Innovating the RCA: Root Cause Analysis & Just Culture

Washington Patient Safety Coalition

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Objectives

- Highlight concepts of Just Culture that support Root Cause Analysis

- Share RCA cases to illustrate

- Suggest strategies to support accountability & improve patient safety

PeaceHealth Sacred Heart Medical Center at RiverBend
Springfield, OR

- Licensed Beds: 338
- Level II Trauma Center
- Tertiary Care Center

Root Cause Analysis

Various techniques used-

- Brainstorming
- Trouble-shooting
- A3 Problem Solving
- Fishbone diagrams
- 5 Whys
- Fault trees
- Logic Tree

RCA Steps in Common

- Notification of events
- Early investigation
- Forming a team
- Analyzing events
- Action planning
- Spreading lessons learned

Just Culture and Event Investigations

– People make errors, which lead to accidents. Accidents lead to deaths. The standard solution is to blame the people involved. If we find out who made the errors and punish them, we solve the problem, right? Wrong. The problem is seldom the fault of an individual; it is the fault of the system. Change the people without changing the system and the problems will continue."

   – Don Norman
   – Author, The Design of Everyday Things

Three Behaviors We Can Expect

- Human Error – inadvertent action; inadvertently doing other than what should have been done; slip, lapse, mistake.

- At-risk behavior – behavioral choice that increases risk where risk is not recognized or is mistakenly believed to be justified.

- Reckless behavior – behavioral choice to consciously disregard a substantial and unjustifiable risk.

Human Error

- Inevitable
- Manage through:
  - Human factors design to reduce the rate of error
  - Barriers to prevent failure
  - Recovery to capture failures before they become critical
 - Redundancy to limit the effects of failure

Human Error

- If an employee makes an error, he/she knew the right thing to do, intended to do the right thing and followed the right process , but made a mistake he/she should be consoled and the organization should design a system that will prevent this error from occurring again.

Case: Medication Error

- A nurse in the Intensive Care unit pulled a bag of Potassium Chloride instead of the Sterile Water needed for humidification. Both bags contained clear liquid and had similar red lettering on the labels. They were stored close to each other.

