Long-term Care

Performance Improvement Project Guide

What is QAPI?

Quality Assurance Performance Improvement (QAPI) programs are formal, comprehensive, data-driven quality improvement programs that focus on systems of care, outcomes of care and resident quality of life. A QAPI program proactively designs quality improvement into each of a facility's programs at the outset, monitors data (performance indicators, quality measures and reports of staff/residents/families), determines root causes of problems, designs and uses Performance Improvement Projects (PIPs) to promote continuous improvement, develops and implements plans that effect system improvement, and monitors the success of this systematic approach to improving quality.*

This guide is designed to help you work through a PIP from beginning to end; providing you with the tools to start you on your improvement journey.

*For further information on QAPI visit:
www.cms.gov/Medicare/Provider-Enrollment-andCertification/QAPI/qapiresources.html
www.qioprogram.org/
www.nhqualitycampaign.org
www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/Downloads/ProcessToolFramework.pdf

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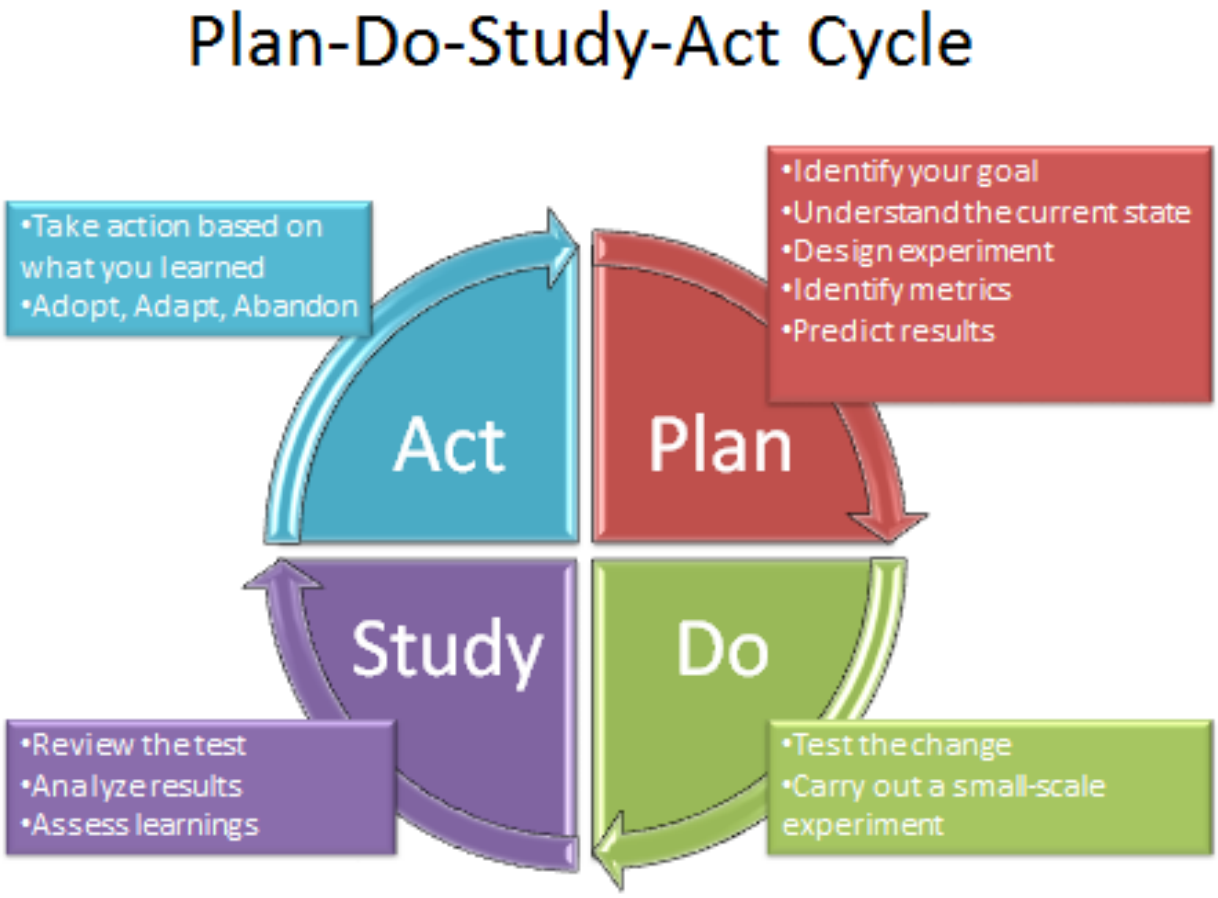
Quality Improvement Strategy:
Problem Solving Using the Scientific Method



