

Nebraska Coalition for Patient Safety Webinar Series: Improving Your RCA2 Processes

**Session #1 – Identifying and Classifying Events for Review
Determining the Team & Engaging the Patient**

Presenters

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Objectives

1. Discuss the key elements of the RCA² process.
2. Describe what types of events should be considered for RCA² and what should be excluded.
3. Explain the concept of risk-based prioritization and use a risk matrix tool.
4. Identify who should be included on the RCA² team.
5. Describe the type of training required to participate in an RCA² team.
6. Explain how to incorporate the patient and family perspective in RCA²

Acknowledgment

The content of this presentation is taken from a variety of sources which include:

- Institute for Healthcare Improvement
- Veterans Health Administration National Center for Patient Safety
- Actual events reported to NCPS

Goals of an RCA



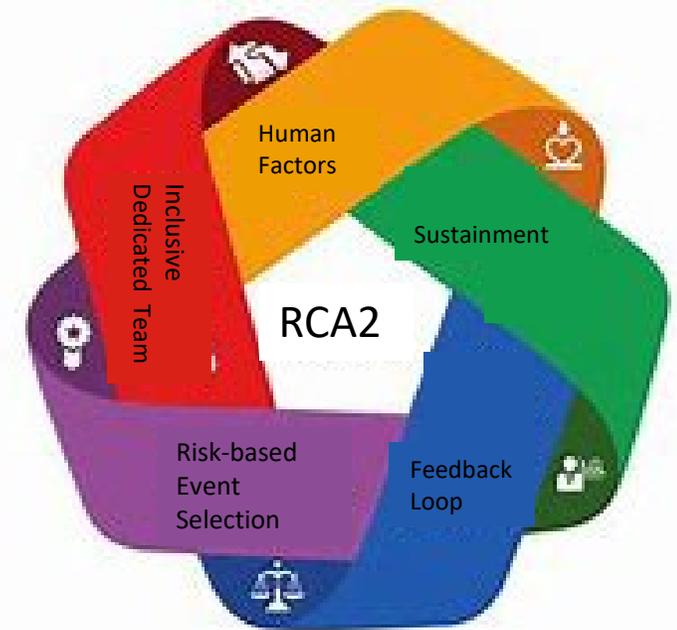
RCA² Introduction

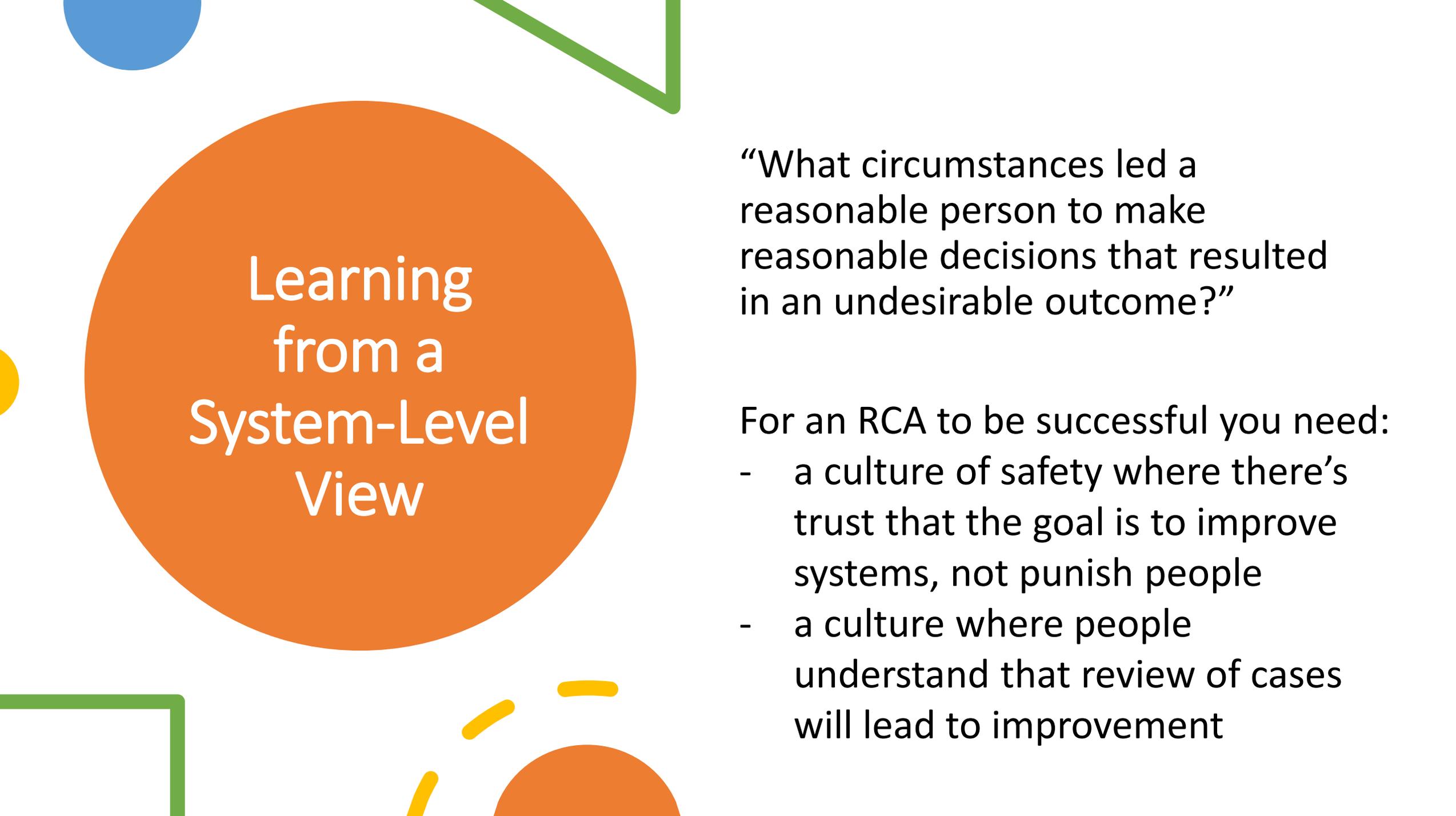