- The error was discovered before reaching the patient.
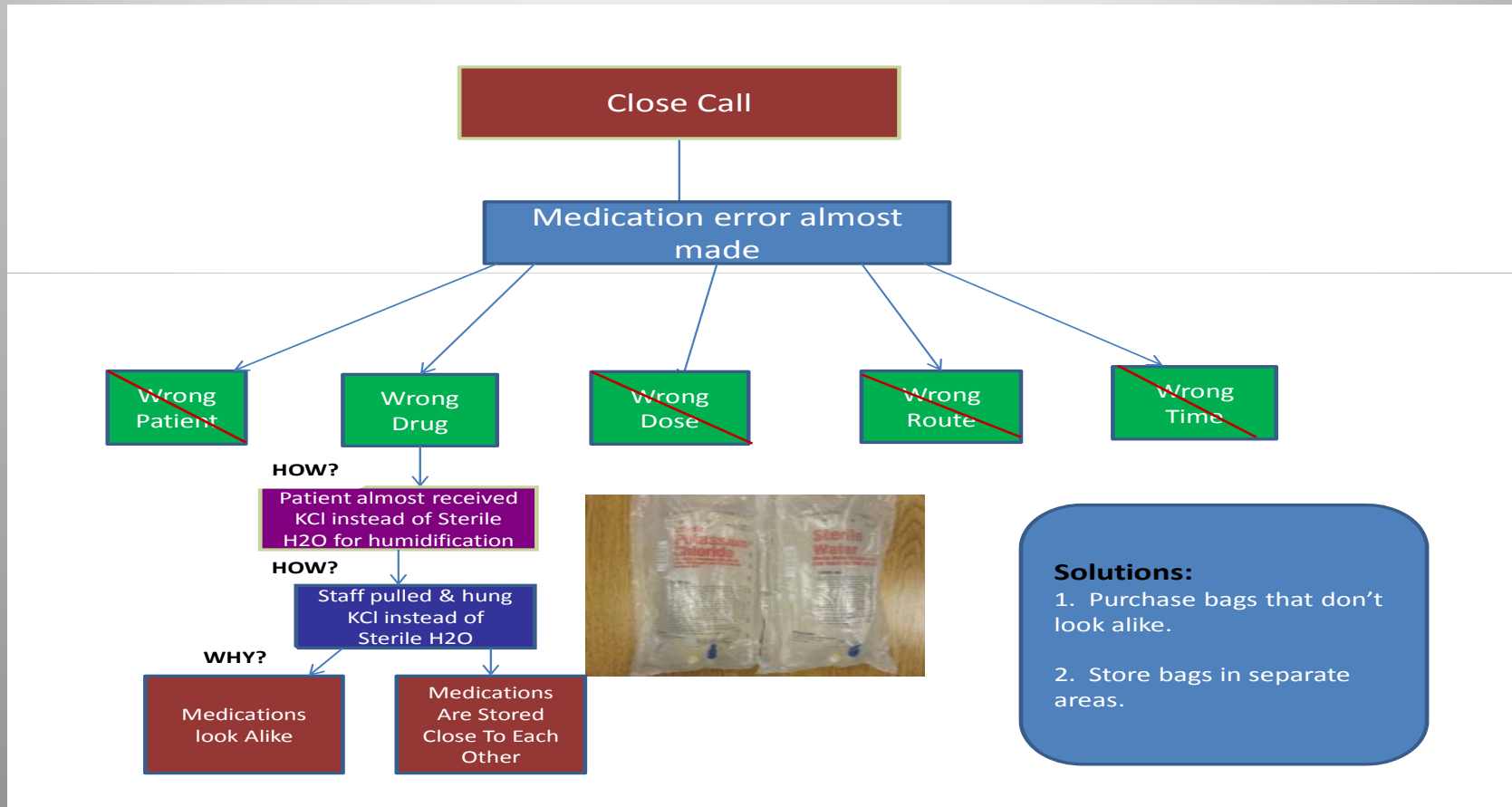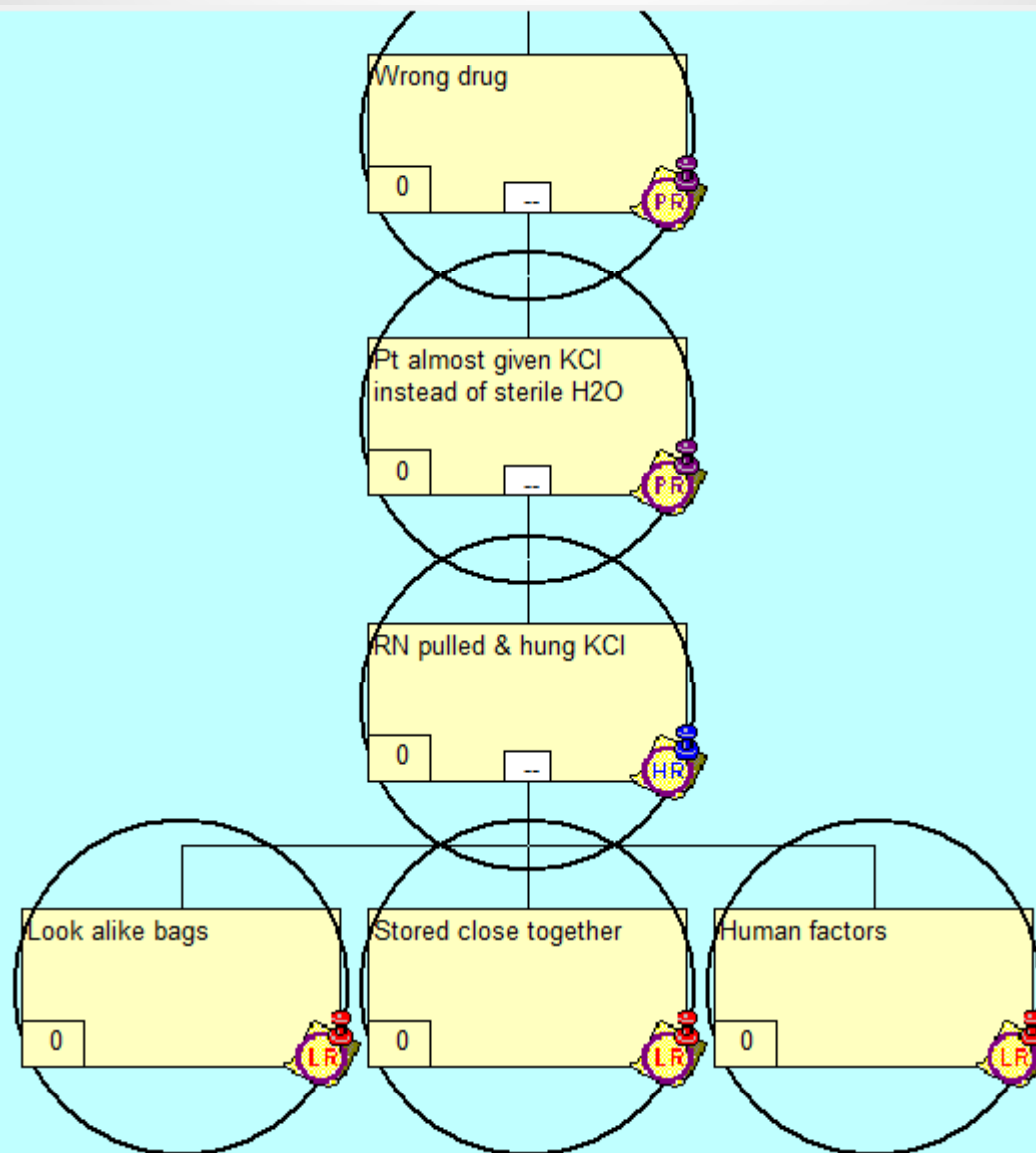
Action Plan

