

Making Near Misses Count: Turning Mistakes into Teachable Moments

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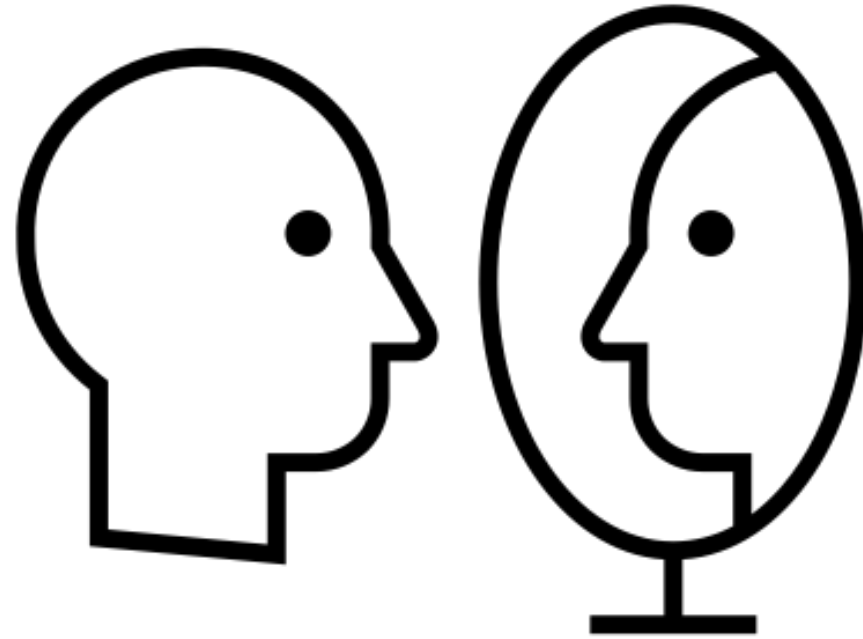
Objectives

By the end of the session, participants will be able to:

1. Define "near misses" and their impact
2. Identify the opportunities and challenges related to discussing near misses
3. Introduce the NEAR MISS framework for turning near misses into teachable moments with learners



Reflecting on Our Experiences



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number 22333 or sign on
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Why is it difficult to talk about errors and/or learn from them?



No responses received yet. They will appear here...

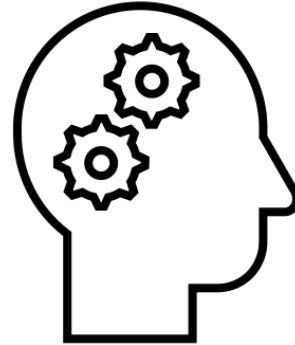
Why Is It Difficult to Discuss & Learn From Mistakes?

- Emotional barriers



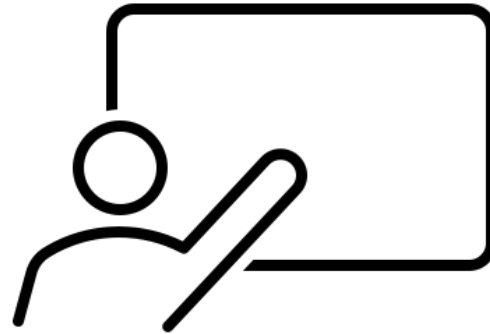
Why Is It Difficult to Discuss & Learn From Mistakes?

- Emotional barriers
- Cognitive barriers



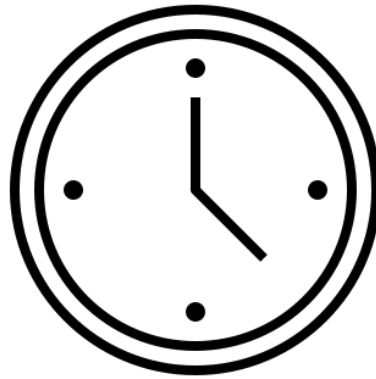
Why Is It Difficult to Discuss & Learn From Mistakes?

- Emotional barriers
- Cognitive barriers
- Lack of training



Why Is It Difficult to Discuss & Learn From Mistakes?

- Emotional barriers
- Cognitive barriers
- Lack of training
- Logistics: time, space, awareness



Why Is It Difficult to Discuss & Learn From Mistakes?