RCA² changes your way of thinking

- Focuses our process on both *analysis* and *actions*
- Reminds us that there is *often more than one factor* that contributes to each event and so, more than one corrective action may be needed for improvement

Core elements of an RCA²:

- Risk-based event selection
- Inclusive/dedicated team to conduct
- Emphasis on human factors thinking in analysis and action steps
- Actions focused on sustainable improvement
- Tracking, measuring, and providing feedback once changes are implemented



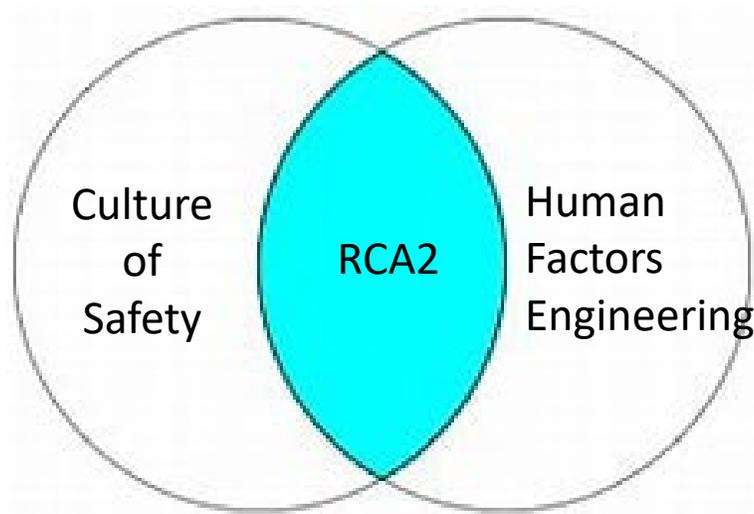


Learning from a System-Level View

“What circumstances led a reasonable person to make reasonable decisions that resulted in an undesirable outcome?”

For an RCA to be successful you need:

- a culture of safety where there's trust that the goal is to improve systems, not punish people
- a culture where people understand that review of cases will lead to improvement



Root Cause

A latent vulnerability in a system that allows an event to occur.

