



Root Cause Analysis (RCA)

October 2020

**A presentation for DBHDS
Licensed Providers**

Goals of the Presentation

- ✓ **What** is a RCA?
- ✓ **When** is a RCA required?
- ✓ **Why** a RCA policy?
- ✓ **How** to conduct a RCA?

Root Cause Analysis – What is it?

Reference – 12VAC35-105-20. Definitions:

“Root cause analysis means a method of problem solving designed to identify the underlying causes of a problem. The focus of a root cause analysis is on systems, processes, and outcomes that require change to reduce the risk of harm.”

Root Cause Analysis – The Focus

The focus of a Root Cause Analysis is on **prevention**, not blame or punishment.

Root Cause Analysis – When is it required?

12VAC35-105-160.E

A root cause analysis shall be conducted by the provider **within 30 days of discovery** of Level II serious incidents and any Level III serious incidents that occur during the provision of service or on the provider's premises.

12VAC35-105-160.E.

1. The root cause analysis shall include at least the following information:
 - a. a detailed description of what happened;
 - b. an analysis of why it happened, including identification of all identifiable underlying causes of the incident that were under the control of the provider; and
 - c. identified solutions to mitigate its reoccurrence and future risk of harm when applicable.

a. A detailed description of what happened.

- Step-by-step sequence of events leading up to an incident
- Actions taken immediately following the incident



Root Cause Analysis – Minimum Requirements

b. An analysis of why it happened; including identification of underlying causes that were under the control of the provider; and

c. Identified solutions to mitigate its reoccurrence and future risk of harm when applicable.

12VAC35-105-160.E.2

2. The provider shall develop and implement a root cause analysis policy for determining when a more detailed root cause analysis should be conducted, including:

- convening a team;
- collecting and analyzing data;
- mapping processes, and
- charting causal factors



RCA Policy

Specific to the organization:

- Size
- Population served
- Service specific
- Criteria to use when determining the need for a more detailed RCA (Who appoints the team?)

Policy shall include:

- Minimum requirements from the regulations

12VAC35-105-160.E.2.a-d

At a minimum, the policy shall require a provider to conduct a more detailed root cause analysis:

a. A **threshold number**, as specified in the provider's policy based on the provider's size, number of locations, service type, number of individuals served, and the unique needs of the individuals served by the provider, of similar Level II serious incidents occur to the same individual or at the same location within a six-month period;

Minimum Requirements

b. Two or more of the same Level III serious incidents occur to the same individual or at the same location within a six-month period;



Minimum Requirements

c. A **threshold number**, as specified in the provider's policy based on the provider's size, number of locations, service type, number of individuals served, and the unique needs of the individuals served by the provider, of similar Level II or Level III serious incidents occur across all of the provider's locations within a six-month period;
or

Minimum Requirements

d. A death occurs as a result of an acute medical event that was not expected in advance or based on a person's known medical condition.