- Emotional barriers
- Cognitive barriers
- Lack of training
- Logistics: time, space, awareness
- “Fix and forget”

Original research

Learning from near misses: from quick fixes to closing off the Swiss-cheese holes

Lianne Jeffs,^{1,2,3} Whitney Berta,⁴ Lorelei Lingard,^{5,6} G Ross Baker⁴

ORIGINAL RESEARCH

Fix and forget or fix and report: a qualitative study of tensions at the front line of incident reporting

Tanya Anne Hewitt,¹ Samia Chreim²



Error Discussion, Feedback, & Learning



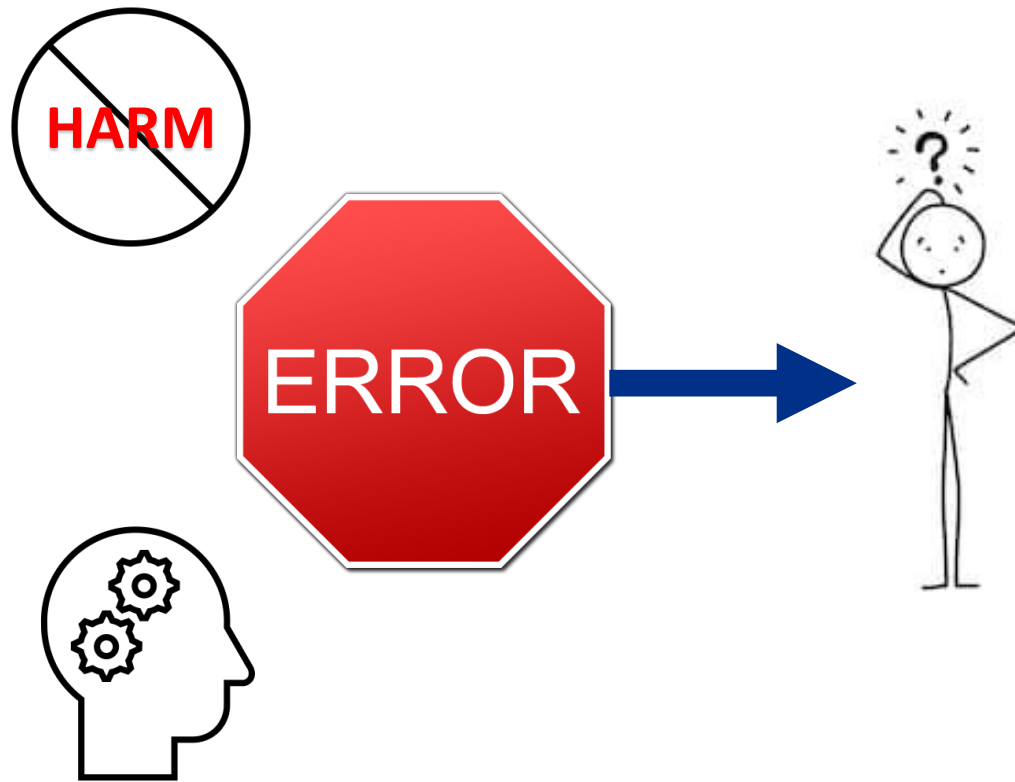
Error Discussion, Feedback, & Learning



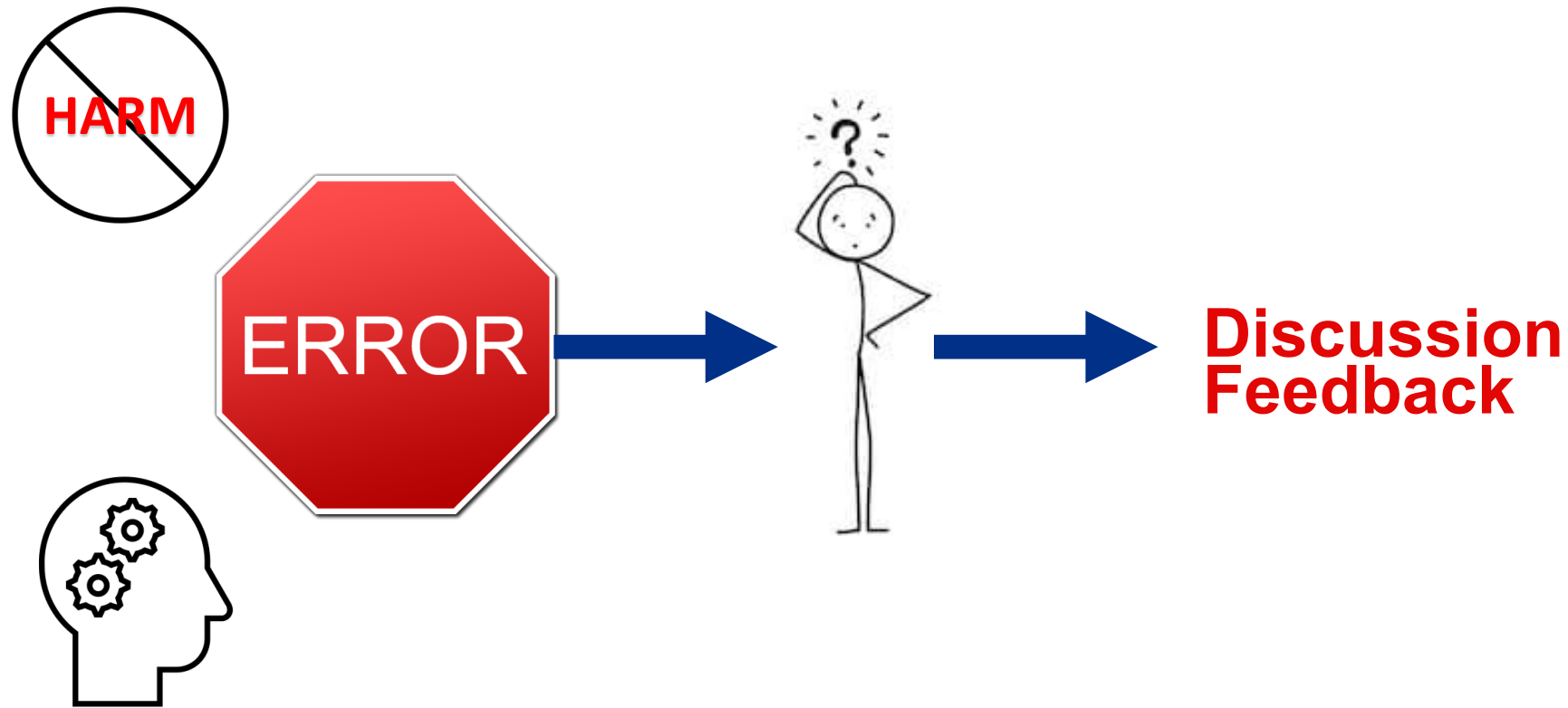
