

# focus on Patient Safety

A NEWSLETTER FROM THE NATIONAL PATIENT SAFETY FOUNDATION®

## 1,400 Attend 2008 NPSF Annual Patient Safety Congress in Nashville

BY LARRY STEPNIK, SEVERYN GROUP, INC., AND ANITA SPIELMAN, NPSF

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A diverse group of 1,400 participants from around the world met May 14-16 at the Gaylord Opryland Resort & Convention Center in Nashville, Tenn for NPSF's Annual Patient Safety Congress. This year's event, "Connect, Communicate, Commit," emphasized the need for stakeholders across the healthcare system to make connections, communicate effectively, and commit resources to enacting change in support of improved patient safety.

The Congress featured 4 plenary sessions and 50 breakout sessions as well as expert-led roundtables and poster presentations highlighting innovative patient safety research and solutions. "Connect, Communicate, Commit" was preceded by 3 concurrent full-day workshops:

- 1. Leadership Day** focused on the role of executive leadership in effecting organizational change to achieve and sustain improvement in patient safety. Through case studies and panel discussions presented by senior healthcare leaders, participants explored the challenges and opportunities that leaders encounter when implementing change, and learned about effective, translatable strategies and tools they can use to facilitate this process in their own organizations.
- 2. Patient Safety 101** offered an overview of patient safety fundamentals for healthcare personnel unfamiliar with or newly working in this area. Through lectures, group discussions, and interactive exercises, the program explained the theoretical foundations of patient safety, introduced approaches and techniques for improving safety in practice, and familiarized participants with patient safety organizations and resources.
- 3. Community Engagement from the Patient and Family Perspective**, which debuted at the 2008 Congress, offered firsthand insights on patient education and advocacy. The Community Engagement program focused on approaches to educating and involving patients and families to improve patient safety. The program

featured a faculty of patient and family representatives who shared perspectives and insights from their own experience.

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**"Taking the wrong patient for surgery would be front-page news. But it is just as egregious to operate on an uninformed patient who, if informed, would have chosen not to have surgery."**

—Michael J. Barry, MD

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### Involving patients in medical decision making

Floyd J. Fowler, Jr, PhD, president of the Foundation for Informed Medical Decision Making, and Michael J. Barry, MD, chief of the General Medicine Unit at Massachusetts General Hospital, discussed the growing imperative for informed decision making in health care, the ways in which current practices fall short, and what can be done.

Fowler highlighted research findings suggesting that medical decisions are a pervasive part of life for adults in the US, and that while patients generally wish to be informed and involved in decisions about their care, most decisions are made with scant input from patients.

Barry described the potential of decision aids to help patients become more knowledgeable about the risks and benefits of various options, and thus make more-informed decisions. "Taking the wrong patient for surgery would be front-page news," he said. "But it is just as egregious to operate on an uninformed patient who, if informed, would have chosen not to have surgery." Barry highlighted a

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The complete Congress program is available at <http://www.npsf.org/nps-fac/pc/>. Full Congress proceedings appear in the September 2008 issue of NPSF's Journal of Patient Safety.

For more information on 2008 Congress topics, including the high-reliability task force initiative and NPSF's proposed Universal Patient Compact, please see Focus Volume 11, Issue 2, available online at: [http://npsf.org/paf/npsfp/fo/pdf/Focus\\_Volume\\_11\\_Issue\\_2.pdf](http://npsf.org/paf/npsfp/fo/pdf/Focus_Volume_11_Issue_2.pdf).

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decision aid designed to help patients decide how to treat benign prostatic hyperplasia (BPH). A 1997 randomized controlled trial found that patients using the BPH decision aid had greater knowledge and satisfaction with the decision-making process, a result that is consistent with more general research findings on decision aids.<sup>1</sup>

### Transforming concepts for patient safety

This year's Congress included the fifth annual "town-hall" plenary moderated by Paul A. Gluck, MD, chairman of the NPSF board of directors. The discussion focused on the role of the new Lucian Leape Institute at NPSF in setting a strategic direction and strategic priorities for the field of patient safety.

