Hands-On Workshop: Using Incidents to Improve Patient Care

Moderator: Jean Moran, Brett Miller

- Using Root Cause Analysis When Analyzing Incidents
  - Grace Kim
- Classification of Incidents
  - Jennifer Johnson
- Developing a Corrective Action Plan
  - Leah Schubert
- Hands-On Exercise
Using Root Cause Analysis When Analyzing Incidents

Grace Gwe-Ya Kim, Ph.D.
Learning Objectives - RCA

• To understand the basics of Root Cause Analysis (RCA)
• To learn about the techniques to implement RCA
• To be able to analyze the causes and contributing factors for an incident
Definitions

- **Incident** – An unwanted or unexpected change from a normal system behavior which cause or has the potential to cause an adverse effect to persons or equipment.

- **Adverse event** – An incident that occurs during the process of providing health care that results in suboptimal clinical outcome including unintended injury or complication leading to disability, death, or prolonged hospital stay for the patient.

- **Cause** – A situation, condition, action, or omission that leads to an incident

Definitions

- **Error** – Failure to complete a planned action as intended or the use of an incorrect plan of action to achieve a given aim.

- **Mistake** - Implementation of a plan unlikely to achieve its intended outcome even if executed correctly. Blunder, wrong judgment, wrong action or statement from faulty judgment; inadequate knowledge or inattention.

- **Near miss** – An event or situation that could have resulted in an accident, injury or illness but did not either by chance or through timely intervention. Also known as a close call, good catch or near hit.

Root Cause Analysis (RCA)

• Retrospective analysis

• Serious, adverse events (and near misses) with rare occurrences

• Identify underlying problems that increase likelihood errors

• RCA is a “systems analysis”
  – Examine relationships between different layers & other aspects of systems design

• Impartial analysis (Culture of Safety)
Three Levels of Root Cause

- Failure of Analysis
- "Witch Hunting"
- RCA

Causes from all of these areas are important in RCA

- Physical Roots
  - Symptoms
- Human Roots
  - Inappropriate Human intervention
- Latent Roots
  - Deficiencies in Process

RCA Overview

1. Collect information (What happened?)

2. Identify causes (Why it happened?)

3. Recommendations for remediation

4. Implement and Monitor
We can’t solve problems by using the same kind of thinking we used when we created them.
RCA Step 1: What happened?

- Focus on “what” rather than “why”
  - A narrative can be helpful

- Helpful tools
  - Process Mapping
  - Ask questions and listen
    - Let the interviewee ‘connect the dots’
RCA Step 2: Why it happened?

• Identify causes
  – Focus on the “whys”

• Helpful tools
  – Brainstorming
  – 5-Whys: force and in-depth analysis
  – Cause & Effect (Fishbone) Diagram
Brainstorming

• A method for a group of people to generate a large number of ideas in a short period of time

• Designate a note taker & moderator (separate people)

• Start with a statement of the problem

• No bad ideas, all ideas recorded
  – Criticizing or discussing the ideas is not allowed
The 5 Whys

• Simple procedure of asking ‘why’ 4 or 5 times as to the cause of an error or near-miss to force an in-depth analysis

• At each successive ‘why’ question, the group probes deeper

• Results are recorded for use in the RCA
Cause & Effect Diagram

aka: Ishikawa or Fishbone Diagram
RCA Step 3: Recommendations

• Requires domain experts
• Low cost, high impact
  • Focus on sphere of influence
  • Cost-benefit analysis
• Examples
  – Checklists
  – No interruption zone
  – Time out
  – Intuition
RCA Step 4: Implement & Monitoring

• Monitoring System
  - National reporting system: RO-ILS
  - Department reporting system

• For a RCA to be useful it has to encompass:
  - Corrective Actions
  - Learning
  - Follow-up
Example - Event Reported

You are the agent for the chipmunks

Awesome Studio

Studio A

Incident

Chipmunks were out of control and injured

Local Identifier:

Reporter's Name:

Reporter's Role: Agent

Identify the date and time the event occurred:

Save, Reset, Cancel

Note: Required questions marked with *
What Happened

https://www.youtube.com/watch?v=CvfINIM87il
RCA Step 1: What happened?

• Narrative
  • In the recording studio, the chipmunks were tired so they couldn’t sing
  • Manager decided to give them coffee
  • Manager brought the large coffee with caramel and whip cream.
  • Chipmunks finished the coffee
  • Chipmunks were out of control and injured after drinking coffee
RCA Step 1: What happened?

• Process Map

1. Chipmunks were tired with cont. recording
2. Manager decided to give them coffee
3. Manager brought coffee
4. Chipmunks finished coffee
5. Chipmunks were out of control and injured

Incident
RCA Step 2: Why it happened?

• The 5 Whys

Q1. **Why** were the Chipmunks out of control and injured?
   A1. They drank coffee

Q2. **Why** did they drink coffee?
   A2. The manager asked them to

Q3. **Why** did the manager ask them to drink coffee?
   A3. So they could keep recording

Q4. **Why** did they need to keep recording?
   A4. They only had the studio for one more hour
Manager asked

Limited record time

To keep recording

Drank coffee

Kids love sweet stuff

LOVE coffee

Studio singing

Chipmunk injured

aka: Ishikawa or Fishbone Diagram
RCA Step 2: Why it happened?

• The 5 Whys

Q1. **Why** were the Chipmunks out of control and injured?
   A1. They didn't have the proper focus

Q2. **Why** didn't they focus?
   A2. They like to play

Q3. **Why** do they like to play?
   A3. They are chipmunks and that's what they do
Cause & Effect Diagram

Manager asked

Limited record time

Studio singing

To keep recording

Drank coffee

Reason #3

#3.1

Chipmunk injured

Like to play

That’s what they do

No focus

Kids love sweet stuff

LOVE coffee

Manager asked

Limited record time

Studio singing

To keep recording

Drank coffee

Reason #3

#3.1

Chipmunk injured

Like to play

That’s what they do

No focus

Kids love sweet stuff

LOVE coffee

aka: Ishikawa or Fishbone Diagram
RCA Step 3: Recommendations

- Don’t record chipmunks any longer
- Don’t give chipmunks coffee
  - What if chipmunks LOVE coffee?
- Recommend a new manager that better understands chipmunks – not ideal (no direct control, only a recommendation (weak))
- Work in padded recording studio
- Make sure there is enough recording time for breaks
- Order small coffee / decaf only?
- Make sure chipmunks play before recording
RCA Step 4: Implement & Monitoring

• Choose and always use the proper size cup for Chipmunks

• Give play time before recording

• Keep tracking record time and break time