Quality Improvement Report using the Scientific Method

Summary Page: Once you have worked through each section of the workbook, summarize your PIP here.

PLAN

Briefly state the problem, challenge, or opportunity for improvement
(What is it that you want to improve? What baseline information is necessary to fully understand the issue?)

(Refer to page 9)

Current Condition
How does the current process work?
What are the major issues? What does the data show?
Making it visual –Draw the steps of the process, graphical representations of the issue

(Refer to pages 11-16)

Root Cause Analysis
Identify the Reason for the Problem (Root Cause): Ask Why? Why? Why? Why? Why is this problem occurring? (Refer to page 17)

Cause	Answer
1. What causes the problem?	
2. What contributes to that cause?	
3. What deeper issues contribute to that cause?	
4. What deeper issues contribute to that cause?	
5. What deeper issues contribute to that cause?	

Target Condition
What change are you going to try?
Create a graphical display of the proposed process as it will look
What do you expect to see as a result of this change?

(Refer to pages 20-22)

Implementation Plan

DO – STUDY – ACT

Identify tasks, responsible parties who are responsible, when it is due, how often will progress be measured?
(Refer to page 25)

Action	By Whom	Target date	Progress / Status	Outcomes / Barriers

Measurements

Select metrics to be collected and tracked in order to measure progress toward your goal. (Refer to page 23)

Follow-up Actions

Create a plan for following up on the process in order to ensure the gains have been sustained.
Reflect on the project and create a plan to share what you have learned with others in the organization.
What are next steps? **Adopt** ☐ **Adapt** **Abandon**

My Improvement Opportunity

Describe an aspect of your work that you plan to improve. It should be a problem you are familiar with and should fall within your scope of influence. In other words, you should have the ability to implement changes to your work using the principles and tools learned during the University or in this workbook.

Please answer in detail the following questions:

1. What is the problem?

_____

_____

_____

_____

2. What are five factors that contribute to this problem?

1._____

2._____

3._____

4._____

5._____

3. Pick one of the five factors above as a starting point for improvement.
   Describe why you think this is the best place to begin.

_____

_____

_____

Where do we find problems in Long-Term Care?

In thinking about your problem, what types of waste can you identify?

Types of Waste: DOWNTIME

Waste	Definition	Examples	Examples of Waste in your Current Condition
Defects/ Rework	Doing something again because of a defect (rework / repair)	• Medication errors • Records / reports misfiled • Delivering wrong tray to a resident • Incorrect charges / billing • Retaking a weight due to un-calibrated scale	
Over Production	Generating excess parts, information, etc. too soon or too fast in the process	• Monthly medication carts • Multiple forms with the same information • Copies of reports sent automatically	
Waiting	Idle time created when people, information, equipment or materials are not at hand	***Residents waiting for…*** • Call lights to be answered • Transportation • Treatment • MD, Nurse, CNA ***Staff waiting for…*** • Other staff at meetings, care conferences	
Not Clear/ Confusion	Lack of information or incorrect information that hinders the ability to complete work	• Clarification of orders • Regulations • Redundant information • Missing medication	

Transport/ Motion	Movement of equipment, supplies, paper, people which does not add value	• Searching for staff when help is needed with a resident
		• Searching for charts, supplies or equipment
		  ○ Transporting a resident to therapy when therapy is not ready
		  ○ Carrying more supplies than needed to a community	

