Root Cause Analysis Training

On Demand

Part 3 of 3: Facilitation of the Fishbone Diagram

Telligen QI Connect™
Partnering to improve health outcomes through relationships and data
QIN–QIO
Quality Innovation Network - Quality Improvement Organizations
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

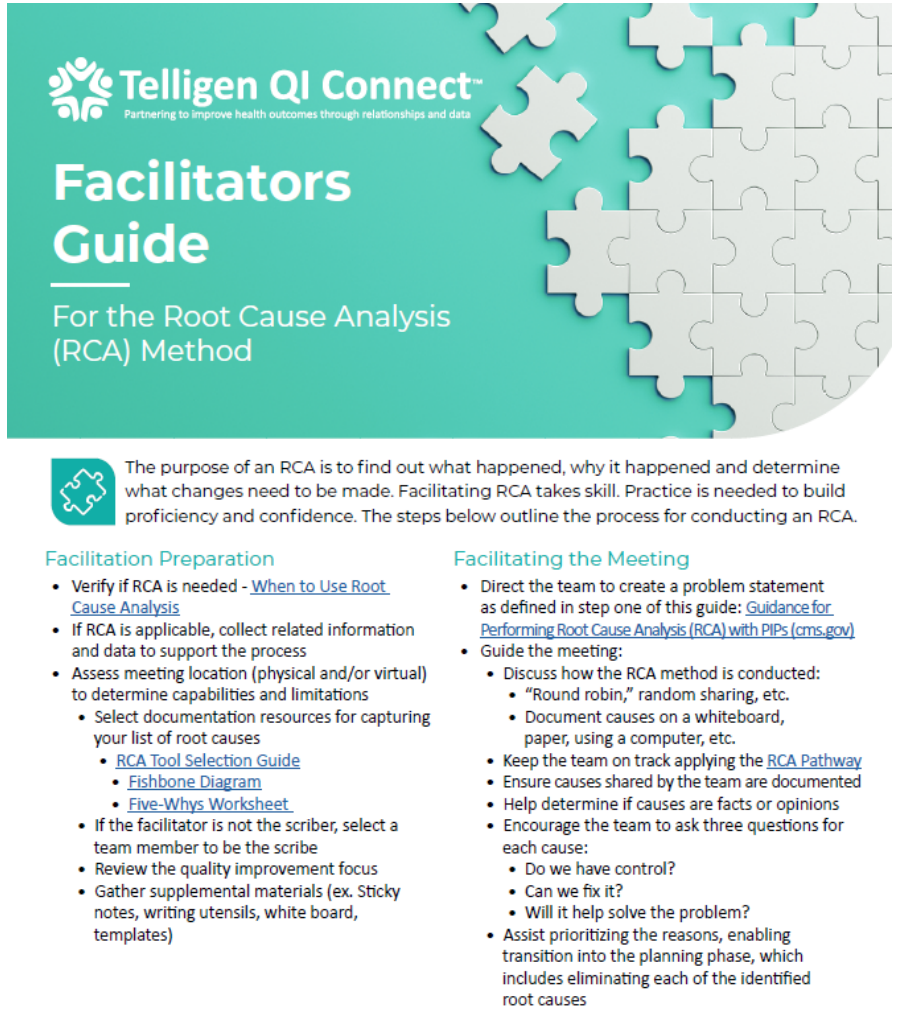
Part 3: Root Cause Analysis (RCA) Learning Objectives

- Define the Fishbone Diagram method
- Identify when to use the Fishbone Diagram in RCA
- Demonstrate a Fishbone RCA

If you missed parts 1 or 2 of the RCA training, check it out on demand!

Facilitators Guide to Root Cause Analysis

- Guides the RCA team meeting
- Keeps everyone on track
- Ensures key elements are incorporated during the RCA process



Telligen QI Connect™
Partnering to improve health outcomes through relationships and data

Facilitators Guide

For the Root Cause Analysis (RCA) Method

The purpose of an RCA is to find out what happened, why it happened and determine what changes need to be made. Facilitating RCA takes skill. Practice is needed to build proficiency and confidence. The steps below outline the process for conducting an RCA.