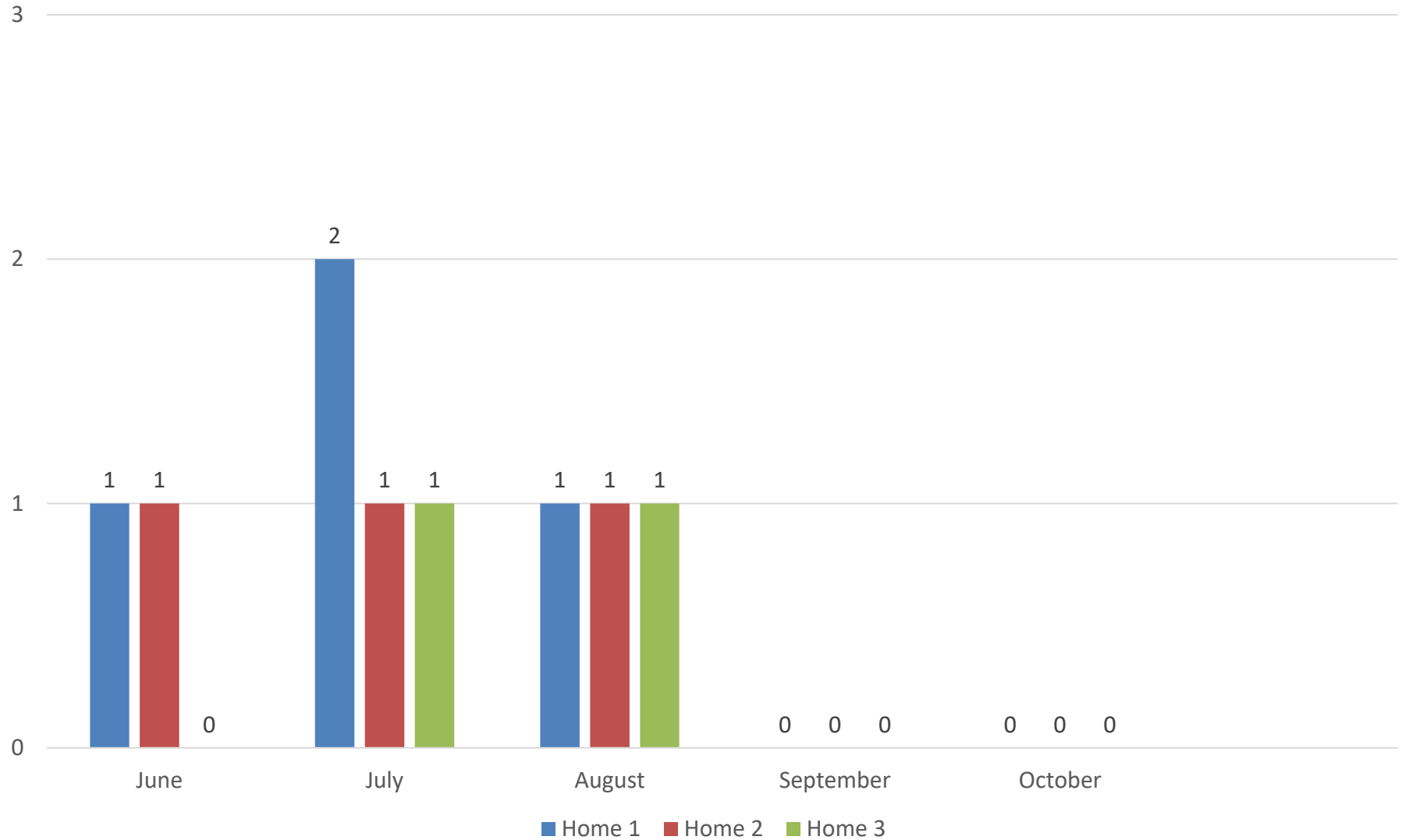
Example – More Detailed RCA

A licensed provider (named XYZ Residential) has three residential homes.