Inventory	More materials on hand than are required to do the work	• Overstocked supplies on units (linens, medications) • Overstocked supplies in stock rooms • Outdated forms	
Minds/ Unused Employee Creativity	Loss of time, ideas, skills and learning opportunities by failing to engage or listen to employees	• Employee skills not used to their full potential • Employee suggestions for improvement not taken seriously • Frontline staff not part of redesign of work	
Excess Processing	Duplicating efforts	• Asking for the same information multiple times • Regulatory paperwork	

Getting Started:

Picking Your Team: **The right people with the right skills*

Executive Leadership
Example: NHA, DON

Characteristics
- "Clout" to implement new approaches to care
- Authority to allocate time and resources necessary for change

Role
- Supports the change team
- Leads the spread of specific changes

Name_____

Title_____

Stakeholders
Example: Educator, Department Director, ADON

Characteristics
- Vested interest
- Concern

Role
- Engage staff
- Support the team

Name_____

Title_____

Quality Champion
Example: Individual leading the team

Characteristics
- Knowledge expert
- Able to make decisions

Role
- Provides mentorship
- Leads by doing

Name_____

Title_____

Team
Example: Dedicated Staff

Chacteristics
- Understands the process
- Does the work

Role
- Implements the PDSA
- Driving force for the team

Name_____

Title_____

Other Change Team Members: **Name - Staff Position** ***(ADON, Nurse Supervisor, RNAC, Direct Care Staff)***	

*Keep in mind: You may change team members as the project progresses.

Identifying a Problem: *How do we know there is a problem and why does it matter?*

Specifically state the problem, challenge, or opportunity for improvement and identify the involved process(es).

Problem

- What is the problem or need?
- How do we know this is a problem?
- Why is it important to solve?

Scope

- Who is experiencing the problem?
- Where is the problem occuring?
- When is the problem happening?

Team

- Who owns the problem? (Executive Sponsor)
- Who has an interest/concern in the problem? (Stakeholders)
- Who can make decisions about the problem? (Champion)
- Who is involved in the problem at the front-line? (Team)

My Improvement Opportunity: Using the problem you identified on the previous page, please answer in detail the following questions.

Problem

- What is the problem or need?
- How do we know this is a problem?
- Why is it important to solve?

Scope

- Who is experiencing the problem?
- Where is the problem occurring?
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Understanding the Current Condition

Data: *What data do you have to support the problem?*

Process Measure

- How do we know a process is being followed
- Assess the steps or activities carried out in order to deliver care or services

Example:

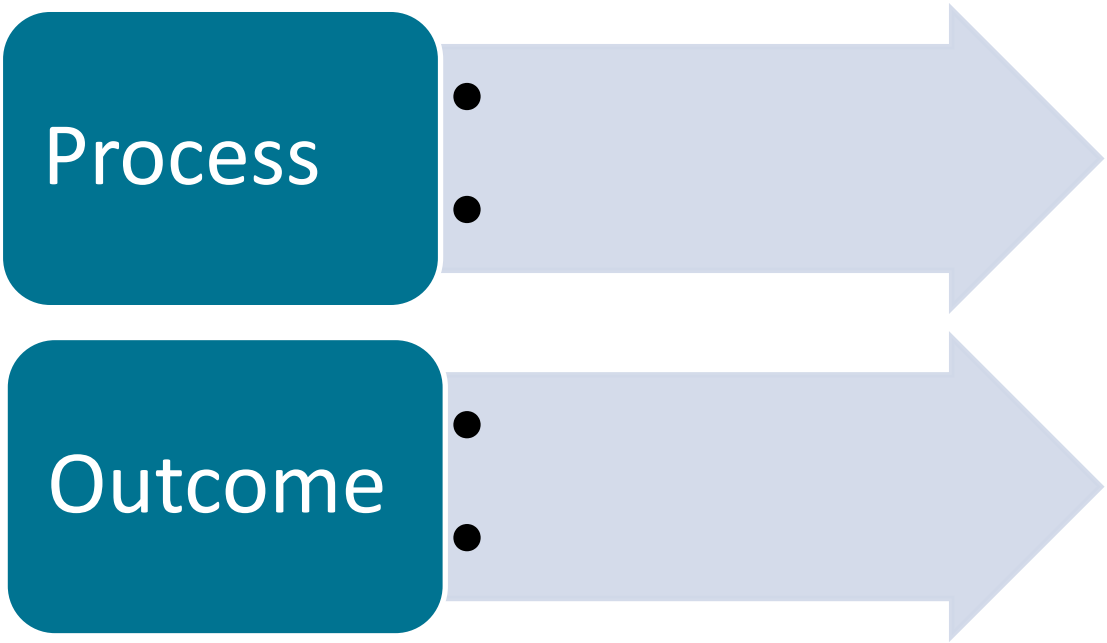
The percentage of newly admitted residents receiving skin assessments at time of admission