Facilitation Preparation

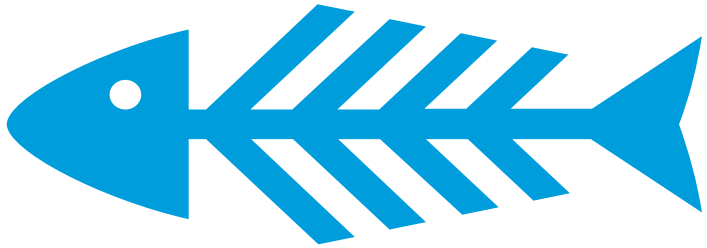
- Verify if RCA is needed - When to Use Root Cause Analysis
- If RCA is applicable, collect related information and data to support the process
- Assess meeting location (physical and/or virtual) to determine capabilities and limitations
  - Select documentation resources for capturing your list of root causes
    - RCA Tool Selection Guide
      - Fishbone Diagram
      - Five-Whys Worksheet
  - If the facilitator is not the scriber, select a team member to be the scribe
  - Review the quality improvement focus
  - Gather supplemental materials (ex. Sticky notes, writing utensils, white board, templates)

Facilitating the Meeting

- Direct the team to create a problem statement as defined in step one of this guide: Guidance for Performing Root Cause Analysis (RCA) with PIPs (cms.gov)
- Guide the meeting:
  - Discuss how the RCA method is conducted:
    - "Round robin," random sharing, etc.
    - Document causes on a whiteboard, paper, using a computer, etc.
  - Keep the team on track applying the RCA Pathway
  - Ensure causes shared by the team are documented
  - Help determine if causes are facts or opinions
  - Encourage the team to ask three questions for each cause:
    - Do we have control?
    - Can we fix it?
    - Will it help solve the problem?
  - Assist prioritizing the reasons, enabling transition into the planning phase, which includes eliminating each of the identified root causes

https://www.telligenqiconnect.com/resource/facilitators-guide-for-the-root-cause-analysis-rca-method/

