Nexus of Patient Safety and Worker Safety

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Agency for Healthcare Research and Quality

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“The fundamental problem with the quality of American medicine is that we’ve failed to view delivery of health care as a science. … That’s a mistake, a huge mistake.”

Peter Pronovost, M.D., PhD, Johns Hopkins Hospital
… Applying Evidence-Based Approaches to Safety Issues is Another

Or, how do we get from here to there?
HHS Organizational Focus

NIH
Biomedical research to prevent, diagnose, and treat disease

CDC
Population health and the role of community-based interventions to improve health

AHRQ
Long-term and system-wide improvement of health care quality and effectiveness
AHRQ Priorities

Ambulatory Patient Safety
- Safety & Quality Measures, Drug Management, & Patient-Centered Care
- Survey of Patient Safety Culture
- Diagnostic Error Research

Medical Expenditure Panel Surveys
- Visit-Level Information on Medical Expenditures
- Annual Quality & Disparities Reports

Patient Safety
- Health IT
- Patient Safety Organizations
- Patient Safety Grants

Effective Health Care Program
- Comparative Effectiveness Reviews
- Patient-Centered Outcomes Research
- Clear Findings for Multiple Audiences

Other Research & Dissemination Activities
- Quality & Cost-Effectiveness, e.g., Prevention & Pharmaceutical Outcomes
- U.S. Preventive Services Task Force
- MRSA/HAIs
AHRQ’s Focus and Strategic Goals

- **Quality**: Deliver the right care at the right time to the right patient
- **Safety**: Reduce the risk of harm by promoting delivery of the best possible health care
- **Efficiency**: Enhance access to effective health care services and reduce unnecessary costs
- **Effectiveness**: Improve health care outcomes by encouraging the use of evidence to make more informed health care decisions
Why is Safety Important?

- Support for Patient Safety Research
- Evidence-Based Tools To Help You Recognize and Provide Safer Care
- Building a Safer Health Care System
Quality Improvement for Hospitals with High Readmission Rates

- New Federal policy reduces hospital payment for high readmission rates for AMI, heart failure, pneumonia
- Hospitals to work with Patient Safety Organizations, other community-based groups to learn/address readmissions
- Project RED, Project BOOST shown to reduce readmissions
Partnership for Patients: HHS Public-Private Initiative

By end of 2013:

- 40% decrease in instances of hospital patients acquiring preventable conditions, including:
  - Central line-associated bloodstream infections
  - Catheter-associated urinary tract infections
  - Surgical site infections
  - Ventilator-associated pneumonia
  - Pressure ulcers
  - Adverse drug events
  - Venous thromboembolisms
  - Injuries from falls
  - Injuries from obstetrical adverse events

- 20% decrease in preventable readmissions due to complications during a transition from one care setting to another

www.healthcare.gov/center/programs/partnership/index.html
AHRQ Awards $34 Million To Expand Fight Against HAIs

- Healthcare-associated infections (HAIs) affect up to 1 in 20 patients in hospitals at any one time
- HAIs cost billions each year; lead to tens of thousands of lives lost
- Awards help attain the goals of Partnership for Patients and HHS Action Plan to Prevent HAIs
- Projects include:
  - Three new modules for the Comprehensive Unit-based Safety Program (CUSP)
  - Research on ways to reduce MRSA and Clostridium difficile (C-diff)
  - Use of health system facility design to reduce HAIs
Nationwide Implementation of AHRQ’s CUSP for CLABSI

- Following on Michigan Keystone success, an AHRQ project with HRET and JHU has recruited:
  - 46 State hospital associations
  - 1,055 hospitals
  - 1,775 hospital units

- First year results – 750 hospitals

  Average CLABSI rate/1000 central line days:
  - Baseline 1.87
  - CUSP for CLABSI 1.25

\[ \frac{1.87 - 1.25}{1.87} \times 100 = 33\% \]
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Patient Safety Focus Areas

PS Portfolio

- Research
- Implementation
- Measurement
- Evaluation
- Active Patient Engagement
AHRQ offers tools for health care workers, organizations, providers, policymakers, and patients to improve safety [http://www.ahrq.gov/QUAL/pstools.pdf].

