

Nine Meaningful Minutes on RCA: Falls

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Ayana Lawler

LTC Health Care Surveyor: Where regulations and fall meet.

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Learning Objectives

- Define Root Cause Analysis
- Identify how RCA is a valuable tool for QAPI
- Identify some key concepts in the RCA process
- Describe when/how to conduct a root cause analysis for a fall event.
- Identify key contributive factors when reviewing a fall event.
- Identify the regulation related to fall prevention
- Evaluate outcomes from using root cause analysis.

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Polling Question #1

Is the following statement true or false?

All falls are avoidable.



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F689 - Accidents

- The facility must ensure that the resident environment remains as free of accident hazards as is possible; and
- Each resident receives adequate supervision and assistance devices to prevent accidents

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F689 Accidents

- **Intent:**
- ... to ensure the facility provides an environment that is free from accident hazards over which the facility has control and provides supervision and assistive devices to each resident to prevent avoidable accidents. This includes:
 - Identifying hazards and risks
 - Evaluating and analyzing hazard(s) and risk(s); and
 - Implementing interventions to reduce hazard(s) and risk (s); and
 - Monitoring for effectiveness and modifying interventions when necessary.

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State Operations Manual (SOM) Definitions

- Accident, any unexpected or unintentional incident which results or may result in injury... to a resident
- Avoidable Accident, means that an accident occurred because the facility failed to...



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SOM Definitions (cont.)

- Unavoidable Accident, means that an accident occurred despite sufficient and comprehensive facility systems designed and implemented to...
- Assistance/Assistive Device, refers to any item...used by, or in the care of a resident to promote, supplement, or enhance the resident's function and/or safety.



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SOM Definitions (cont.)

- Fall, refers to unintentionally coming to rest on the ground, floor, or other lower level, but not as a result of an overwhelming external force... A fall without injury is still a fall.
- Hazards, refer to elements of the resident environment that have the potential to cause injury...



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SOM Definitions (cont.)

- Risk, refers to any external factor, facility characteristic (e.g., staffing or physical environment) or characteristic of an individual resident that influences the likelihood of an accident.
- Supervision/Adequate Supervision, refers to an intervention and means of mitigating the risk of an accident. Facilities are obligated to provide adequate supervision to prevent accidents. Adequate supervision is determined by assessing...
 - Staffing, competency and training of staff, and the frequency of supervision needed.

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Fall Factors

- Hazards
- Footwear (unsafe or absent)
- Medical conditions
- Changes in condition (acute)
- Medications
- Orthostatic hypotension
- Weakness, deconditioning
- Poor balance
- Functional impairments
- Gait disorders
- Cognitive impairments
- Pain
- Incontinence

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Example of Facility Noncompliance

- The facility failed to reassess the resident and his fall risks, determine root causes of fall, and revise the care plan interventions if indicated, for a resident who fell, sustaining only a bruised forehead.



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SOM Guidance

- A Systems Approach
 - A consistent application of a process to address identified hazards and/or risks
 - An effective system not only proactively identifies environmental hazards and the resident's risk for an avoidable accident, but also evaluates the resident's need for supervision
 - Identification of Hazards and Risks
 - Evaluation and Analysis
 - Implementation of Interventions
 - **Monitoring and Modification**
 - Supervision

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Polling Question #2

Adequate supervision can be determined by assessing which of the following.

- A. Staffing, competency and training of staff, and the frequency of supervision needed.
- B. Staffing, review of the regulations, and competency and training of staff.
- C. Competency and training of staff, facility policy, and staffing.

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Root Cause Analysis

Why is it Valuable?

Kim Hoeft RN /Yvonne Burston RN

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Superior Health members MPRO, MetaStar and Stratis Health organized as Lake Superior Quality Innovation Network work in partnership with patients, providers, and practitioners across organizations and care settings to achieve national quality goals. Lake Superior Quality Innovation Network (QIN) serves:

3 states: Michigan, Minnesota and Wisconsin

Nearly 2,500 health care organizations

More than four million Medicare beneficiaries

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What is Root Cause Analysis (RCA)?