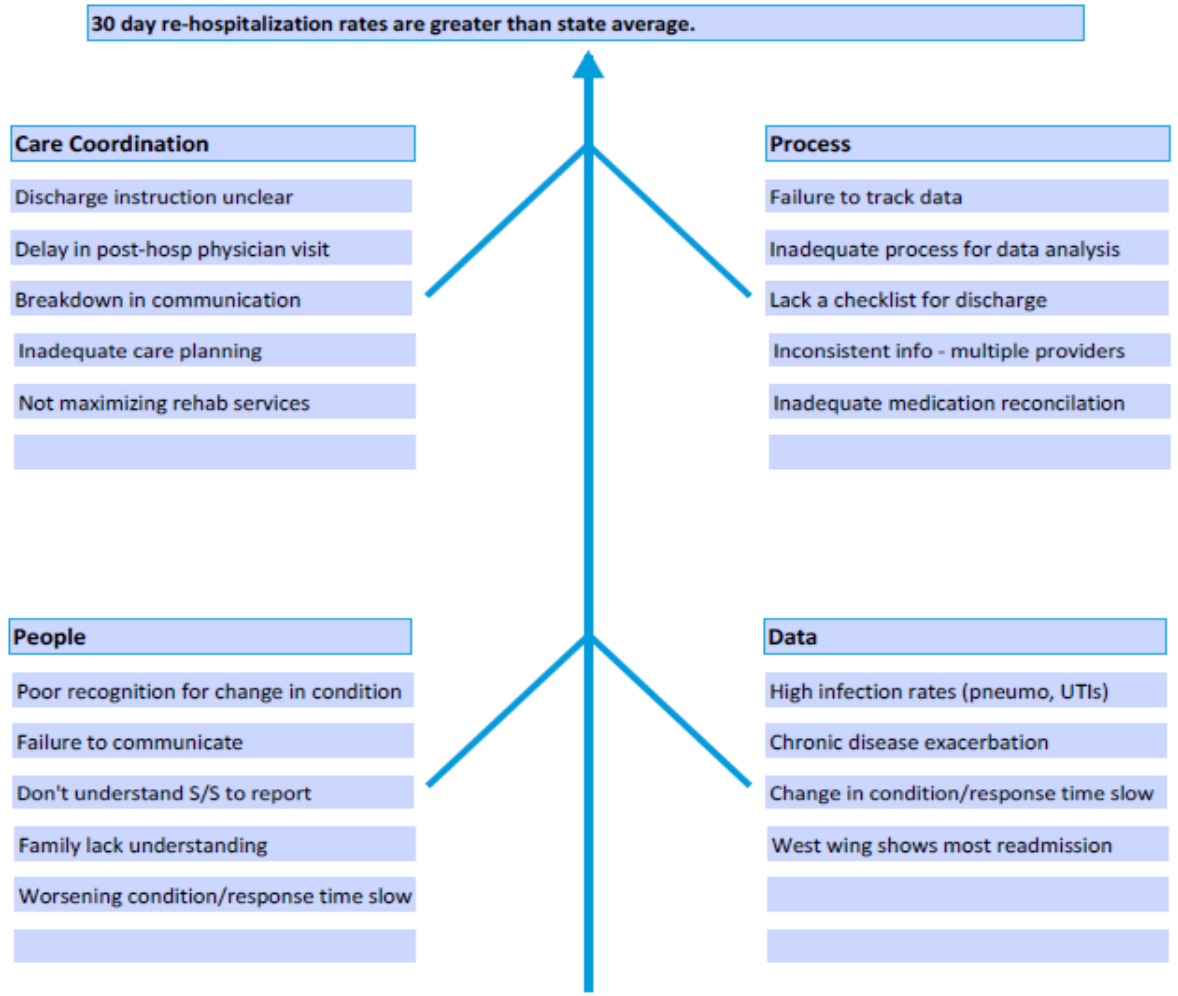
What is the Fishbone Diagram?



- A fishbone tool helps identify possible causes of a problem
- Organizes the causes into useful categories
- Brainstorming tool to generate ideas and share insights
- Addresses major or likely to reoccur problems

https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/fishbonerevised.pdf

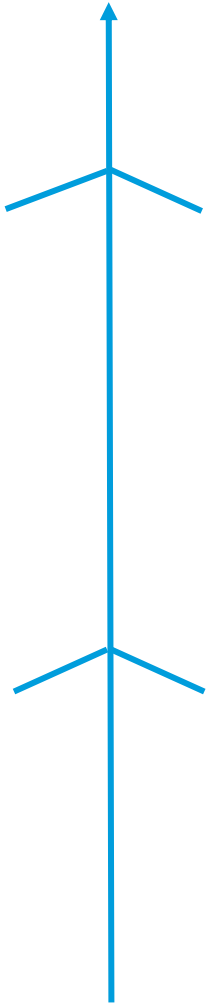
Fishbone Worksheet Example



https://www.telligenqiconnect.com/resource/fishbone-diagram-worksheet/

Fishbone Root Cause Analysis Exercise

Problem: 30-day rehospitalizations are greater than the state average



CARE COORDINATION

- Discharge instructions unclear
- Patient did not have a follow up appointment after discharge
- Nurse to nurse report not received at discharge
- No support services set up after discharge
- Discharge too soon

PEOPLE

- Poor recognition for change in condition
- Families demand patients go to the hospital
- Health literacy barriers – not understand how were explaining it