Participants included: Lucian L. Leape, MD, Chair, Lucian Leape Institute and adjunct professor of health policy, Harvard School of Public Health; Donald M. Berwick, MD, MPP, president and CEO, Institute for Healthcare Improvement; James B. Conway, MAM, CHE, senior fellow, Institute for Healthcare Improvement; David Lawrence, MD, Chairman and CEO (retired), Kaiser Foundation Health Plan, Inc. and Kaiser Foundation Hospitals; Julianne Morath, RN, MS, chief operating officer, Children's Hospitals and Clinics of Minnesota; and Dennis O'Leary, MD, president emeritus, The Joint Commission.

At the Institute's first roundtable session in February 2008, the think tank identified 5 priorities: transparency, consumer involvement, bringing joy and meaning in work, integrating organizations, and health professions education. These 5 targets formed a framework for the panel's discussion of the state of patient safety, ongoing improvement efforts, barriers and facilitators to progress, and goals.

### A whole new mind: Why right-brainers will rule the future

Daniel Pink, author of *A Whole New Mind: Why Right-Brainers Will Rule the Future*, discussed why the skills of "right brainers," including artists, authors, and other creative individuals, will be increasingly important in the future, and why historically valued skills, such as linear, logical thinking, while still important, are becoming relatively less so.<sup>2</sup> Pink argued that the conjunction of 3 forces—abundance, Asia, and automation—will drastically change the prevailing cultural and economic order.

Economic survival in this reorganized society, which Pink terms the Conceptual Age, will require proficiency in skills that cannot be automated or outsourced, such as artistic reasoning and thinking, multitasking, and design skills. Pink identified 6 right-brain-related abilities that will be

increasingly valuable in this future economy: design, story, symphony, empathy, play, and meaning.

Simple design innovations, such as providing more light in the rooms of patients recovering from surgery, have been shown to improve hospital patient outcomes, according to Pink. Right-brain-directed thinking can also help physicians to be more sensitive caregivers and better diagnosticians.

### How leaders influence learning, collaboration, and innovation

Amy C. Edmondson, PhD, Novartis Professor of Leadership and Management and Chair of Doctoral Programs at Harvard Business School, led a panel discussion on how leaders can influence learning, collaboration, and innovation. She discussed the role of hospital leadership in creating a climate of openness and teamwork, and reviewed study findings showing that hospital units with an open, team-oriented climate had higher rates of error reporting—a critical factor in patient safety.

Lee A. Carter, past chair of the board of trustees, Cincinnati Children's Hospital Medical Center (CCHMC), discussed the board's role in promoting learning, collaboration, and innovation at CCHMC. For the past 7 years, the organization has focused on engaging board members and senior leaders in quality and safety, using transparency to drive improvement, and measuring progress, including collecting baseline data and establishing benchmarks.

Gary S. Kaplan, MD, chairman and CEO of Virginia Mason Medical Center in Seattle, Wash, described his efforts to lead a cultural change, which included travel to Japan by the organization's senior leaders to study the Toyota Production System (TPS), and important leadership lessons learned during the subsequent implementation of TPS at Virginia Mason.

Gregg S. Meyer, MD, MSc, senior vice president of the Center for Quality and Safety at Massachusetts General Hospital (MGH), described how an institutional failure can inspire leaders and catalyze positive change. When a Joint Commission evaluation in December 2006 showed that MGH was underperforming in a number of safety-related areas, MGH leaders engaged in open and honest discussion with MGH staff, the media, and the public at large. This experience demonstrated how transparent communication and an appropriate leadership response can mitigate a negative situation and help to overcome barriers to change. **NPSF**

# Interruptions and Distractions: Workflow Intrusions at a Level-One Trauma Center

BY JULIANA J. BRIXEY, PHD, MPH, RN; DAVID J. ROBINSON, MD, MS, FACEP; JIAJIE ZHANG, PHD; AND JAMES P. TURLEY, PHD, RN, UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Interruption, distraction, disruption, interference, “work-fragmenter,” “work-disrupter,” and “time-hacker” are some names assigned to events that unexpectedly intrude on workflow. These terms do not denote a smooth, seamless workflow, but one of irregularity and unpredictability. An interruption is defined as a break in the performance of a human activity caused by an internal or external source. It results in the suspension of the initial task by performing an unplanned task.

