Driving learning & improvement after RCA^2 event reviews

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CAI Webinar Series

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Disclosures & housekeeping

- Lauge Sokol-Hessner, MD, CPPS has no relevant financial disclosures
- Any opinions shared are his own
- Please use Zoom for questions (not Slido)

Learning objectives

- Explore the post-event review RCA^2 process and its challenges.
- Explore two frame shifts: the ways we present event review findings; and the ways in which we report on corrective actions.
- Demonstrate how these frame shifts can be operationalized.
- Propose next steps for organizations interested to implement these ideas.

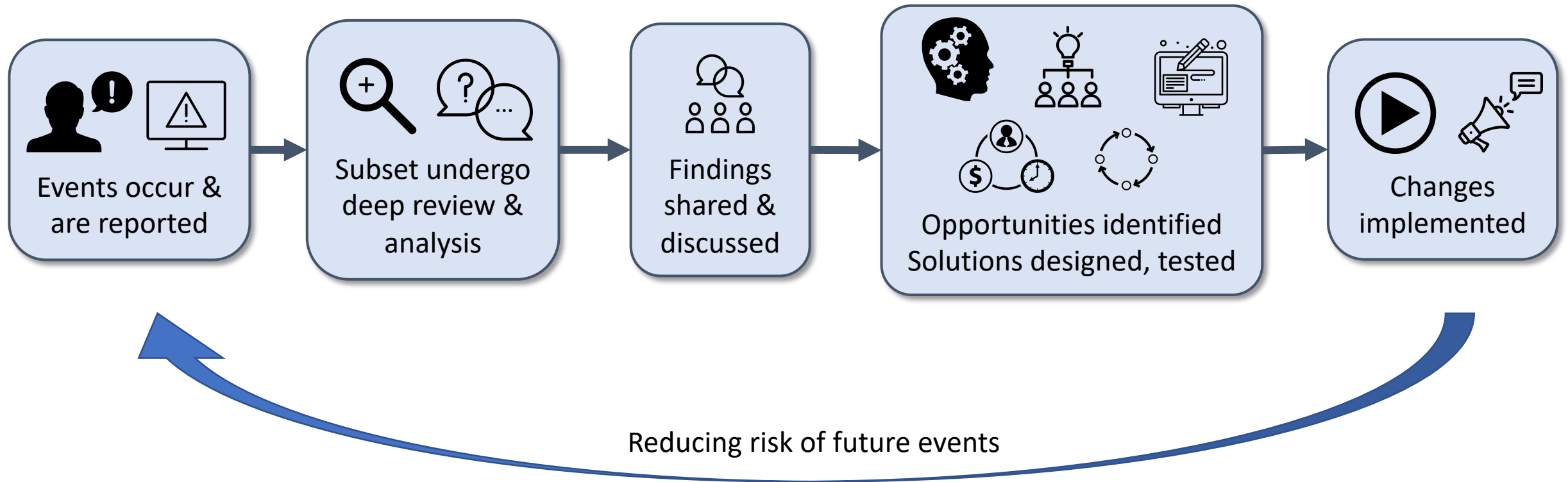Collaborative for Accountability and Improvement

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Check all with which you have experience:

Start presenting to display the poll results on this slide.

Overview

- Explore the post-event review RCA^2 process
- Challenges with post-event review work
- Frame shifts:
  - Individual events → thematic areas of risk
  - Corrective actions → areas of unmitigated risk & improvement bottlenecks
- Building & integrating processes supporting these new perspectives
- Examples from an organization
- Summary & next steps

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RCA^2

Events occur & are reported → Subset undergo deep review & analysis → Findings shared & discussed → Opportunities identified Solutions designed, tested → Changes implemented

Reducing risk of future events

https://www.ihi.org/resources/Pages/Tools/RCA2-Improving-Root-Cause-Analyses-and-Actions-to-Prevent-Harm.aspx

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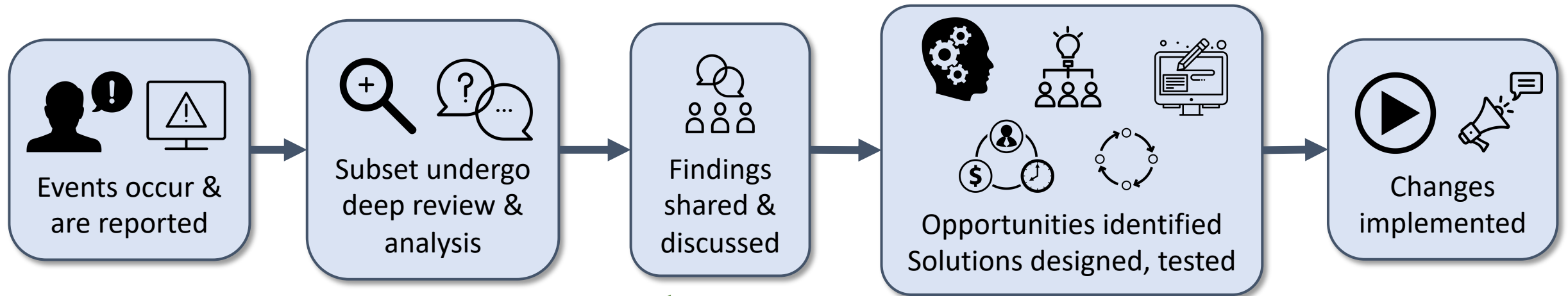
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RCA²

