Root Cause Analysis

"The Source to Understanding"

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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.

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A Root Cause Analysis Is
a Tool to Understand

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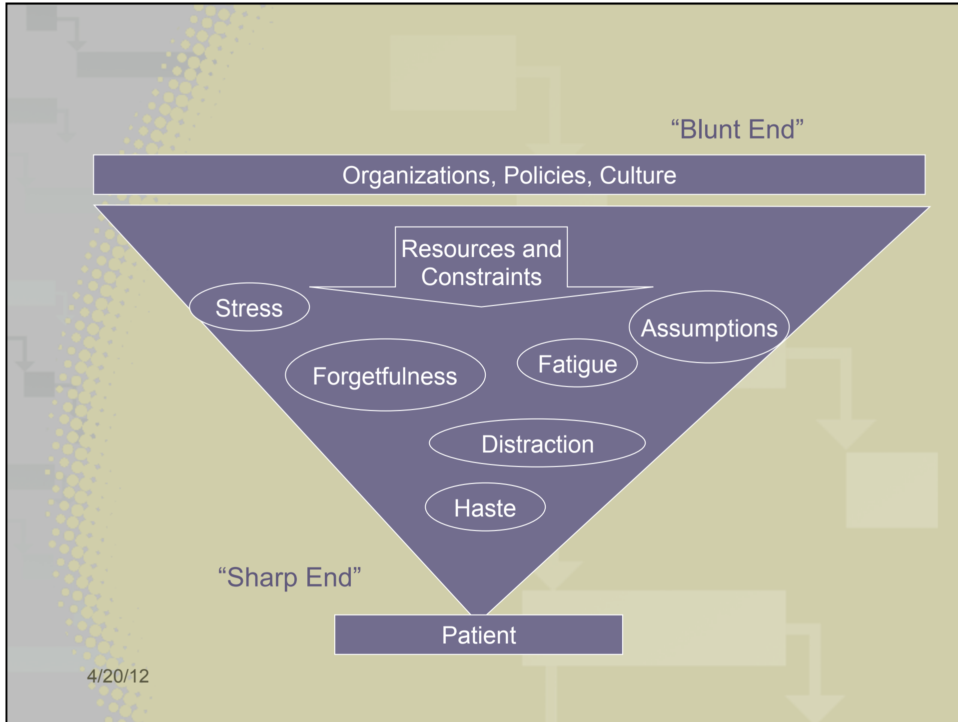
"Blunt End"
Organizations, Policies, Culture
Resources and Constraints
Stress
Assumptions
Forgetfulness
Fatigue
Distraction
Haste
"Sharp End"
Patient
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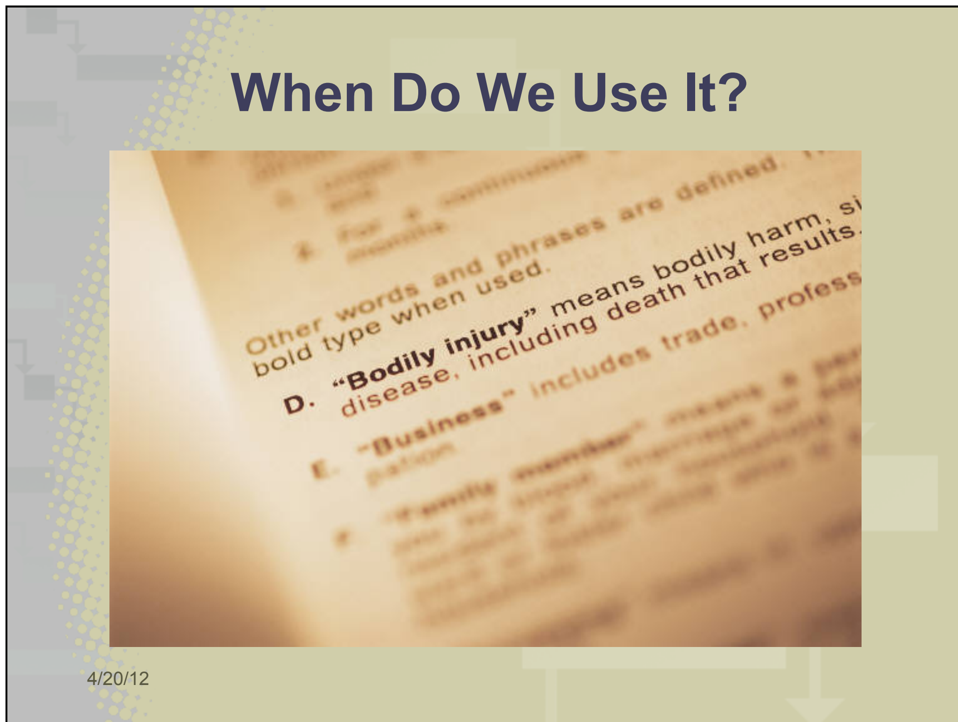
When Do We Use It?
Other words and phrases are defined.
bold type when used.
D. "Bodily injury" means bodily harm,
disease, including death that results.
"Business" includes trade, profess
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RCA is Acceptable If:

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

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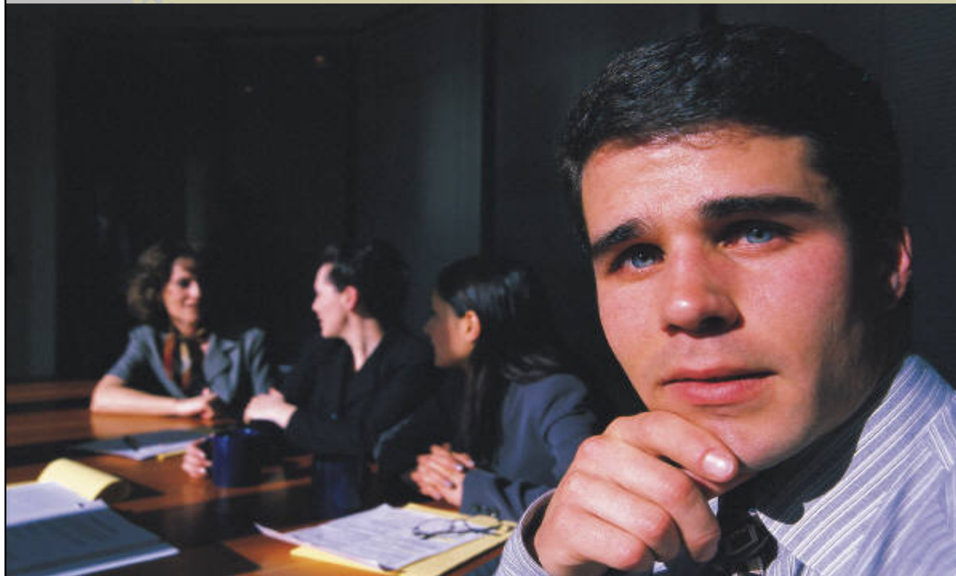
Root Cause Analysis
Should Be Credible



What a RCA is NOT!

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A sentinel event or near miss happens….

now what?

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Patient and Family First

- Express sincere sympathy and compassion
- Refrain from castigation or infighting

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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

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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.

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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

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Three Phases to RCA

- Investigation
- Analysis
- Risk Reduction Plan

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Phase 1 - Investigation

Identify a facilitator

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Investigation
Develop a Timeline

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

From what point do you start with a timeline?

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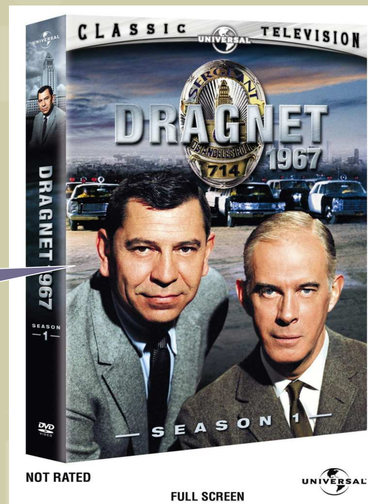
Investigation
Just the Facts, Ma'am

- Fill in gaps with interviews of those involved

Who does the interviewing?