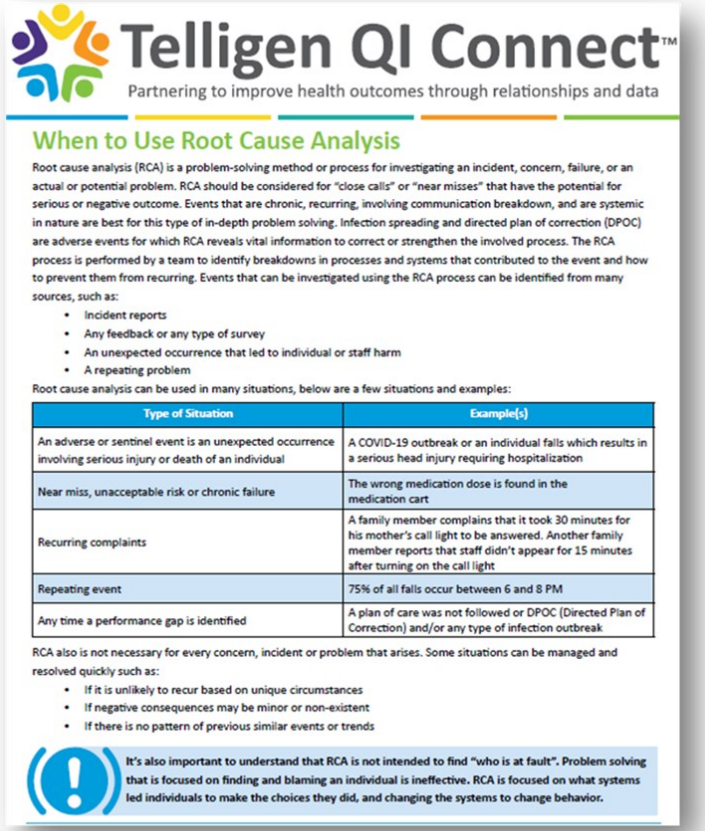
PROCESS

- Inadequate medication reconciliation
- Nurse to nurse report not received at discharge
- Medications not filled timely
- Delay with initiating therapy services
- Skin assessment was skipped on admission

DATA

- High infection rates (pneumonia, UTIs)
- Falls with injury
- Exacerbation of COPD/COVID – didn't see the signs for change in condition

Root Cause Analysis Tools



Telligen QI Connect™
Partnering to improve health outcomes through relationships and data

When to Use Root Cause Analysis

Root cause analysis (RCA) is a problem-solving method or process for investigating an incident, concern, failure, or an actual or potential problem. RCA should be considered for "close calls" or "near misses" that have the potential for serious or negative outcome. Events that are chronic, recurring, involving communication breakdown, and are systemic in nature are best for this type of in-depth problem solving. Infection spreading and directed plan of correction (DPOC) are adverse events for which RCA reveals vital information to correct or strengthen the involved process. The RCA process is performed by a team to identify breakdowns in processes and systems that contributed to the event and how to prevent them from recurring. Events that can be investigated using the RCA process can be identified from many sources, such as:

- Incident reports
- Any feedback or any type of survey
- An unexpected occurrence that led to individual or staff harm
- A repeating problem