Events occur & are reported → Subset undergo deep review & analysis → Findings shared & discussed → Opportunities identified Solutions designed, tested → Changes implemented

Cause maps are a way of sharing event findings

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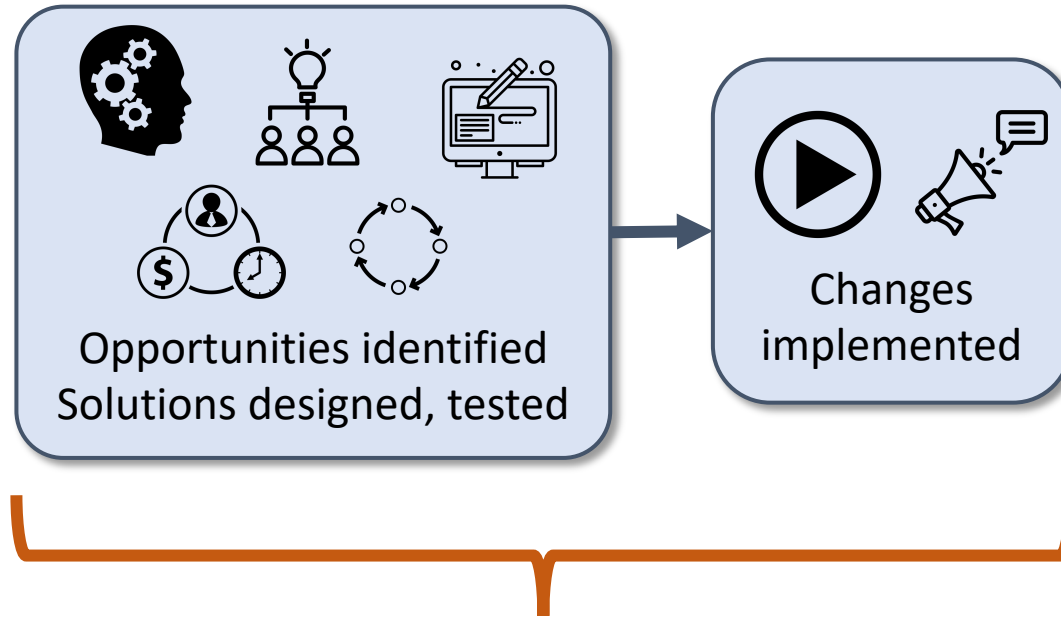
RCA^2

These steps are challenging!

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RCA^2

Opportunities identified
Solutions designed, tested

Timely & complete implementation

Delayed or incomplete implementation

Failure to implement

No changes planned

Areas of unmitigated risk & improvement bottlenecks

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Improvement bottlenecks

Corrective actions →

Organizational function
e.g. EHR revision, policy development, data analysis, etc.

← Common
bottleneck, slow improvement

Ideal →
fast intake & throughput
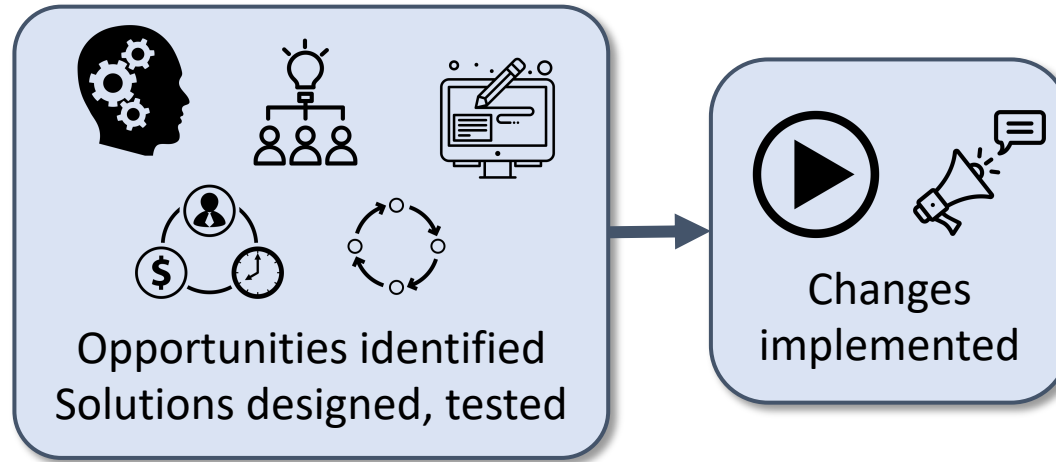
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Think of the organization you know best. Does it have improvement bottlenecks?

