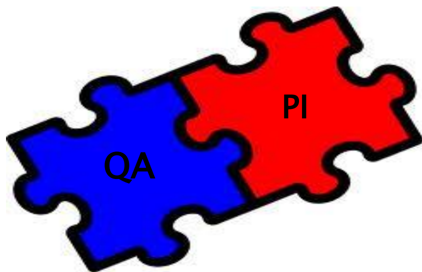
ADVANCED QA/PI FOR ASCs

Presented by Cathy Montgomery, RN



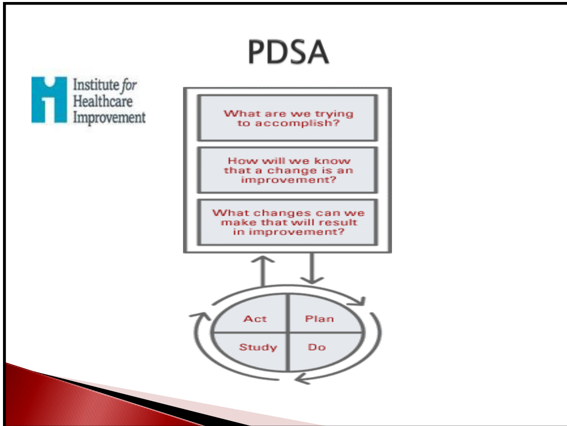
Quality Assurance

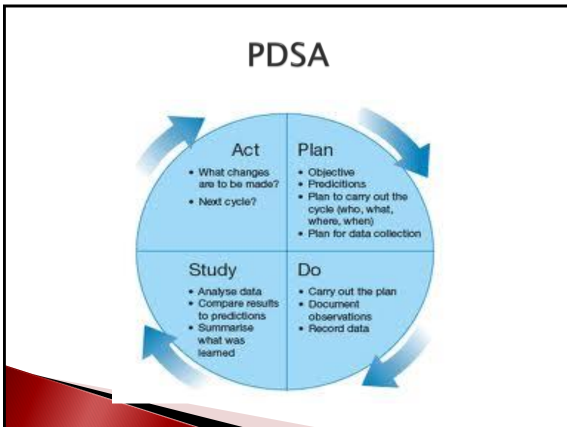
Quality Assurance (QA)

Quality assurance can be characterized as a focus on current outcomes, with a retrospective (look-back) view of "what happened". Often, this is done out of a need to ensure compliance and proper follow-up of identified issues.

Performance Improvement

Performance improvement can be thought of as a system that makes things better. Unlike quality assurance, which focuses on compliance, performance improvement focuses on "systems issues" that cause poor outcomes.





PDSA

- Setting Aims – overall goal you wish to achieve
- Testing Changes – small sample
- Implementing Changes – broader scale
- Spreading Changes – spread to other areas

QA/PI “Parts”

It Takes Teamwork

Root Cause Analysis

“Root” cause of an issue is important to discover…your only hope to ensure the issue does not return.

Root Cause Analysis

Don't just swat mosquitoes…

drain the swamp.

Root Cause Analysis

A process for identifying the basic or causal factors that underlie variation in performance.

*Always perform RCA for **Sentinel Events**

"An unexpected occurrence involving death or serious physical or psychological injury or risk thereof"

21 Steps – Root Cause Analysis

Preparation
- Organize a team
- Define problem
- Study problem

Proximate Causes
- Find out what happened
- ID process contributing factors
- ID other contributing factors
- Collect and assess data
- Interim changes

Root Causes
- ID systems involved
- Prune list
- Confirm root causes

Action Plan
- ID risk reduction strategies
- Formulate improvement actions
- Evaluate actions proposal
- Design improvement
- Ensure plan acceptability
- Implement plan
- Develop measures
- Evaluate improvement efforts
- Take additional action
- Communicate results