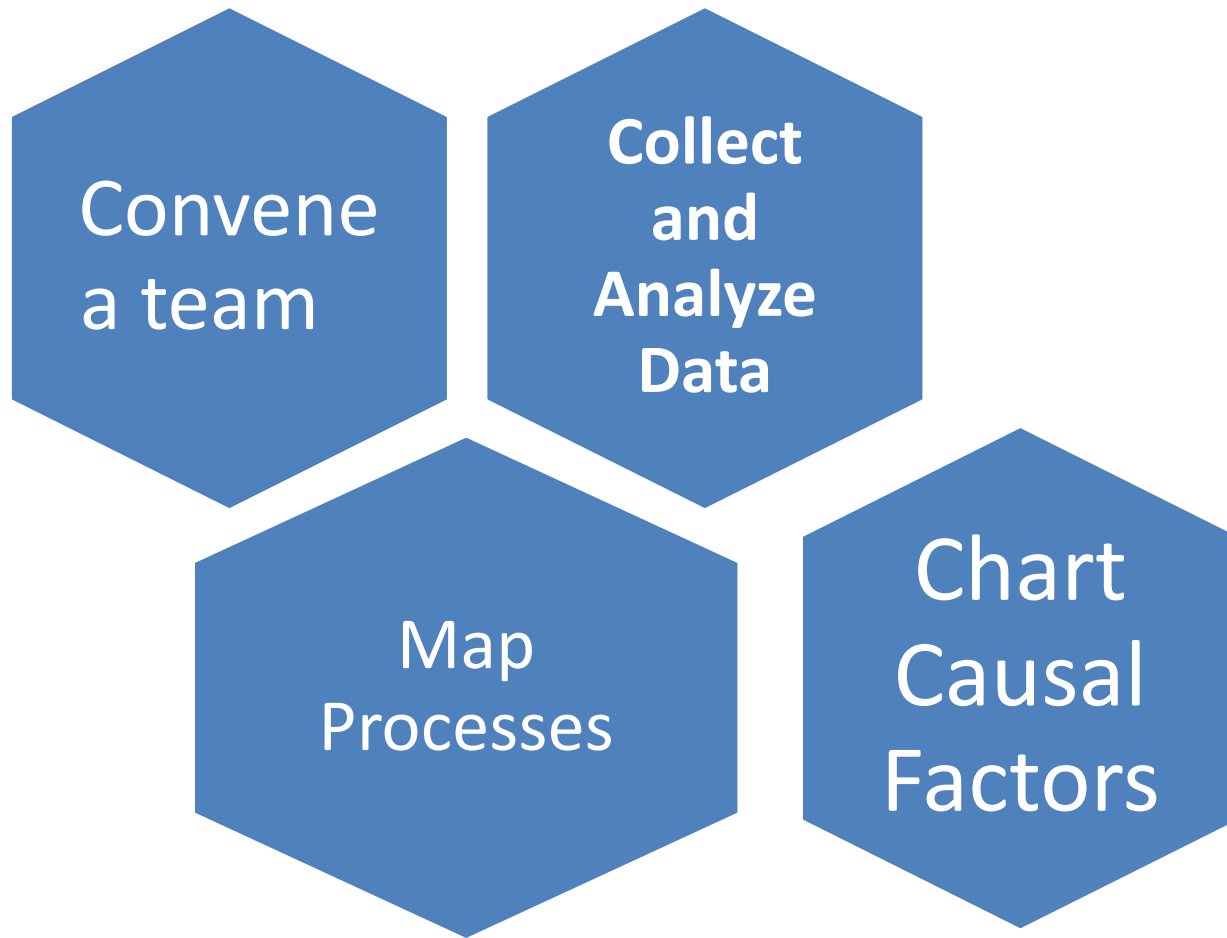
XYZ Residential's RCA policy states that a more detailed RCA will be conducted whenever 5 similar Level II serious incidents occur within a six-month time period across all three locations.



Example - Falls with Injury



What is a More Detailed RCA?



Convene a Team

- Provider's policy identifies who will appoint the team
- No requirements for how large a team must be
- Person responsible for the risk management function (per regulation) has training in RCA to:
 - Lead the team or
 - Give overview/guidance



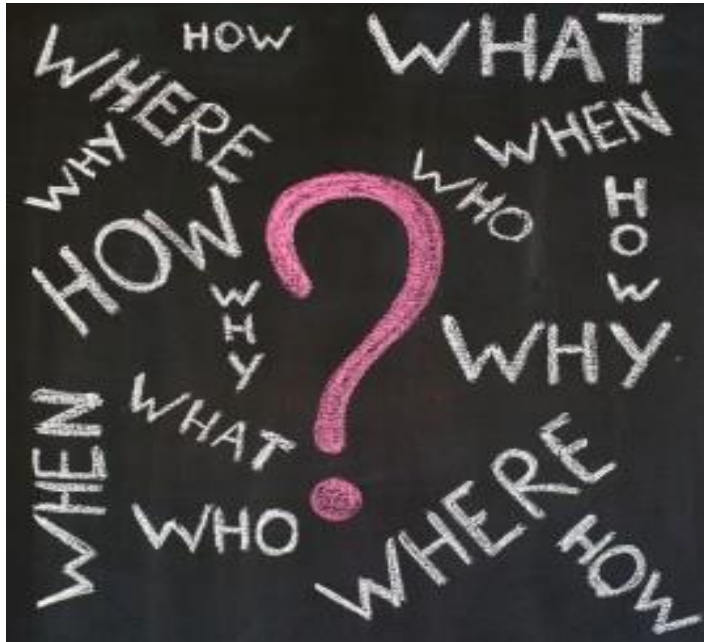
Collect and Analyze Data

For the example outlined, XYZ Residential has identified falls with serious injuries. The RCA team would want to analyze the incidents:

- By home
- By day of the week
- By time of day
- By location (bathroom, sidewalk)
- By diagnosis of individuals involved (medication changes, vision exams, fall risk assessments)
- By weather conditions
- Other factors



Gather More Facts



**Interview
Those
Involved**



Interviews Matter

Ask the person being interviewed to:

- Form a mental image of the event
- Remember and report every detail of the setting and those involved
- Describe what they remember (in their own words)

Don't:

- Interrupt the person's train of thought
- Be confrontational or threatening

Your role is to identify causes, not to lay blame.