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RCA^2

**Opportunities identified
Solutions designed, tested**
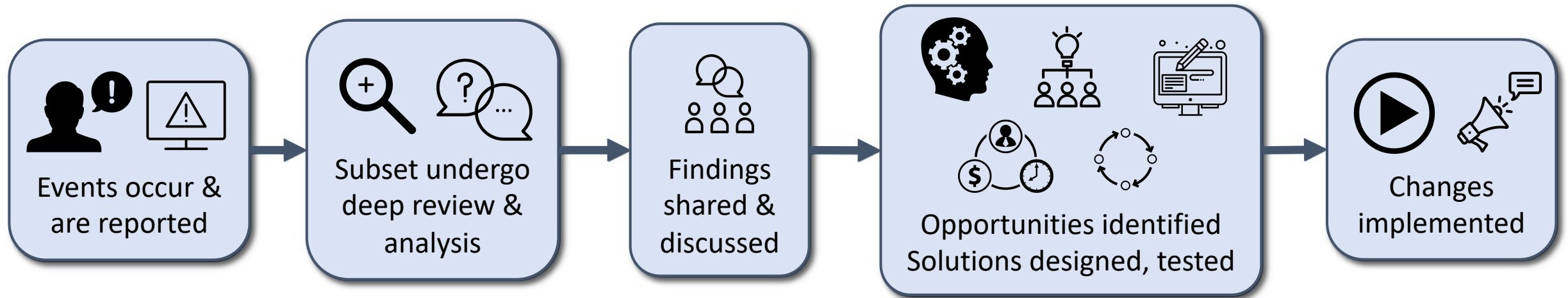
Changes implemented

Challenges

Limited resources

System constraints

Politics, status quo

Siloed improvements

Awaiting innovation

Need for disruptive change

Limited accountability

Misassigned responsibility

Organizational dysfunction
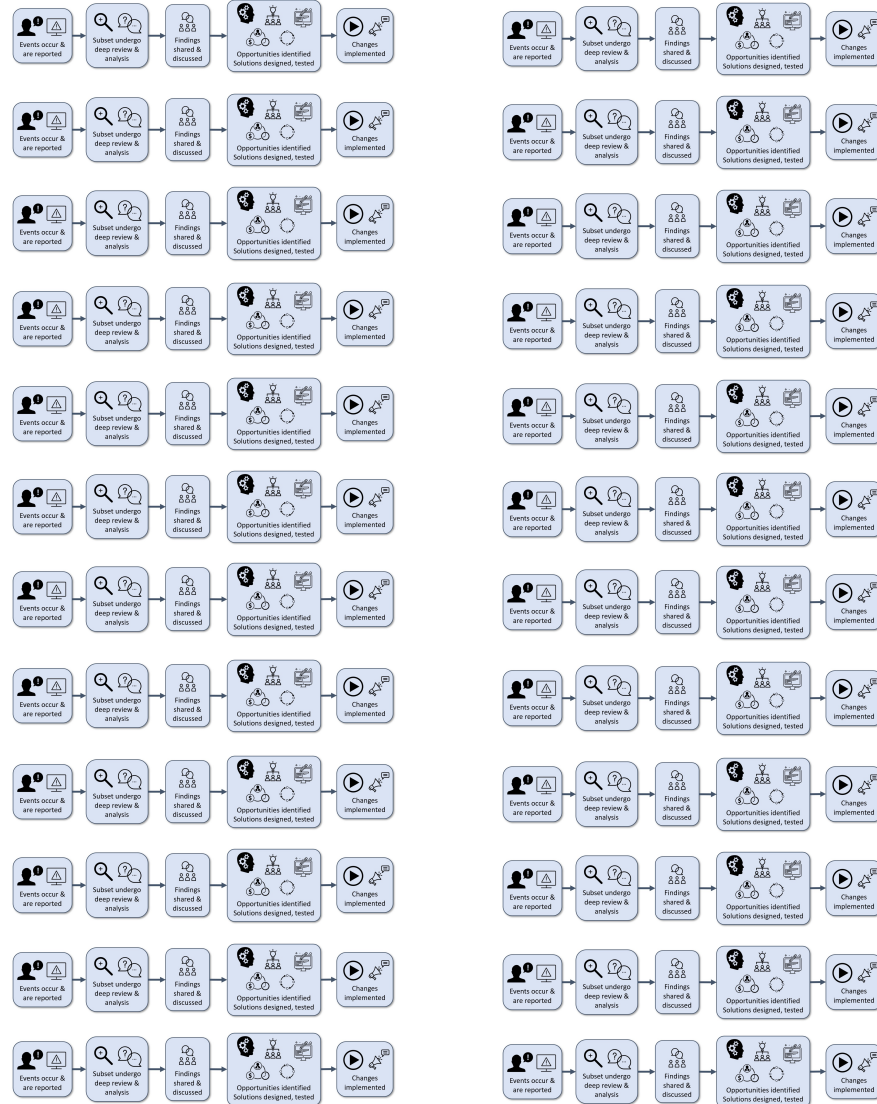
Competing priorities

Inadequate prioritization

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RCA^2

Events occur & are reported → Subset undergo deep review & analysis → Findings shared & discussed → Opportunities identified Solutions designed, tested → Changes implemented

This process happens for each significant event… and it happens many times a year…

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RCA²

Ask yourself...

- What are we learning overall?

- How well are we implementing the changes we proposed?

- What are our areas of unmitigated risk, and why are they unmitigated?

- Who in the organization is seeing this information?

- How might it shape their perspectives, knowledge, and choices?

- Into which organizational processes should this information flow?

