Root Cause Analysis
“The Source to Understanding”
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Presented to CAH Quality Network - April 19, 2012

Objectives
• Understand value of conducting a Root Cause Analysis (RCA)
• Become aware of tools and resources available for conducting a RCA
• Become aware of special concerns for small hospitals
Swiss Cheese

Originally proposed by British psychologist James T. Reason in 1990.

A Root Cause Analysis Is a Tool to Understand
When Do We Use It?

- Bodily injury
- Business
- Family member

Other words and phrases are defined in bold type when used.

4/20/12
RCA is Acceptable If:

A Root Cause Analysis Should Be Timely
Root Cause Analysis Should Be Thorough

- Consider human & other factors
- Dig deep!
- Identify contributing factors as well as root causes
- Develop an action plan

Root Cause Analysis Should Be Credible
What a RCA is NOT!

“To address this mistake we must use root-cause analysis. I’ll begin by saying it’s not my fault.”

A sentinel event or near miss happens.... now what?
Patient and Family First

• Express sincere sympathy and compassion

• Refrain from castigation or infighting

Positive Measures

• Immediately,
  – Assess situation & communicate w patient/family.
  – Determine who will discuss the event, with whom, and when.
  – Maintain contact with patient/family for questions
  – Organize family meeting if several relatives involved or treatment decisions complicated
More Positive Measures

• Also,
  – Empathize with patient/family and offer emotional support.
  – Attempt to reconcile opposing perceptions of what has occurred.
  – Accept responsibility for follow-up of serious complaints but do not accept/assign blame or criticize the care of other providers.

Resources

Get advice about ways to communicate in a manner that is forthright & comforting but does not unintentionally alarm, misinform, or render judgment from
  – Risk manager
  – Legal counsel
  – Liability insurance company
Three Phases to RCA

Investigation

Analysis

Risk Reduction Plan

Phase 1 - Investigation
Identify a facilitator
Investigation
Develop a Timeline

• Begin with the documentation
  – Medical record,
  – Incident report,
  – Logs, etc.

From what point do you start with a timeline?

Investigation
Just the Facts, Ma’am

• Fill in gaps with interviews of those involved

Who does the interviewing?
Investigation
Why Interview?

Investigation
Gathering More Information
What Does Timeline Look Like?

- Simple process flow
- Narrative outline ordered by date and time
- Joint Commission Framework for RCA (http://www.jointcommission.org/Framework_for_Conducting_a_Root_Cause_Analysis_and_Action_Plan/)

Matrix Flowchart

<table>
<thead>
<tr>
<th>Event Timeline</th>
<th>Policies/Procedures</th>
<th>Best Practice</th>
<th>Opportunities</th>
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<tbody>
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4/20/12
Putting the Team Together
Everyone Is Equal

Phase 2 - Analysis Begins
Ground Rules for Team

- Review purpose of RCA
- All are equal; be respectful
- Use the “parking lot” to validate concerns but stay on task
- Be open-minded; speak candidly and honestly
- Confidentiality - What is said in the room about who said or did what stays in the room
What Leaves the Room…

The proposed system changes are what you should focus on when you leave the room.

The Analysis
Understand What Happened

1. Review the timeline with all present
2. Compare actual events with internal policy, procedures and best practice
3. Begin to identify opportunities or ideas
   - (Idea: Participants can record ideas down on post-it notes; one per note)
The Analysis
Determine the Root Cause

- Ask why, why, why, why, why?

- Group into categories of causal factors:
  - Human factors - communication
  - Human factors – fatigue/staffing
  - Environment/Equipment
  - Rules/Policies/Procedures
  - Information management
  - Culture


<table>
<thead>
<tr>
<th>Areas of Potential Root Causes</th>
<th>Types of Sentinel Events</th>
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<tbody>
<tr>
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<td>Suicide (24 Hour Care)</td>
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<td>Medication Error</td>
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<td>Procedural Complication</td>
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<td>Wrong-Site Surgery</td>
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<td>Treatment Delay</td>
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<td>Restraint Death</td>
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<td>Elopement Death</td>
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<td>Assault/Rape/Homicide</td>
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<td>Transfusion Death</td>
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<td>Patient Abduction</td>
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<td>Unanticipated Death of Full-Term Infant</td>
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<td>Unintended Retention of Foreign Body</td>
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<td>Fall Related Behavior</td>
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<td>Physical Assessment</td>
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<td>Individual Identification</td>
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<td>Individual Observation</td>
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<td>Care Planning Process</td>
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<td>Continuum of Care</td>
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<td>Staffing Levels</td>
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<td>Orientation and Training of Staff</td>
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<td>Communication Among Staff Members</td>
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<td>Communication With Individual/Family</td>
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<td>Availability of Information</td>
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<td>Adequacy of Technological Support</td>
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<tr>
<td>Equipment Maintenance/Management</td>
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<td>Physical Environment</td>
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<td>healing Systems and Processes</td>
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<td>Medication Management</td>
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The Analysis
Contributing Factor vs. Root Cause

Contributing Factor
• A factor that, if corrected would not prevent a recurrence, but is significant enough to fix

• Contributing factors result in future unwanted events if not corrected

Root Cause
• The most basic condition that, if corrected, prevents recurrence

• Within management’s control to correct

Phase 3 - Risk Reduction Plan

<table>
<thead>
<tr>
<th>Risk Reduction Plan</th>
<th>Evaluation Plan</th>
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<tbody>
<tr>
<td>Root Cause</td>
<td>Y/N</td>
</tr>
<tr>
<td>Staff not trained on falls risk assessment</td>
<td>Y</td>
</tr>
<tr>
<td>Format for risk assessment difficult to fill out.</td>
<td>N</td>
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</tbody>
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RM&PSI, Lansing, Michigan
### Risk Reduction Plan

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Measures of Success

Risk Reduction Plan
Final Action
Lessons Learned

• Team members must be truly equal…titles are dropped at the door
  – Idea: Symbolic gesture – place name badges in a bowl

• Open, learning environment must be created

• Facilitator can ask those who blame to leave

Lessons Learned

• Assume failure is NOT individual fault
• If evidence points to intentional unsafe act, stop RCA; refer for disciplinary action
• Those involved in discipline DO NOT facilitate RCA
  – Consider external facilitator for sensitive events
• Train multiple people to facilitate RCA
Other Considerations
The Logistics

• Do we conduct
  – Multiple sessions or single session to identify root causes?

Number of Meetings

• Multiple meetings
  – Complex process
  – Multiple people involved in the event
  – Staff available for multiple one hour meetings
  – Internal skilled facilitator available

• Single meeting
  – Difficult for staff to meet multiple times
  – Staff available for one 3-hour meeting
  – Need for external facilitator
  – First meeting debriefs & identifies topics for action plans
Special Concerns for Small Hospitals

• Few staff to draw team from
  – Management must encourage & adjust staff to allow participation in RCA team activity
  – Ensure feedback/ “Thank you’s” to participants

• Administrator – “show and go”; re-engage during action planning

Symptoms of an Inadequate RCA
Summary

Root Cause Analysis consists of ______ separate phases.

A thorough investigation of an event includes reviewing ____________, conducting ____________, and reviewing the literature for current ________________.

Credible RCA starts with the __________ point, or special cause, and finishes with consideration of the ______ end, or common causes that impact processes.

A ____________ factor is one that, if corrected, would not prevent a recurrence but is significant to fix.
Summary

? The facilitator needs to be __________ and not directly involved with the ________.

… The facilitator needs to be impartial and not directly involved with the event.

Every problem is really an opportunity.

Every system defect, a treasure.

Kichiro Toyoda
Founder of Toyota