- A structured process used to determine why an unexpected or unintended outcome (an event) occurred and what can be done to prevent it from happening again
- A tool for quality improvement
- A team-based investigative approach that focuses on systems and processes and their impact on individual behavior

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Value of RCA

- Avoids choosing a “quick fix”
- Engages staff in analyzing why events occur
- Promotes change in culture through encouraging a non-punitive approach
- Guides teams to measure the impact of changes made as the result of an RCA
- Improves resident safety

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Contrasting Approaches

Less Effective

- Focus on individual blame
- Punish errors
- Expectation of perfect performance
- Use discipline or education as main actions to prevent recurrence

More Effective

- Focus on conditions / systems that influence individual performance
- Learn from errors and change systems
- Expectation of professional performance –realize human limitations
- Base actions on root cause findings- generally a change in the process

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RCA Process

- Identify the event
- Select the team
- Describe the event- where did the breakdowns occur
- Identify all factors
- Identify root causes and contributing factors
- Create change by designing and implementing process and system changes
- Measure to determine results

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Key Concepts In Root Cause Analysis

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Systems and Processes

- Process
 - The steps to be followed
 - Often guided by policies and procedures
- System- the combinations of
 - Processes
 - People / culture
 - Environment / equipment

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Systems Thinking

- Belief that the parts of a system can be best understood through how they relate to each other, rather than in isolation
- Requires critical thinking skills to analyze, synthesize and evaluate information

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Theories that relate to RCA

- Human Factors
- Tunnel vision
- Swiss cheese

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Human Factors

- The elements that influence the performance of people operating equipment or systems, including behavioral, medical, operational, task-load, machine interface and work environment factors
- These elements include both physical and cognitive abilities

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Predicting Human Error

Activity	Probability
Misreading a label	0.003
Simple math error with self-checking	0.03
Monitor or inspector fails to detect error	0.1
Error in high stress situation requiring rapid action or multiple actions are occurring rapidly	0.25

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Human Factors Engineering

- Human factors engineering seeks to improve performance by designing systems that are compatible with our perceptual, cognitive and physical abilities.
- The designs support or enhance a person's performance rather than mislead into an unintentional error
- Avoid designs that force users to make an extra effort to interact successfully with an interface or device

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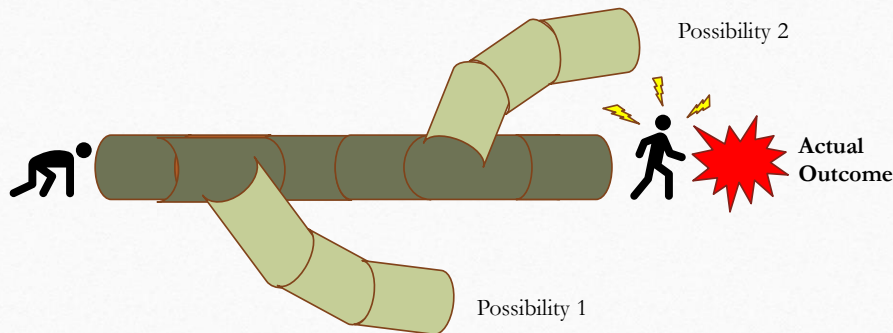
Relevance to RCA

Human Factors teaches us to:

- Avoid reliance on memory and vigilance (use protocols and checklists)
- Simplify processes
- Standardize procedures to reduce unintended variation
- Use constraints and forcing functions (e.g., a car won't start if it's in gear)

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Tunnel Vision



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Getting Inside the Tunnel

- Avoid hind-sight bias
Hindsight is 20/20
- Understand why actions made sense at the time
- Understand all potential outcomes cannot be realized

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Relevance to RCA

- The point of the RCA process is to understand why people did what they did – not to judge them for what they did not do
- Getting inside the tunnel allows us to fully understand why individual actions were felt to be reasonable at the time

