Using Standard Work and Root Cause Analyses in Your Quality Improvement Work

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Objectives

- Provide overview of quality improvement
- Incorporating standard work for quality improvement
- Applying root cause analysis for problem solving

What Is Quality Improvement?

A **culture** of how we work and do business each day in which all employees, **from frontline staff to senior leadership**, are **empowered** to drive change toward quality and strategic goals.

Culture of quality is a mindset…

Everyone, everyday, closer to better

It is ***everyone's*** responsibility to promote and participate in a continuous improvement culture within their daily activities.

What Is Quality Improvement?

Applies a **systematic approach** to problem solving

- **Gradual improvements** in everyday processes to improve quality of services, reduce variations and redundancies, and increase customer AND employee satisfaction
- Deliver best-in-class service to members in the community

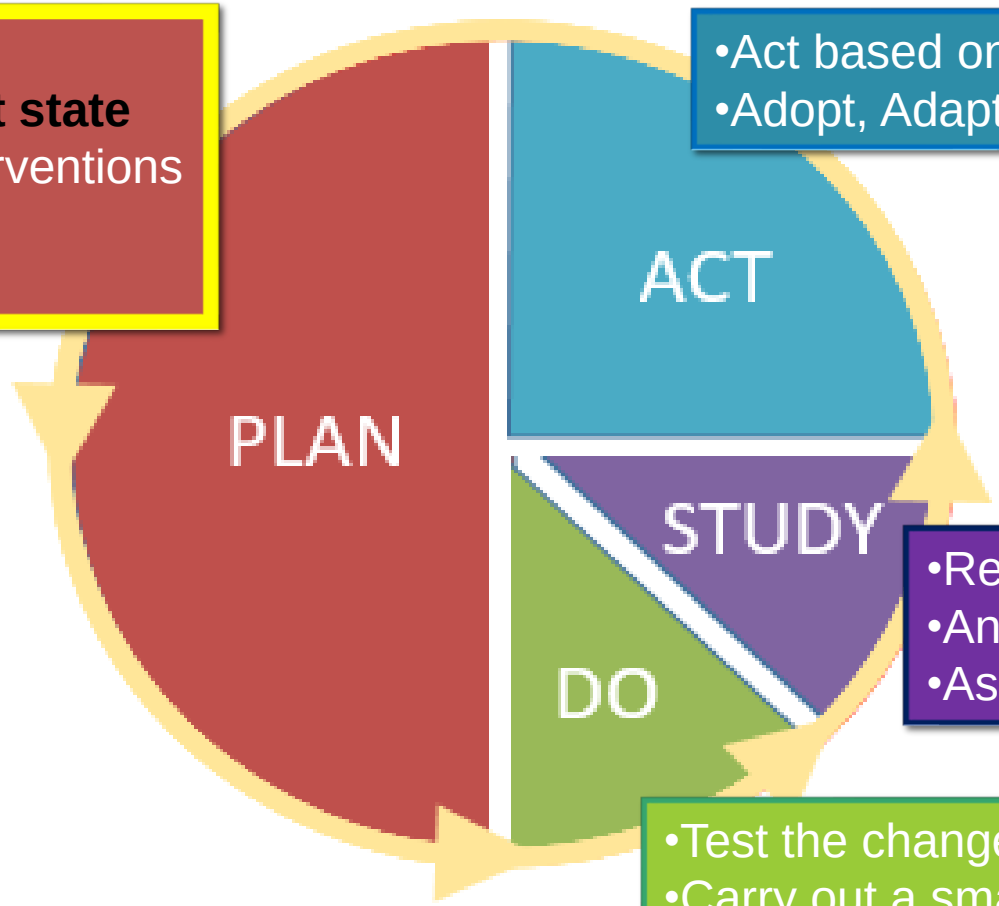
Poll Question #1:

What **quality improvement methodology or language** does your team use?