Steps for RCA 1

Organize a Team/Pick a Leader

- Leaders lay the groundwork – credibility
- Keep size of team manageable
- Multidisciplinary
- Choose individuals closest to the event
- Look for diverse knowledge
- Establish ground rules

Steps for RCA 2

- Define the problem
- Focus on what happened, not why
- Obtain all the details

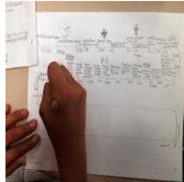
Steps for RCA 3

- Study the problem
- Collect information related to the event
- Facts/witness statement
- Physical evidence

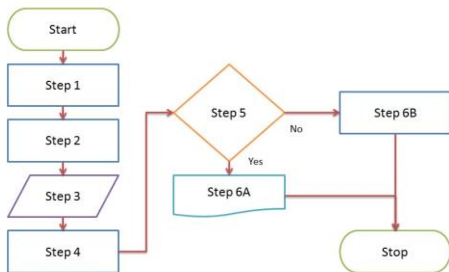
Steps for RCA 4

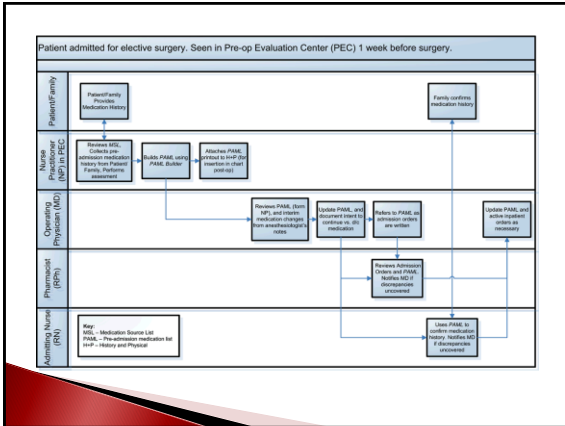
Determine What Happened

- Chart out sequence (timeline of events)
- Flow chart the ideal sequence
- Flow chart P&P steps



Sample Flowchart





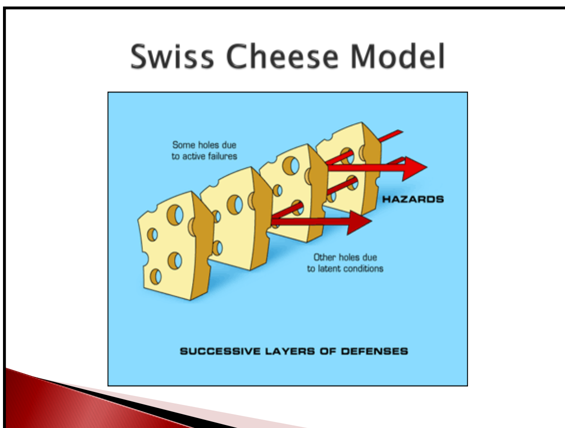
Steps for RCA 5

Identify Contributing Process Factors

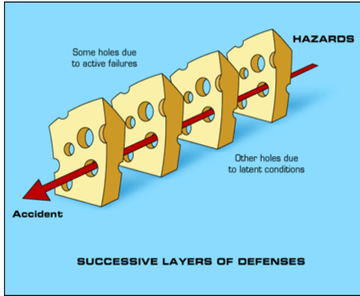
Why did the event happen?

- Which processes were involved?
- What are the steps in the process?
- What is currently done to prevent failure?
- Was it done? Why not?
- Who else was affected?