- Support the nurse

- Reward the report of a close call

- Change labelling of Sterile Water bags by using alternate manufacturer

- Separate the storage

- Look for other SALADs

At-Risk Behaviors

- If a person engages in at-risk behavior, he/she knows the right thing to do, but does otherwise because he/she does not see the risk or feels the benefit of the chosen behavior outweighs the risk or the employee is simply drifting away from what he/she has been taught.

At-Risk Behavior: Greatest Risk

- Why? We Think We Are Safe!
  - Cutting corners to save time
  - Insufficient staff to perform tasks
  - Right equipment is not available or functioning
  - Perception that practice is safe
  - Drift from safe practice
  - Belief that rules no longer apply
  - Lack of rule enforcement
  - Violations are routine and therefore become the norm
  - Perception that rules are too restrictive or ineffective

At-Risk Behaviors

- In an event investigation leaders must ask:
    - How prevalent is the at-risk behavior?
    - Why are people engaging in the at-risk behavior?
    - How can we put systems in place that will encourage or force the correct behavior?
    - How can we help our employees to perceive the risk so they will make the right behavioral choice?

Case: Deteriorating Patient

- An elderly man developed a hematoma in his neck on POD #1 from an anterior cervical fusion & discectomy

- Nurse & SLP assessed a tracheal deviation

- The surgeon ordered stat imaging

- Pt's nurse left the room to obtain order for medications, and was not present when transport came & took Pt

Deteriorating Patient (cont.)