- Tools to improve performance and prevent healthcare-associated infections
- TeamSTEPPS™
- AHRQ’s Survey of Patient Safety Culture (SOPS)
Evidence-Based Tools to Reduce Healthcare-Associated Infections HAIs

- New AHRQ toolkit released on 9/10/12; http://www.onthecusptophai.org/. Tools include:
  - Promoting a culture of safety
  - Improving communications among ICU staff
  - Using checklist to promote practice of CDC guidelines
TeamSTEPPS™: A Patient Safety Improvement Tool

- Evidence-based system to improve communication and teamwork among health care professionals
- Rooted in more than 20 years of research and lessons from application of teamwork principles
- Developed by Department of Defense’s Patient Safety Program in collaboration with AHRQ
TeamSTEPPS™ National Implementation Plan

- AHRQ and DoD have teamed with Health Research & Educational Trust (HRET) to build national training and support network

- Six resource centers: North Shore Long Island Jewish Health System (NY), Duke Medical Center (NC), Tulane University (LA), University of Minnesota-Fairview Medical Center (MN), Presbyterian St. Luke’s Medical Center (CO), and University of Washington-Seattle (WA)
Team Training and Outcomes

- The best outcomes data so far come from the Veterans Health Administration (VHA) Medical Team Training (MTT) Program
- 74 MTT sites experienced an 18% reduction in annual surgical mortality compared with a 7% decrease among the 34 non-MTT sites
- Dose-response relationship demonstrated: for every quarter of MTT implementation, there was a reduction of 0.5 deaths per 1000 procedures

JAMA, October 20, 2010
Beth Israel Deaconess Medical Center
OB-GYN Team Training Results

Dr. Benjamin Sachs, Clinical Congress, American College of Surgeons, San Francisco, Oct. 2005
AHRQ’s Surveys of Patient Safety Culture

What: Surveys to assess safety culture in hospitals, nursing homes, ambulatory medical offices. (Pharmacy service survey in development)

Why?

- Raise staff awareness about patient safety
- Diagnose and assess current status of patient safety culture; identify strengths and weaknesses
- Examine trends in patient safety culture over time
- Evaluate impact of patient safety initiatives and interventions
Survey Background

- Sponsored by the Medical Errors Workgroup of the QuIC, funded by AHRQ, developed by Westat

- On AHRQ web site at
  [www.ahrq.gov/qual/hospculture](http://www.ahrq.gov/qual/hospculture)

- Public use instrument for hospitals, health systems, researchers
  - Practical and easy-to-use
  - Provides “actionable” information
  - Reliable and valid: Pilot tested with over 1,400 respondents from 21 hospitals
## AHRQ Patient Safety Culture Surveys

### Survey Dimensions

- Teamwork
- Staffing
- Training
- Handoffs
- Communication
- Organizational learning
- Management support for patient safety
- Non-punitive response to mistakes
- Overall perceptions of patient safety

### Settings

- Hospitals (2004)
- Nursing homes (2008)
- Medical offices (2009)
- Retail pharmacies (October 2012)
Safety Culture Dimensions

Dimensions:

1. Overall perceptions of safety
2. Frequency of events reported
3. Supervisor/mgr. expectations & actions promoting patient safety
4. Organizational learning—continuous improvement
5. Teamwork within units
6. Communication openness
7. Feedback & communication about error
8. Nonpunitive response to error
9. Staffing
10. Hospital management support for patient safety
11. Teamwork across hospital units
12. Hospital handoffs & transitions

Also--
- Patient safety “grade” (A-E)
- Number of events individuals have reported in last 12 months
Surveys on Patient Culture

Survey: Questions

- Outcome Measures:
  - When a mistake is made but is caught and corrected before affecting the patient, how often is this reported?
  - Please give your unit in this hospital an overall grade on patient safety
  - In the past 12 months, how many event reports have you filled out and submitted?

www.ahrq.gov/qual/patientsafetyculture/hospdim/htm
Higher patient safety culture scores associated with lower adverse event rates

$r = -.36$

In late 2006, AHRQ funded development of a comparative database for HSOPS

**Purposes of database:**

- **Comparison**—of survey results in efforts to establish, improve and maintain a culture of patient safety
- **Assessment and Learning**—in patient safety improvement process (rather than basis for determining punitive actions or external judgment of hospital performance)
- **Supplemental Information**—to help hospitals identify areas of strength and areas with potential for patient safety culture improvement
Hospital Survey on Patient Safety Culture: 2012 User Comparative Database Report

- Displays results from more than 1,100 hospitals and nearly 600,000 hospital staff respondents

- Four areas of strength for most hospitals:
  1. Teamwork within units
  2. Supervisor/manager expectations and actions promoting patient safety
  3. Organizational learning-continuous improvement
  4. Management support for patient safety

- Three areas needing improvement:
  1. Nonpunitive response to error
  2. Handoffs and transitions
  3. Staffing
The average hospital response rate was 53 percent, with an average of 503 completed surveys per hospital.

66 percent administered Web surveys, which resulted in lower response rates (51 percent) compared with response rates from paper (61 percent) but higher response rates compared with mixed-mode surveys (49 percent).

90 percent administered the survey to all staff or a sample of all staff from all hospital departments.
AHRQ Mission
To improve the quality, safety, efficiency, and effectiveness of health care for all Americans

AHRQ Vision
As a result of AHRQ's efforts, American health care will provide services of the highest quality, with the best possible outcomes, at the lowest cost

www.ahrq.gov