What Should Have Happened?

Compare Actions to Policies and Procedures



What Do Experts Say?

Review Literature



Do I have the Root Cause?

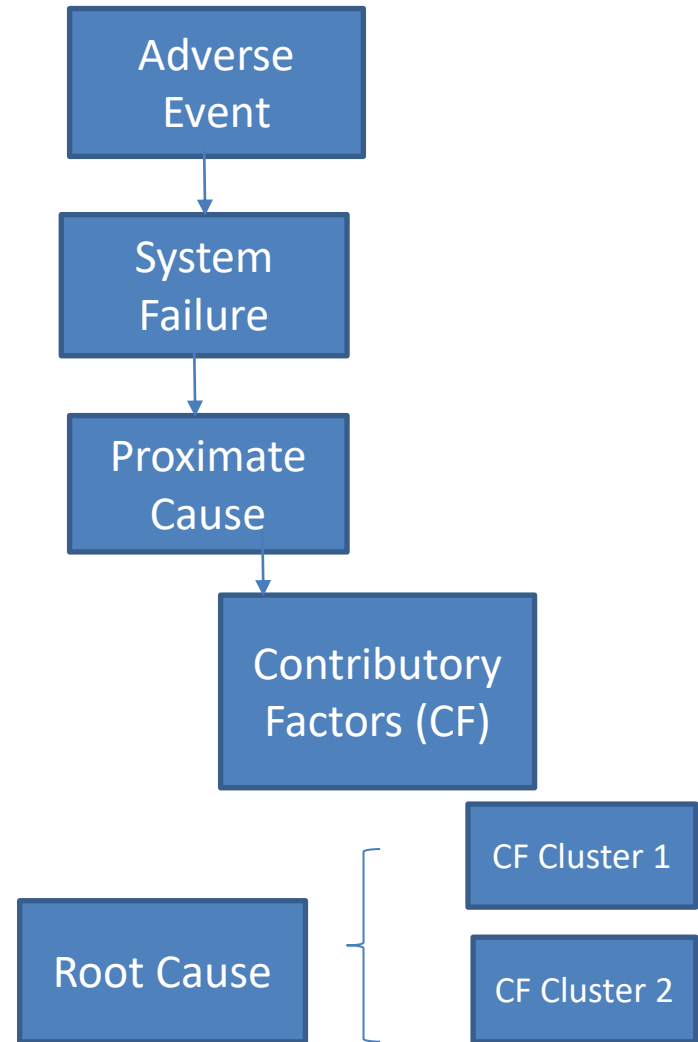
NO!

**Now you only have enough
information to state the
problem.**



Finding the Root Cause

WHY? WHY? WHY?

