


The Relationship between Organizational Leadership for Safety and Learning From Patient Safety Events

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Presenting Author: Liane R. Ginsburg
Associate Professor & Ontario MOHLTC Career Scientist
School of Health Policy & Management
Faculty of Health, York University
lgins@yorku.ca

Co-Authors: You-Ta Chuang, Peggy Ng, Whitney Berta,
Peter Norton, Deborah Tregunno, Julia Richardson



to err is human
to cover up is unforgivable
to fail to learn is inexcusable

-Sir Liam Donaldson
Chief Medical Officer
UK Department of Health




MAJOR NEAR MISS

DEFINITION: An event that would have resulted in death or serious physical or psychological injury but did not because it was caught or because of good luck.

EXAMPLES: Interrupted attempted suicide by hanging, wrong patient is sent for a surgical procedure and is discovered in the OR.


12. The table below lists several things that might occur in an organization following a MAJOR NEAR MISS (as defined above). Please indicate how often each of these things happens following Major Near Misses that are identified in your organization (please check only 1 box in each row).

	Always or almost always	Usually	Sometimes	Never or almost never	don't know
(a) Major near misses are reported to a reporting system that is internal to the hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Major near misses are reported to a reporting system that is external to the hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Major near misses are discussed in dedicated "patient safety rounds"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Following major near misses, a systematic approach is used in this organization (e.g., root cause analysis) to understand what occurred, how and why it happened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Individuals involved in major near misses contribute to the understanding and analysis of the event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) A multidisciplinary review team in our organization helps with the analysis of major near misses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) In discussions around major near misses, the focus is mainly on system-related factors, rather than on the individual(s) most responsible for the event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) A systematic approach is used to identify strategies to reduce re-occurrence of major near misses in this organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Individuals involved in major near misses contribute to the generation of possible solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) Changes are made to reduce re-occurrence of major near misses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Procedural changes resulting from analysis of major near misses are followed up on a regular basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



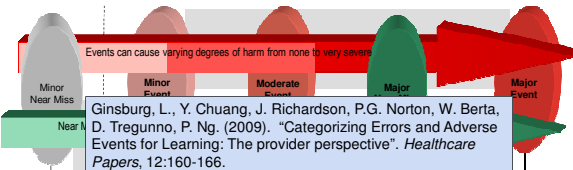
Learning from Patient Safety Events

- 3-year, 2-phase study:
 - P1. To understand what kind of PSEs are relevant to staff and managers in daily practice
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Typology of Patient Safety Events

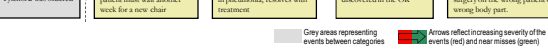
Events can cause varying degrees of harm from none to very severe



Ginsburg, L., Y. Chuang, J. Richardson, P.G. Norton, W. Berta, D. Tregunno, P. Ng. (2009). "Categorizing Errors and Adverse Events for Learning: The provider perspective". *Healthcare Papers*, 12:160-166.


<p>Definition: An event that would have resulted in no harm or very minimal temporary harm to the patient but did not because it was caught or because of good luck.</p> <p>Examples: Administering Extra-strength Tylenol instead of Tylenol 2's, a missed respiratory and patient suffers one day of mild congestion; staff forgets patient's appointment for seeing servicing and a patient must wait another week for a new chair</p>	<p>Definition: An event that causes discomfort sufficient to interfere with usual activity and requires additional specific therapeutic intervention but, poses no significant or permanent risk of harm to the patient.</p> <p>Examples: Post stroke patient on dysphage diet is given thin fluids and aspirates resulting in pneumonia, resolves with treatment</p>	<p>Definition: An event that would have resulted in death or serious physical or psychological injury but did not because it was caught or because of good luck.</p> <p>Examples: Interrupted attempted suicide by hanging, wrong patient is sent for a surgical procedure and is discovered in the OR</p>	<p>Definition: An event involving death or major permanent loss of function, outside hemolytic transfusion reaction involving administration of blood, surgery on the wrong patient or wrong body part.</p>
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Grey areas representing events between categories Arrows reflect increasing severity of the events (red) and near misses (green)



Learning from Patient Safety Events

- 3-year, 2-phase study:
 - P1. To understand what kind of PSEs are relevant to staff and managers in daily practice
 - P1. Develop PSE Learning Instrument
 -



Learning from Patient Safety Events

- 3-year, 2-phase study:
 - P1. To understand what kind of PSEs are relevant to staff and managers in daily practice
 - P1. Develop PSE Learning Instrument
 - P2. What factors influence learning from PSEs



Objective

- To examine the relationship between organizational leadership for patient safety (formal and informal) and learning from four types of patient safety events (PSEs).