Outcome Measure

- Are we achieving the intended outcome of a process or system of care or services which can identify different or more complex underlying causes

Example:

The rate of incidence of nursing home acquired pressure ulcers



Go and See: *Direct workflow observation*

When you complete an observation, you want to observe:

- The steps in the process for completing the activity
- The roles involved in completing process activities
- What is working well
- Opportunities for improvement
- Types of waste – refer to page 7

Where will you observe:

When will you observe:

Observation Preparation

- Think about what you want to observe
- Prepare your equipment
  - Observation Sheets/Clipboard
  - Pencil
  - Stopwatch/Digital Watch

Go and See

- Establish a comfortable staff rapport
  - Introduce yourself
  - Explain to staff you are watching a process and they should go about routine
- Assess the current condition of the issue
- Record the observation by time and activity as it is happening (write down everything you see and hear
- Limit questions during the observation; ask for clarification at the end if needed

Analyze Observation Data

- Define the process being observed—the major "buckets" of activity
- Identify strengths of the existing process—what is going well
- Identify opportunities for improvement and waste in the process

Observation Form

Date: _____ Site: _____

TIME (Minute by Minute)	LOCATION	ACTIVITY	OTHER

Page _____ of _____

Process Mapping: Activity of making the process visual to graphically represent a process or pathway

Why?

- Explore a process across departments
- Identify opportunities to reduce waste
- Recognize problems or breakdowns in a process
- Guide you closer to the ideal

How?

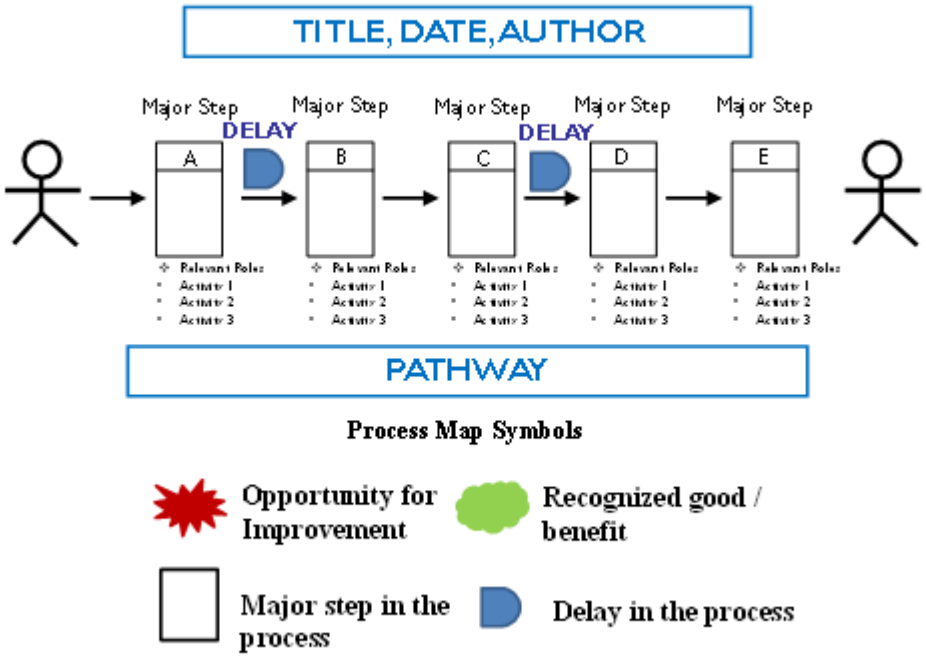
- Analyze observations
- Interview and talk to groups of staff – those that do the work
- Validate the process or pathway