In healthcare, root causes often related to:

- Institutional context
- Organizational and management factors
- Work environments
- Team factors
- Individual staff members
- Task factors
- Patient characteristics

Human Factors Engineering

An established science that uses disciplines such as anatomy, physiology, physics, and biomechanics to understand how people perform under different circumstances.



Prioritizing Events for Review

Risk-based prioritization

Benefits of this strategy:

- considers the *probability* of harm as a key factor in allocating limited resources
- considers *near misses* as *opportunities* for improvement

Safety Assessment Code (SAC) Matrix

Probability and Severity	Catastrophic Death or major permanent loss of function	Major Permanent lessening of bodily functioning, disfigurement, or surgical intervention or for ≥ 3 patients increased length of stay or level of care	Moderate Increased length of stay or increased level of care for 1 or 2 patients.	Minor No injury increased length of stay, or increased level of care
Frequent (may happen several times in 1 year)	3	3	2	1
Occasional (may happen several times in 1 -2 years)	3	2	1	1
Uncommon (may happen sometime in 2 – 5 years)	3	2	1	1
Remote (may happen sometime in 5 – 30 years)	3	2	1	1

Adapted from the VA National Center for Patient Safety

Safety Assessment Code (SAC) Matrix

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From the VA National Center for Patient Safety

Safety Assessment Code (SAC) Matrix

Probability and Severity	Catastrophic	<i>Actual severity score: N/A</i> <i>Potential severity score: CATASTROPHIC</i> <i>Probability score: UNCOMMON</i>		
Frequent	3	3	2	1
Occasional	3	2	1	1
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From the VA National Center for Patient Safety

How Would You Score This Event Using the SAC Matrix?

A patient that was scheduled for an outpatient spinal steroid injection presented for the procedure. Per policy her identity was verified and she was consented for the scheduled procedure. She was then taken into the procedure room where the pre-procedure time out was performed. Her identity was verified and all participants present in the room agreed that the procedure on the documents in the procedure room was the procedure they were to perform.

A short time after the procedure was completed it was realized that the injection was given in an incorrect site. The physician explained the error to the patient and the patient was returned to the procedure room for an injection in the correct location.

In the immediate review of the event, it was discovered that the nurse scheduling the procedure had made an entry error when she scheduled the procedure. In reviewing records, it was found that this type of event had occurred one other time in the prior 6 months with a different nurse having made the error.

How would you score this event using risk-based prioritization and the SAC Matrix?

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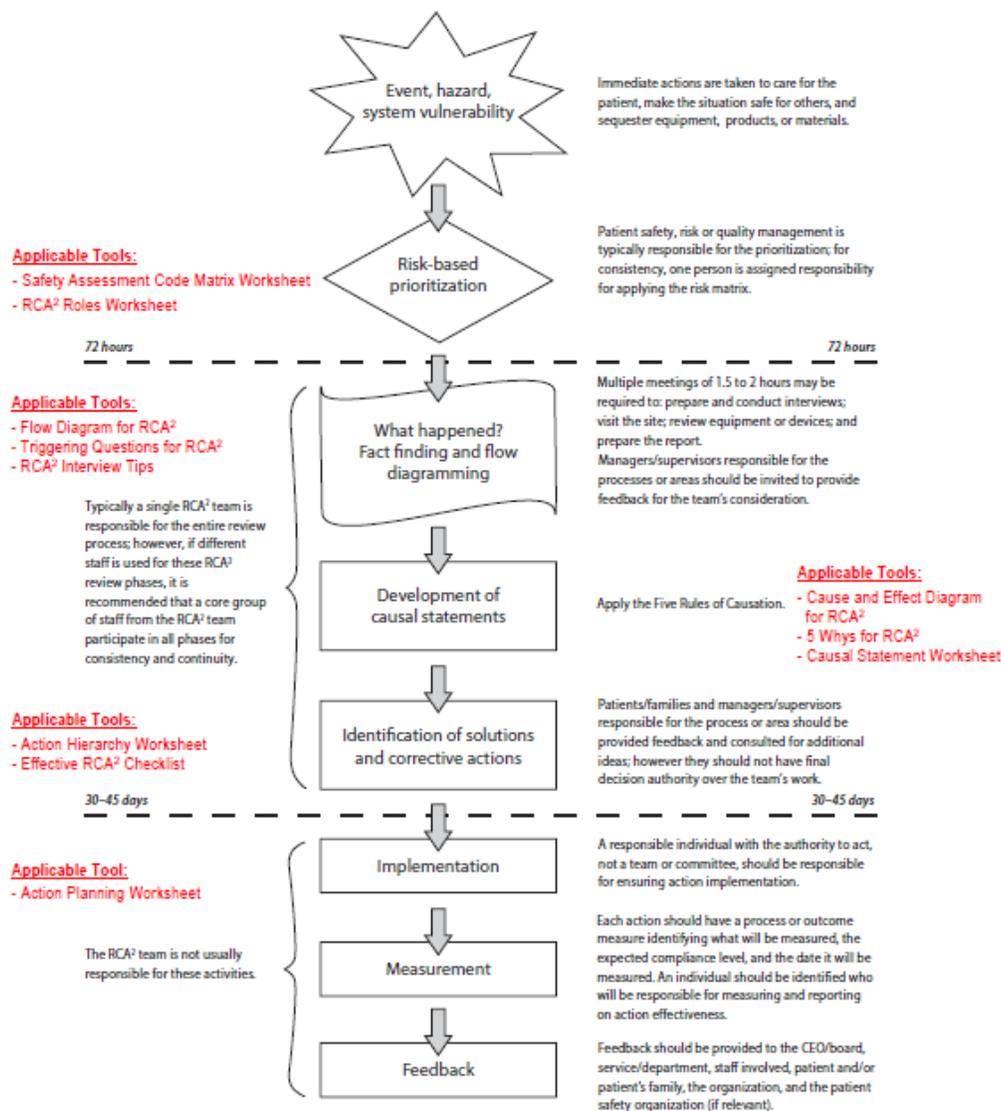
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Timeline for RCA² Event Review Process