- Plan-Do-Study-Act (PDSA or PDCA)
- Lean/Toyota Production System (A3 thinking)
- Six sigma (belts, i.e. green belt)
- Other *(type in the chat)*

An approach to standardizing problem solving

- Identify your goal
- Understand the **current state**
- Design experiment/interventions
- Identify metrics
- Predict results



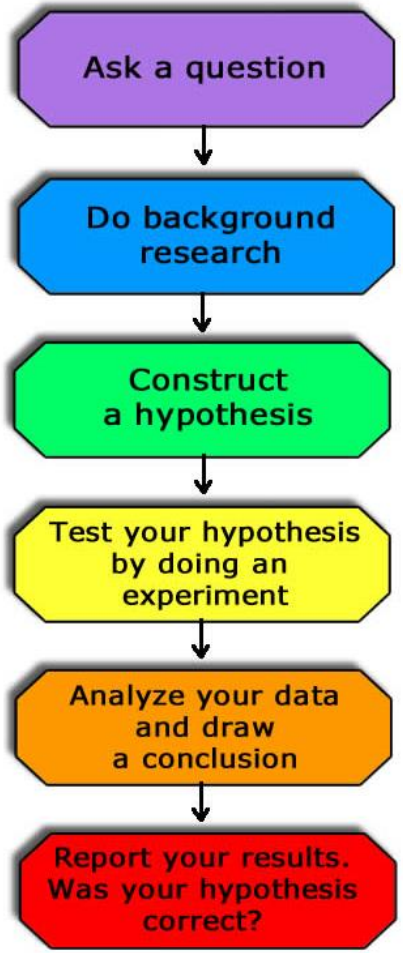
- Act based on what you learned
- Adopt, Adapt, Abandon

- Review the test
- Analyze results
- Assess learnings

- Test the change
- Carry out a small-scale experiment
- Collect data

PDSA is Rooted in the Scientific Method

- ✓Identify the problem ***logic***
- ✓Gather data (***objective*** observation)
  - Gain **consensus** among stakeholders
- ✓Root cause analysis ***process focused***
- ✓Establish a **hypothesis** ("X will happen if these countermeasures are implemented")
- ✓Conduct an **"experiment"** by implementing countermeasures
- ✓Verify the hypothesis (**measurement**)



Where do you start your QI efforts?

Ask the team:

- Are your patient's needs being met?
  - Right care, right time
- Do staff have what they need to be successful in their work?
- Are there defects or inefficiencies in how work is done?
  - Value added vs. non-value-added work activities (DOWNTIME)

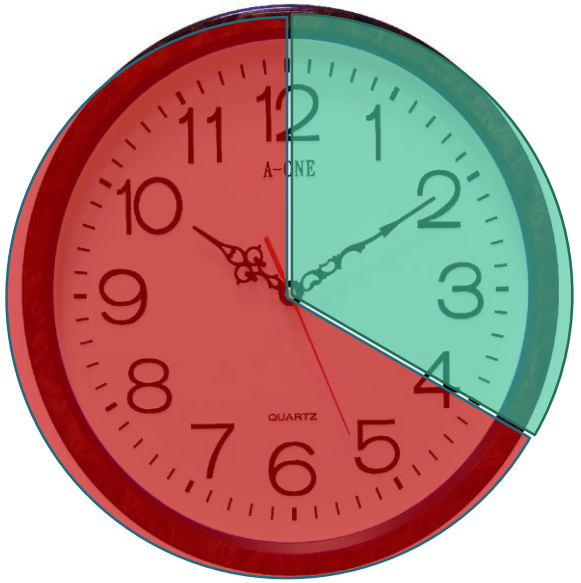
How do you identify improvement opportunities in your day-to-day work?

Think About…

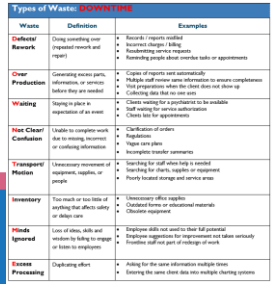
Do you have work that keeps you BUSY but doesn't add value?

- What is getting in the way of achieving your work goals?
- What activities of your role add value to your patients? What would you like to be doing more of?
- What activities of your role do not add value to your patients or make the best use of your time?