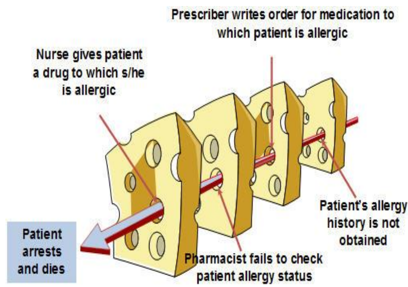
Swiss Cheese Model

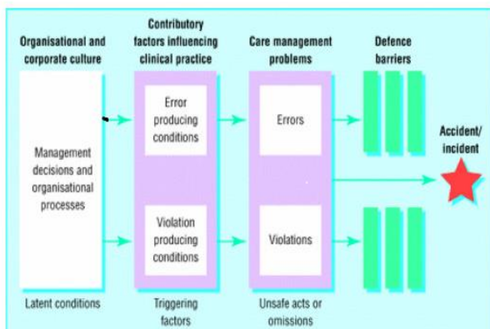


Swiss Cheese Model



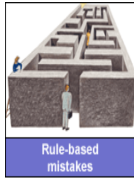
Swiss Cheese Model





Anatomy of an Error

Skill-based mistakes


Rule-based mistakes

Knowledge-based mistakes

Steps for RCA 6

Identify Other Contributing Factors

General Root Causes

1. Communication
2. Orientation/training
3. Patient assessment
4. Staffing levels
5. Availability of information
6. Competency/credentialing
7. Procedural compliance
8. Physical environment
9. Continuum of care
10. Organization culture

Most Common Root Causes of Medical Errors

1. Communication problems
2. Inadequate information flow
3. Human problems
4. Patient-related issues
5. Organizational transfer of knowledge
6. Staffing patterns/work flow
7. Technical failures
8. Inadequate policies & procedures

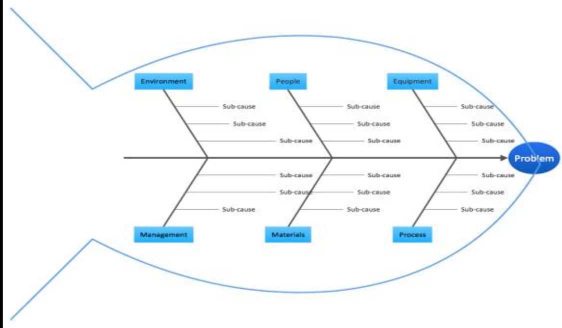
Fishbone Diagram

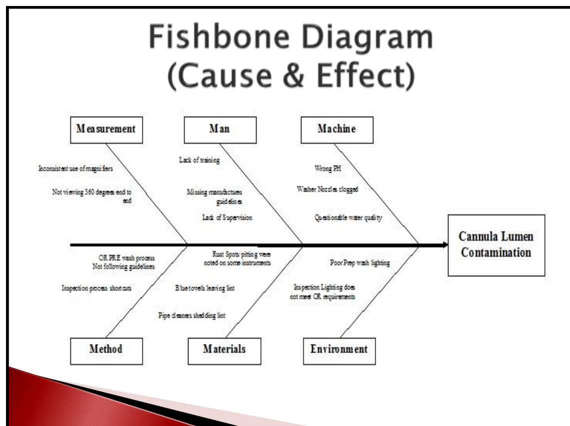
When to go fishing?

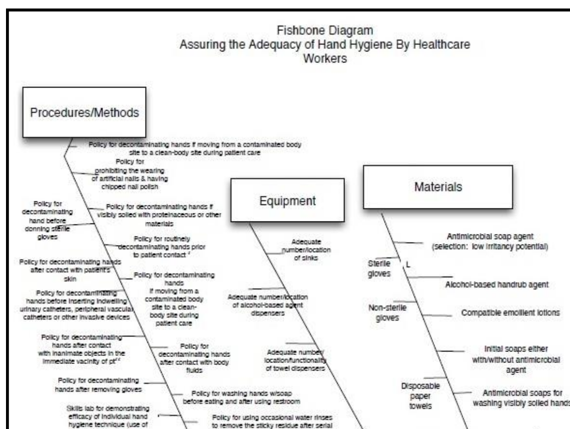
- When trying to identify possible causes
- When thinking tends to fall into a rut