Reasons to Act Quickly:

1. Patient and family trust



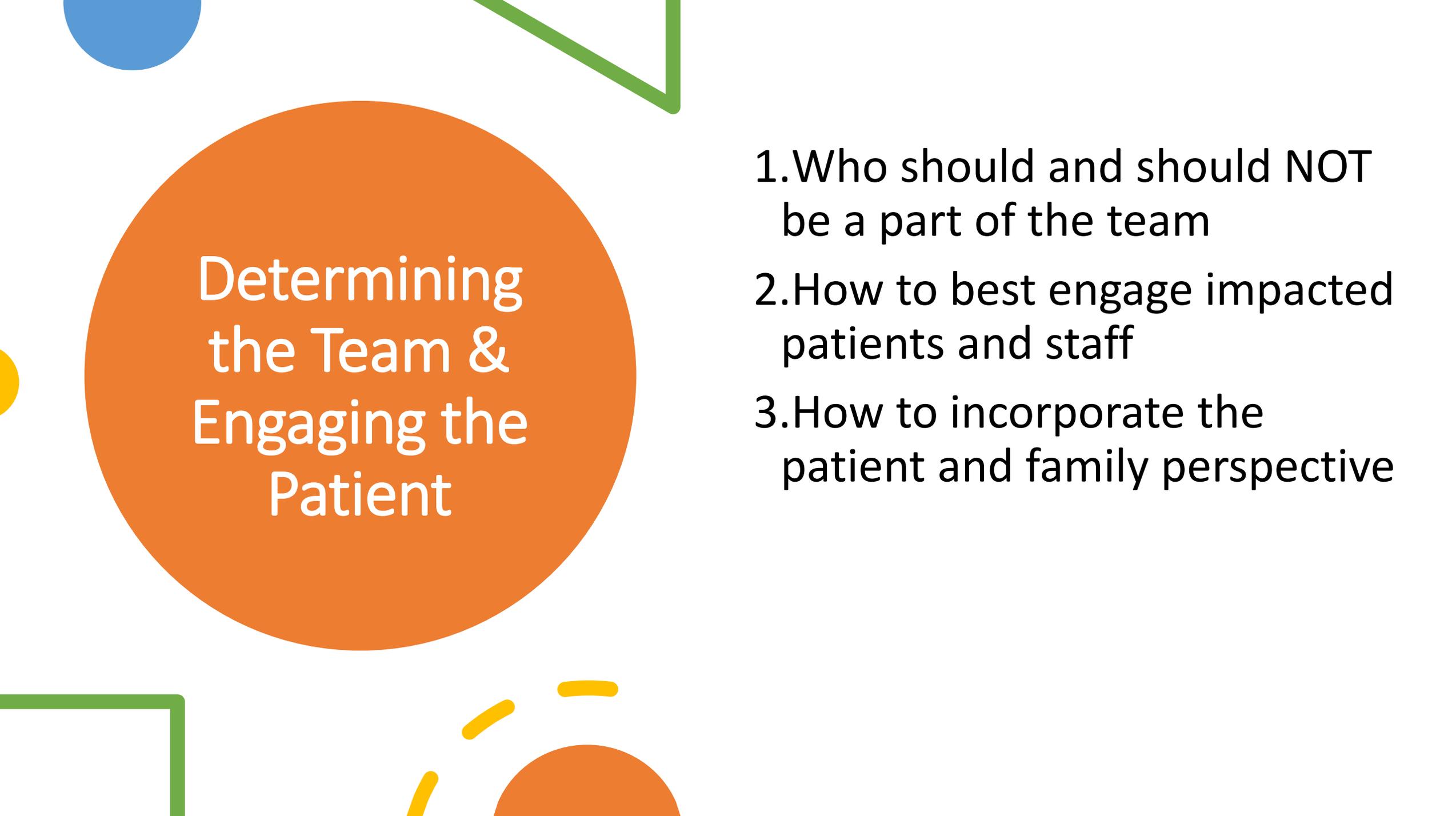
2. Care for the caregiver



3. Early learnings



[Second Victims: Support for Clinicians Involved in Errors and Adverse Events](#)



Determining the Team & Engaging the Patient

1. Who should and should NOT be a part of the team
2. How to best engage impacted patients and staff
3. How to incorporate the patient and family perspective

But first let's consider

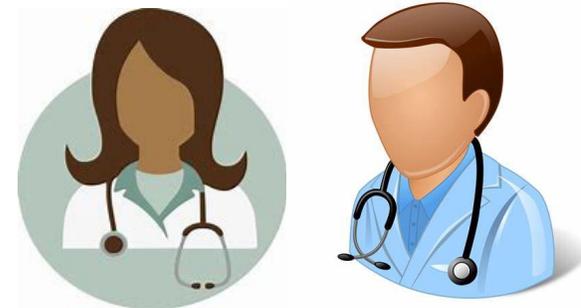
- The Patient's Perspective

- May have the clearest picture of what went wrong
- May be the people most motivated to enact change