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Frame shift 1

Individual events → **Thematic areas of risk**
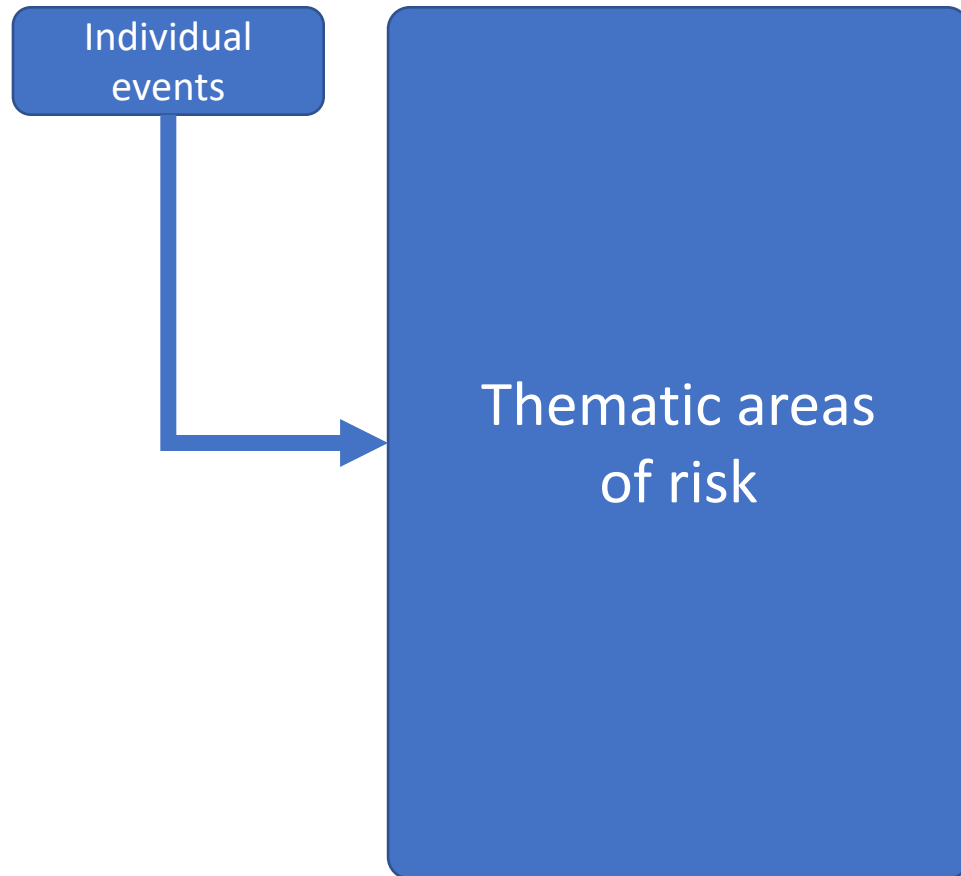
From individual events…
- "An event happened… it was reported to the DPH, the patient is suing…"
- "Contributing factors included X, Y, Z"

…To all events in a time period
- "There were X events during this period, the most common types were…"
- "The consequences of these events included…"
- "The most prevalent contributing factors were X, Y, Z"
- "Most of the events involved well known areas of risk, but we also discovered new risks…"

