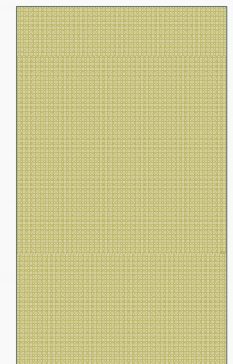


MORE THAN A MEETING

MAXIMIZING THE EFFECTIVENESS OF YOUR
ROOT CAUSE ANALYSIS PROCESS



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OBJECTIVES

- Explore the benefits of Root Cause Analysis (RCA)
- Discuss common barriers associated with facilitating RCA and implementing action items
- Practical suggestions for overcoming common RCA barriers

QUALITY IMPROVEMENT CONTINUUM

- Incident identification
- **Prioritization of incidents**
- Systematic notification of incidents to those who need to know
- **Investigation using RCA depending on the severity of the incident**
- Analysis and action regarding recommendations
- **Feedback of aggregated data within the system**
- Open disclosure

ROOT CAUSE ANALYSIS DEFINED

- A systematic process for **identifying** “root causes” of problems or events and an approach for **responding** to them. RCA is based on the basic idea that effective management requires more than merely “putting out fires” for problems that develop, but finding a way to prevent them.
- Designed to answer three questions:
 - What happened?
 - Why did it happen?
 - What can be done to prevent it in the future?

COMMON RCA TECHNIQUES

The “5-Whys” Analysis”

- A simple problem-solving technique. Often the answer to the first “why” prompts a second “why” and so on—providing the basis for the “5-why” analysis.

Barrier Analysis

- Involves the tracing of pathways by which a target is adversely affected by a hazard, including the identification of any failed or missing countermeasures that could or should have prevented the undesired effect(s).

Change Analysis

- Looks systematically for possible risk impacts and appropriate risk management strategies in situations where change is occurring.

Causal Factor Tree Analysis

- Technique used to record and display, in a logical, tree-structured hierarchy, all the actions and conditions that were necessary and sufficient for a given consequence to have occurred.

Failure Mode and Effects Analysis

- A “system engineering” process that examines failures in products or processes.

Fish-Bone Diagram or Ishikawa Diagram

- An analysis tool that provides a systematic way of looking at effects and the causes that create or contribute to those effects.

Pareto Analysis

- A statistical technique in decision making that is used for analysis of selected and a limited number of tasks that produce significant overall effect. The premise is that 80% of problems are produced by a few critical causes (20%).

Fault Tree Analysis

- The event is placed at the root (top event) of a “tree of logic”. Each situation causing effect is added to the tree as a series of logic expressions.

WHAT TYPE OF RCA MUST BE COMPLETED?

In **WA state**, DOH reportable Adverse Events must undergo RCA and action plan development. (RCW 70.56.020, WAC 246-302-020)

- RCA must follow the procedures and methods of:
 - The Joint Commission;
 - The department of Veterans Affairs national center for patient safety; or
 - Another nationally recognized root cause analysis methodology the department has found acceptable for the type of facility reporting an adverse health event
- **The Joint Commission** requires that Sentinel Events undergo
 - “a thorough and credible root cause analysis and action plan...”

MOTIVATIONS TO PERFORM RCA

- **Facility** commitment to safe patient care
- **Regulatory** Requirement
 - The Joint Commission/WA Department of Health
- **Contract agreement**
 - CMMS
 - Private payors
- **Community** Standard of Care
 - IOM – “To Err is human” /AHRQ recommendations
 - Public opinion/expectation

COMMON BARRIERS TO PERFORMING RCA

- 2006 Australian study that interviewed trained RCA facilitators; evaluated perspectives surrounding RCA
- Participants reported difficulties experienced while conducting RCAs
 - Lack of:
 - Time (75.0%)
 - Resources (45.0%)
 - Feedback (38.3%)
 - Difficulties with:
 - Colleagues (44.5%)
 - RCA teams (34.2%)
 - Other professions (26.9%)
 - Management (16.7%)

COMMON BARRIERS TO IMPLEMENTING RCA ACTION ITEMS

JAMA article in 2008, Dr. Wu performed retrospective meta-analysis of RCA literature

- Citing published studies going back as far as 2002, the authors reported problems with RCAs such as:
 - Incomplete investigations,
 - Ineffectual corrective actions,
 - Failure to follow through on implementing actions, and
 - Lack of evaluation to assess the outcomes from actions that are implemented

COMMON BARRIERS TO IMPLEMENTING RCA ACTION ITEMS

- Maryland Office of Health Care Quality's retrospective review of RCAs revealed that those hospitals that fail to find and fix serious systematic problems **lack leadership involvement in the investigation process.**
- Of the 168 RCAs reviewed in 2007, the **most common** action plan was to **educate staff** (65%)
- In the Australian study, almost a quarter were **unsure whether recommendations of their RCA teams were implemented.**

COMMON BARRIERS

CANNOT COMPLETE RCA ON ALL EVENTS THAT REQUIRE REVIEW

- Develop and adopt facility definition of **Serious Safety Event (SSE)**
 - Track and transparently report SSE throughout organization
- **Triage** system to identify incident types that require RCA vs those that require lower level of review
 - Not all SSE are “reportable”
 - Near-miss events are important opportunity
- **Formalize** the process for lower level review
 - Keep centralized file
 - Track action items
 - Train all leaders in how to complete lower level review

EXAMPLE BARRIER

- At one hospital, a patient known to be allergic to latex had an anaphylactic reaction to a Penrose (latex) drain inserted during surgery.
- Following an RCA of this event, the operating room (OR) manager was instructed to evaluate all OR supplies and convert to non-latex where such products were available.
- Six months after the RCA, the manager had not yet started the evaluation.