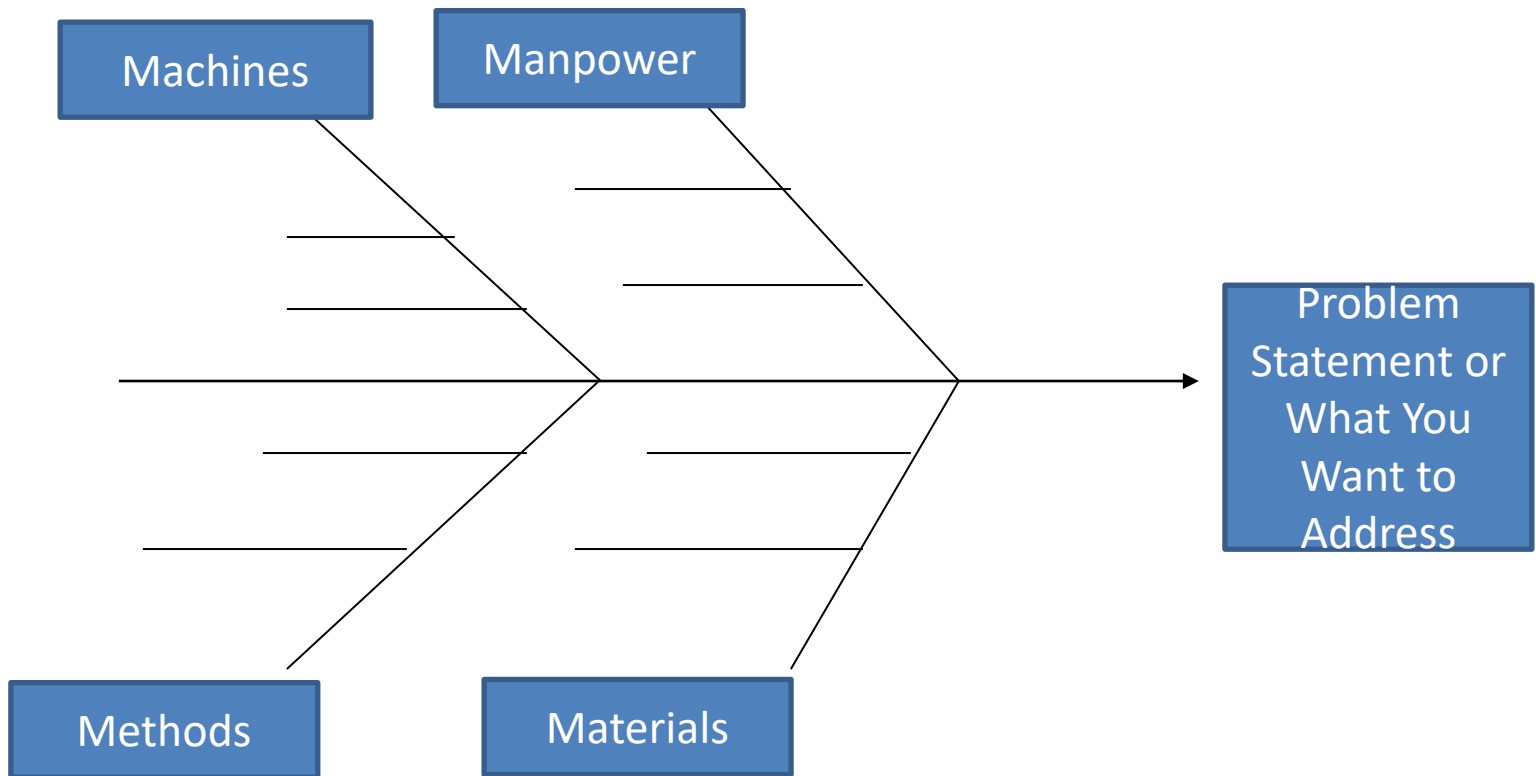


5 Whys Worksheet

Problem Statement	One sentence description of incident, injury or problem:
Why?	→
Why?	→
Why?	→
Why?	→
Why?	→
Root Cause(s)	To validate root causes, ask the following: If you removed this root cause, would this event or problem have been prevented?