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Frame shift 1

Individual events → **Thematic areas of risk**
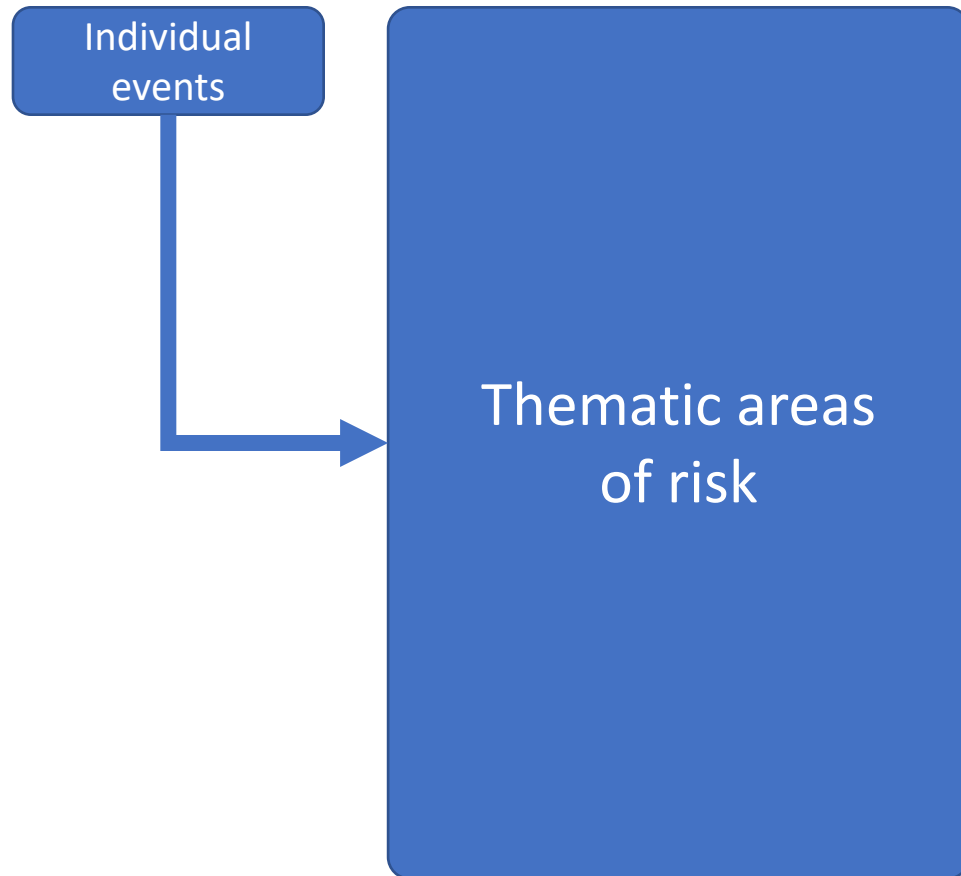
- Tells a more comprehensive & compelling story
- Advances the conversation's sophistication
- Makes connections to other streams of data
  - Quality metrics
  - Workforce safety
  - Failure modes and effect analyses (FMEAs)
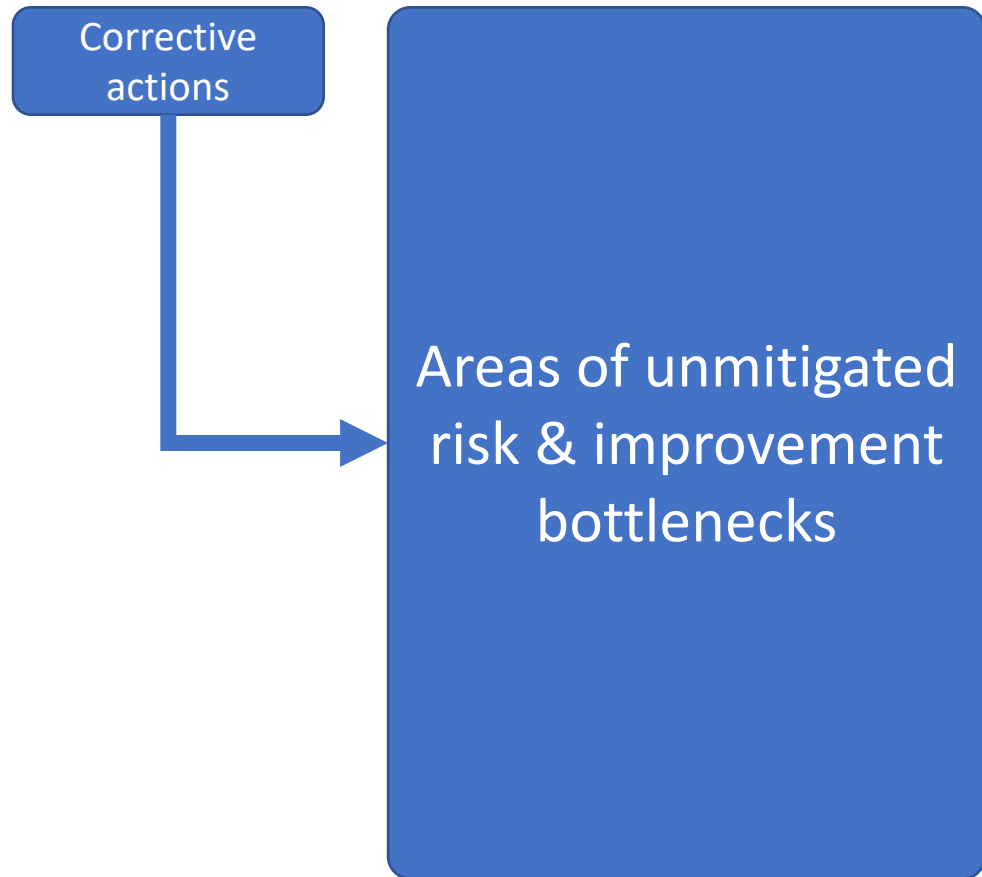- Forms the foundation of rational prioritization

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If you are a safety professional, do you/your team share thematic areas of risk with your organization's senior leaders?

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Frame shift 2

Corrective actions → **Areas of unmitigated risk & improvement bottlenecks**

From individual events...
- "We are going to implement X, Y, Z"

...To all events in a time period
- "Of all the events during this period, X% had all of their proposed corrective actions implemented, Y% had at least one not yet implemented, and Z% had none implemented..."
- "The types of corrective actions most often not implemented included..."
- "The time from completion of the event review to implementation of corrective action varied by the type of corrective action..."