Error Discussion, Feedback, & Learning



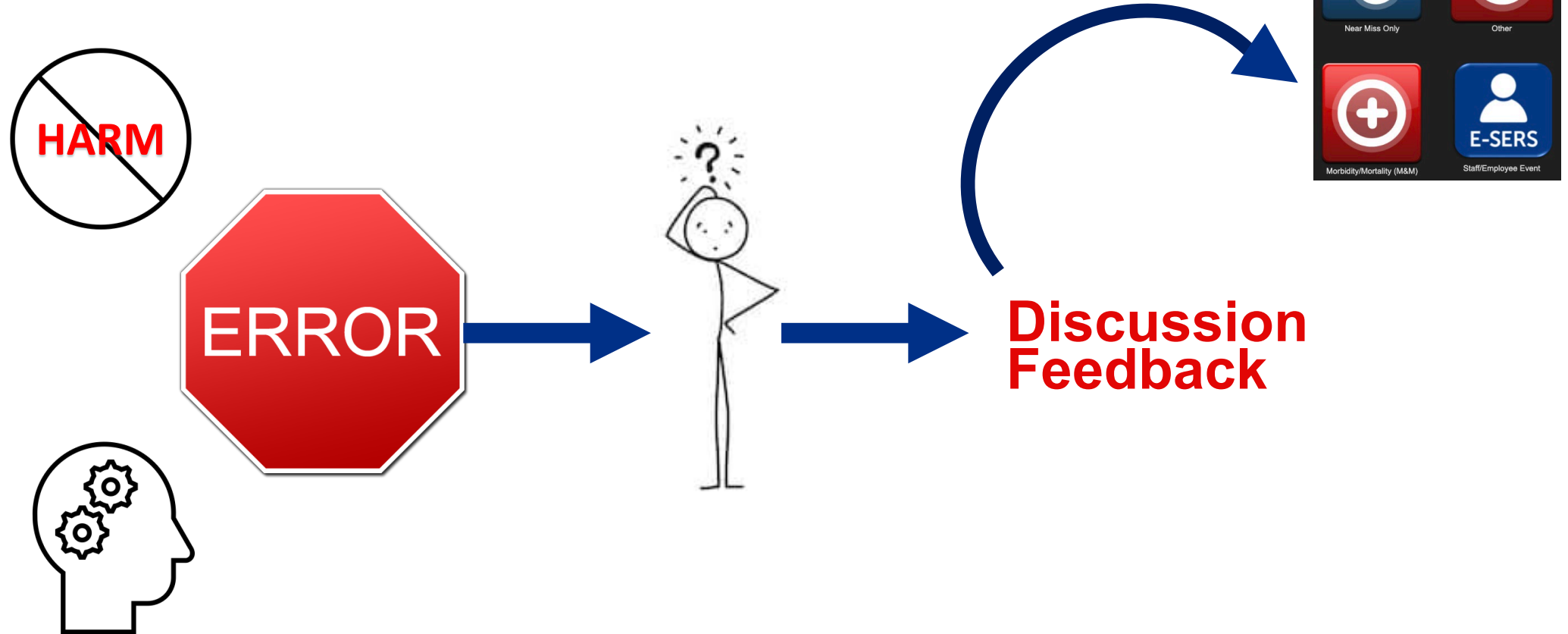
Error Discussion, Feedback, & Learning



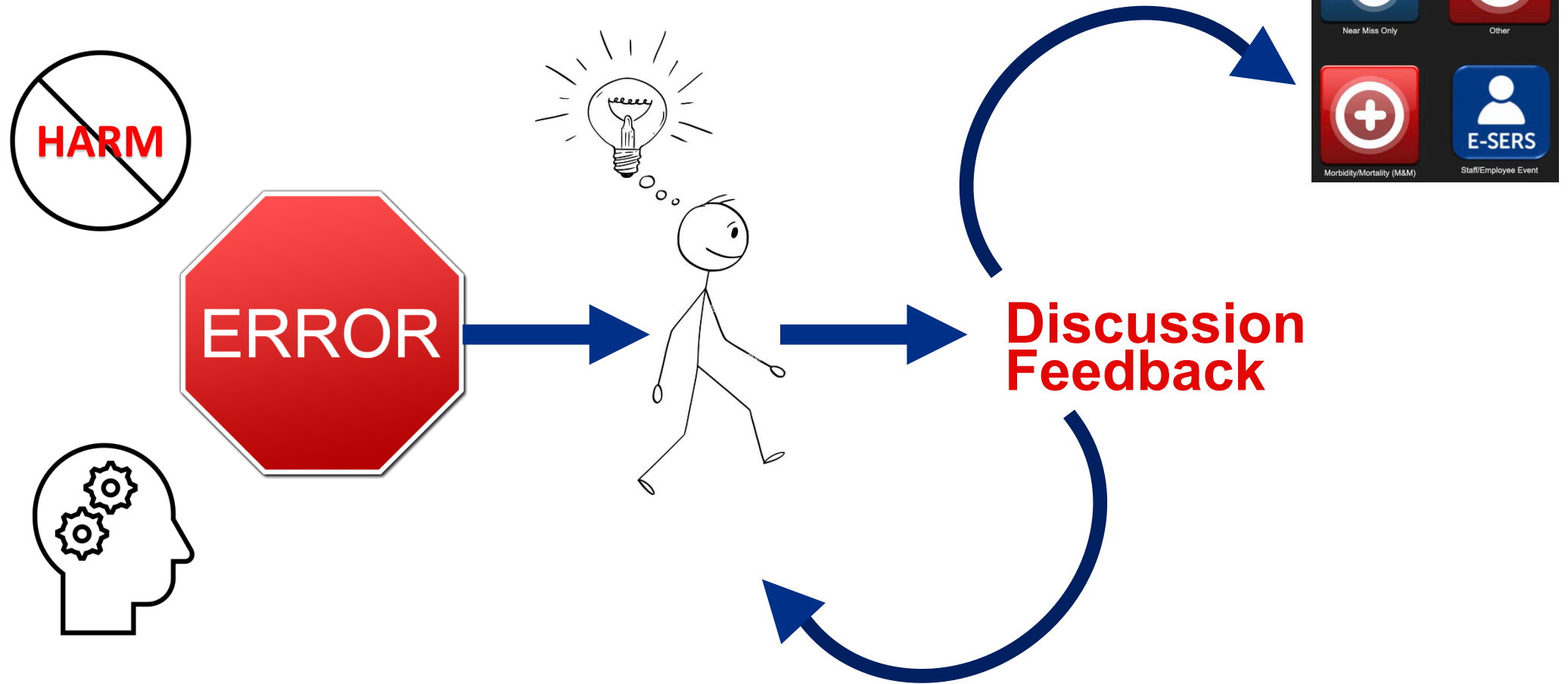
Error Discussion, Feedback, & Learning



Error Discussion, Feedback, & Learning



Error Discussion, Feedback, & Learning



Why Near Misses?

- **Near miss** = an error that does not cause injury to a patient, either by chance or because it is intercepted before being administered or provided to the patient



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COMMO
N



Why Near Misses?

- **Near miss** = an error that does not cause injury to a patient, either by chance or because it is intercepted before being administered or provided to the patient

COMMON

FIXED &
FORGOTTEN



Why Near Misses?

Comparison of Responses to Near Misses vs. Adverse Events

Scale	Severity of Error	Near Miss	Adverse Event	P-value
Importance Rating*, mean (\pm SD)	Mild	4.00 (0.97)	4.61 (0.60)	<.001
	Moderate	4.61 (0.60)	4.87 (0.33)	<.001
Effort to Notify Rating^, mean (\pm SD)	Mild	2.55 (0.64)	2.58 (0.60)	<.001
	Moderate	2.58 (0.60)	2.64 (0.56)	<.001

***Importance** was rated on 5-point Likert scale (1 = not at all, 2 = slightly, 3 = moderately, 4 = very, 5 = extremely).