EXAMPLE BARRIER

- At another hospital, anesthesiologists complained that it wasn't convenient to always label medication containers on the sterile field and they often didn't follow this safe practice.
- Medical staff leaders were unwilling to speak up and say, "For the sake of patient safety, we will no longer accept this behavior."

“WEAK” ACTION ITEMS

- When **developing** action item:
 - Look **outside** your organization – every time
 - Try not to limit yourself to resources currently available
 - Do not set unattainable timeline for completion
 - Utilize formal project management methods and resources
 - Do not rely on front-line team members as **ONLY** source for action item development
- Clear, unambiguous action item **ownership** (local and executive)
- Make action item, owner, and completion actions **public**
- Do not “close” action item until completion has been **validated**
- Consider involving outside parties as an “**oversight** tool”

CANNOT MOTIVATE PHYSICIAN INVOLVEMENT

- Engage senior physician leadership
 - If a physician was key player in event, consider having an MD leader facilitate RCA
- Provide “safe space”
 - Clearly outline MD involvement in Facility Coordinated Quality Improvement Plan
 - Partner with MD insurer whenever possible
 - Consider confidentiality agreements, limits on note-taking or recording
 - Ensure a “partner” MD is present to provide support
- Create clear expectation
 - Make participation mandatory in Medical Staff Bylaw
 - Ensure senior physician leadership holds MDs accountable

CANNOT COORDINATE SCHEDULES TO ENABLE ALL RELEVANT PARTIES TO ATTEND

- Consider setting a recurring, protected date/ time when all RCAs are scheduled. Ensure this is “**block time**” on executive and physician leader calendars
- If key parties absolutely cannot attend, consider obtaining a **narrative statement from the involved clinician**. Read the narrative out loud at RCA meeting.
- Utilize technology. Teleconference, etc...

OUTSIDE PARTIES WANT TO ATTEND RCA

- **Partner Organizations/Vendors**
 - Pursue transparency whenever possible
 - Signed confidentiality agreements
 - Assure BAA is in place
 - Consider including Quality Improvement confidentiality language into contract agreement
- **Patient/Family**
 - Prepare clinicians for patient/family involvement
 - Be prepared to financially support your disclosure– partner with your claims/insurance team
- **Non-employed Physicians**

CANNOT GET LEADERSHIP ENGAGED

- **Provide consistent, transparent data regarding:**
 - SSE rate
 - Number of RCA & low level review
 - Action items developed and those completed
 - Barriers to action item completion (resource need, lack of leader accountability)
- **Do not wait to be asked for the data**
 - Imbed Patient Safety & RCA data into key meetings (physician leadership, executive leadership, operation management)
 - Show Patient Safety and Patient Satisfaction data together. **Patient Experience** is not a silo.
- **Be prepared to “tie it all together” to give context to any situation**

WHAT SHOULD BE TRACKED?

- Go beyond incident reporting
 - Triage decision, SSE status
 - Meetings scheduled and held
 - Detailed action items (ownership, completion state)
 - Cost to review
 - Cost to resolve
 - Recurrence of similar events
 - Disclosure
 - Evolution into a Claim
 - Detailed notes regarding conversations with patient/family & interviews of involved providers
- Ability to create and run reports on any data point

TECHNOLOGY FOR RCA WORK PRODUCT

Move beyond Excel

- Access
- Sharepoint
- RedCap
- Microsoft Project Management
- Claims databases (STARS, RISKMASTER)
- Incident Reporting databases (RL Solutions, Quantros, Midas, UHC)

SELF-EVALUATION

- **What type of events get RCA?**
 - Anything beyond the mandatory regulatory requirement? Who decides? How is decision made?
- **Who facilitates and participates in the RCA?**
 - Do the participants have the actual operational power to effectuate the action items? Is physician participation mandatory? Who “owns” the action item?
- **Are action items well-developed?**
 - How do you ensure effective action item? How is completion of an action item validated? Is audit/survey/data collection required? Is there outside oversight? (i.e. Board of Directors)
- **Are you maximizing your ability to effect change?**
 - Do you have a process to review all RCAs to identify pattern or trend? Are the RCA learnings being shared and spread? Are you able to validate sustained change?

CONCLUSION

- It is not the RCA process that truly makes the difference; it is **implementing** and **evaluating** recommendations that will truly make the difference

QUESTIONS?

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RESOURCES

- <http://www.des.wa.gov/services/Risk/AboutRM/enterpriseRiskManagement/Pages/rootCauseAnalysis.aspx>
- <http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/PatientCareResources/AdverseEvents/FrequentlyAskedQuestions>
- Joint Commission, Framework for Conducting a Root Cause Analysis and Action Plan. Found online at:
http://www.jointcommission.org/Framework_for_Conducting_a_Root_Cause_Analysis_and_Action_Plan/
- AHRQ PSNet Patient Safety Primer, Root Cause Analysis. Found online at:
<http://www.psnet.ahrq.gov/primer.aspx?primerID=10>
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