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Frame shift 2

Corrective actions → Areas of unmitigated risk & improvement bottlenecks
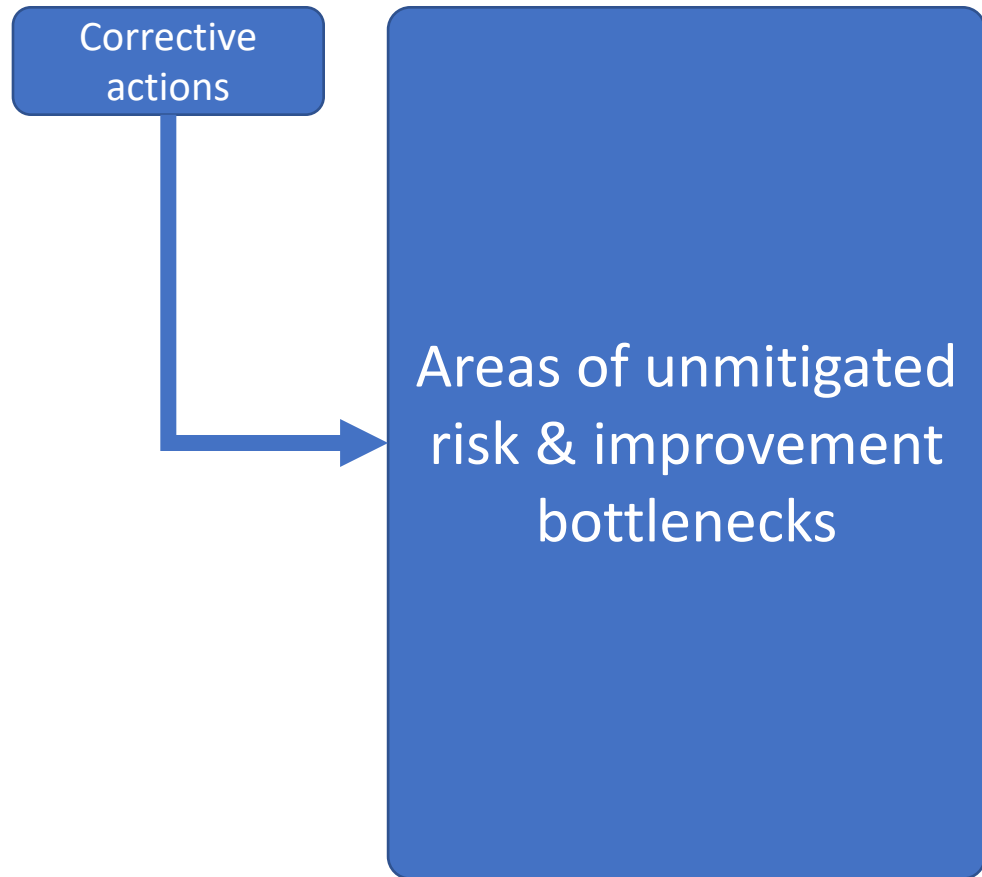
- Highlights where more attention is needed
  - And where successes have occurred!
- Shows how achieving safety is an *organizational* responsibility; move from "you" to "we" problems
- Promotes accountability
- Informs future work, prioritization, and resourcing

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If you are a safety professional, do you/your team share areas of unmitigated risk & improvement bottlenecks with your organization's senior leaders?

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Why focus so much on safety events?

Despite the limitations (of passive event reporting and targeted event analysis)...

- Safety events are powerful stories
  - Severe/long-lasting impacts to patients, families, professionals, organization
  - Real & human → connect to hearts & minds
  - "First, do no harm"
  - Explore mechanisms & contributing factors → drive towards action
  - Undergo detailed analysis, seen by/known to many people
  - Can shape people, processes, systems, and culture for many years to come

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Safety professionals

- Tell the stories of safety events
- Develop deep understanding & experience, often respected voices in the organization
- Embody high-reliability organization (HRO) characteristics
  - Preoccupation with failure
  - Reluctance to simplify
  - Sensitivity to operations
  - Deference to expertise
  - Commitment to resilience
- Should be "at the table" helping guide organizations at the highest levels
- Safety leader visibility & influence often reflect the culture of safety

Why isn't this part of all safety programs?

Journal on Quality and Patient Safety

**Reporting Systems**   November 2005, Vol 31(11)

Closing the Loop:
Follow-up and Feedback in a
Patient Safety Program

Tejal K. Gandhi, M.D., M.P.H.
Erin Graydon-Baker, M.S., R.R.T.
Camilla Neppl Huber
Anthony D.Whittemore, M.D.
Michael Gustafson, M.D., M.B.A.

Discussion: Developing and maintaining a systematic method for feedback represents more of a challenge than the completion of any single recommended action item. However, it is the feedback to the reporter that perpetuates the influx of information and closes the loop. Developing the information-tracking database has made providing feedback easier and more reliable but significant effort is required to keep the database current.

Challenges

- Patient safety vs. Operations
- Unclear expectations
- Lack of tracking systems
- Lack of people & processes
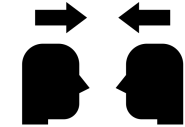
Safer Together
A National Action Plan to Advance Patient Safety

The Institute for Healthcare Improvement convened the National Steering Committee for Patient Safety as a collaboration among 27 national organizations committed to advancing patient safety.

2020

Institute for Healthcare Improvement

How to Cite This Document: National Steering Committee for Patient Safety. *Safer Together: A National Action Plan to Advance Patient Safety.* Boston, Massachusetts: Institute for Healthcare Improvement; 2020. (Available at www.ihi.org/SafetyActionPlan)

Recommendation 13. Facilitate both intra- and inter-organizational learning ... ensuring robust learning feedback loops...