^**Effort** was calculated from two multiple-choice questions pertaining to actions the respondent would take in response to an error. Minimum = 0; maximum = 3.



Study Participant Responses:

*...we're all already working so hard and trying our best, and it would feel **unnecessarily punitive and accusatory** or elicit **shame or guilt**. Also, some errors are quite minor and not necessarily worth bringing up if they won't lead to any meaningful change.*

*I worry significantly about contributing to **burn out and/or shame** surrounding errors and learning.*

***The major factor** is whether there was significant risk to the patient or **if harm occurred**. Things that have little or no consequence are sometimes not worth bringing up to avoid making peers feel **judged/criticized/condescended to**.*



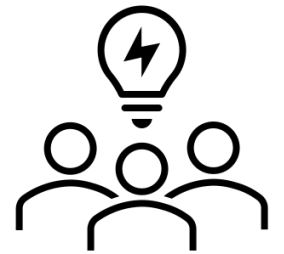
Why Near Misses?

- **Near miss** = an error that does not cause injury to the patient, either by chance or because it is intercepted before being administered or provided to the patient

COMMO
N

FIXED &
FORGOTTEN

NORMALIZING



Laying the Foundation



Where the world comes for answers



Psychological Safety

- Perception that you can engage in interpersonally risky behaviors in the work environment, such as asking questions, reporting mistakes, and seeking feedback, without negative consequence *(Edmondson, 1999)*
- Shifts focus to shared goals
- Facilitates clinical learning

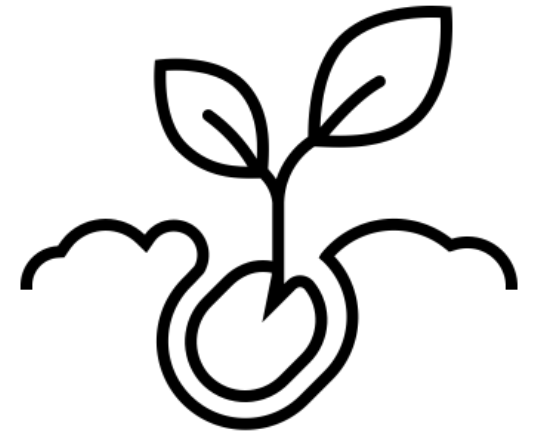


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Growth Mindset

- The belief that intelligence and ability can be **developed**
(Dweck, 2015)
- Compared to fixed mindset
- Facilitates motivation and receptiveness to feedback



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System Level Learning



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How Do Hospitals Learn from Near Misses?

A structured process for near miss and lower-level safety events

**Support Event
Review:**



Safety Culture:



**Enterprise-wide
Sharing and Learning**



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Apparent Cause Analysis

- A *limited* investigation of adverse events that:
 - reach the patient resulting in minimal or no harm (often called **precursor events**) OR
 - do not reach the patient and are caught by detection barrier or chance (**near miss**)

* Emphasis on identifying *immediate local changes* to prevent recurrence



Safe & Reliable Culture Maturity Model



Value ↑

Tipping Point =
Psychological Safety



Generative

Safety is how we do business around here
constantly vigilant and transparent.

Proactive

Anticipating and preventing problems
before they occur; Comfort speaking up.

Systematic

We have systems in place to
manage all hazards.

Reactive

Safety is important. We do a lot every
time we have an accident.

