Permanente of California and Johns Hopkins Hospital in Baltimore launched initiatives to train surgical and critical care personnel to speak up about safety concerns and to cross-check each other's work. By doing so, they aimed to increase the ability of staff to make changes and to flatten hierarchies that traditionally exist among physicians and other clinical care staff. Kaiser Permanente adapted strategies from aviation—including crew resource management training, pre-flight checklists, and crisis simulation—to improve teamwork and communication among their surgical and labor/delivery teams. Within six months, operating room staff became more willing to share their safety concerns and discuss mistakes.

At Missouri Baptist Medical Center in St. Louis, multidisciplinary rapid response teams helped to improve the flow of critical information across traditional boundaries to reduce communication breakdowns. Within two months, the floor nurses recognized the value of these teams as a safety resource and began to call for them any time a patient exhibited early warning signs of a problem. As a result, the hospital reported decreases in acute medical crises of as much as 60 percent.

Error reporting systems—a strategy explored by many of the case study organizations—can present opportunities for future learning. By focusing on change, rather than blame, they can also help to increase the level of trust within an organization. OSF St. Joseph Medical Center, in Bloomington, Ill., enabled informal reporting of errors and near-misses among nursing staff by holding safety briefings at shift changes and through "walk rounds"—routine visits on nursing units—by the hospital's executives. To reduce medication errors, the hospital also instituted a telephone hotline to simplify the reporting of adverse drug events and allow pharmacists to analyze potential problems each day. Within 10 months of enhancing its patient safety reporting system, the Veterans Health Administration's saw a 30-fold increase in the reporting of events—emphasizing the importance of a confidential, nonpunitive system. By training frontline staff to use structured analytic tools and techniques when investigating safety incidents, staff began to see more errors as preventable.

Frustrated by the slow pace of organizational improvement at Sentara Norfolk General Hospital, in Norfolk, Va., officials shifted gears and worked to make specific safe behaviors, like clear communication, a regular practice. Their strategies involved repeating back instructions or asking clarifying questions, and establishing high-priority "red rules"—such as verification of surgical sites—to emphasize the critical nature of certain safety steps. Adherence to these behavioral standards became part of staff performance reviews and overall organizational performance monitoring.

Because all the organizations studied were part of multihospital or integrated health systems, they may possess in-house expertise, physician commitment, or financial resources beyond that of many independent health care institutions. Nevertheless, the authors say none of the changes described are out of reach for community hospitals or providers not linked to integrated networks.

Policy Implications

While none of these initiatives offer a comprehensive model for all institutions seeking a safer care environment, policymakers could help make a safety culture the norm across the health field. Making safety culture assessments part of accreditation reviews, for example, and linking the results to patient outcomes could help to identify and spread promising safety practices. Through pay-for-performance incentives, purchasers could reward providers for attaining certain quality or safety goals. Regulators could leverage state databases on adverse events, now used for accountability, to inform providers about significant safety threats and promising improvement strategies. Medical and nursing educators, meanwhile, could begin to shape clinicians' attitudes about safety—from the reality of human fallibility to the importance of strong communication and teamwork—from the very outset of their careers.

Facts and Figures

- After implementing its patient safety system, Sentara Norfolk General Hospital experienced an 84 percent reduction in ventilator-associated pneumonia from 2001 to June 2004.
- Use of rapid response teams at Missouri Baptist Medical Center led to a 60 percent decrease in emergency calls for respiratory arrest and similar crises and a 15 percent decrease in cardiac arrests.
- Johns Hopkins Hospital experienced a 49 to 91 percent increase in the proportion of ICU staff reporting positive safety climate and an elimination of observed catheter-related bloodstream infections, preventing an estimated 8 deaths and saving $2 million annually from reduced ICU length of stay
- After implementing safety improvements, the rate of adverse drug events dropped by 91 percent at OSF St. Joseph Medical Center.