Methods

- Study setting: 49 general hospitals in Canada
- Quantitative non-experimental design
- Used cross-sectional surveys of:
 - patient care managers (PCMs) provided data on *formal and informal organizational leadership for patient safety*
 - hospital patient safety officers (PSOs) provided data on *organization-level learning responses following 4 types of patient safety events: (a) minor events, (b) moderate events, (c) major near misses, and (d) major events*



Measures

Formal Leadership for Patient Safety

- **Formal leadership** for safety – (PCM perception of) extent patient safety is valued by an organization's senior leadership and is a priority in the organization
- 7-item scale (alpha = 0.86), e.g.:
 - My organization effectively balances the need for patient safety and the need for productivity
 - Senior management considers patient safety when program changes are discussed*
- 5-pt agree-disagree Likert scale



Measures

Informal Leadership for Patient Safety

- Newly created in this study
- We defined *informal "champions" or "opinion leaders"* – *those with expertise related to patient safety who provide natural leadership for PS that's beyond their formal authority*
- Is there a champion(s) in your organization? If so, how influential is s/he at driving and encouraging PS?
- Scoring ranged from "0" (no champion) to "5" (extremely influential champion(s))



Measures

Learning from Patient Safety Events

- The measure is rooted in theoretical models of learning from failure (Aroote 1999; Sason and Reason 1999)
 - Ginsburg, L., Y. Chuang, P.G. Norton, W. Berta, D. Tregunno, P. Ng, J. Richardson. (2009) "Development of a Measure of Patient Safety Event Learning Responses". *Health Services Research*. Early on-line.
- **Learning** was measured using 11-13 survey items that reflect behaviours/responses which should follow each type of PSE if learning is likely to occur. 5 DVs:
 1. Minor event learning
 2. Moderate event learning
 3. Major near miss learning
 4. Major event **analysis**
 5. Major event **dissem/communication**



Analyses

- Hospitals were the unit of analysis
- Multivariate regression analysis was used to test the unique effect of:
 - (a) hospital size
 - (b) informal leadership for patient safety
 - (c) formal organizational leadership for patient safety
 - (d) the interaction between hospital size and each leadership variable.
- ...on 5 types of PSE learning
- Used Seemingly Unrelated Regression (SUR) (Zellner 1962)

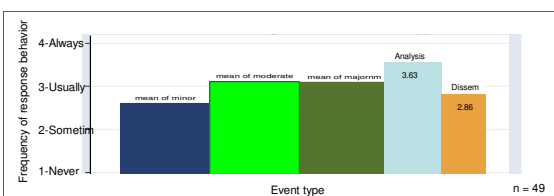


Results

- Mail-survey
 - 54/68 PSOs returned a survey (79%)
 - 28 from small hospitals, 26 from large hospitals
 - 282/621 PCMs (46%)
 - 49 cases where we have both PSO and PCM data for an organization



Differential Learning Behaviours in Response to 4 types of PSEs



	Minor events	Moderate events	Major near misses	Major events
PSO mean	2.58	3.07	3.03	3.38
sd	0.67	0.74	0.72	0.55
$p < .0001$				



Regression Results Summary

	Minor event learning	Moderate event learning	Major NM learning	Major event analysis	Major event dissem
Hospital size (dummy)			-		-
Formal leadership	+	+	+		+
Informal leadership					
Formal leadership x hospital size	-	-			-
Informal leadership x hospital size					-



Interaction between Formal Leadership and Hospital Size

(DV = Major Event dissemination/communication)



Discussion

- Formal leadership for patient safety and hospital size
- Informal leadership for patient safety
- Formal leadership for patient safety: leadership and culture constructs



Limitations

- Org level research tends to have small samples
- Reliance on PCM and PSO perspectives
- PCM RR 46%
- Absolute PSE learning levels ++ bias
- Strength lies in different sources for IV And DV data



Implications

- Future research is required to empirically examine the relationship between PSE learning responses and improvements in other important PS outcomes
- Uses of the PSE LEARNING instrument:
 - (a) to measure learning from different types of patient safety failures
 - (b) by organizational decision makers as a tool / checklist to promote greater responsiveness to different kinds of PSEs



Related Papers

- Ginsburg, L., Y. Chuang, J. Richardson, P.G. Norton, W. Berta, D. Tregunno, P. Ng. (2009). "Categorizing Errors and Adverse Events for Learning: The provider perspective". *Healthcare Papers*, 12:160-166.
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