Unmindful

Who cares as long as we're not
caught *chronically complacent.*

Cultural shift
from *reactive*
to *proactive*



An Apparent Cause Analysis is a 5-Step Process

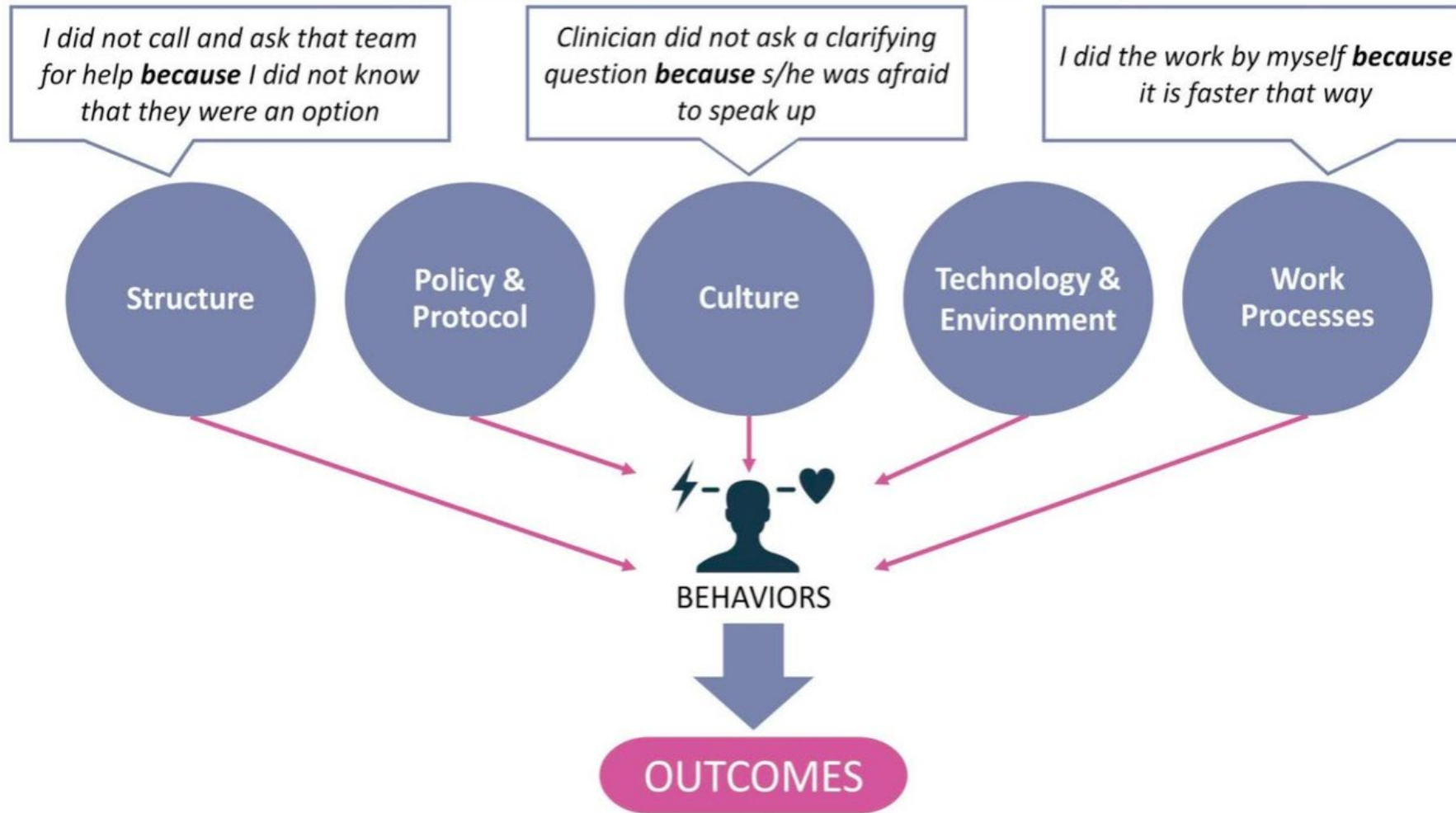
1. Identify criteria to initiate
2. Investigate the event and identify immediate actions
3. Create an apparent cause statement
4. Identify corrective actions
5. Develop solutions and recommendations for [organizational learning](#)



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The Power of *Because*



Adapted from HPI 32



Safety Story for Shared Learning

What Happened:

A nasogastric tube was replaced by the bedside nurse in a patient status post major sinus surgery

Severity: What is a *reasonable* “worst case” scenario for this event?

Select severity level:

<i>Catastrophic</i>	Death or permanent loss of function
<i>Major</i>	Permanent lessening of bodily functions, disfigurement or surgical intervention required
<i>Moderate</i>	Increased length of stay or increased level of care
<i>Minor</i>	No injury, increased length of stay, or level of care

Frequency: What is the frequency of this potentially occurring?

Select the frequency:

<i>Frequent</i>	Likely to occur immediately or within a short period (may happen several times in 1 year)
<i>Occasional</i>	Probably will occur (may happen several times in 1-2 years)
<i>Uncommon</i>	Possible to occur (may happen sometime in 2-5 years)
<i>Remote</i>	Unlikely to occur (may happen sometime in 5-30 years)

ACA Guide

Potential Severity: Worst case scenario for this event

		<i>Catastrophic</i>	<i>Major</i>	<i>Moderate</i>	<i>Minor</i>
Frequency of event occurring	<i>Frequent</i>				
	<i>Occasional</i>				
	<i>Uncommon</i>				
	<i>Remote</i>				

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Safety Story for Shared Learning

ACA Statement:

The bedside nurse replaced the tube BECAUSE this is a routine bedside task for nurses and BECAUSE a system alert did not identify risk.