Interruptions and distractions have come under scrutiny by many businesses because they increase costs by decreasing productivity and efficiency. The typical office worker spends 2.1 hours per day handling interruptions, costing companies an estimated \$588 billion per year in unproductive time, regardless of an interruption’s relevance to the worker’s primary task.<sup>1-2</sup> Even a one-minute interruption can reduce productivity because the worker must take time to reconnect with the unfinished work.<sup>3</sup>

## Interruptions can contribute to workplace errors

High-reliability industries such as aviation and nuclear power have systematically studied how interruptions and distractions can lead to errors. Since the 1940s, the military and civilian aviation industries have known how attention lapses caused by interruptions can lead to pilot error. Operator interruptions and distractions also have been shown to contribute to shutdowns in nuclear power plants.

The Institute of Medicine recognizes interruptions and distractions as intrusions in workflow, contributing to an interruption-driven environment.<sup>4-6</sup> A proliferation of medical devices and software applications attempting to deliver information to healthcare professionals has similarly resulted in an interruption-driven medical environment.

Interruptions and distractions can occur as pop-up warnings in electronic health records (EHRs) as well as alarms, alerts, and reminders initiated by medical devices such as infusion pumps, cardiac monitors, and ventilators. However, medical device alarms and alerts do not distinguish whether a situation is an emergency requiring immediate attention to prevent patient harm, or a discretionary interruption that can be delayed until a better time. In either case, these

interruptions disrupt workflow. Healthcare colleagues, patients, and family members also initiate interruptions and distractions to convey information.

## “High-reliability industries... have systematically studied how interruptions and distractions can lead to errors.”

Researchers have found that healthcare professionals prefer synchronous communication channels such as phone and face-to-face interactions.<sup>7</sup> Hence, they do not consider calling or stopping a colleague in the hall an unwanted, time-wasting workflow intrusion, but an opportunity to exchange critical, urgent data about a patient. Healthcare professionals would rather interrupt their colleagues when seeking information than consult printed resources.

A desire to mitigate the negative effects of interruptions and distractions prompted the authors to launch a study. Their research observed, recorded, and contextualized workflow interruptions and distractions for medical doctors (MDs) and registered nurses (RNs) working at a level-one trauma center.<sup>8</sup> All observations were made in the trauma section of the emergency department (ED) of a large teaching hospital, not in the medical or pediatric sections.

The hospital is in a major medical center in the US Gulf Coast region. A level-one trauma center provides the most comprehensive emergency care to critically injured patients. This center provides 24-hour emergency and trauma care to approximately 52,000 patients a year. The ED occupies 51,000 square feet and contains major trauma and cardiac resuscitation rooms. Patients arrive at the ED via private car and by ground and air ambulance.

The authors observed that the MDs and RNs used land-line and mobile telephones as well as face-to-face interactions to synchronously exchange information with colleagues, patients, and families. Telephone use was usually initiated

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*This material is based on a May 16, 2008 NPSF Patient Safety Congress presentation titled Interruptions for RNs Working in a Level One Trauma Center.*

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# Interruptions and Distractions: Workflow Intrusions at a Level-One Trauma Center

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without knowledge of the work being performed by the intended call recipient. Consequently, call initiators would sometimes hold for the recipient, re-call in an attempt to deliver the information, or leave a message for the recipient to return the call. Accordingly, productivity and efficiency were often decreased for both the initiator and recipient because of delays from handling the phone calls.

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**“Interruptions and distractions can occur due to environmental conditions, such as the centralization of medications and services, as well as searching and locating equipment and supplies.”**

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Face-to-face interactions were frequently opportunistic, such as when passing a person in the hallway and initiating a conversation. These interactions often occurred at the initiator’s convenience; thus, they were almost always handled immediately by the recipient. In these cases, it can be assumed that productivity and efficiency were decreased primarily for the recipient.