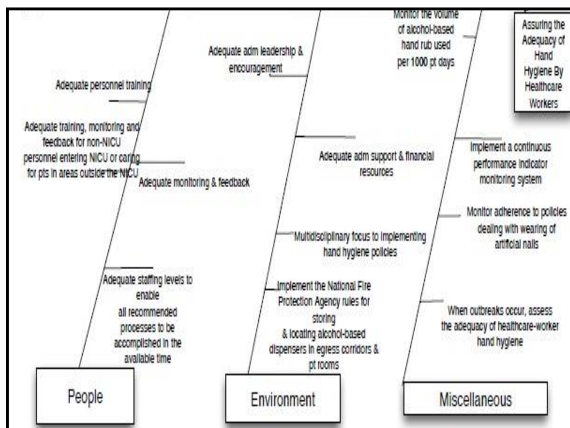
*Works best as a team

Fishbone Diagram (Cause & Effect)




Fishbone Diagram
(Cause & Effect)
Measurement
Man
Machine
Inconsistent use of magnifiers
Not viewing 360 degrees end to end
Lack of training
Missing manufactures guidelines
Lack of Supervision
Wrong PH
Washer Nozzles clogged
Questionable water quality
Cannula Lumen Contamination
OR PRE wash process
Not following guidelines
Inspection process short cuts
Rust Spots/pitting were noted on some instruments
Blue towels leaving lint
Pipe cleaners shedding lint
Poor Prep wash lighting
Inspection Lighting does not meet OR requirements
Method
Materials
Environment


Fishbone Diagram
Assuring the Adequacy of Hand Hygiene By Healthcare Workers
Procedures/Methods
Policy for decontaminating hands if moving from a contaminated body site to a clean-body site during patient care
Policy for prohibiting the wearing of artificial nails & having chipped nail polish
Policy for decontaminating hand before donning sterile gloves
Policy for decontaminating hands if visibly soiled with proteinaceous or other materials
Policy for routinely decontaminating hands prior to patient contact
Policy for decontaminating hands after contact with patient's skin
Policy for decontaminating hands if moving from a contaminated body site to a clean-body site during patient care
Policy for decontaminating hands before inserting indwelling urinary catheters, peripheral vascular catheters or other invasive devices
Policy for decontaminating hands after contact with inanimate objects in the immediate vacinity of pt
Policy for decontaminating hands after contact with body fluids
Policy for decontaminating hands after removing gloves
Policy for washing hands w/soap before eating and after using restroom
Skills lab for demonstrating efficacy of individual hand hygiene technique (use of
Policy for using occasional water rinses to remove the sticky residue after serial
Equipment
Adequate number/location of sinks
Adequate number/location of alcohol-based agent dispensers
Adequate number/ location/functionality of towel dispensers
Materials
Antimicrobial soap agent (selection: low irritancy potential)
Sterile gloves
Alcohol-based handrub agent
Non-sterile gloves
Compatible emollient lotions
Initial soaps either with/without antimicrobial agent
Disposable paper towels
Antimicrobial soaps for washing visibly soiled hands


Adequate personnel training
Adequate training, monitoring and feedback for non-NICU personnel entering NICU or caring for pts in areas outside the NICU
Adequate monitoring & feedback
Adequate staffing levels to enable all recommended processes to be accomplished in the available time
Adequate adm leadership & encouragement
Adequate adm support & financial resources
Multidisciplinary focus to implementing hand hygiene policies
Implement the National Fire Protection Agency rules for storing & locating alcohol-based dispensers in egress corridors & pt rooms
Monitor the volume of alcohol-based hand rub used per 1000 pt days
Assuring the Adequacy of Hand Hygiene By Healthcare Workers
Implement a continuous performance indicator monitoring system
Monitor adherence to policies dealing with wearing of artificial nails
When outbreaks occur, assess the adequacy of healthcare-worker hand hygiene
People
Environment
Miscellaneous

The Process

- Identify the problem
- Brainstorm categories
- Use generic headings when needed
- Ask, "why does this happen", and assign to a category. Can be in multiple categories.
- Can have sub-causes