Local Clinical Action Items:

1. EDUCATION
2. CHECKLISTS
3. COGNITIVE AIDS (signage)
4. DECISION SUPPORT (clinical orders)

Broader Dissemination:

Presented at an inpatient M & M

Action Item Strength and Reliability	Action Item Plan	Assigned Point Value
Most Reliable	<ul style="list-style-type: none">Forcing functionsPhysical stops and constraintsComputerized automationRedundancySimplification, removal of unnecessary steps	1
Somewhat Reliable	<ul style="list-style-type: none">Checklists, cognitive aids, decision supportReduce distractionsStandardizationForced pauses, self-check, double-checks	2
Least Reliable	<ul style="list-style-type: none">Education and trainingRules, policies, procedures	3 34

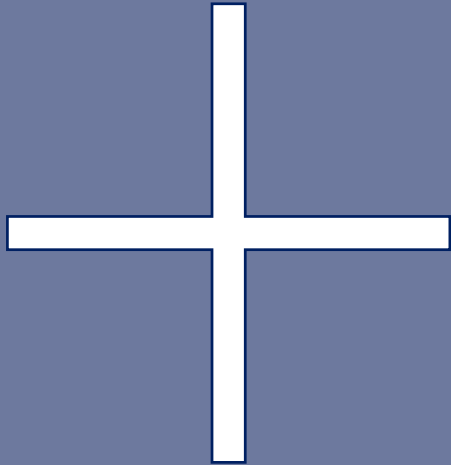


Role Play

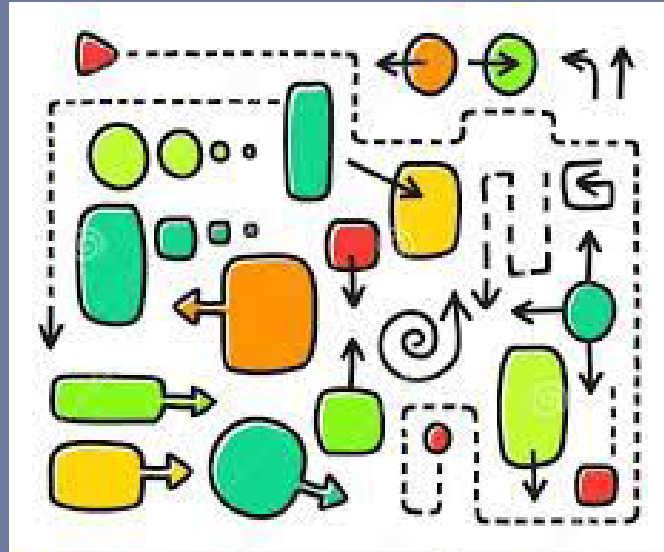
A learner admits a patient with pneumonia. The patient has a severe seizure disorder. The learner does not order the patient's seizure medication, but a parent at bedside alerts the team that seizure medication is due.



Role Play



NEAR MISS Framework



NEAR MISS Framework

Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

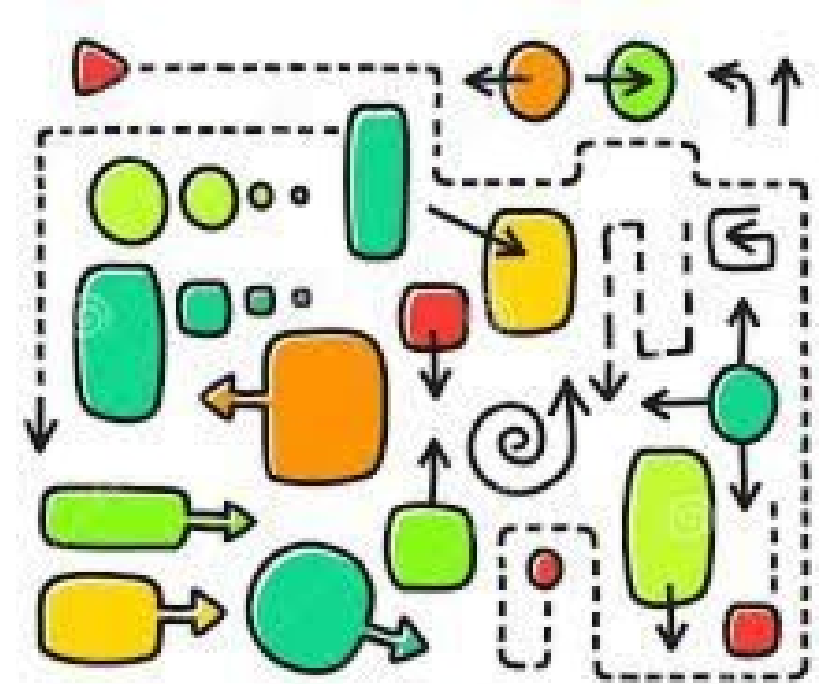
Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner



Note the time

- Not too long after event
- Good time for learner
- Good time for you



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Note the time

- *How long ago did this occur? Do I need to address this immediately?*
- *Is it sign out time? Is the learner amid time-sensitive tasks?*
- *Am I emotionally and physically available to discuss this?*



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

40



Evaluate facts & feelings

- Learn facts of event
- Reflect on your own feelings about the event
- Reflect on any biases you may have



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

41



Evaluate facts & feelings

- *What do I know about what actually happened?*
- *What am I assuming about the learner?*
- *How am I feeling right now?*



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Approach with curiosity & kindness

- Try to understand learner's frames, assumptions, and knowledge that may have guided their actions
- Maintain respect for learner and value their perspectives



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

43



Approach with curiosity & kindness



- *I'm wondering...*
- *How were you seeing that situation...*
- *Can you help me understand...*

Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Review error specifically

- Discuss the details of the error
- Name the “near miss”



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

45



Review error specifically

- *What I observed was...*
- *This was a near miss because...*



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

46



Make it a teachable moment

- Instill teaching points into discussion



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

47



Make it a teachable moment

- *It is completely understandable how this error occurred, but I hope we can still learn from it...*
- *This is important because...*
- **Address knowledge gaps or biases specifically**



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Invite reflection

- Ask the learner about their thoughts, feelings, and perspectives about the event



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Invite reflection

- *What thoughts do you have?*
- *Did you see things differently?*



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Strategize for change

- Make a plan with the learner for the next time to avoid a similar error
- Discuss potential **system** changes
 - Report the error (i.e., SERS)



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Strategize for change

- *Do you have any ideas about how you could do things differently next time?*
- *What can we change for the future?*
- *I think others can learn from this too... Have you filed a SERS before?*



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Support the learner

- Normalize and share own experiences
- Listen to the learner's feelings
- Provide overall evaluation if relevant/helpful
- Refer for outside support if needed (e.g., OCS, other supervisors)



Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

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Support the learner

- *This is a common mistake that has been made by many other learners...*
- *I have made the same mistake before...*
- *I have confidence in your abilities...*
- *I appreciate your willingness to discuss this and learn from it...*
- *How can I support you in making that change in the future?*
- *If it might be helpful to talk to someone else about this (now, next week, next month...), there are other resources (OCS, supervisors, program leaders, etc.)....*



Note the time
Evaluate facts & feelings
Approach with curiosity & kindness
Review error specifically
Make it a teachable moment
Invite reflection
Strategize for change
Support the learner

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NEAR MISS Framework

Note the time

Evaluate facts & feelings

Approach with curiosity & kindness

Review error specifically

Make it a teachable moment

Invite reflection

Strategize for change

Support the learner

Have you tried anything similar or different?

What might you add?

What might make this challenging to implement?



What is one thing you are going to
take away or change as a result of
this session?



Conclusion

- Near misses are **common, no-harm** events that are typically “fixed & forgotten”
- Near misses are opportunities to facilitate
 - **individual** learning
 - **system** learning
 - **culture** change
- **NEAR MISS** can be utilized to approach learners with empathy and kindness in order to turn a mistake into a teachable moment



Q&A



Where the world comes for answers



Boston Children's



References

1. Edmondson A. Psychological safety and learning behavior in work teams. *Adm Sci Q* 1999;44:350e83.
2. Eskreis-Winkler, L., & Fishbach, A. (2022). You Think Failure Is Hard? So Is Learning From It. *Perspectives on Psychological Science*, 17(6), 1511–1524. <https://doi.org/10.1177/17456916211059817>
3. Henriksen K, Battles J, Marks E, Lewin D. Implementing Safety Cultures in Medicine: What We Learn by Watching Physicians. *Adv Patient Saf*. 2005:7-10.
4. Hewitt TA, Chreim S. Fix and forget or fix and report: A qualitative study of tensions at the front line of incident reporting. *BMJ Qual Saf*. 2015;24(5):303-310. doi:10.1136/bmjqs-2014-003279
5. Jeffs L, Berta W, Lingard L, Baker GR. Learning from near misses: from quick fixes to closing off the Swiss-cheese holes. *BMJ Qual Saf*. 2012 Apr;21(4):287-94. doi: 10.1136/bmjqs-2011-000256. Epub 2012 Feb 22. PMID: 22357777.
6. Rudolph JW, Simon R, Dufresne RL, Raemer D. There's no such thing as "nonjudgmental" debriefing: a theory and method for debriefing with good judgment. *Simul Healthc*. 2006 Spring;1(1):49-55.