Value added



Non-value added



Types of Waste: DOWNTIME

Waste	Definition	Examples
Defects/ Rework	Doing something over (repeated rework and repair)	• Records / reports misfiled • Incorrect charges / billing • Resubmitting service requests • Reminding people about overdue tasks or appointments
Over Production	Generating excess parts, information, or services before they are needed	• Copies of reports sent automatically • Multiple staff review same information to ensure completeness • Visit preparations when the client does not show up • Collecting data that no one uses
Waiting	Staying in place in expectation of an event	• Clients waiting for a psychiatrist to be available • Staff waiting for service authorization • Clients late for appointments
Not Clear/ Confusion	Unable to complete work due to missing, incorrect or confusing information	• Clarification of orders • Regulations • Vague care plans • Incomplete transfer summaries
Transport/ Motion	Unnecessary movement of equipment, supplies, or people	• Searching for staff when help is needed • Searching for charts, supplies or equipment • Poorly located storage and service areas
Inventory	Too much or too little of anything that affects safety or delays care	• Unnecessary office supplies • Outdated forms or educational materials • Obsolete equipment
Minds Ignored	Loss of ideas, skills and wisdom 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 effort	• Asking for the same information multiple times • Entering the same client data into multiple charting systems

Ex: Variability in SUD screening across team

Ex: Variability in Inter-rater reliability rates

Plan-Do-Study-Act (PDSA):

A way of **engaging and organizing teams** to continuously identify and act upon opportunities for improvement

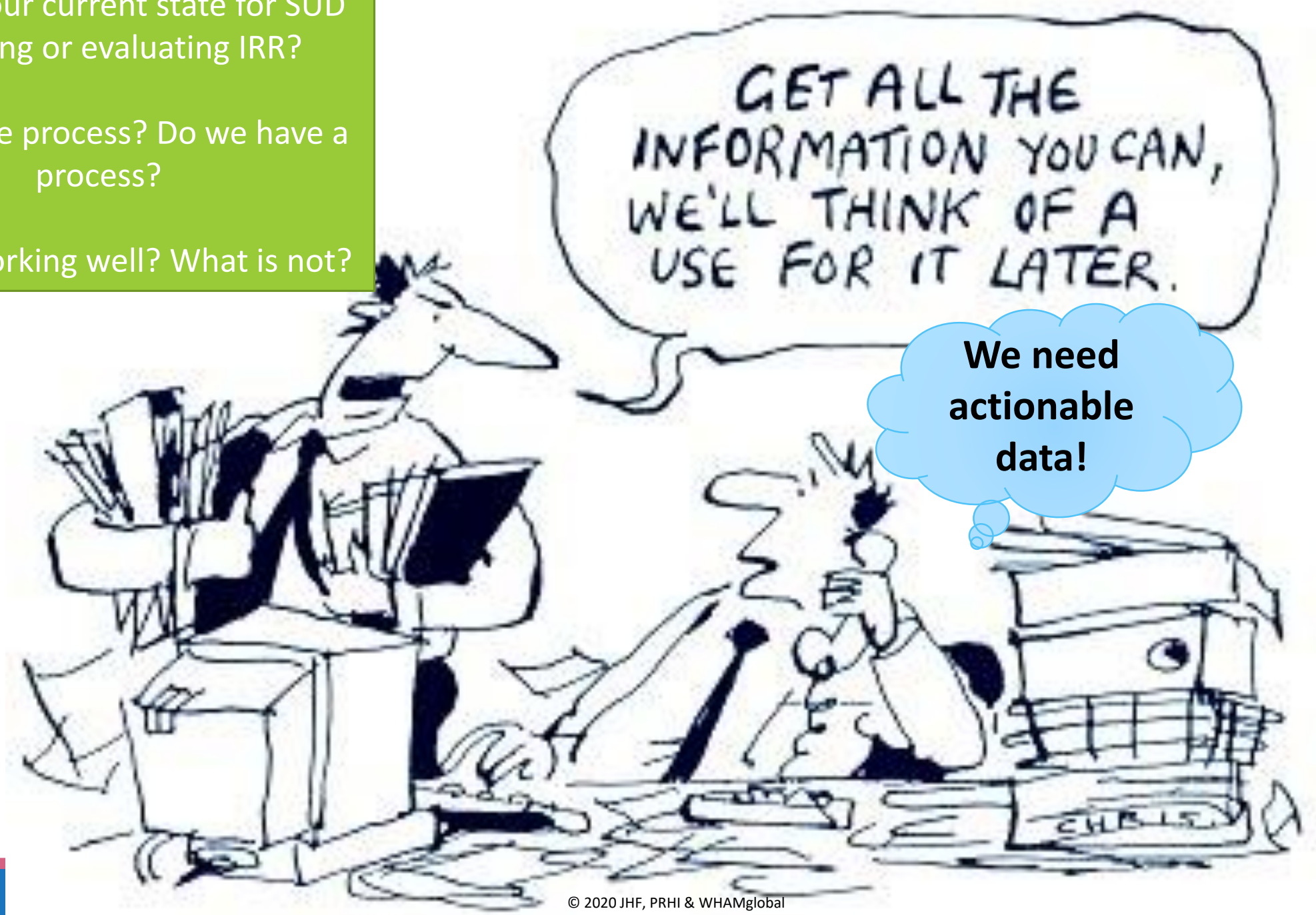
Applied to **process changes** as well as behavior changes, and to problems big and small