- CN accompanied Pt to Radiology suite, assumed a nurse would be there, & assumed Pt's nurse would give report

- Imaging did not have a nurse on the weekend

- Tech unaware of Pt's hx or risk to airway

- Pt deteriorated further & required rescue

At- Risk Behaviors

- Incomplete handoffs with RN & Transport, CN & CT

- CN assumed, and didn't confirm, a nurse would be in CT
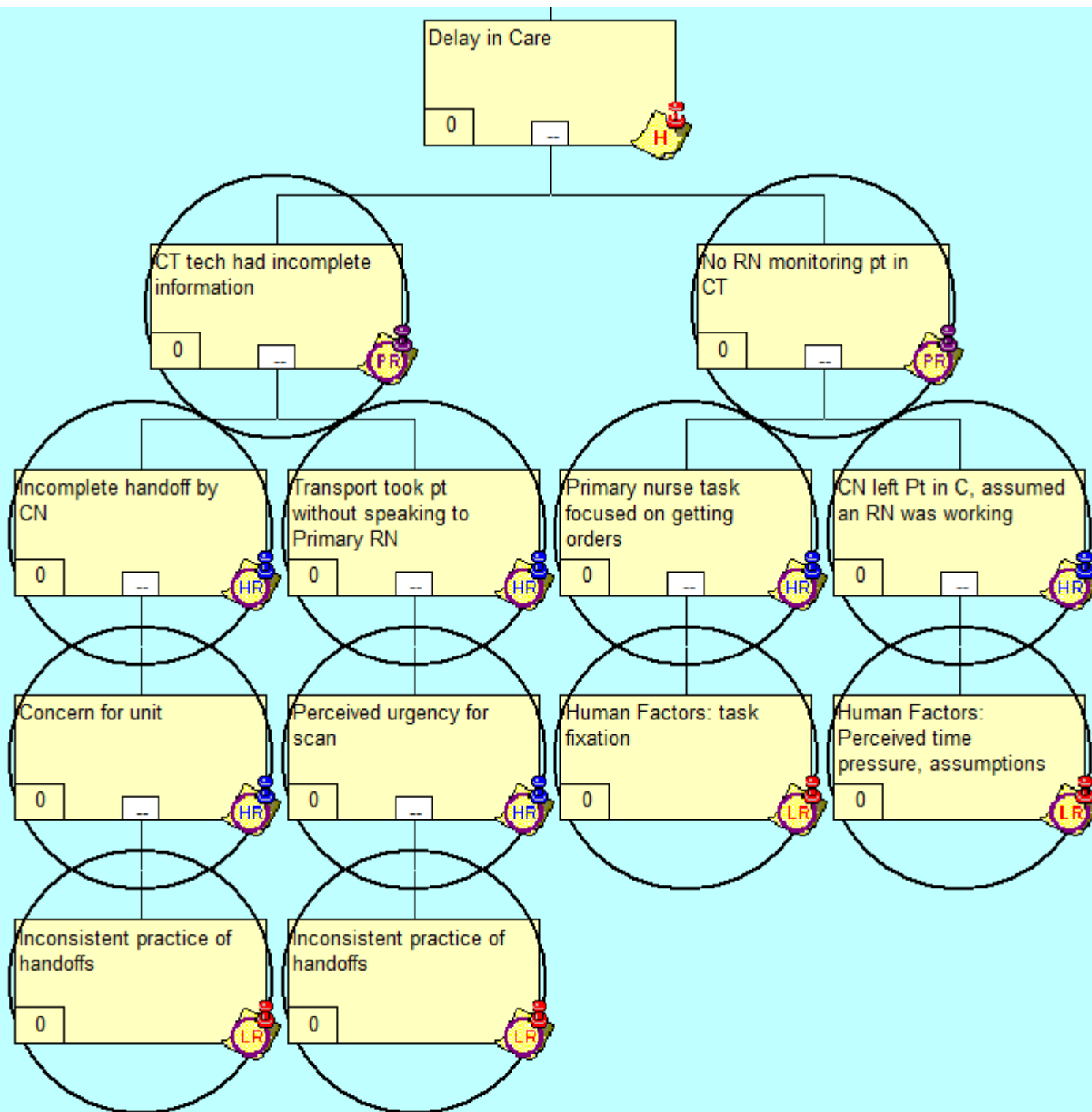
Action Plan

- Coach the caregivers
- Find out how wide spread the practice is

- Taught practice for using huddles
- Standardized process for handoffs with nursing, using "Ticket to Ride"

At-Risk behavior

- Manage through:
  - Removing incentives for At-Risk Behavior
  - Creating incentives for healthy behaviors
  - Add forcing functions
  - Change perceptions of risk (coaching)
  - Change consequences

Reckless Behavior

- A given behavior may be at-risk in one situation but reckless in another.