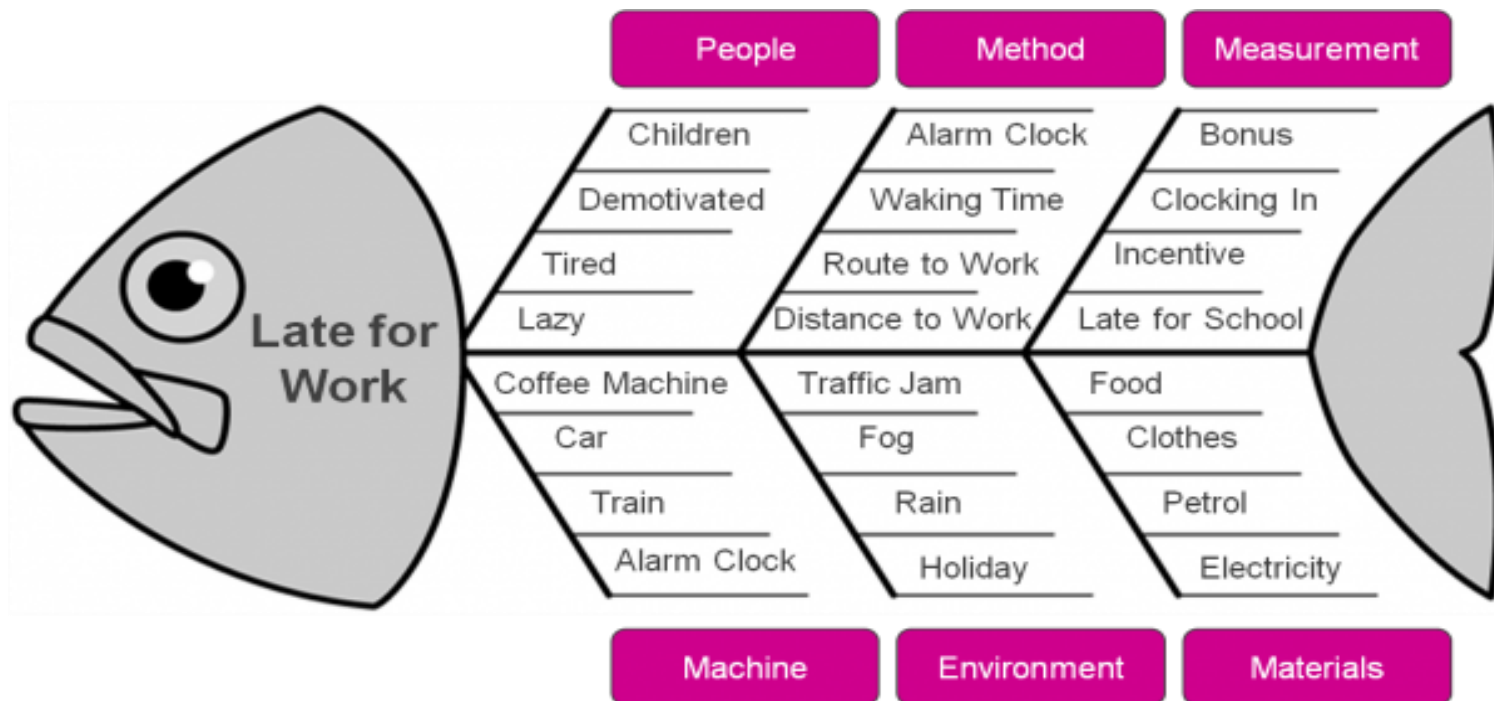


Fishbone Template



Fishbone Example

Example:



5 Whys Approach

XYZ Residential took the following steps:

- Appointed the RCA team
- Team reviewed data (falls by individual, time of day)
- Team evaluated equipment and location of falls
- Team interviewed various staff members
- Team members reviewed best practices (fall risk assessments)
- Team reviewed their policies and procedures

5 Whys Approach

Problem Statement – Falls resulting in serious injury are occurring in the bathroom

Why are more falls occurring in the bathroom?

The staff report that the floor is often slippery when individuals step out of the shower.

Why is the floor more slippery?

The staff observed that the floor looks dirty or has a residue.

Why is the floor dirty or appear with a residue?

The cleaning agent is leaving a residue that results in condensation or slippery conditions especially in warm weather.

Why did the home switch to this cleaning agent?

The home did not switch cleaning agents, but the manufacturer altered their product and the home was not aware. The product label said, “new and improved,” but no longer included chemicals that added grip and resistance to the linoleum flooring.

Root Cause

The team identified a potential root cause using “4 Whys” (sometimes it will take more).

Slippery Floors Caused by Cleaning Solution = Falls



5 Whys – Next Steps

Now they need to **act** by recommending solutions to mitigate future incidents (falls in the bathroom):