## Centralized medications and supplies can cause interruptions

Poorly designed processes such as the centralization of medications and services, as well as searching for and locating equipment and supplies, have not been classically categorized as interruptions or distractions. However, these conditions do result in interruptions in workflow. The authors observed current tasks, including medication administration, being interrupted as RNs had to leave the trauma section to retrieve medications from another department. The RNs were observed dealing with further interruptions from colleagues during their time away from the trauma section.

Also, the stat laboratory and the fax machine were centralized in the medicine section. Nurses repeatedly left the trauma section to deliver blood specimens to the stat

laboratory, and frequently walked to the medicine section to send a fax. Other workflow interruptions and distractions occurred when MDs and RNs had to search for or retrieve patient care supplies not kept in the trauma rooms, retrieve blankets from a centralized warmer, locate the digital thermometer, get the EKG machine, or locate colleagues.

## How other industries manage interruptions

The aviation industry and businesses continue to develop strategies and technologies to manage interruptions and distractions. To manage interruptions, aviation has implemented the sterile cockpit rule, used primarily during taxi-in and taxi-out. During a sterile time, the cockpit crew cannot be interrupted except for an emergency.

Aviation also recommends using checklists, building lines of defense to keep communication open and concise, and defining task-sharing.

## Developing situational awareness

The aviation industry advocates 6 steps to develop situational awareness following interruptions and distractions:<sup>9</sup>

- 1. Identify.** What task was interrupted?
- 2. Ask.** Where was the task interrupted?
- 3. Decide and act.** What action must be taken to get back on track with the interrupted task?
- 4. Prioritize.** In what order should tasks be done?
- 5. Plan.** Take time to prevent rushing to perform an interrupted task.
- 6. Verify.** Which actions of the interrupted task have been delayed? Which actions have been performed?

Similarly, businesses have devised strategies to delay or block interruptions and distractions. Employees can come to work early or stay late, close the office door, and designate quiet time when no telephone calls or emails will be accepted or answered.

The authors recognize that not all interruptions and distractions can or should be eliminated in the ED. In this study, healthcare professionals were found to rely primarily on blocking or delaying the interruptions and distractions. The authors recommend developing strategies and technologies to reduce or mitigate the negative effects of

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# Improving Patient Safety at Duke Medicine Through Effective Teamwork

BY KAREN FRUSH, BSN, MD; GAIL SHULBY, MA, RN; MICHAEL ALTON, RN; JANE MERICLE, RN, BSN, MHS-CL; AND LAURA MAYNARD, MDIV, DUKE UNIVERSITY HEALTH SYSTEM

*Authors Frush and Shulby are alumnae of the NPSF co-sponsored Patient Safety Leadership Fellowship.*

Excellence in patient safety is a fundamental need in healthcare and an essential component of the patient care mission of healthcare organizations. While many organizations focus on technological advances to safeguard patients, there is a commensurate need for human-based, non-technical skills such as communication and teamwork.

Communication failures are among the most common causes of sentinel events reported to The Joint Commission.<sup>1</sup> The complexity of medical care and the inherent limitations of human performance make it essential that clinicians standardize communication tools, create an environment in which individuals can speak up and express concerns, and share common "critical language" to alert team members to unsafe situations.<sup>2</sup>

Much of the evidence for effective, highly reliable communication and teamwork comes from military special operations, the nuclear power industry, and the aviation industry, where crew resource management (CRM) training

has been linked to improved teamwork and safety attitudes in the cockpit.<sup>3</sup> Teams in these high-reliability organizations understand the critical importance of communication in accomplishing their goals, and have learned to communicate effectively through structured processes that create a shared mental model for team performance and goals.<sup>4</sup> Mutual trust is fostered and backup behaviors are encouraged and expected in the pursuit of reliable outcomes.

