Four Safety Strategies: A Symposium on Implementation

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# **Abstract**

### Purpose

On May 28, 2003, the Health Research and Educational Trust, in collaboration with the Johns Hopkins Office of Continuing Medical Education, hosted a 1-day symposium, "Improving Patient Safety: From Rhetoric to Reality." The course was designed to accomplish two goals: to present several tools to aid healthcare administrators in incorporating patient safety priorities into organizational culture and to collect information from symposium attendees on current patient safety initiatives.

### Scope

Preventing medical errors is a high priority among hospital and health system leaders, and healthcare leaders have expressed a need for hands-on tools that bring clarity to systems change through guided processes. *Improving Patient Safety* shared learnings from the development of three successful safety improvement tools: Patient Safety Leadership WalkRounds, developed at Partners HealthCare System; the Johns Hopkins 8-Step Comprehensive Patient Safety Program; and a Teamwork and Safety Climate Survey from the University of Texas at Austin.

### Methods

The conference partners convened periodic conference calls to discuss session content and faculty selection. The project invited leaders from Johns Hopkins and Partners HealthCare System as well as Cedars-Sinai Medical Center and Kaiser Permanente, where implemented improvement strategies were modeled on WalkRounds and the Johns Hopkins 8-Step Program. The Office of Continuing Medical Education at the Johns Hopkins University School of Medicine coordinated meeting logistics, registration, and attendee CME credits.

## Results

More than 100 physicians, nurses, and patient safety and quality improvement directors attended the symposium. The evaluation response rate was 18%, with 19 responses submitted.

## Key Words

safety, patient safety, error, systems improvement, safety culture

#### **Purpose**

On May 28, 2003, the Health Research and Educational Trust, in collaboration with the Johns Hopkins Office of Continuing Medical Education, hosted a one-day symposium, "Improving Patient Safety: From Rhetoric to Reality." The course was designed to accomplish two goals: to present several tools to aid health care administrators in incorporating patient safety priorities into organizational culture; and to collect information from symposium attendees on current patient safety initiatives.

#### **Scope**

Preventing medical errors is a high priority among hospital and health system leaders. However, hospitals' implementations of validated safety measures are still in their infancy, and healthcare leaders have expressed a need for hands-on tools that bring clarity to systems change through guided processes. Patient safety leaders at the Health Research and Educational Trust, Partners HealthCare System, and Johns Hopkins Medicine developed the 1-day symposium, *Improving Patient Safety: From Rhetoric to Reality*, to address this need.

*Improving Patient Safety* shared learnings from the development of three successful safety improvement tools: Patient Safety Leadership WalkRounds, developed by Allan Frankel, M.D., of Partners HealthCare System; the 8-Step Comprehensive Patient Safety Program, developed by Peter Pronovost, M.D., Ph.D., at Johns Hopkins; and the Teamwork and Safety Climate Survey from Bryan Sexton, Ph.D., and colleagues at the University of Texas at Austin.

#### Settings

In 2001, the Health Research and Educational Trust (HRET), Partners HealthCare System, and the Massachusetts Hospital Association began piloting the Patient Safety Executive WalkRounds<sup>TM</sup> program, funded by the Health Resources and Services Administration. The WalkRounds<sup>TM</sup> process was initiated with the following four goals in mind: 1) to increase awareness of safety issues by all clinicians; 2) to make safety a high priority for senior leadership; 3) to educate staff about patient safety concepts, such as nonpunitive reporting; and 4) to obtain and act upon information collected from staff about barriers to safety. Over the course of 3 years, the WalkRounds<sup>TM</sup> have been implemented in hospitals throughout Massachusetts.

Also in 2001, The Johns Hopkins Hospital formed a Patient Safety Committee, which developed an 8-step program for sequential implementation by individual work units. Because of the additional risks posed to patients in intensive care settings, ICUs were the first practice areas at Johns Hopkins to implement the 8-step program. The eight steps promote culture change on a wide scale and codify a continual, iterative process of communication, action, and feedback. The steps are to 1) conduct a cultural survey; 2) educate staff on the science of safety; 3) identify staff's safety concerns through a survey; 4) analyze events; 5) implement improvements; 6) document results; 7) share stories and disseminate results; and 8) resurvey staff with a cultural survey. The 8-step program stimulates involvement of staff and yields valuable unit-specific data for measuring the progress of a delivery system and its practice areas.