Benefits:

- Unites a team in improvement
- Explores work across departments
- Generates a deeper understanding of work
- Identifies opportunities for improvement

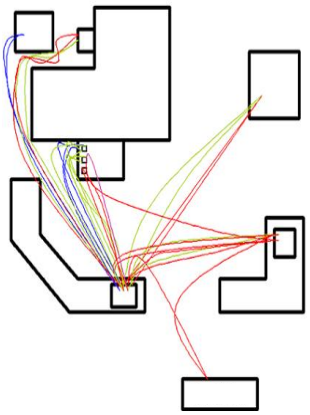
EXAMPLES:

Process Map



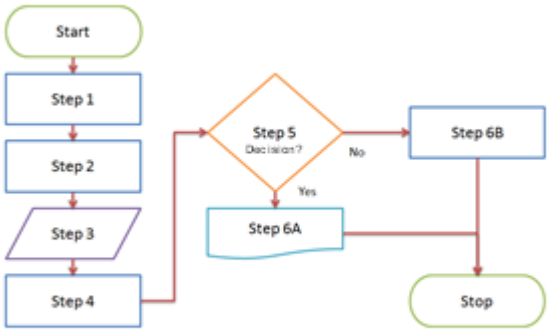
SPAGHETTI DIAGRAM

Measures motion and distance



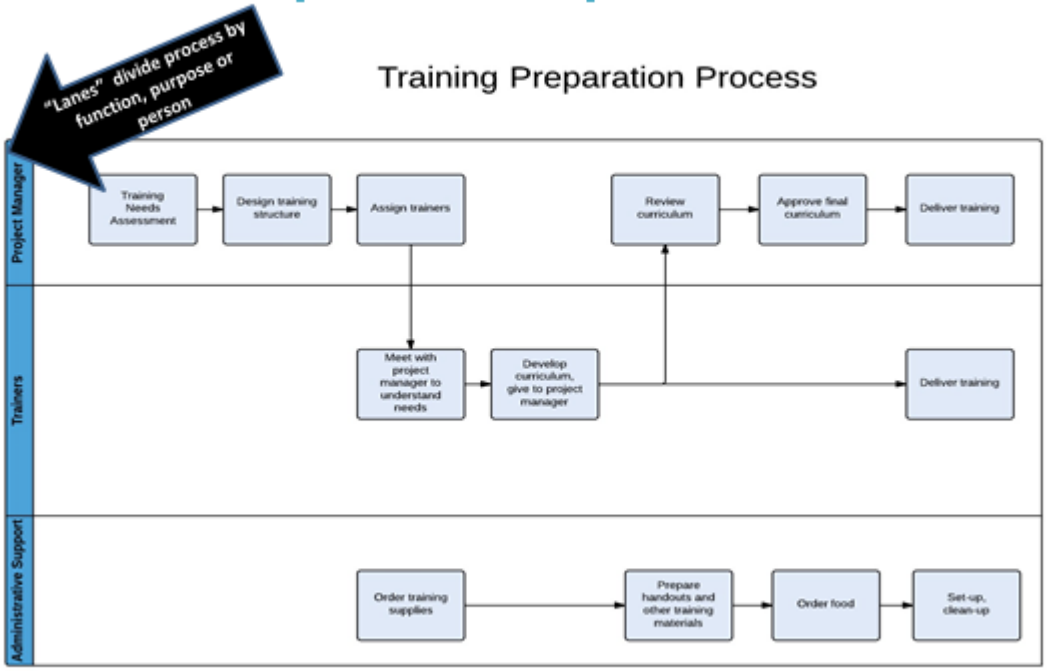
FLOW DIAGRAM

Demonstrates decisions in a process



SWIMLANE DIAGRAM

Used when processes parallel each other



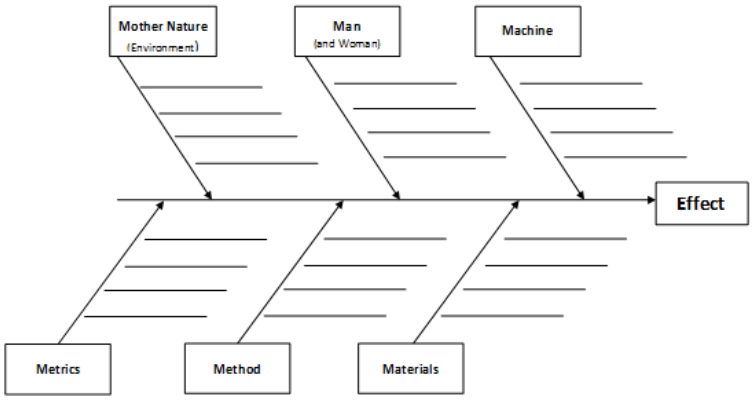
Instructions:

After the team has analyzed all observations, work together to create a process map on this page (you could also use large flip chart paper). The team will decide which process map to create to best visually represent the process or pathway they observed.

