Overcoming Barriers to Error Reporting: Individual, Organizational and Regulatory Issues

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Learning Objectives

1) Identify common barriers across three levels: Individual, Organizational and Regulatory
2) Identify common lessons learned across three levels: Individual, Organizational and Regulatory
3) Describe the successful introduction of a new program with the BNE
<table>
<thead>
<tr>
<th>University of Texas Center of Excellence for Patient Safety Research and Practice</th>
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<tbody>
<tr>
<td>• One of three Centers of Excellence funded by AHRQ in 2002</td>
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<tr>
<td>• PI: Eric Thomas, M.D.</td>
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<td>• Five projects focused on different aspects of patient safety</td>
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The **Institute for Healthcare Excellence** was established to identify opportunities to:

improve health care delivery services,

implement ground breaking solutions in a research environment,

and systematically deploy successful solutions across M. D. Anderson and beyond.
Safety in Healthcare

the absence of preventable harm
Focus of the Presentation

• Three projects:
  – Individual Level – nurse survey and multidisciplinary study
  – Organizational Level – The University of Texas Close Call Reporting System
  – Regulatory Level – Healthcare Alliance Safety Partnership
Individual Level Study # 1

PI: Terry Throckmorton, Ph.D.

Survey nurses in the State of Texas to determine:
1) their intent to report close calls and errors

2) factors related to reporting such events including:
   a) Organizational influences
   b) Individual attitudes
   c) Individual knowledge about what to report
Participants

A sample of 435 nurses in the State of Texas participated in the present study.

- 91% were Women
- 82% were Caucasian; 5% were Asian; 5% were Black; 5% were Hispanic; 3% were other.
Methodology

• Participants were asked questions about their:
  – Intent to report errors of varying magnitude
  – Intent to tell someone else about an error they committed
  – Perceptions for not reporting errors
  – Perception of a punitive climate
  – Commitment to the organization
  – Commitment to the nursing occupation
Results

• Nurses intending to report an error were:
  – more experienced
  – and less likely to perceive the organizational climate as punitive.

• Interestingly, organizational and occupational commitment did not predict intent to report an error.
Results Continued

- Nurses intending to informally tell someone else about an error were also more experienced and likely to perceive a less punitive climate.

- In contrast to nurse intent to report an error, organizational and occupational commitment predicted intent to report an error.
Organizational and Occupational Commitment

• Three dimensions (Meyer, Allen, & Smith, 1993)
  – Affective – attachment
  – Continuance – perceived cost of leaving
  – Normative - obligation to remain
Implications

• Nurses are more likely to share information about errors with others when they:
  – are attached to their occupation,
  – feel an obligation to their organization and occupation,
  – have a greater tenure with the organization,
  – and perceive the climate to be less punitive.
Limitations

§ Low return rate
§ Over sampling to obtain even a small sample
  • Required by the statistician
  • Controversial
§ Mailed Questionnaire
§ Sensitive topic
§ Over representation of professional association members
§ Small amount of variance in the intent to report scores
Individual Level – Study # 2

- Differentiating close calls from errors: A multidisciplinary perspective (Etchegaray, Thomas, Geraci, Simmons, & Martin, 2005)
  - Examined whether nurses, pharmacists, physician assistants, and physicians could correctly identify close calls and errors.
  - Also examined the influence of providing these healthcare providers with definitions of close calls and errors on their ability to correctly identify these situations.
Participants

- Sixty-eight healthcare providers participated in the study.

- Asked to identify hypothetical scenarios as depicting close calls, errors, or neither.

- A close call refers to a potential error that was caught and prevented prior to reaching a patient (Bagian & Gosbee, 2000).

- Half of the providers were given definitions of close calls and errors prior to reading the scenarios.
Results

• Most participants correctly identified close calls and errors.

• Providers with definitions of errors did not identify the error situations more correctly.

• However, providers with definitions of close calls identified significantly more close call situations correctly.
Implications...

• We can not assume that healthcare providers share the same definition of close calls.

• The educational component of any reporting system needs to define what should be reported.
The University of Texas Close Call Reporting System

www.utccrs.org

(demo1)
What is a “Close Call”? 

- A close call is a potential error that does not reach the patient nor cause harm to the patient.
Close Call Reporting

• Why limit the system to close calls?
  – Limits liability from board actions and litigation
  – Limited punitive consequences to reporting close calls; therefore, should encourage reporting
  – Minimal evidence in literature on close calls
  – We can learn from close calls and accidents waiting to happen
The University of Texas Close Call Reporting System

- System Features
  - Anonymous voluntary reporting
  - Paper or internet-based reporting
  - Collects narrative reports and information about contributing factors and categories from frontline providers
  - Two to three minute completion time
  - Feedback via website
10 hospitals
Geographically diverse
Longest participation 2.5 years
Total of 597 reports received
4 ‘Alerts’ distributed
How they know about it

- 73% of reporters revealed how they knew of the close call
89% of reporters cite 1 Event Type
4% of reporters cite 2 or 3 Types
7% of reporters do not cite an Event Type
Top 10 Contributing Factors Cited

- Order/Transcr.
- Communication
- Label/Packaging
- Understanding
- Clinical Proc.
- Workload
- Interruptions
- Training
- Other
- Equipment
Description:
A tech when refilling the heparin 5,000 vial noticed that a couple of the vials were magnesium sulfate 50% 2 ml vials. They were removed and replaced with heparin. If a nurse had removed them and administered SQ for heparin without catching our error...

