The RCA Event; Cause and Effect

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Objectives

- Root Cause Analysis
  - Definition
  - How we end up here
  - Process
  - Outcomes
- Common Perfusion safety issues
- Solutions to prevent safety concerns
Levels of Harm

Serious Safety Event
- Reaches the patient
- Results in moderate to severe harm or death

Precursor Safety Event
- Reaches the patient
- Results in minimal harm or no detectable harm

Near Miss Safety Event
- Does not reach the patient
- Error is caught by a detection barrier or by chance

GAPS

- GAPS - A deviation from generally accepted performance standards
- Deviations from GAPS are determined by comparing actual performance to expected performance
- Consideration of performance expectations should include external as well as internal sources
Safety Event Decision Algorithm

Was there a deviation from generally accepted performance standards?
- Yes
  - Did the deviation reach the patient?
    - Yes
      - Did the deviation cause moderate to severe harm or death?
        - Yes
          - Serious Safety Event
        - No
          - Precursor Safety Event
    - No
      - Near Miss Safety Event
  - No
    - Not a Safety Event

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Apparent Cause Analysis (ACA)
- For events classified as “Precursor” or “Near Miss”
- Local (dept, unit, division) focused approach
- Identifying inappropriate acts
- Constructing corrective actions to address them
Perfusion Safety Issue - Circuit Issue

- Recognize not oxygenating
- Troubleshooting
- Resolution

Apparent Cause Analysis vs Root Cause Analysis

**ACA**
- Performed by 1-2 people
- More of a review of what occurred
- Local level
- Corrective actions
- Reported for tracking and trending

**RCA**
- Multidisciplinary 8-10 people
- Facilitated by patient safety manager
- Deep dive to learn root cause
- Performed on SSE that pose serious threat to safety of pts and staff
RCA Guiding Principles

- A fair and safe environment
  - Human error is an unintentional act
  - Humans are fallible and errors are to be expected
  - Blaming is an obstacle to finding the cause of human error
  - Resist hindsight bias
  - People do not come to work to hurt someone or make a mistake
  - We can’t fix what we don’t know

RCA Guiding Principles

- It is about the process
  - Errors must be accepted as system flaws, not character flaws
  - Errors are seen as consequences not causes
  - It is the process not the individual who failed
  - It is the cause of the error, NOT the error itself that leads to productive prevention strategies
Perfusion Safety Issue - Blood Product Issue

- Checking blood
- Multiple practitioners involved
- Serious safety event vs Good catch

Root Cause Analysis (RCA)

- Retrospective review of an event
- It is a process that can help build a culture of safety and move beyond the culture of blame
- Goal is to find out:
  - What happened?
  - Why did it happen?
  - What to do to prevent it from happening again?
RCA Advisory Team

- Provides oversight and operational ownership of the root cause analysis program

- Members (8-10):
  - Executive sponsor
  - Facilitator
  - Team leaders (1 physician, 1 nurse)
  - Team member (content expert)
  - Invited guest (as needed)

The Three Meeting RCA Model

**Meeting #1**
- Review event flow
- Compare what happened to what should have happened
- Identify proximate and root causes

**Meeting #2**
- Review outstanding items from first meeting
- Review report draft
- Come to consensus

**Meeting #3**
- Review report
- Finalize action plan

**Event Occurs**
- Stabilize/remedial actions
- Event scored
- Executive sponsor, team leads identified

**Begin**
- Investigation/chart reviews, interviews, etc
- Meeting planning
- Meet with team leads

**Create event flow**
- Create introductory ppt
- Facilitate meeting

**Draft report**
- Follow-up on "homework"

**Interim meeting**
- with Exec. Sponsor
- Review findings
- Determine meeting 3 attendees

**Disseminate report**
- Plan for Safety Committee
- Close out case in database

**Executive Sponsor, Team Leads, Subject Matter Experts**

**Process Owners, Line Leadership, Safety Officer**

**Patient Safety Manager**
RCA - Process

- What happened?
  - Interviews
  - Chart review
  - Policy review
  - Lit review/benchmarking
- What USUALLY happens?
- What SHOULD happen?
- Must get to the WHY in order to make a change to prevent this from happening in the future

Perfusion Safety Issue- ECMO to CPB Scenario

- Multiple cannulations
- End of case
- Clamp manipulation
RCA Template

- RCA Summary
  - Description of incident, impact
- Chronological sequence of events
- Root cause findings
  - Issues identified
  - Associated lessons learned
- Issues: People, process, technology, communication

Perfusion Safety Issue-Communication

- Off CPB
- Protamine given
- Bleeding
- Circuit Issue
RCA – Outcome and Next Steps

- Transparent sharing-senior leaders and intranet
- Agreed upon action items
- Continue to monitor for déjà vu events that may signal incomplete or ineffective action

Learning From Our Safety Events

- Storytelling is a proven way to teach lessons about culture
- A well told story will stay with the listener for a long time
- Lessons learned
- Promotes organizational learning
Safety Behaviors for Error Prevention

- 4 Behaviors that will reduce human error
  - Practice with a questioning attitude
  - Pay attention to detail
  - Communicate clearly
  - Support each other

Proven Reductions of 80% in Serious Safety Events

- Current event rate, set at 100%
- 80% Decrease in Event Rate Over 1-2 Years
A Safe Culture

- Not a project or initiative—it is a culture shift
- Core value that is about embedding specific behaviors to keep patients safe
- Drive cultural change

“You are what you repeatedly do” - Aristotle

RCA; Cause and Effect

In Conclusion

- It is the cause of the error, NOT the error itself that leads to productive prevention strategies
- RCA provides solutions to process issues
- Transparency is key
- Error prevention strategies
Human error is an unintentional act.

Human error is not the cause of failure, but a *symptom of a system failure*

Human error – by any other name or by any other human – should be the *starting point of an investigation, not the conclusion*