- Though they should NOT be a part of the team reviewing the event that they were involved, everyone benefits when patients and families are incorporated into the RCA2 process in appropriate ways.



- The Providers Perspective

- In a traditional RCA method, difficult to explain what you did and why you did it at the time you did it in front of colleagues whose respect you want the most



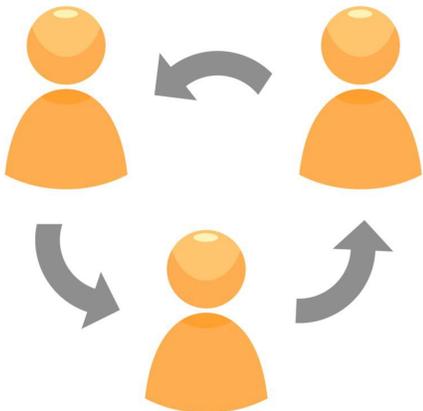
Who Should be on an RCA2 Team?

- Four to six members on the core team.
 - More usually not necessary, slows process down
 - Can consult subject matter experts for additional input



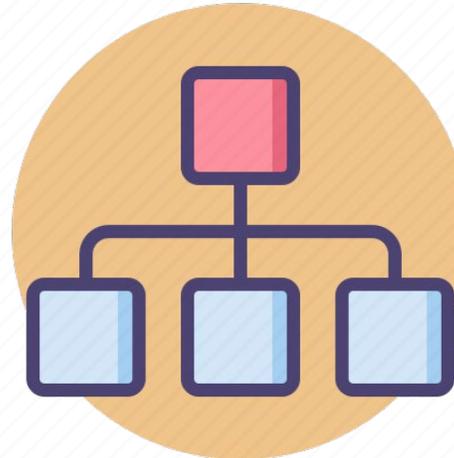
- Use different people on a rotating basis

- Fresh eyes
- Helps advance culture of learning and improvement



Who Should be on an RCA2 Team?