Ensure that the elimination of risk and harm and sustained levels of safety over time are ultimate strategic goals of the learning system...

Develop and implement processes to systematically learn from safety events...

https://www.ihi.org/Engage/Initiatives/National-Steering-Committee-Patient-Safety/Pages/National-Action-Plan-to-Advance-Patient-Safety.aspx

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Building a process

- Event & analysis coding
- Creating an expectation & rhythm

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Event & analysis coding

Within a few days of meetings where events are presented, code and track…

- Care processes: groups of related actions performed to fulfill care needs and prevent harm
- Preventability
- Contributing factors: the underlying causes of events
- Corrective Actions, each mapped back to a contributing factor, with action owners and status

At intervals

- Periodic outreach to owners of pending actions
- Action statuses updated in database

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Creating an expectation and rhythm

Review how safety information flows through your organization

- Meetings/forums
- Attendees
- Ask:
  - Which key organizational leaders are not regularly learning from safety events?
  - How enhance the # of people learning from safety events & scope/depth?

Identify the existing "quality planning" process
How the organization identifies its quality strategy, priorities, goals, and measures

- Get on the agendas of the relevant meetings
- Set a pace: quarterly, twice-yearly, annually, etc.

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From the Noun Project: metric by Nithinan Tatah; think by Rflor; resources by Fiona OM; design by Flatart; impact by Justin Blake; focus group by Justin Blake; Graph by Andrejs Kirma

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Does the healthcare organization with which you're most closely affiliated have a "quality planning" process?

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Examples

Themes from event analysis

- Overview of case flow & #s
- Event impacts
- Care processes, preventability
- Contributing factors
- Summary

Corrective action tracking

- Check in process drives accountability
- Contributing factor themes and corresponding corrective actions
- Exploration of findings and potential next steps

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Examples

Themes from event analysis

- Overview of case flow & #s

- Event impacts

- Care processes, preventability

- Contributing factors

- Summary

3512 safety event reports during period → • All reviewed locally • Some reviewed at Dept. M&Ms → If needed to be reported externally **or** otherwise represented significant risk to patients across departments → 38 cases at Hospital-level peer review → Coded and tracked

# of safety events reported per day

Of the ~19/day
~3 falls/day
~3 pressure injuries/day
~2.5 medication events/day
~12 other

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Examples

Themes from event analysis

- Overview of case flow & #s
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- Contributing factors
- Summary

Impact to patients
- Deaths, worsened cancer prognosis, unplanned procedures, prolonged LOS, increased risk of complications, intent/action to never return to our organization, loss of trust

26% (10) Reported externally
- Two of these prompted on-site regulator visits

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Examples

Themes from event analysis

- Overview of case flow & #s
- Event impacts
- Care processes, preventability
- Contributing factors
- Summary

Care Process	# Events*	# (%) Preventable
Procedure-related	21	5 (24%)
Diagnosis-related	12	8 (66%)
Medication management	3	3 (100%)
Other injury	3	0 (0%)
Fall-related	2	2 (100%)
Self-harm	1	1 (100%)
TOTALS	**38**	**16 (42%)**

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Examples

Themes from event analysis

- Overview of case flow & #s
- Event impacts
- Care processes, preventability
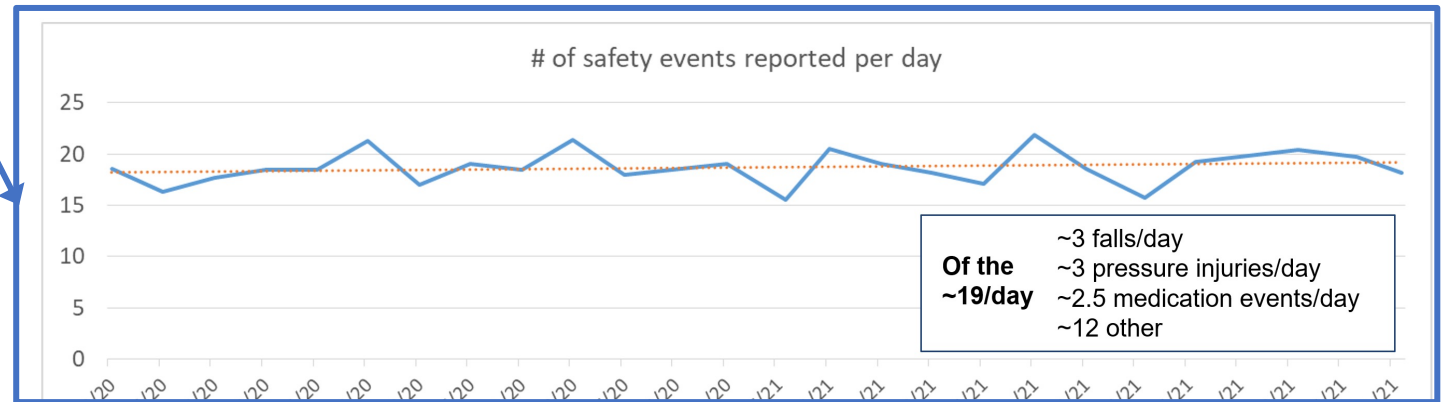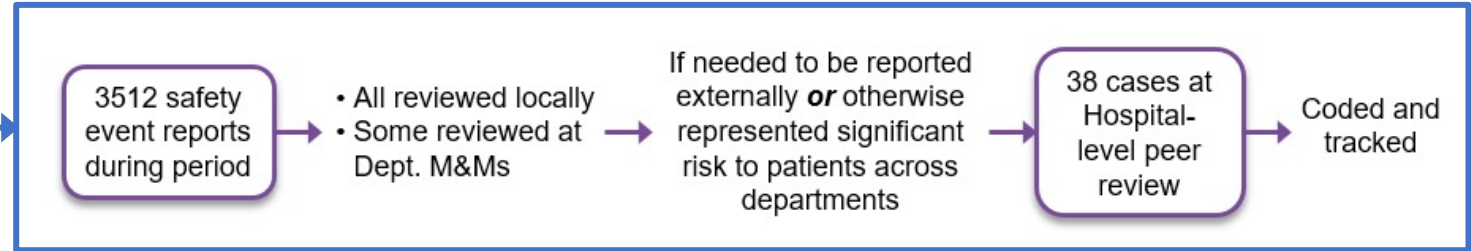- Contributing factors
- Summary