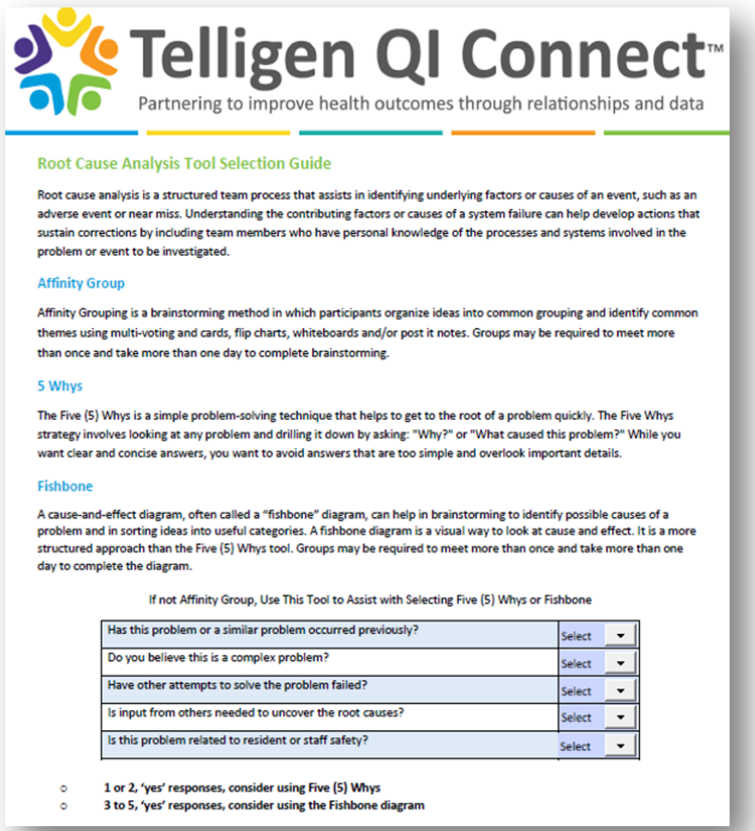
Root cause analysis can be used in many situations, below are a few situations and examples:

Type of Situation	Example(s)
An adverse or sentinel event is an unexpected occurrence involving serious injury or death of an individual	A COVID-19 outbreak or an individual falls which results in a serious head injury requiring hospitalization
Near miss, unacceptable risk or chronic failure	The wrong medication dose is found in the medication cart
Recurring complaints	A family member complains that it took 30 minutes for his mother's call light to be answered. Another family member reports that staff didn't appear for 15 minutes after turning on the call light
Repeating event	75% of all falls occur between 6 and 8 PM
Any time a performance gap is identified	A plan of care was not followed or DPOC (Directed Plan of Correction) and/or any type of infection outbreak

RCA also is not necessary for every concern, incident or problem that arises. Some situations can be managed and resolved quickly such as:

- If it is unlikely to recur based on unique circumstances
- If negative consequences may be minor or non-existent
- If there is no pattern of previous similar events or trends

It's also important to understand that RCA is not intended to find "who is at fault". Problem solving that is focused on finding and blaming an individual is ineffective. RCA is focused on what systems led individuals to make the choices they did, and changing the systems to change behavior.



Telligen QI Connect™
Partnering to improve health outcomes through relationships and data

Root Cause Analysis Tool Selection Guide

Root cause analysis is a structured team process that assists in identifying underlying factors or causes of an event, such as an adverse event or near miss. Understanding the contributing factors or causes of a system failure can help develop actions that sustain corrections by including team members who have personal knowledge of the processes and systems involved in the problem or event to be investigated.

Affinity Group

Affinity Grouping is a brainstorming method in which participants organize ideas into common grouping and identify common themes using multi-voting and cards, flip charts, whiteboards and/or post it notes. Groups may be required to meet more than once and take more than one day to complete brainstorming.

5 Whys

The Five (5) Whys is a simple problem-solving technique that helps to get to the root of a problem quickly. The Five Whys strategy involves looking at any problem and drilling it down by asking: "Why?" or "What caused this problem?" While you want clear and concise answers, you want to avoid answers that are too simple and overlook important details.