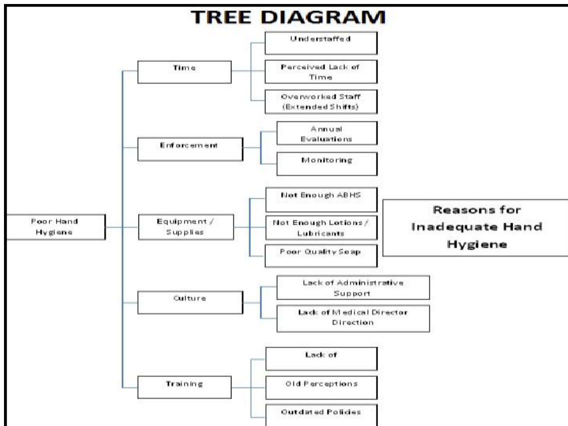
Tree Diagram

3 Different Types

1. Planning: Used proactively in planning and organizing
2. Problem Solving: Used reactively in problem solving (also called root-cause tree)
3. Analysis: For decision making or problem analysis

Tree Diagram – Planning Type

Improving
Customer
Satisfaction
in a Grocery Store



RCA 7

Measure and Collect the Data

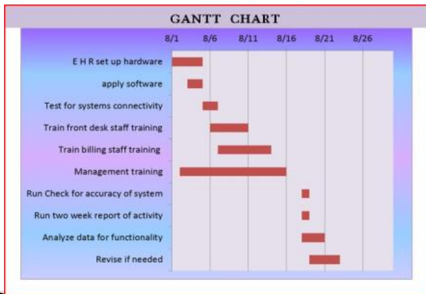
- Baseline data
- Ongoing
- Comparison

RCA 8

Design & Implement Interim Changes

- Immediately do the quick fixes
- Decide on your timeline

Gantt Charts



RCA
9

Identify Which Systems are Involved

- Identify underlying causes for the proximate cause
- Drill down using the fishbone, flowchart, or tree analysis

RCA
10

Prune the List of Root Causes
The Big 3???

1. Would the problem have occurred if Cause #1 had not been present?
2. Will the problem recur due to the same causal factor if Cause #1 is corrected or eliminated?
3. Will correction or elimination of Cause #1 lead to similar events?

NO = root cause
YES = contributing cause

RCA 11

Confirm Root Causes

Risk – Reduction Strategies
- Systems approach – do not blame individuals
- Each stage of system development

Error Prevention Strategies
- Systems should be designed to absorb errors
- Look to "mistake proof" when possible

RCA 12

Explore & Identify Risk – Reduction Strategies

Failure Mode & Effect Analysis (FMEA)
- Determine the severity of the potential cause
- Determine the probability
- Design a system to absorb errors
- Training & retraining
- Create a safe reporting environment

RCA 13

Formulate Improvement Actions

- Directed at process

- Use the tools we referenced earlier

RCA 14

Improvement Action Goals

- Address a root cause
- Offer a long term solution
- Offer a more positive than negative impact on other processes
- Be objective and measurable
- Defined implementation time
- Assign accountability

RCA 15

Design Improvement

- What?
- How?
- When?
- Who?

RCA 16

Ensure Acceptability of the Action Plan

- Focus on process
- Identify responsibilities
- Identify timeline
- How will you evaluate the action plan

RCA 17

Implement the Improvement Plan

- Scientific Method: Plan, Test, Study, Implement
- PDSA: Plan, Do, Study, Act

RCA 18

Collect Data

- Risk Manager, Infection Preventionist, Analyst…
- IT assist?