Recommendations from the Institute of Medicine report on medical errors suggest that healthcare providers and nurses may benefit from similar interdisciplinary team training to create a shared mental model for patient care and safety.<sup>5</sup>

## Duke launches formal teamwork training

In 2006, Duke University Hospital's Pediatric Intensive Care Unit (PICU) initiated formal teamwork training using a 4-phase process improvement approach:

1. Pre-training/assessment
2. Training
3. Post-training/implementation
4. Evaluation/sustaining change

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## Interruptions and Distractions

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interruptions and distractions. They propose that healthcare organizations selectively test strategies from aviation and business to identify appropriate methods. **NPSF**

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# Improving Patient Safety at Duke Medicine Through Effective Teamwork

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The overall goal was to provide PICU team members with the knowledge, skills, and attitudes required for effective interdisciplinary teamwork, and to assess the impact of effective teamwork on patient safety.

## Phase 1: Pre-training/assessment

Duke convened an interdisciplinary steering committee to oversee the initiative, and gathered pre-training data to document baseline performance and identify opportunities for improvement. Teamwork attitudes were assessed using the Teamwork and Safety Climate Survey, which consists of 19 questions assessing the context of teams and their work environment.<sup>6</sup>

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**“Feedback from frontline staff nurses...highlighted the need to focus on enhancing mutual respect, developing collaborative goals, and leveling the clinical hierarchy to improve communication flow.”**

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On-site observations assessed communication skills and teamwork behaviors, both within and across disciplines. These data were analyzed and the results shared with the steering committee. Based on these findings, the committee identified specific opportunities for improvement and incorporated them into training sessions so that core training concepts could be customized to the PICU's unique needs. Feedback from frontline staff nurses, for example, highlighted the need to focus on enhancing mutual respect, developing collaborative goals, and leveling the clinical hierarchy to improve communication flow.

## Phase 2: Training

In phase 2, formal training was provided to all frontline staff, including nurses and nursing assistants, physicians, clinical pharmacists, technicians, and unit support staff. Training sessions targeted 4 key areas:

- 1. Communication**—structured and assertive language
- 2. Leadership**—briefs, debriefs, mutual respect
- 3. Situational monitoring**—situational awareness and shared mental models
- 4. Mutual support**—collaboration and sharing information to improve decision making

At the start of each session, the PICU nursing director and medical director presented results of the pre-training assessment to demonstrate leadership support for the training and to frame the issues the team had identified. Next came core training using didactic lectures and interactive exercises, some of which were taken from the TeamSTEPPS curriculum.<sup>7</sup> Interactive learning was encouraged through breakout sessions with time for participants to practice new communication techniques. Team members were asked to “weigh in” on potential implementation steps presented by the PICU steering committee.

Proposed strategies included using structured language (situation-background-assessment-recommendation, or SBAR) and assertive language (“I need clarity”), introducing the “sterile cockpit” environment—where staff cannot be interrupted except for an emergency—for rounds and patient handoffs, and implementing team huddles.<sup>8</sup>

The team discussed and modified these recommendations, and developed timelines for implementation. This dialogue proved critical in understanding potential obstacles as well as fostering ownership and commitment from all team members.

## Phase 3: Post-training/implementation

The core strategies that the team chose to implement were initiated with significant mentoring by unit leadership. Throughout the implementation process, both nursing and medical leadership stayed actively engaged, ensuring continued focus as well as accountability for the agreed-on operational changes.

Regular on-site coaching was provided by trained nurses and physicians who worked in the PICU, while consultants joined the coaches intermittently to offer additional support. These external trainers also participated in unit-based safety activities such as huddles and safety team meetings, and provided real-time feedback for the team.

#### Phase 4: Evaluation/sustaining change

The major initiatives implemented after training included: pre- and post-rounds huddles, SBAR communication, a “sterile cockpit” environment for rounds, and a standardized communication process for handoffs. A 4-level Kirkpatrick evaluation model, as outlined in the far right column, was used to assess results.<sup>9</sup> The initial reaction to team training was positive; more than 90% of participants indicated the training would affect the way they worked and 100% said they would recommend it to others.