Supports **deep examination** of problems

What is your current state for SUD screening or evaluating IRR?

What is the process? Do we have a process?

What is working well? What is not?



Quality Improvement Provides a New Perspective

Starts with how we look at day to day activities and processes

- **The power of observation**: Importance of watching and documenting things, not interfering and fixing things

- "It is about the **work processes, not the individual person** doing the work."
  - Open, judgment-free communication between the team members
- **Involves the people who do the work** to help address the challenges
- Seeks to develop **long-term**, sustainable solutions to issues, not quick fixes or workarounds- what's the root cause?

We need to define how work should be done…Standard Work

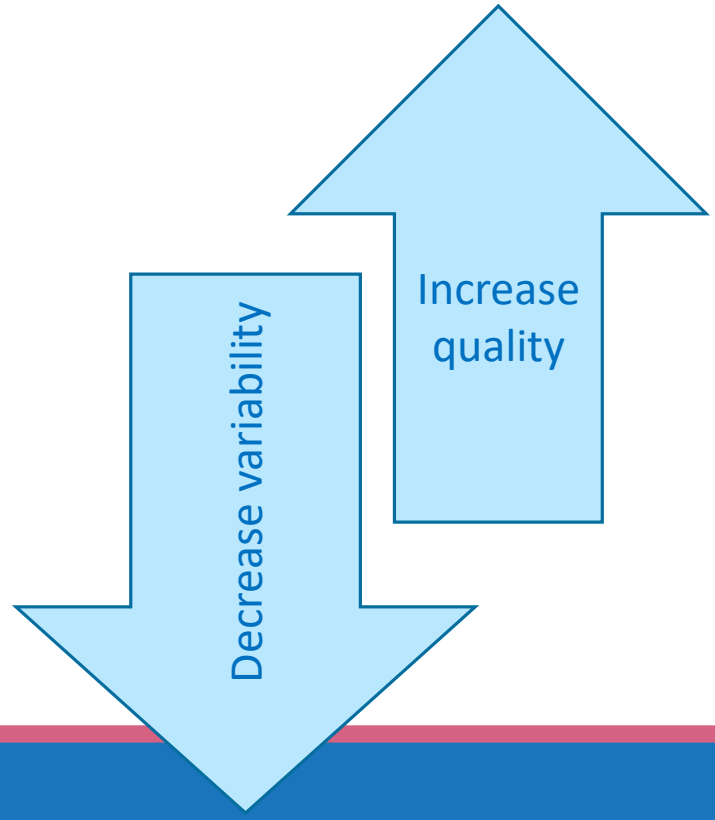
Documentation of the <u>current</u> best practice

Standard work is the foundation of continuous improvement.

We can't improve a process unless we know how it happened in the first place.