- Value stream map
- Flow chart
- Swim lane diagram
- Spaghetti diagram

Root Cause Analysis: *Identifying the contributing factors to the problem*

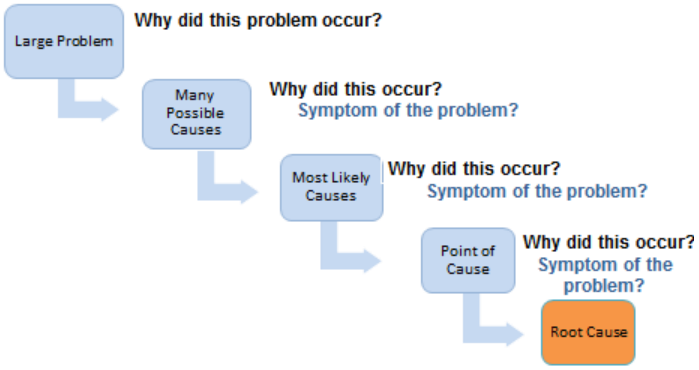
Fish Bone Diagram



An opportunity to brainstorm the causes of the problem by grouping them in common categories.

- **Man/Woman** – people in the process
- **Method** – way in which the process is completed
- **Material** – supplies used in the process
- **Machine** – equipment used in the process
- **Mother Nature** – environment in which the process occurs
- **Metrics** – data which is important