- People need protected time to participate
 - Leadership should ensure this time is granted.
- Consider hierarchy and interpersonal dynamics
 - E.g., Don't include a team member's direct supervisor, omit senior leaders



Who Should be on an RCA2 Team?

RCA ² Roles		
Staff	Team Member?	Interview?
Staff directly involved in the event	X	✓
Front line staff working in the area/ process being studied	✓	✓
Staff who are not familiar with the process being studied	✓	X
Subject Matter Experts	Team Member?	Interview?
Subject matter expert(s) on the process being evaluated	✓	✓
Subject matter expert on the RCA ² process	✓	X
Patients and Families	Team Member?	Interview?
Patient involved in the event	X	✓
Family of patient involved in the event	X	✓
Patient representative	✓	✓

From IHI's Redesigning Event Review

Example of Selecting Members of a Team

Event Under Review: Medication error that harmed a patient on an inpatient unit.

- Nurse who works on the unit when event occurred
- Pharmacist
- Patient Safety Team Member
- Physician who typically orders medications in the inpatient setting
- Electronic Health Records Team Member

RCA² Team Member Training

- Team members only need just-in-time training and the right mindset
 - ✓ Analytical people
 - ✓ Unbiased, open-minded, able to react to facts
 - ✓ Credibility among peers
 - ✓ Motivated to participate, not forced
- Training should include:
 - ✓ Overview of the RCA2 process
 - ✓ Information on Confidentiality
 - ✓ Timeline of the process
 - ✓ Roles and responsibilities of team members
 - ✓ Event briefing
- Milestones with meeting dates/times established at the first meeting



*From the VA National
Center for patient Safety
[RCA2 Team Member Training
Video](#)*

RCA² Team Leader Training

- Fully trained in RCA² methods and processes
- Responsibilities include
 - Keeping the team on schedule
 - Guiding the team through completing tasks
 - Building consensus within the group
- Personal skills they should possess
 - Strong communicator
 - Skilled at project management, facilitation, and group dynamics



RCA² Tools Discussed in this Training

- SAC Matrix
- RCA² Team Roles
- Flow Charting the Incident
- Triggering Questions
- Cause and Effect Diagram
- 5 Whys for RCA²
- Causal Statement
- Action Hierarchy
- Effective RCA² Checklist

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Session 1

RCA² Tools Discussed in this Training

- SAC Matrix
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- **Flow diagramming the incident**
- **Triggering Questions**
- **Cause and Effect Diagram**
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- **Causal Statement**
- Action Hierarchy
- Effective RCA² Checklist

Session 2

RCA² Tools Discussed in this Training

- SAC Matrix
- RCA² Team Roles
- Flow diagramming the incident
- Triggering Questions
- Cause and Effect Diagram
- 5 Whys for RCA²
- Causal Statement
- **Action Hierarchy**
- **Effective RCA² Checklist**

Session 3

Session 1 Optional Homework

- Risk-Based Prioritization Exercises
- NCPS RCA² Case Example for:
 - ✓ Assessing Probability and Severity
 - ✓ Developing an RCA2 Team

Tools and Resources

- RCA² Report [RCA2 Improving Root Cause Analyses and Actions to Prevent Harm](#)
- Safety Assessment Code Matrix Worksheet
- RCA² Roles Worksheet [RCA2 Roles Worksheet](#)

Exercises, Tools, and Resources will be sent to you via email and when the session is complete will be downloadable from the NCPS website.

Resources

- Institute for Healthcare Improvement (IHI) <https://www.ihl.org>
- IHI RCA2 Tools and Action Hierarchy Tool
<http://www.ihl.org/resources/Pages/Tools/RCA2-Improving-Root-Cause-Analyses-and-Actions-to-Prevent-Harm.aspx>
- Veteran's Health Administration Center for Patient Safety
<https://www.patientsafety.va.gov/>



Thank You!

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