Level 2 evaluation of attitude, assessed by re-administering the safety climate survey 9 months after training, showed improvements in staff’s perception of teamwork from 67% to 87%, and in use of briefings from 63% to 84%.

Independent observations of teamwork behavior, conducted as a level 3 evaluation, showed an increase in overall teamwork by 72% and leadership perception by 75%.<sup>10</sup> Level 4 evaluation data indicated improvements in work culture, a 30% decrease in nursing turnover, and improved clinical outcomes including a decline in catheter-associated blood stream infections.

“[M]ore than 90% of participants indicated the training would affect the way they worked and 100% said they would recommend it to others.”

Early experiences with team training at Duke Children’s have been positive, leading to improvements in teamwork attitudes and skills, and contributing to a positive work culture and improved clinical outcomes. Based on this success, interdisciplinary team training has been implemented in other clinical areas across the Duke University Health System and introduced into the schools of medicine and nursing, to facilitate a shift in culture and a focus on teamwork and communication.

In addition to introducing the model across Duke Medicine, Duke facilitators and trainers have piloted this approach

statewide in both North Carolina and South Carolina, providing leadership to collaboratives initiated by the North Carolina and South Carolina Hospital Associations.

Early evaluation indicates that safety culture and clinical outcomes can be improved by an approach that uses pre-training assessment to help direct the design and objectives of team training. The post-training implementation of practice and behavior changes is most effective when supported by coaching and feedback and followed up with adequate data collection and analysis. **NPSF**

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### Team Training Evaluation Based on Kirkpatrick’s 4-level Evaluation Model

#### Level 4

**Results:** Whether the training has affected process or outcomes, such as increased production, improved quality, reduced adverse events, decreased costs, or improved return on investment.

- Patient satisfaction survey
- Complication rate
- Length of hospital stay
- Adverse drug events
- Staff satisfaction survey
- Nurse turnover rates

#### Level 3

**Behavior:** Whether participants change their workplace behavior as a result of training.

- Observation of teamwork behavior during routine patient care

#### Level 2

**Learning:** Whether the training results in an increase in knowledge or skills, or an improvement in attitudes.

- Teamwork knowledge test
- Survey of teamwork attitudes
- Survey of self-perceived communication skills

#### Level 1

**Reaction:** How did participants react to the training?

- Post-training reaction survey

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## Apply Now for the 2009-2010 Patient Safety Leadership Fellowship

The American Hospital Association and NPSF, in partnership with Health Forum, the American Organization of Nurse Executives, the American Society for Healthcare Risk Management, the Society of Hospital Medicine, and the Health Research and Educational Trust, are now accepting applications for the 2009-2010 Patient Safety Leadership Fellowship (PSLF).

The PSLF is an educational program through which health-care professionals explore the dimensions of patient safety leadership and cultivate their abilities as patient safety leaders. Fellows enjoy interaction with a faculty of national experts and experience a varied curriculum including independent fieldwork, self-study, and 3 intensive week-long

retreats. An online learning network allows Fellows to communicate with faculty and peers during the fellowship year and beyond.

As the centerpiece of the learning experience, each individual Fellow or team completes an Action Learning Project—an initiative focused on improving quality and safety at the Fellow's organization. Fellows are encouraged to apply the new tools and techniques they have acquired to their projects.

The application deadline is Feb. 20, 2009. For details, visit [www.hretfellowships.org](http://www.hretfellowships.org) or contact the HRET Fellowship department at 312-422-2610 or [fellowships@aha.org](mailto:fellowships@aha.org). **NPSF**