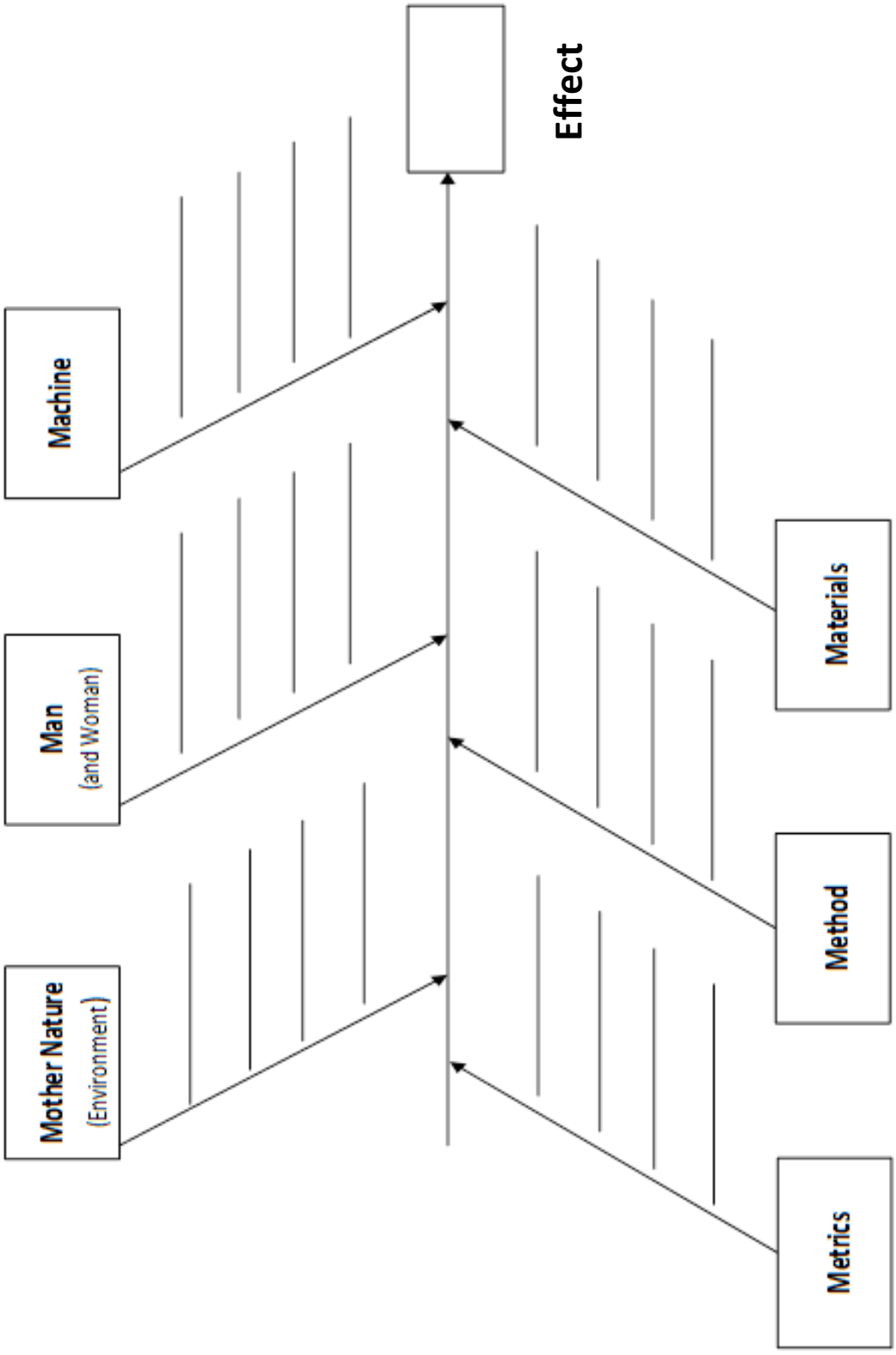
Root Cause Analysis: 5 Why's



Example:

Problem: Residents are complaining about cold breakfast trays
Why? The food is sitting on the dining cart waiting to be served
Why? The residents are not in the dining room
Why? The residents are not ready to come to the dining room for breakfast
Why? The residents have not completed their morning self-care
Why? There are not enough linens available for residents to complete self-care
Why? There is no standard process to restock linen

Using the problem your team observed and mapped, please complete a Root Cause Analysis (Fish Bone Diagram) of one of the opportunities (storm clouds) you identified.



Coursework:

Using the problem your team observed and mapped, please complete a Root Cause Analysis (5 Why's) of one of the opportunities (storm cloud) you identified.

Problem: _____

Why? _____

Why? _____

Why? _____

Why? _____

Why? _____

Why? _____

Root Cause _____

Designing the Target Condition

Rules of Work Design: How to Build in Quality

When designing your target condition, adhere to the following rules:

Rule 1: Activities (all activities of work in a process)

- Content (what the work is)
- Sequence (in what order should it occur)
- Timing (about how long should it take?)
- Location (where it will occur)
- Expected outcome (what result is clearly expected)

Rule 2: Connections between customer and supplier are direct (direct communication between two people…think of making a request)

- Direct (no middle person in the request)
- Yes/No answer (no "maybes")

Rule 3: Pathway: The steps in delivering the requested product or service

- Simple (involving as few steps and people as necessary)
- Pathways are predefined, simple, and direct, no forks or loops

Rule 4: **Improvement** is highly specified, in direct response to a problem, using the scientific method, under guidance of a teacher, completed at the place where work is done, and aiming toward the ideal

As a team, identify how any of the first 3 rules of work design are violated in the current condition of your improvement opportunity? How will applying each rule to the target condition make a positive impact?