### **Participants**

Allan Frankel, M.D., is the Director of Patient Safety at Partners HealthCare System in Boston. In 1995, Dr. Frankel began to divide his time equally between his anesthesia practice and spreading medical safety concepts. He started first as the Medical Safety Officer at the Newton-Wellesley Hospital and then as the Director for Patient Safety for the Partners Healthcare System in Boston, Massachusetts. In both positions, Dr. Frankel has sought to develop methods to practically incorporate patient safety concepts into the delivery of healthcare and has headed numerous initiatives at a hospital and an integrated delivery network level to achieve this goal. He is also on the faculty of the Institute for Healthcare Improvement and has co-chaired two Institute for Healthcare Improvement Collaboratives on adverse drug events.

Mary Pittman, Dr.P.H., is president of the Health Research and Educational Trust, the research and education affiliate of the American Hospital Association, where she is responsible for research, educational programs, and demonstration projects conducted by AHA. Dr. Pittman has worked for over 20 years in the areas of public health, hospital administration, and health policy and served on a number of national and state advisory panels. Dr. Pittman participated in the development of the *Pathways for Medication Safety* series of tools and is an investigator on the HRSA-funded Executive WalkRounds project.

Peter Pronovost, M.D., Ph.D., is an Associate Professor in the departments of Surgery, Anesthesiology, and Critical Care Medicine and of Health Policy and Management at Johns Hopkins University in Baltimore. Dr. Pronovost's special interest is applying clinical research methods that improve quality of healthcare and safety, especially in intensive care units (ICUs). Within the Johns Hopkins community, he co-chairs the Patient Safety Committee and directs Performance Improvement for Intensive Care Units at the hospital; serves on the Johns Hopkins Health System's Performance Improvement Council and Leadership Development Program; and is core faculty for the Program for Medical Technology and Practice Assessment. On a national level, Dr. Pronovost is leading an effort to develop the idealized ICU design with the Institute for Healthcare Improvement and is developing standards for ICU quality measures with the VHA.

Bryan Sexton, Ph.D., is currently an Assistant Professor with the Johns Hopkins Quality and Safety Research Group. Prior to his work at Hopkins, he was a post-doctoral fellow at The University of Texas Human Factors Research Project, where he conducted human factors research through The University of Texas Center for Excellence in Patient Safety Research and Practice with Professors Bob Helmreich and Eric Thomas. He has spent the past 12 years conducting research in safety-critical team environments in both medicine and aviation. In 1995, he spent a year in Switzerland as a visiting scholar at Kantonsspital Basel, the teaching hospital of the University of Basel. His work there examined human factors in the operating room through surveys, observational studies, and the development of a high-fidelity operating room simulator for training full surgical teams.

## Methods:

The conference partners, Mary Pittman, Peter Pronovost, and Allan Frankel, met by conference call every 2 to 4 weeks during the 5 months before the symposium to discuss session content and faculty selection. The partners selected speakers based on their involvement in safety initiatives at Johns Hopkins or Brigham and Women's Hospital. To illustrate the variety of settings that can benefit by applying either WalkRounds or the 8-Step Program, the project invited leaders from Cedars-Sinai Medical Center and Kaiser Permanente to present an overview of their safety improvement processes. The improvement strategies at Cedars and Kaiser were modeled on WalkRounds and the Johns Hopkins 8-Step Program.

The following speakers contributed to symposium sessions:

- Richard O. Davis, Ed.M., Ph.D., Senior Director of Operations, Integrations, Ambulatory Services, Practice Management, and Performance Improvement, Johns Hopkins Health System, Co-Director, Center for Innovations in Quality Patient Care, Johns Hopkins Medicine, Baltimore, Maryland
- Beryl J. Rosenstein, M.D., Vice President, Medical Affairs, Johns Hopkins Hospital, Professor of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Maryland
- John M. Brookey, M.D., Assistant to Regional Associate Medical Director, Physician Director of Quality, Utilization, and Risk Management, Southern California Permanente Medical Group, Assistant Clinical Professor, UCLA School of Medicine, Pasadena, California
- Tejal K. Gandhi, M.D., Director of Patient Safety, Brigham and Women's Hospital, Associate Physician and Instructor of Medicine, Harvard Medical School, Boston, Mass.
- Suzanne Graham, R.N., Ph.D., Director of Patient Safety, Kaiser Permanente, Oakland, California
- Sorrel King, Founder, Josie King Safety Program, Baltimore, Maryland
- Nancy Kruger, D.N.Sc., R.N., Vice President, Patient Care Services, Chief Nursing Officer, Brigham and Women's Hospital, Boston, Massachusetts
- Neil Romanoff, M.D., M.P.H., Vice President, Medical Care Services, Cedars-Sinai Medical Center, Los Angeles, California
- J. Bryan Sexton, Ph.D., M.A., Postdoctoral Fellow, The University of Texas, Center for Excellence in Patient Safety Research and Practice, Austin, Texas
- Andrew D. Whittemore, M.D., Chief Medical Officer, Brigham and Women's Hospital, Professor of Surgery, Harvard Medical School, Boston, Massacusetts

After a brief introduction by Peter Pronovost and Mary Pittman, Bryan Sexton presented concepts underlying the Teamwork and Safety Climate Survey and the recommended processes for conducting the survey. The next two sessions outlined concepts and processes of Patient Safety Leadership WalkRounds and the Hopkins 8-Step Comprehensive Patient Safety Program.

During WalkRounds<sup>™</sup>, designated senior executives go on rounds to individual practice areas. Senior Executives visit one practice area each week for approximately 1 hour. At least 24 hours before a scheduled WalkRounds visit, the nurse manager on duty will be notified. The nurse manager will then informally notify unit staff of the scheduled round in order for them to think about existing or potential safety hazards in the department. On a WalkRound, the executive meets with the unit nurse manager and one or two nurses to discuss the patient safety issues that concern the staff. The executive or patient safety director briefly discusses concepts of patient safety and the importance of reporting events. Action items collected on the WalkRounds are then entered into a database and assigned to a designated senior staff member, who follows up by recommending and implementing a system improvement.

Within the first year of its patient safety program, seven ICUs at The Johns Hopkins Hospital had implemented some portion of the 8-step program. One surgical oncology ICU has completed all 8 steps. As a result of this work, dedicated patient transport teams and ICU pharmacists have been instated, and units have incorporated medication reconciliation, daily short-term goal sheets for patient rounds, and relabeling of Buretrol and epidural catheters. Responses to cultural surveys have improved, and the average ICU length of stay has decreased from 2 days to 1.

The Office of Continuing Medical Education at the Johns Hopkins University School of Medicine coordinated meeting logistics, registration, and attendee CME credits. The Office of CME communicated with identified faculty to gather educational materials and to coordinate speakers' audiovisual needs, travel, and other logistics.

Symposium attendees were drawn from a varied range of clinical and administrative professionals. Physicians, nurses, patient safety directors, risk managers, and chief officers were all encouraged to attend.

## **Results:**

More than 100 physicians, nurses, and patient safety and quality improvement directors attended the symposium. Attendees represented hospitals, health systems, consultants, and IT vendors. Immediate response to the event was overwhelmingly positive. In the Fall of 2003, a follow-up evaluation was conducted to learn about outcomes of the symposium. The evaluation response rate was 18%, with 19 responses submitted. Of the 19 responses, 18 were from hospitals or health systems, and one was from a representative of ECRI (formerly the Emergency Care Research Institute). All 18 of the responding hospitals and health systems had either already implemented or planned to implement either one or both of the safety programs presented.

Respondents cited several barriers to implementation of safety initiatives, including:

- Competing organizational priorities
- Lack of time
- Perception that errors are not occuring in the organization
- Lack of organizational focus on safety
- Inadequate information systems

Several attendees also named several safety facilitators, including the vocal support of senior leadership, the presence of dedicated staff, and adjustments in WalkRounds processes to adapt to the local setting.

Six responding hospitals had not used the Teamwork and Safety Climate Survey, nine hospitals had used the survey in one or more units, and three organizations planned to use the survey in the near future.

## **Resources and Products:**

All symposium attendees received a binder of educational materials, including copies of all presentation slides, sample Teamwork and Safety Climate Surveys, and instructions on best practices for conducting the survey among front-line staff. The educational sessions were videorecorded and are available on either VHS or DVD, with meeting handouts on CD-ROM, from both Johns Hopkins and HRET.