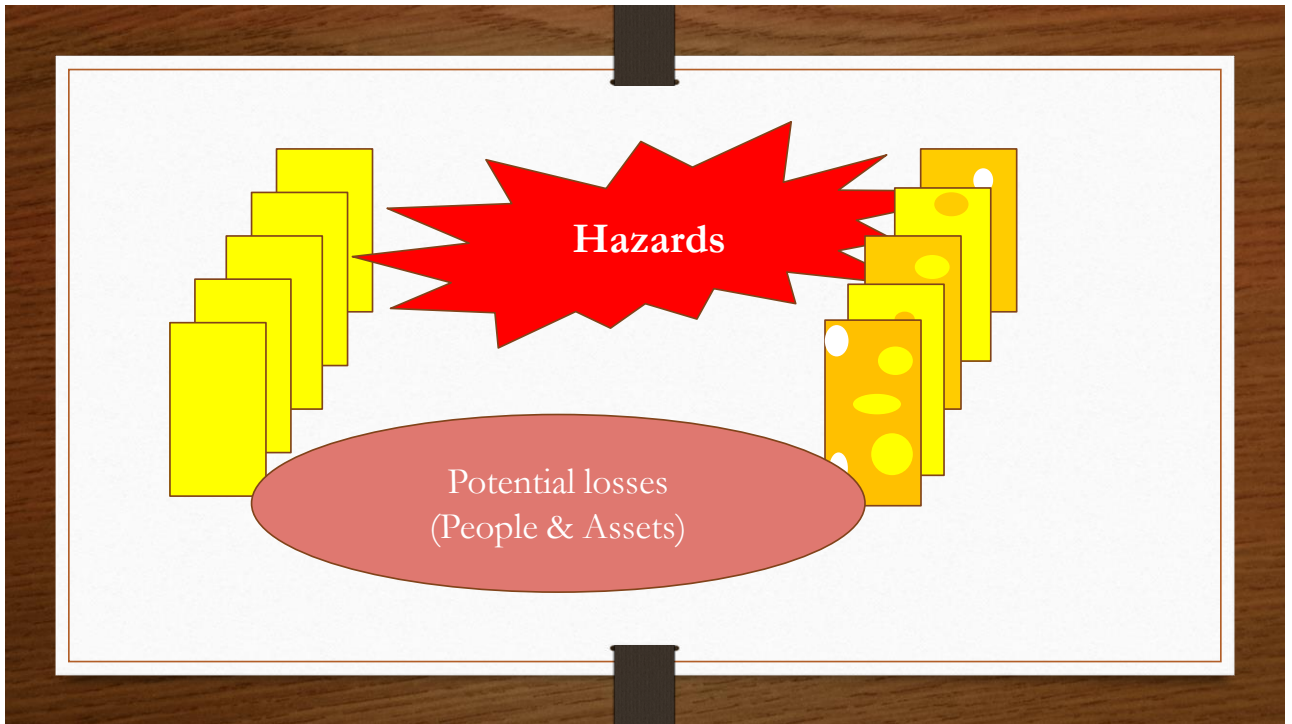
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Swiss Cheese Model