### NPSF Welcomes 2008–2009 Patient Safety Leadership Fellows

**Stephen W. Bartol, MD, MBA, FRCSC**, Henry Ford Hospital and Health Network, Detroit, Mich; **Lisa M. Beno, RN, MN, CCRN**, University Hospitals, Cleveland, Ohio; **Fortuna Borrego, RN, MSN**, Memorial Healthcare System, Pembroke Pines, Fla; **Lisa Byrd, RN, MPH, CPHRM**, Scotland Memorial Hospital, Laurinburg, NC; **Francesca J. Charney, RN, MSHA, CPHRM, CPSO**, Holy Spirit Hospital, Camp Hill, Pa; **Rachel A. Crow**, National Patient Safety Foundation, North Adams, Mass; **Ramona A. Davis, PharmD, RPh**, The Cleveland Clinic, Cleveland, Ohio; **Betty DeValle, RN, MSHSA**, Memorial Healthcare System, Miramar, Fla; **Kathy E. Fiechter, MBA, JD, CPMSM, CPHQ**, Glendale Adventist Medical Center, Glendale, Calif; **Joshua B. Fleming, RN, MHA**, Clarian Health, Indianapolis, Ind; **Cynthia Friedewald, RN**, Joe DiMaggio Children's Hospital, Memorial Healthcare System, Hollywood, Fla; **Karen M. Garner, RN**, Memorial Hospital, Chattanooga, Tenn; **Heather L. Gocke, RN**, Catholic Healthcare West, Pasadena, Calif; **Abigail Hain, RN, MScN, CNCC**, The Ottawa Hospital, Ottawa, Ontario, Canada; **Frank A. Illuzzi, MD, FACEP**, St. Vincent's Medical Center, Bridgeport, Conn; **Jack Jordan, MS**, Henry Ford Health System, Detroit, Mich; **Vernita L. Julian, RN, MA, MBA, CPHQ**, Health Care Excel, Louisville, Ky; **Bettyann Kempin, RN, MSN, CCRN, APN-C**, The Valley Hospital, Ridgewood, NJ; **Luba Komar, MD, FRCP, FAAP**, Hospital for Sick Children, University of Toronto, Toronto, Ontario, Canada; **Ann Marie Leichman, RN, MSN**, The Valley Hospital, Ridgewood, NJ; **James P. Lynch, MD**, William Beaumont Hospital, Troy, Mich; **Kathleen W. McNicholas, MD, JD, FACS, FACC, FCCP**,

Christiana Care Health System, Newark, Del; **Sherissa Microys, MD, FRCPC**, The Ottawa Hospital, Ottawa, Ontario, Canada; **Bonnie Miner, RN, MSN, CNS**, University Hospital, Syracuse, NY; **Debra Moyer, RN, MPA**, ARAMARK Healthcare, Des Moines, Iowa; **Kathie Nessa, RN, MBA**, Iowa Health-Des Moines, Des Moines, Iowa; **Daniel Patterson, PhD, MPH, EMT-B**, University of Pittsburgh, Department of Emergency Medicine, Pittsburgh, Pa; **Joe H. Patton, Jr, MD, FACS**, Henry Ford Health System, Detroit, Mich; **Ann Polich, MD**, Veteran's Administration, Omaha, Neb; **Valerie P. Pracilio**, Thomas Jefferson University, Department of Health Policy, Philadelphia, Pa; **Ramanathan Raju, MD, MBA, CPE, FRCS, FACS**, New York City Health and Hospital Corporation, New York, NY; **Rebecca L. Royer, RN, MSN**, Health Care Excel, Terre Haute, Ind; **Ilan Rubinfeld, MD, FACS, FCCP**, Henry Ford Hospital, Detroit, Mich; **Deborah A. Tedder, RN, MBA**, Memorial Regional Hospital, Hollywood, Fla; **Holly Twesten-Curtis, MPA**, Alamance Regional Medical Center, Burlington, NC; **Debbie G. Whisenhunt, RN, MSHSA, CPHQ**, St. Vincent's Birmingham, Birmingham, Ala; **Kathleen Woods, RN, MSN, CEN**, St. Vincent's Medical Center, Bridgeport, Conn. **NPSF**

#### Find out more about Action Learning Projects

For descriptions of the 2008-2009 PSLF Action Learning Projects and past years' projects, please go to <http://www.hret.org/hret/programs/falp.html>.