Standard Work Tells Us…

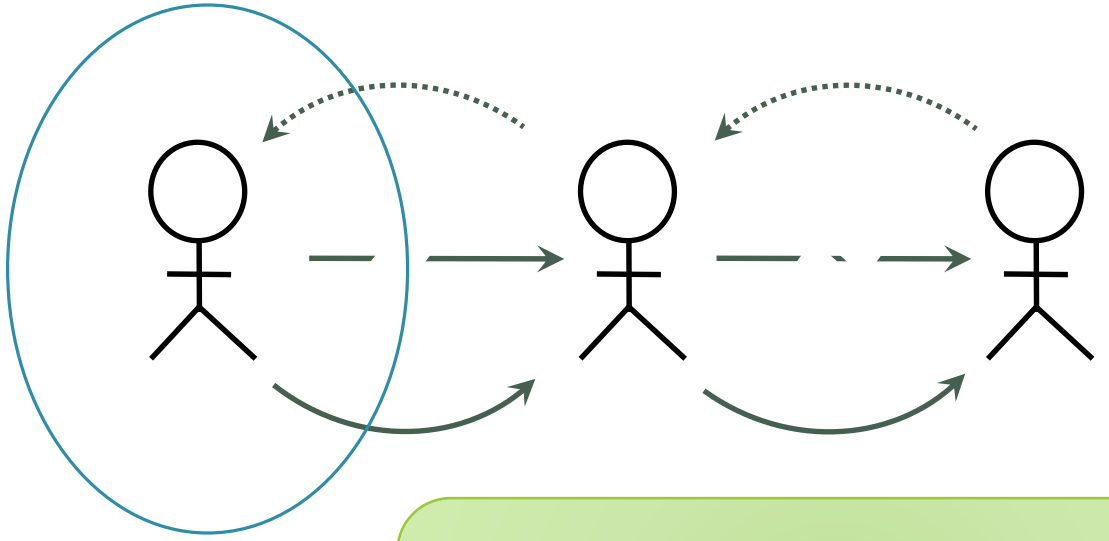
- **Who does what?**
- **How do you do it?**
- **When do you do it?**
- **Where do you do it?**
- **Why do you do it that way?**



Activities

Activities (work) must be highly specified as to:

- Content
- Sequence
- Timing
- Location
- Expected outcome



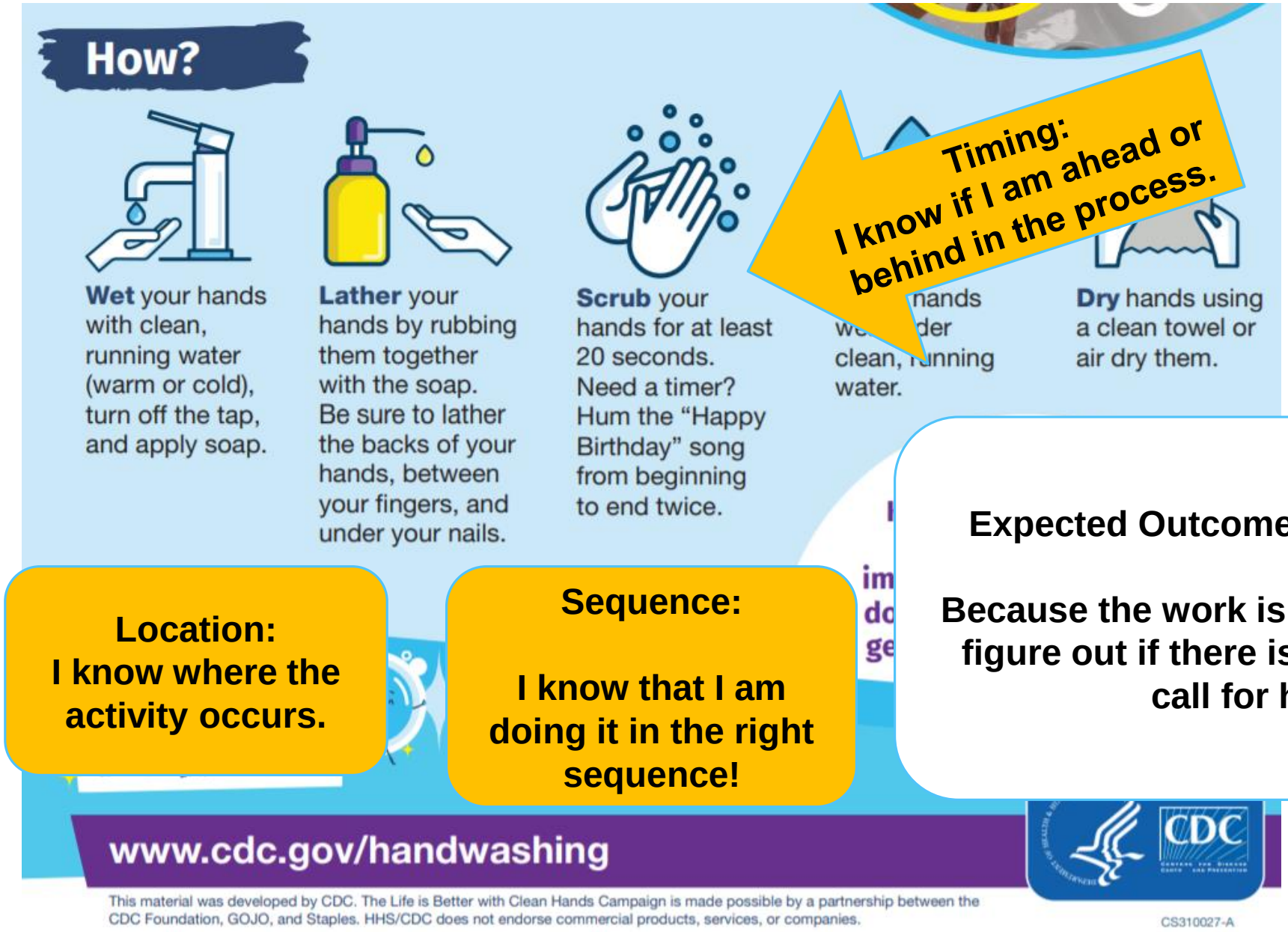
GOAL: Building successful processes for those that do the work