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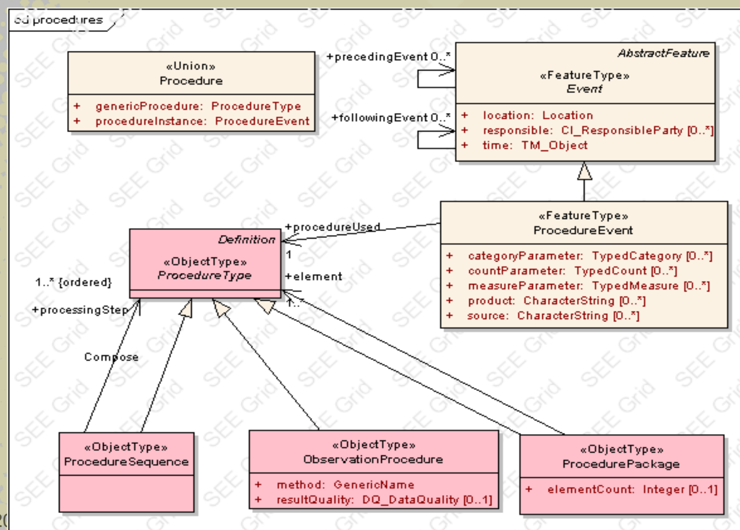
Investigation
Why Interview?

Investigation
Gathering More Information



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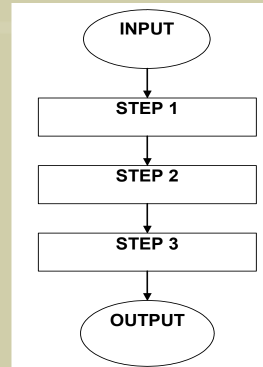
What Does Timeline Look Like?

- 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/)



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Matrix Flowchart

Event Timeline	Policies/Procedures	Best Practice	Opportunities
1)			
2)			
3)			
4)			

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Putting the Team Together

Everyone Is Equal

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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

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What Leaves the Room…

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

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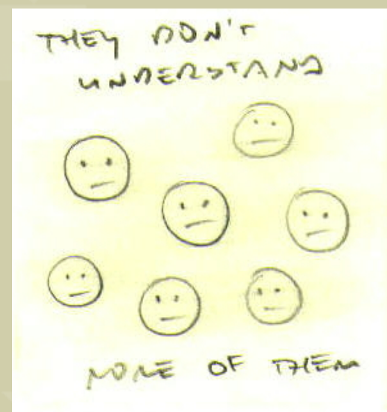
The Analysis
Understand What Happened

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)



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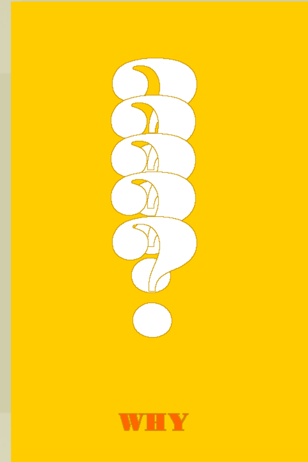
The Analysis
Determine the Root Cause

- 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



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Joint Commission's Minimum Scope of Root Cause Analysis for Specific Types of Sentinel Events for Critical Access Hospitals.

Areas of Potential Root Causes	Types of Sentinel Events												
	Suicide (24 Hour Care)	Medication Error	Procedural Complication	Wrong-site surgery	Treatment Delay	Restraint Death	Elopement Death	Assault/Rape/Homicide	Transfusion Death	Patient Abduction	Unanticipated Death of Full-Term Infant	Unintended Retention of foreign Body	Fall Related
Behavioral assessment process	x					x	x	x					
Physical assessment process	x	x	x	x	x	x	x				x		x
Individual identification process		x		x					x				
Individual observation procedures	x				x	x	x	x	x		x		x
Care planning process	x		x			x	x				x		x
Continuum of care	x	x		x	x								x
Staffing levels	x	x	x	x	x	x	x	x	x	x		x	x
Orientation and training of staff	x	x	x	x	x	x	x	x	x	x	x	x	x
Competency assessment/credentialing	x	x	x	x	x	x	x	x	x	x	x	x	x
Supervision of staff	x	x	x		x	x			x			x	
Communication w individual/family	x	x		x	x	x	x			x			x
Communication among staff members	x	x	x	x	x	x	x	x	x	x	x	x	x
Availability of information	x	x	x	x	x	x			x		x		x
Adequacy of technological support		x	x										
Equipment maintenance/management		x	x		x	x					x		x
Physical environment	x	x	x	x		x	x	x	x	x			x
Security systems and processes	x					x	x	x		x			
Medication management		x	x		x				x		x		x