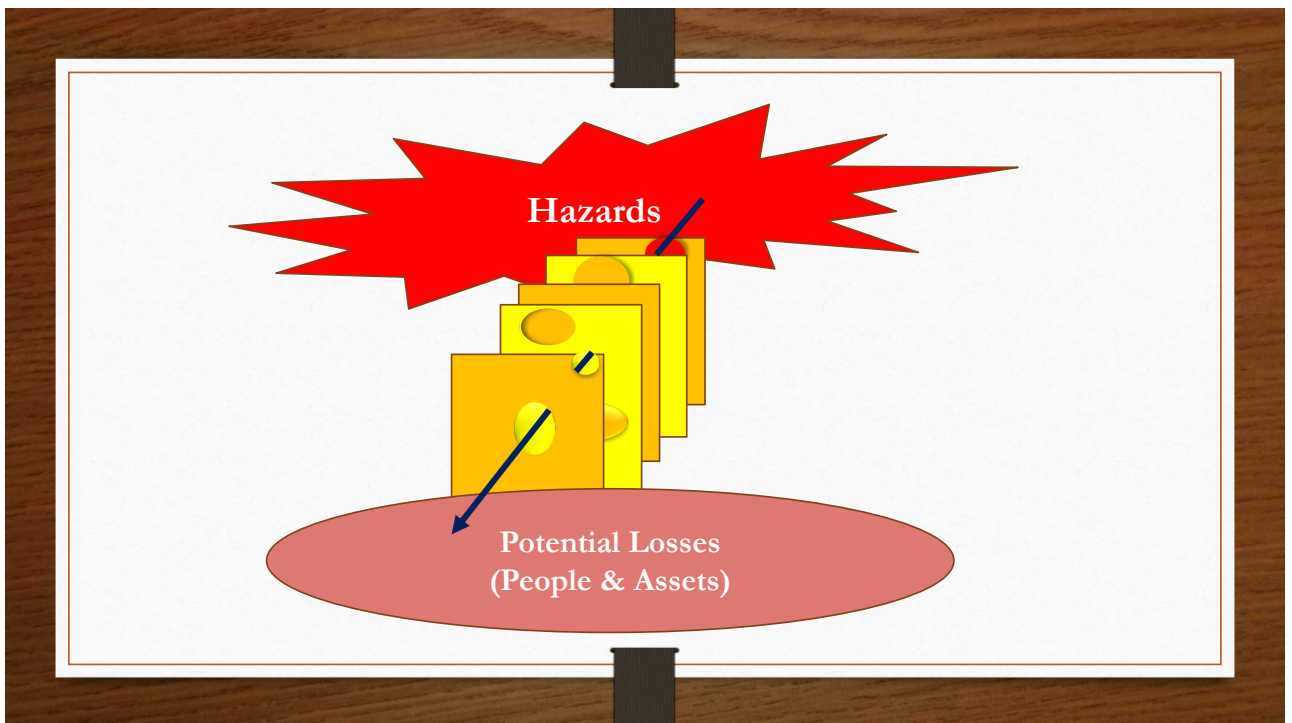


- Barriers designed to prevent errors are like multiple slices of Swiss cheese
- No barrier is perfect
- Holes continually vary in size and position
- Errors or failures occur when all holes in each of the slices momentarily align

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The Holes



- The holes in the Swiss cheese represent **Latent Conditions**
 - These are pre-existing factors and conditions that combine to cause an undesirable event, e.g., excessive noise, stress, difficult to clean areas.

Latent conditions can be present for long periods before they are recognized

These Latent Conditions increase likelihood of **Active Failures** which are:

- Errors that occurs at the level of the frontline operator (healthcare professional, visitor or patient) and whose effects are felt almost immediately, e.g. medication errors, back injuries, slips and falls
- Active failures are on the sharp end of the system

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Relevance to RCA

- A root cause will typically be a process or system that can be redesigned in order to reduce risk
- Latent conditions over which we have control are often root causes
- Active failures are rarely root causes

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Goal of RCA

Determine why something
happened and prevent
it from happening again

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What Can Trigger an RCA

- Unexpected events with serious outcomes
- Repeating incidents
- Near misses
- Good catches

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Polling Question #3

When deciding on a **strong** corrective action for the root cause, which action requires **less** reliance on humans to remember to perform the task correctly?

- A. Training (re-educate on how to perform a resident fall assessment and incident report)
- B. Simplifying the process (simplify and standardize the fall assessment process, eliminating unnecessary steps and use checklists.)
- C. Double Checks (having Nurse A check to see if Nurse B's resident fall assessment is complete and sign off)

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Erica Holman/Amy Stoll

Presentation: Videos of Fall and 9 Minute RCA at Bedside

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Following the Fall

- Suzy was assessed for injuries and range of motion before being lifted to her bed in accordance to her care plan
- Vital signs were taken and recorded
- Suzy is NOT a reliable historian and neurochecks were implemented

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Background Information

- Our team developed career ladder positions for Certified Nursing Assistants
- Liaisons and PIPists – Liaisons have more “leadership” roles and PIPists help with many QAPI and Resident Satisfaction projects
 - Performance Improvement Program Specialists = PIPists

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The PIP Crew

- Performance Improvement Program Specialists = PIPists
- The PIP Crew is comprised of team members – nurses, PIPists, Caregiver Liaisons, other IDT members and housekeepers who meet at bedside after a fall event
- The PIP Crew helps RECONSTRUCT the chain of events
- “Real time” PIP Crew fall review to identify if care plan was in place and if not, why not and IF it was – what else can be provided BASED ON the underlying contributive factors (the ROOT CAUSE)
- End of week – review falls to determine effectiveness of interventions (before the weekend)

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INTERVENTION INDEX

4 Ps – pain, presence (staff checking in), positioning, personal needs

Pain treatment

Labs

Changes to wheelchair (anti-tip etc.)