- Leaders must establish processes to know when someone is engaging in reckless behavior and be willing to punish those who engage in it.

- Reckless behavior is punishable regardless of the outcome of the behavior.

At-Risk vs. Reckless Behavior

- Scenario 1: Nurse "A" goes to the drawer to pull a bag of hespan to administer to a stroke patient. The hespan is kept in the same drawer as heparin. Both bags are the same size, contain clear liquid and have black writing. The names of both medications contain the letters "h", "p" and "n". She uses the bar coder in the room but it is not working. She does not have time to walk around the unit and find a working bar coder. She administers a bag of heparin to the stroke patient. The patient develops a hemorrhage in the stroke and dies.

At-Risk vs. Reckless Behavior

- Scenario 2: Nurse "B", pulls a bag of heparin instead of hespan from the drawer. She is in a hurry and does not use the bar coder although it is in the room and working. She administers the heparin to the stroke patient. Fortunately, a follow-up repeat head CT shows no intracranial hemorrhage as a result.

Polling

- Nurse A- reckless or at-risk?

- Nurse B- reckless or at-risk?

At-Risk Behavior vs. Reckless Behavior

- In the event investigation a just culture would want to know:
  - Was the nurse aware of the policy to use the bar coder?
  - Was it possible to use the bar coder?
  - Do other nurses administer medications without using the bar coders because they malfunction?
  - Do other nurses do work-arounds because of time pressures?
  - Why are two look alike medications stored together?

At-Risk vs. Reckless Behavior
Nurse A

- The event investigation revealed the behavior to be an at-risk behavior:
  - The nurses had expressed concern regarding the safety of storing hespan next to heparin to their manager.
  - The nurses had also expressed frustration over the frequent malfunctioning of the bar-coders to their manager.
  - It was a common practice on the floor to work around the bar-coder if it was not working.

At-Risk vs. Reckless Behavior
Nurse B

- In the close call event investigation it is determined that the behavior was reckless:
  - All the nurses on the floor use the bar coder before administering any medication.
  - The nurse knew the policy that requires bar coding before administering medications. The policy was doable and other were following the policy.

Action Plans

How they will be different:

Nurse A-
- Separate medicines
- Plan for bar coders to function
- Coach nurses about using bar coders

Nurse B-
- separate medicines
- discipline

Action Plan

- Discipline the Tech

- Teach TeamSTEPPS

Just Culture in the RCA Process

- Notification-
  - Reward reporting potential errors & safety issues
  - Align Human Resources/Risk Management/ Patient Safety
  - Use Just Culture terms vs. 'No Blame'
  - Leadership support is critical

Just Culture in the RCA Process

- Early Investigation
  - Ask what others would have done
  - Look at system designs, policies, procedures, protocols, cultural norms
  - Utilize Just Culture algorithms

Just Culture in the RCA Process

- Teams-
  - Include front-line caregivers
  - Comfort of being part of the improvement process

- Analyzing-
  - Start by asking 'how' event occurred
  - Go deep to understand why decisions were made

Just Culture in the RCA Process

- Action Planning-
  - Avoid 'train & blame' plans
  - Understand how wide-spread the practice is
  - Work on systems

- Share Lessons Learned-
  - Stories told communicate the systems approach to event analysis & process improvement
  - Acknowledging events in a non-punitive way increases reporting & patient safety

Thank You

- Reference-
  - <u>Whack-a-Mole: The Price We Pay For Expecting Perfection</u>. David Marx, 2009
  - Outcome Engenuity

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