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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

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Phase 3 - Risk Reduction Plan

Risk Reduction Plan				Evaluation Plan		
Root Cause	Y/N	Risk Reduction	Responsible Person & Timeframe	Measurement Indicator	Responsible Person & Timeframe	Status
Staff not trained on falls risk assessment	Y	Implement skills validation for falls risk assessment				
Format for risk assessment difficult to fill out.	N	Simplify form				

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Reduction Plan

1. For each contributing and root cause, identify corrective measures
2. Create a timeframe for completion
3. Assign accountability for implementation
4. Develop a plan for pilot testing
5. Determine measurement method
6. Assign accountability for measurement
7. Evaluate effectiveness of actions
8. Set a date to review measurement results
   - Risk reduced?
   - Revised action plan if necessary
   - Evaluate RCA process; ask if process valuable

Risk Reduction Plan

Risk Reduction Plan				Evaluation Plan		
Root Cause	Y/N	Risk Reduction	Responsible Person & Timeframe	Measurement Indicator	Responsible Person & Timeframe	Status

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Measures of Success

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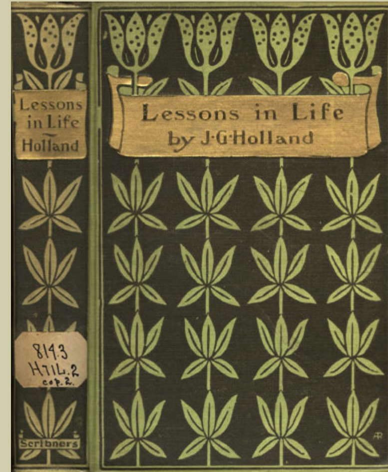
Risk Reduction Plan
Final Action

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



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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

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Other Considerations

The Logistics

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

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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

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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

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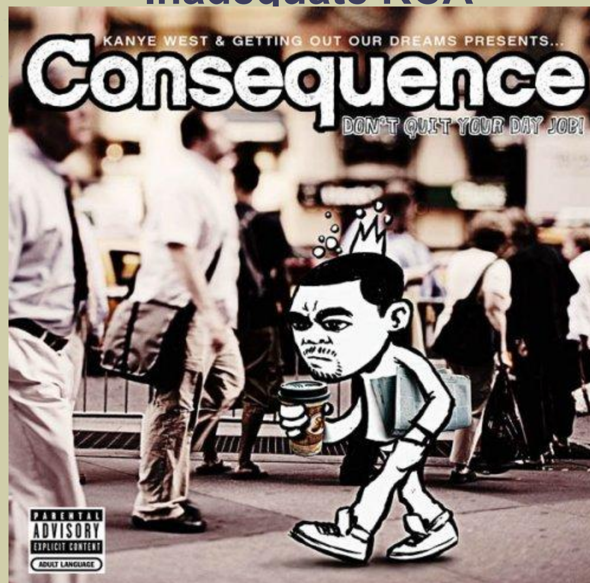
Symptoms of an
Inadequate RCA



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Summary

? Root Cause Analysis consists of _______ separate phases.

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

… Root Cause Analysis consists of **three** separate phases.

… A thorough investigation of an event includes reviewing **documentation** conducting **interviews**, and reviewing the literature for current **guidelines.**

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Summary

? 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 <u>not</u> prevent a recurrence but is significant to fix.

… Credible RCA starts with the **sharp** point, or special cause, and finishes with consideration of the **blunt** end, or common causes that impact processes.

… A **contributing** factor is one that, if corrected, would <u>not</u> prevent a recurrence but is significant to fix.

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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.**

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Every problem is really an opportunity.

Every system defect, a treasure.

Kitchiro Toyoda
Founder of Toyota