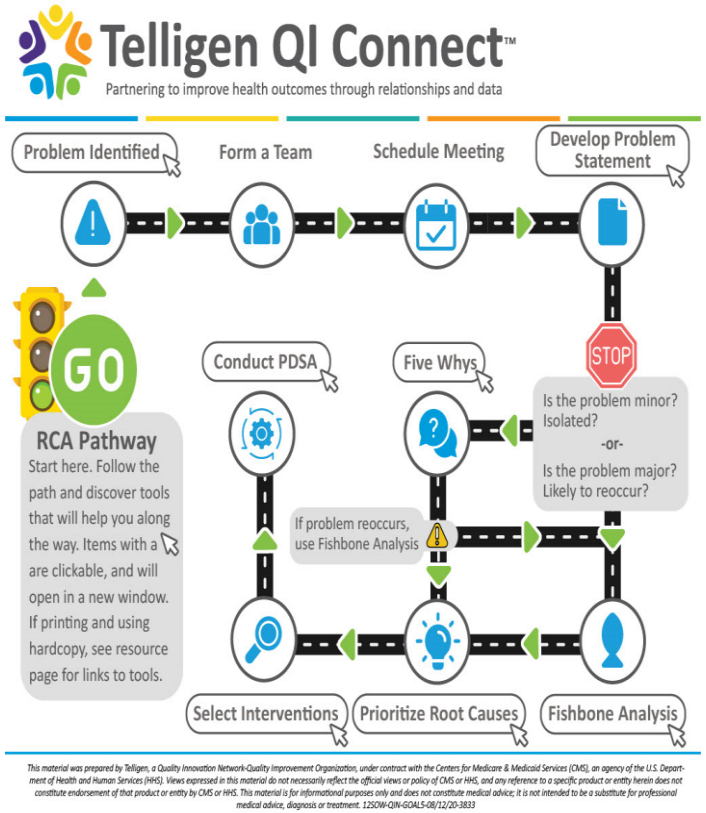
Fishbone

A cause-and-effect diagram, often called a "fishbone" diagram, can help in brainstorming to identify possible causes of a problem and in sorting ideas into useful categories. A fishbone diagram is a visual way to look at cause and effect. It is a more structured approach than the Five (5) Whys tool. Groups may be required to meet more than once and take more than one day to complete the diagram.

If not Affinity Group, Use This Tool to Assist with Selecting Five (5) Whys or Fishbone

Has this problem or a similar problem occurred previously?	Select
Do you believe this is a complex problem?	Select
Have other attempts to solve the problem failed?	Select
Is input from others needed to uncover the root causes?	Select
Is this problem related to resident or staff safety?	Select

- **1 or 2, 'yes' responses, consider using Five (5) Whys**
- **3 to 5, 'yes' responses, consider using the Fishbone diagram**



Team Actions for Improvement Process

Leadership Team

- Identify the problem
  Medication reductions have not occurred in six months
- Review the data
- Create a SMART goal
- Build a Team charter
- Deploy an improvement team
- Support the improvement team

Improvement Team

- Decide RCA type and tools
- Identify contributing factors and root causes for the problem
- Select changes/interventions to eliminate each root cause
- Run Plan-Do-Study-Act (PDSA) cycles
- Create sustainability plan

https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/guidanceforrca.pdf

Resources

- Quality Improvement Process Steps and Tools https://www.telligenqiconnect.com/resource/quality-improvement-process-steps-and-tools/
- Telligen's Resources and Tools: https://www.telligenqiconnect.com/resources/
- Root Cause Analysis Framework: rca_framework_101017.pdf (jointcommission.org)
- QAPI Process Framework Tool: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/ProcessToolFramework.pdf
- Institute for Healthcare Improvement: http://www.ihi.org/

- Change Packages for Improvement Strategies
  - NNHQCC Change Package https://www.telligenqiconnect.com/resource/national-nursing-home-quality-care-collaborative-change-package/
  - All Cause Harm Prevention in Nursing Homes https://www.telligenqiconnect.com/resource/all-cause-harm-prevention-in-nursing-homes-change-package/

Continue the Knowledge Growth

Watch Root Cause Analysis Trainings On-Demand:

- Part 1: Preparing for Root Cause Analysis
- Part 2: Facilitation of the Five Whys

Telligen QI Connect™ events web page: **https://www.telligenqiconnect.com/calendar/**

Contact Us

- General Inquiries | QIConnect@telligen.com
- www.telligenqiconnect.com

Telligen QI Connect™
Partnering to improve health outcomes through relationships and data