Reporting Actual vs. Potential Incidents

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Outline

• Definitions
• Detecting safety in the system
• Barriers to learning
• Learning responses to near misses
• Leadership
Does it Matter?

"A patient safety incident is an event or circumstance that could have resulted, or did result, in harm to a patient, and whose wish it is not repeated again (WHO 2010)."
Actual or Potential What?
Some Definitions...

• Incident
  – An unwanted or unexpected change from a normal system behavior which causes (actual) or has the potential to cause an adverse effect to persons or equipment

  “Actual vs. Potential”

• Adverse event
  – An incident that occurs during the process of providing health care that results in suboptimal clinical outcome including unintended injury or complication leading to disability, death, or prolonged hospital stay for the patient

Ford et. al. 2012
Actual or Potential What?
Some Definitions...

• Error
  – Failure of a planned action to be completed as intended, or the use of a wrong plan to achieve an aim

• Mistake
  – Implementation of a plan unlikely to achieve its intended outcome even if executed correctly.
  – Blunder, wrong judgment, wrong action or statement from faulty judgment; inadequate knowledge or inattention

Ford et. al. 2012
Actual or Potential What?
Some Definitions...

• Near miss
  – An event or situation that could have resulted in an accident, injury, or illness but did not either by chance or through timely intervention. (AKA close call, good catch or near hit)

  Harm to the patient was avoided
  – Incident that occurs but without harm
  – Incident that occurs but intercepted before harm was done/reached the patient (potential adverse event)

Ford et. al. 2012
Which of the following describes an unwanted or unexpected change from a normal system behavior which causes or has the potential to cause an adverse effect to persons or equipment?

1. An adverse event
2. An error
3. A failure mode
4. An incident
5. A near miss
Which of the following describes an unwanted or unexpected change from a normal system behavior which causes or has the potential to cause an adverse effect to persons or equipment?

1. An adverse event 20%
2. An error 20%
3. A failure mode 20%
4. An incident 20%
5. A near miss 20%

Which of the following is an event or situation that **could have** resulted in an accident, injury, or illness but **did not** either by chance or through timely intervention?

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Problems in a Complex System

• Errors due to numerous problems in the complex system (Reason 1990)
  – Safety culture
  – Working conditions (incl. human factors)

• To avoid future errors, must improve underlying, more-common and less-harmful systems problems (associated with near misses)

• Detect through reporting

Wolf and Hughes 2008
What Do You Report?

• Should you report actual incidents?

• Should you report potential incidents?

• What if it does not cause (actual) or does not have the potential to cause an adverse effect on the patient?
  – Guess depends on how define “suboptimal clinical outcome”…
Voluntary Reporting

• Institute of Medicine (IOM)
  – Advocating studying near misses “...to detect system weaknesses before the occurrence of serious harm (IOM 2000).”
  – Recommended implementation of
    • voluntary near-miss reporting system
    • mandatory reporting of serious adverse incidents

• Uncertainty if mandatory reporting would improve safety of patients

Eadie 2012
Safety Initiatives

• “Safety initiatives target systems-related failures that contribute to errors within complex environment of health care (Marella 2007).”

• Many errors are not reported voluntarily or captured through mechanisms, causing any improvement efforts to fail.

Marella 2007
• Near misses can occur 300 x more frequently than adverse events

Barach and Small 2000
Potential Consequences

• Looked at 2 incident reporting systems = 4407 incidents reported
  – 1507 (34%) were considered potential for clinical consequences
  • 149 (10%) rated potential severity >2 (on validated French Nuclear Safety Authority (ASN) 5-point scale.
    – 79 (53%) would be submitted to a National Reporting System; majority related to human error or human-software interface
    – **Point:** learn from the other 47% (70)
    – **Point:** 4407/79 = near miss 18-56 x more often than adverse events

Terezakis et. al. 2013
“...reporting errors that result in patient harm as well as seemingly trivial errors and near misses has the potential to strengthen processes of care and improve the quality of care afforded patients (Wolf and Hughes 2008). ”
Human Factors-Focused Reporting

• Human factors contribute to quality and safety
• Incorporating human factors into the reporting may help identify specific issues that can be resolved (prior to an actual event.)

Morag et. al. 2012
How often are near misses likely to occur compared to adverse events?

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Barriers to Learning from Near Misses

• Lack of familiarity in safety science in general

• Underappreciation of importance of near misses in particular

• Lack of accountability for patient safety

• Resource limitations
Barriers to Learning from Near Misses

• Recovery from a close call may give a false sense of security on ability to prevent/recover from incidents
  – 2% of transfusion service high-risk events showed that 90% were close calls

Call 2011
Barriers to Learning from Near Misses

- Near miss bias affects Bayesian
- People respond differently to potential events if they view it as
  - “did not occur”
    - Amplify risky decision making
  - “almost happened”
    - Attenuate risky decision making

Tinsley et. al. 2012
Barriers to Learning from Near Misses

• Not just healthcare: seen in potential events such as hurricanes, which by chance not end in disaster

Tinsley et. al. 2012
Learning Responses from Near Misses

• Constructivist grounded theory included semi-structured interviews with 24 participants = 3 response scenarios to near misses

1. “Doing a quick fix” (most common); corrected error with no further action

• Pervasiveness of near misses cause no harm and fear associated with reporting the near miss

Jeffs et. al. 2012
Learning Responses from Near Misses

2. Reporting near misses “into a black hole”; not hear anything from management
   • Managers’ focus on operational duties and events that harmed patients

Jeffs et. al. 2012
Learning Responses from Near Misses

3. “Closing off the Swiss-cheese holes”; corrective action at organizational level
   • Managers perceived substantial potential for harm and preventability

Jeffs et. al. 2012
Leadership Matters

• Relationship between organizational leadership for safety and learning from patient safety events

• Study: open interviews (N=26) and cross-sectional questionnaire (N=183)
  – Leaders that enacted priority of safety has stronger relationship with incident reporting than espoused priority of safety
  – Confirmed relationship between incident reporting and error management exists

Ginsburg et.al. 2010; Van Dyck et. al. 2013
Barriers to learning from near misses include having:

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Wealth of Information

“If your hospital collects only reports of adverse events and ignores near misses, you are missing out on the most valuable source of data for identifying patient safety priorities and for measuring your progress on problems you’re trying to fix (Marella 2007).”
References