Activities
Connections
Pathways

Spear, Steven, and Bowen, Kent H. "Decoding the DNA of the Toyota Production System," Harvard Business Review, 77 (1999): 97-106
Jimmerson, Cindy. "A3 Problem Solving for Healthcare", Healthcare Performance Press, (2007): 15

Designing the Target Condition

Countermeasures: *What change are we going to try?*

- Design the work to create a new and better reality
- How will you change the work?

Example: Color-coding supply closet (visual management)

Tools Available

- **Rules in Use**
  - **Standard Work**
- **Visual Management**
- **5 S**
- **Kanban**
- **Mistake Proofing**
- **Push vs Pull**

As a team, list your top two-three suggestions (countermeasures) for improving your identified problem.

Suggestion (Countermeasure) List

☐ _____

_____

☐ _____

_____

☐ _____

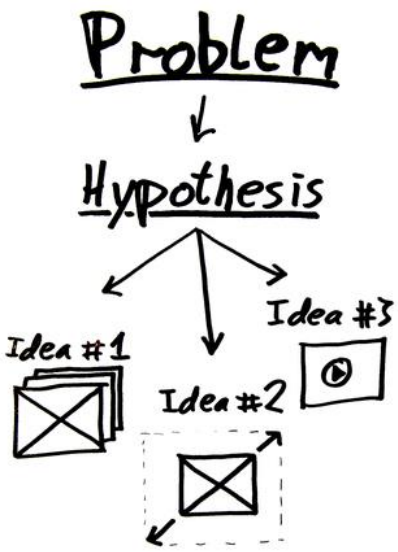
_____

Hypothesis: *What do we expect to happen as a result of this change?*

- Educated guess; the belief you want to test
- Prove or disprove – leads you to Adapt, Adopt or Abandon

Hypothesis should be:

- ✓ **Simple and clear**
- ✓ **Written as a statement**
- ✓ **Testable**
- ✓ **Observable**
- ✓ **Measurable**



Example: Color-coding supply closet will decrease time nurses spend looking for supplies.

What Will We Do?

Using the list above, pick one countermeasure the team would like to try to implement.

What change are we going to try?

_____

_____

_____

If we make this change, then what do we think will happen?

_____

_____

_____

Measure/Data Collection and Monitoring Plan:

- *What results did you get?*
- *What did you observe?*
- *What did you learn*

What are we measuring (measure/indicator)?	When are we measuring this (frequency)?	How do we measure this (where do we get our data)?	Who is responsible for tracking on this measure?	What is our performance goal or aim?	How will data findings be tracked and displayed?

Metrics:

Is it Being Done?

How will we know if our countermeasure (suggestion) has been implemented?

_____

_____

Is it Working?

How will we know if our countermeasure (suggestion) is working? What information could we collect to see if our change had an impact?

_____

_____

Act:

Reflect on your plan and the outcomes. After the countermeasure is implemented, return to observe the process and ask the following questions:

- Do the results reflect the changes made and outcomes intended based on your target condition?
- What did you conclude from this PDSA cycle? Has the problem been resolved? If not, are we closer to ideal?

Based on what you learned, you will either Adopt, Adapt, or Abandon:

Adopt*	Adapt	Abandon
• Communicate your findings to the organization • Standardize the improvement • Monitor process and outcome measures	• Communicate your findings to leadership • Identify modifications needed for the next PDSA cycle	• Re-group as a team • Focus on lessons learned • Initiatiate new PDSA cycle

*Reminder- periodically re-examine the process to learn where it can be further improved.

Planning toward the Future State: *Action Planning Tool – use throughout the improvement process*

Action Item *(What will happen)*	**By Whom** *(Team Members/Roles)*	**Target Date**	**Status** Not Started / In Progress / Behind Schedule / Needs Addressed / Completed	**Outcomes** *(Results/Barriers)*

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Notes:

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