Changes to room orientation

Bed height personalized to need

Winged mattress

Pancake style/specialty call lights

Landing mats

Footwear fitted & non-skid

Different wheelchair cushions

Dycem or Green Non-skid

Anti-skid strips on floor

Red light in bathroom

B&B assessment

Items placed within reach

Raised Toilet Seat

Different lighting

RD consultation

Education

Foot pedal location (using bags)

Padding equipment, tables, etc.

Communication boards

Changes in meals/snacks routines

Assess vitals for s/sx of infections, orthos

Therapy screens

Restorative—balance

Signs

Increased/Changed Activities

Medication changes

Enabler bars

Long Handled Reacher

Alarms-only if all else fails

Our mission is to help older people live to their highest potential as individuals who seek independence, good health and personal fulfillment.

Originated: 4/23/2021 K.S.

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"PIP Crew" Investigation Review

Did any of the following **CONTRIBUTE** to the event? (NOT EXHAUSTIVE LIST – add notes)

Environment	Lighting – dim or too bright	Temperature	Crowding
	Furniture	Wet Floor	Bed height not personalized
	Noise (including alarm sounding)		
Physiological	Recent illness/change/current UTI		
	Drowsy	Incontinent	Weakness
	Impaired memory	Confused	Change in medication
	Hypotensive (low bp)	Gait problem	Balance problem
	Inner ear	Other	
Situation	Recent Room Change	Active exit seeker/Wanderer	Ambulating with assist
	Ambulation without assist	New admission	Dislikes roommate
	During Transfer	Using walker/cane/transfer device	Footwear doesn't fit
	Hungry	Thirsty	Personal needs
	Footwear doesn't have non-skid sole		

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Identify Key Contributive Factors at Bedside

ENVIRONMENT/PREDISPOSING

- Batteries not working in remote
- Glasses removed
- Overbed table used to walk
- Call light not in reach

PHYSIOLOGICAL

- Elements of thought impacted – judgement, perception, memory
- Deconditioned due to stroke

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Identify Contributive Factors with Interdisciplinary Team (IDT)

- CARE PLAN is updated after the fall event (may need more updating later)
- IDT meets to review the fall event in more detail – looking at medications, diagnoses, history and more
- Updates the Root Cause or Contributive Factors information AND...
- UPDATE THE CARE PLAN

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Polling Question #4

- It is best to identify, document, and notify staff of changes to the care plan
 - A. Quarterly
 - B. Yearly
 - C. Immediately
 - D. At the following care plan meeting

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Ayana Lawler

Surveyor Investigation

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Did the facility.....

- Identify hazards and risks?
- Evaluate and analyzing hazard(s) and risk(s); and
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- Monitoring for effectiveness and modifying interventions when necessary.

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Monitoring and Modification

- Ensuring that interventions are implemented correctly and consistently
- Evaluating the effectiveness of interventions
- Modifying or replacing interventions as needed and
- Evaluating the effectiveness of new interventions.

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Supervision

- Provide adequate supervision to prevent accidents
- How staff responds to request for assistance
- Does the resident require supervision when using assistive devices



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Polling Question #5

True or False.

LTC surveyors are charged with ensuring providers implement appropriate interventions regarding falls, assessing if the facility evaluates intervention effectiveness while modifying as needed, and identifying evidence of provider continuous process improvement to prevent falls and mitigate injury.

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RCA toolkit

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Tools Used in RCA

Superior Health Quality Alliance RCA toolkit for Long-Term- Care

- Teamwork supports
- Flowcharting / process mapping
- Cause / effect diagrams (e.g., Fishbone)
- Plan-Do-Study-Act (PDSA)
 - Small tests of change
- Data display
 - Graphing, run charts

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Most Important Tools in RCA

- Critical thinking skills
- A non-judgmental attitude
- The desire to understand why
- A belief that we can always do better

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Link to Toolkit

- [Root Cause Analysis Toolkit for Long Term Care \(netdna-ssl.com\)](https://netdna-ssl.com)

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Q&A

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