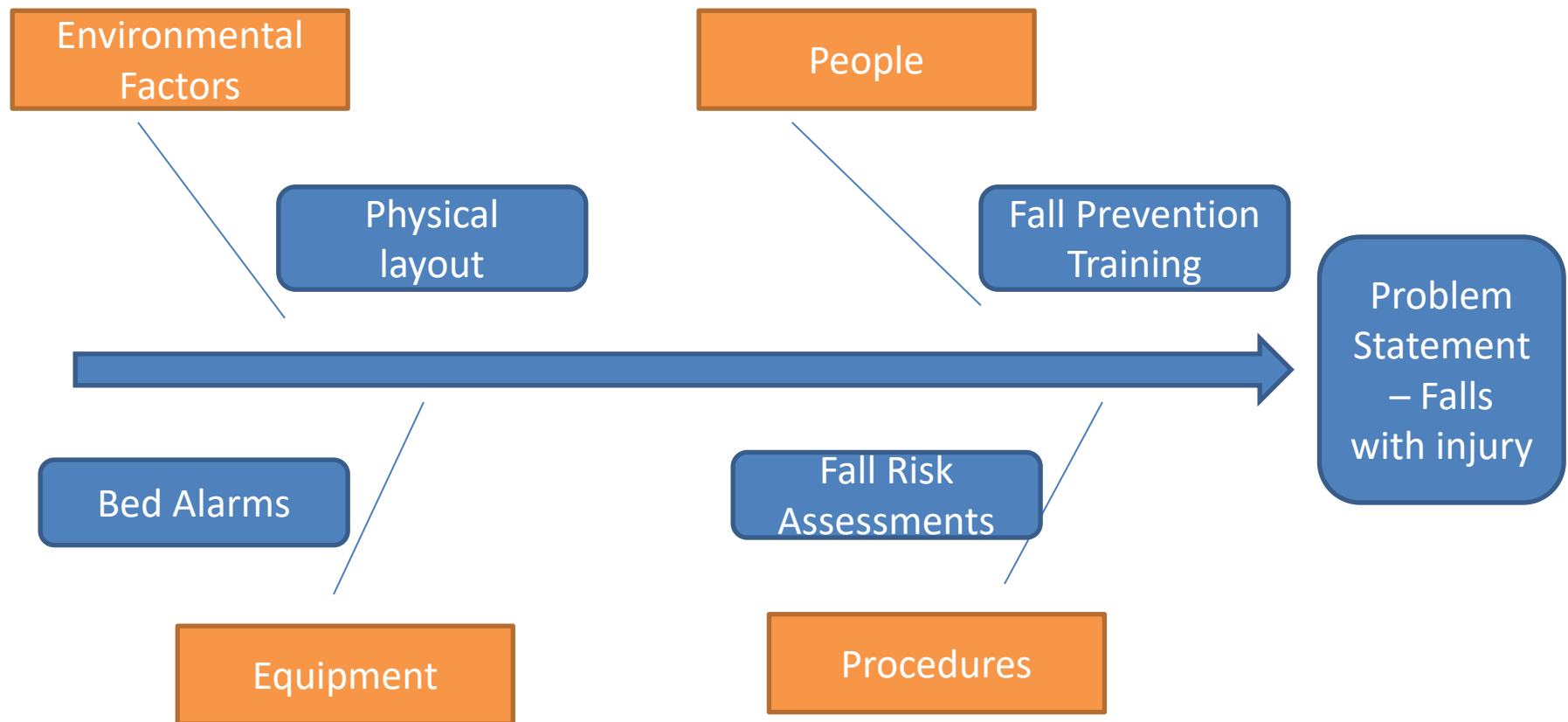
1. Identify a new cleaning product that is “slip resistant”
2. Research anti-slip mats or other bathroom floor solutions to avoid slips, trips and falls
3. Follow the provider’s own processes (PDSA) to determine if they addressed the problem

Perhaps there were more root causes?

Does replacing the cleaning product mitigate harm?

Example - Fishbone Diagram

Same example using a fishbone diagram



Root Cause

The RCA team might determine:

- Majority of falls occurred due to environmental issues (visibility in bathrooms at night); or
- Medication changes were causing dizziness; or
- Fall protocols were not being updated and/or shared with employees.

One or Many Root Causes



Root Cause Analysis - Solutions

Developing an Action Plan:

- **Root cause/contributing factor statement**
- **Action**
- **Outcome measure**
- **Responsible person**
- **Management concurrence**

Quality Improvement Plan

**Caution - Improvement requires
change, but not every change
is an improvement.**



Organizations should always monitor to determine if the recommended actions resulted in mitigating reoccurrence and if the improvement is sustained.

Solutions to Mitigate its Reoccurrence

Solutions ideally focus on systems rather than individual factors

- **Stronger actions**

- Environmental changes – changing equipment, physical plant
- Simplify processes – removing unnecessary steps
- Engineering controls – equipment can only be connected in the correct way; bar coding for medication administration

Quality Improvement/Risk Management



Resources

www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/FiveWhys.pdf

www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/FishboneRevised.pdf

<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/ProcessToolFramework.pdf>