RCA 19

Evaluate Implementation Efforts

- Internal comparisons
- External comparisons
- Practice guidelines/parameters
- Performance targets

RCA 20

Take Additional Steps
POSITIVE

- Communicate results
- Revise processes or procedures
- Complete all retraining
- Plan for continued monitoring
- Roll out improvements to other areas

RCA 20

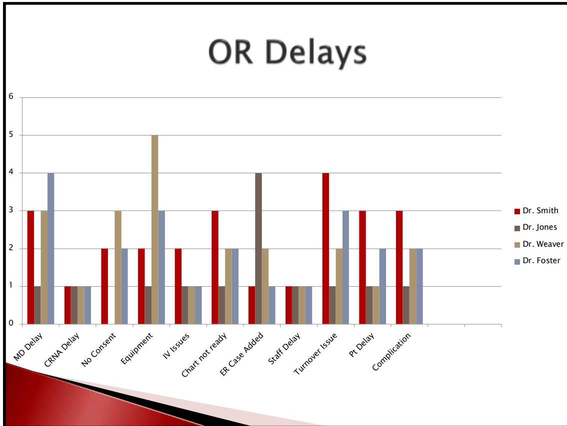
Take Additional Steps
NEGATIVE

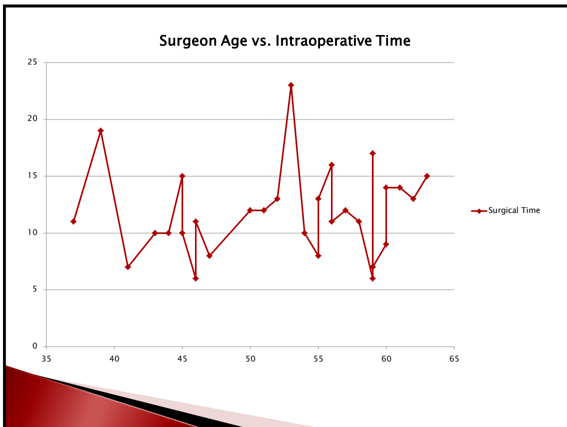
- Double check implementation
- Reconfirm the root cause
- Identify risk reduction strategy
- Plan continued monitoring
- Roll out to other areas

RCA 21

Communicate the Results

- Communicate throughout the process
- Any proposed changes
- New or revised policies
- Celebrate your success





VSMs

Value stream maps are effective tools for facilitating incremental improvements to complex healthcare processes.

Lean Enterprise Institute

Thomas Jefferson University

Operating Room Patient Flow

- Physician Offices
- OR Scheduling
- Pre-Admission Testing
- Registration
- Pre-Procedure Preparation
- Patient Transport
- OR
- Environmental Services
- PACU

1. Staff & Patient Interviews

- Constant changes to the OR schedule on the day prior and the day of
- Poor communication
- Excessive processes
- Inadequate technology
- Workflow variation across all disciplines

2. Gemba Walks

Japanese term that stands for the place of action.

Figure 1 — OR Patient Flow VSM

Patient
Surgeon
OR schedule finalized
Call from scheduling
Patient check-in @ admissions
Arrive @ SPU
Prep for surgery
Patient arrives @ holding area
Enter OR

SPU = short-procedure unit

Figure 2 — OR Patient Flow VSM With Proposed Solutions

Patient
Surgeon
OR schedule finalized
Call from scheduling
Patient check-in @ admissions
Arrive @ SPU
Prep for surgery
Patient arrives @ holding area
Enter OR

ORSOS = OR information system
FAR = first available room
JIT = just-in-time
Pixis = medication carousels on nursing units

Figure 3 — OR Patient Flow VSM With Proposed Action Plan

Patient
Surgeon
Kaizen 1
Kaizen 2
OR schedule finalized
Call from scheduling
Patient check-in @ admissions
Arrive @ SPU
Prep for surgery
Patient arrives @ holding area
Enter OR

QA/PI

- Show your work
- Illustrate your brainstorming activities
- Outline your plan
- Document your findings
- Charts, lists, graphs
- Celebrate your improvements

QA/PI Advanced Skills

Please email your questions and comments to:

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