Contributing factors	# Safety Events
Existing process insufficient or problematic	8
Lack of standard process	5
Cognitive errors	5
Knowledge deficit	5
EHR design	4
Sub-optimal teamwork	2
At-risk behavior	1
Equipment design	1
Lack of bed availability	1

- We see a wide variety of serious events from across our organization
- Procedural complications are prevalent, yet the minority are felt preventable
- Diagnosis problems are also prevalent, and many may be preventable
- Many problems with other care processes may be preventable
- A wide variety of factors contribute to events

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Examples

To: QI leader responsible for a corrective action
From: Patient Safety Project Manager
Subject: Closing the loop

Hello,
Just wanted to follow-up to see if you have any updates about the status of the corrective actions listed below? Any information you can provide would be helpful as we'll be presenting the status of corrective actions to Leadership in 2 weeks.
Please let us know if you'd like to chat.

Corrective action tracking

- Check in process drives accountability
- Contributing factor themes and corresponding corrective actions
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Examples

Contributing factors (CFs)	# Safety Events	# CFs (aka risks) to be mitigated*	# *proposed* Corrective Actions (CAs)*	Status of risks/CAs
Existing process insufficient or problematic	15	25	22	
Lack of standard process	8	10	9	
Cognitive errors	11	15	15	
Knowledge deficit	7	11	10	
At-risk behavior	6	6	6	
EHR design	5	6	3	
Technical error	3	4	4	
Staffing/workload strain	2	2	0	
Distraction	2	2	0	
Equipment Design	2	2	2	
Transfer of knowledge failure	2	2	2	
Suboptimal teamwork	1	2	2	
Lack of bed availability	1	1	0	

* For a given contributing factor (aka risk), QI Directors may propose any number of corrective actions (ranging from zero to many)

Done (risk has been mitigated) **In progress** (risk will be mitigated) **On hold, still planning to implement** (risk may be mitigated) **No specific CAs proposed or 1+ CA proposed but not being pursued** (risk is, and will remain, unmitigated) **Unknown** (action owner(s) did not reply with status update)

Corrective action tracking

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Contributing factors & corrective action status

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No specific CAs proposed or 1+ CA proposed but not being pursued (risk is, and will remain, unmitigated)

Unknown (action owner(s) did not reply with status update)

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Examples

- **High prevalence of process problems, with ~50% unmitigated**
  - Examine what leads to problematic processes, and identify bottlenecks in process improvement work
  - Consider more proactive process assessments, e.g. FMEAs
  - Consider enhancing support for process improvement
- **Cognitive errors and knowledge deficits are prevalent**
  - Explore ways to decrease reliance on individuals' vigilance
- **EHR design remains an area of unmitigated risk**
  - Some submitted IT proposals are "on hold" for extended periods
  - Often, IT proposals are not submitted because crafting them is resource-intensive, and it is felt they would not be approved or implemented
- **Staffing/workload strain, Distraction, and Lack of Bed Availability**
  - Usually no specific CAs are proposed – risks are unmitigated
- **Overall often limited "strength" of corrective actions**

  Many interventions have a limited scope, AND/OR
  Have minimal effects on behavior/outcomes, AND/OR ⟶ Support research & innovation to identify stronger CAs
  Have only short-lived effects

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Moving from reactive to proactive safety

Challenges

Opportunities

Goals

- Reactive
- Firefighting
- External mandates
- Ties up resources

- Enhanced collaboration
- Optimized presentations
- Constructive conversations
- Contributing factor & action tracking
- Aggregating and learning

- More comprehensive risk awareness
- Connect safety with other priorities
- More informed choices
- Better risk mitigation

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Next steps

- Start a conversation with a safety professional

- What do your organization's safety professionals know that *isn't* part of the organization's situational awareness/shared mental model?

- How do your organization's senior leaders incorporate patient safety into their quality planning process?

- Start coding events, and see what you learn!

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Questions & feedback are welcome!

Thank you for your attention

—

lauge@uw.edu

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