Suggestion:
The two medications should be physically separated and education given to all involved. Also consider putting a sign on the medication bin alerting techs/pharmacists to look-alike problem.
Lessons Learned

• Human stocking of dispensing unit has errors
• Look-a-like drugs pose a hazard in automated systems

Need for FAST dissemination of severe close calls
  – 2 more ADM’s stocked the same way at that facility
  – 2 additional facilities found like mis-stocks
The Healthcare Alliance
Safety Partnership

Sherry Martin,
VP Quality Management
Primary Investigator
Phases of Errors

- Initial failures—some instigating failure process (human error, a technical or organizational failure, or combination)
- Dangerous situation—temporarily increased risk resulting from an initial failure without actual consequences
- Adequate defenses – barriers to errors
- Inadequate defenses—failure of official barriers (double-check procedures, automatic compensation by standby equipment, or problem-solving teams) in the system to deal with this risk
- Recovery—a risky situation is detected, understood, and corrected in time
Van Der Schaaf - modified for healthcare
HASP

- March 2004 – MDACC project adopted by BNE
- 2005 – St Luke's Episcopal Hospital and Texas Children's join as partners
- Three IRB approvals
- Three Business Agreements
- Launched July 2005
History of HASP

• 2001 -- Texas Forum on Healthcare Safety addresses BNE regarding alternate reporting systems

• 2002 -- TNA and THA proposes legislation to allow alternate reporting systems

• September 2003 -- Senate Bill 718 of the 78th Texas Legislature was enacted that:
  - authorized the BNE to approve and adopt rules regarding pilot programs for innovative reporting programs
  - allows exception to the mandatory reporting requirements
Healthcare Alliance Safety Partnership - adapts the airline Aviation Safety Action Partnership:

- Joint review of error reports by a member of the Board of Nurse Examiners, Chief Nursing Officer and chair of peer review committee

- Identification of systems and human performance factors in error reports using a modified Eindhoven classification and human factors investigation

- Prescriptive recommendations to prevent the error from recurring with a response from the institution that addresses those factors
Event Review Committee (ERC)

• The Heart of the program:
  – Systems approach
  – Human Factors analysis
  – Unanimous Consensus
  – Prescriptive action – Systems focused, Human Factors Analysis, Detailed and Big Picture
  – Follow through by the reporter and the institution
Take home lessons

• Most errors involve human error by individuals strongly motivated to do well

• Most errors are systemic, with multiple points of failure

• Teamwork is neither taught nor rewarded but is critical to success
The Role of Negligence and Recklessness

- **Negligence**
  - Should have been aware of a substantial and unjustifiable risk
  - Equivalent to social definition of human error
  - A compensatory concept in the law

- **Recklessness**
  - Conscious disregard of a substantial and unjustifiable risk
  - A punitive concept in the common law
The Difficult Provision: Knowing violation of safe operating practices?

- Knowing Violations
- Reckless Violations
- Reckless Conduct

*David Marx – Just Culture*
## Managing Healthcare Risk - The Three Behaviors

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<tr>
<th>Normal Error</th>
<th>At-Risk Behavior</th>
<th>Reckless Behavior</th>
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<tbody>
<tr>
<td><strong>Product of our current system design</strong></td>
<td><strong>Unintentional Risk-Taking</strong></td>
<td><strong>Intentional Risk-Taking</strong></td>
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<tr>
<td>Manage through changes in:</td>
<td>Manage through:</td>
<td>Manage through:</td>
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<tr>
<td>• Processes</td>
<td>• Understanding our at-risk behaviors</td>
<td>• Disciplinary action</td>
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<tr>
<td>• Procedures</td>
<td>• Removing incentives for at-risk behaviors</td>
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<tr>
<td>• Training</td>
<td>• Creating incentives for healthy behavior</td>
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<tr>
<td>• Design</td>
<td>• Increasing situational awareness</td>
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<td>• Environment</td>
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*Normal Error*  
Negligence  
Recklessness

*David Marx – Just Culture*
Recommendation 7-2: The National Council of State Boards of Nursing, in consultation with patient safety experts and healthcare leaders should undertake an initiative to design uniform processes among states for better distinguishing human errors from willful negligence and intentional misconduct.....

*Institute of Medicine, 2004
“Errors are not the disease, they're the symptoms of the disease.”

Dr. Lucian Leape
Harvard School of Public Health