Quality care for patients

Standard Work: *How to wash your hands*

Content:
I know what to do!

Standard Work: *How to wash hands*



Location:
I know where the activity occurs.

Sequence:

I know that I am doing it in the right sequence!

Expected Outcome: Clean Hands!

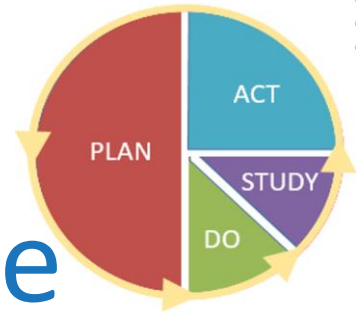
Because the work is so explicit, I can figure out if there is a problem and call for help.

t:
to do!

CARE OUTREACH STANDARD WORK

Step	Content	Location	Timing	Outcome
Identification	1. Review referrals from Case Managers	Office	Daily	Clients are added to lost to care list for outreach
	2. Review closed cases for clients who fell out of contact	File Room	Monthly	
	3. Print performance measures and identify high risk patients	CAREWare	Monthly	
	4. Answer physician referral calls	Phone	Daily	
Contact	5. Call/E-mail client primary information	Phone/Computer	3 attempts over 10 days	Client engages in care outreach
	6. Call/E-mail client emergency or alternate contact	Phone/Computer	3 attenpts over 10 days	
	7. Call/E-mail provider to research client contact information	Phone/Computer	3 attenpts over 10 days	
	8. Initial contact with client	Phone	15 minute increments	
Appointment	9. Review medical facility options with client and give contact information	Phone		Client attends medical appointment
	10. If requested, make client an appointment at medical facility	Phone		
	11. Call patient one day prior and remind of medical appointment	Phone		
	12. If requested, provide transportation or incentive	Client location		
	13. If requested, attend appointment with patient	Medical facility		
Support & Follow-up	14. Follow up with MD for lab results	Medical facility		Client remains engaged in care
	15. Enter data collection into MAI spreadsheet	Office		
	16. Follow-up with other services for client	Office		
	17. Follow-up with client on next steps	Phone		

From Current Condition to Future State



PDSA

Current Condition:
Lack of standard work

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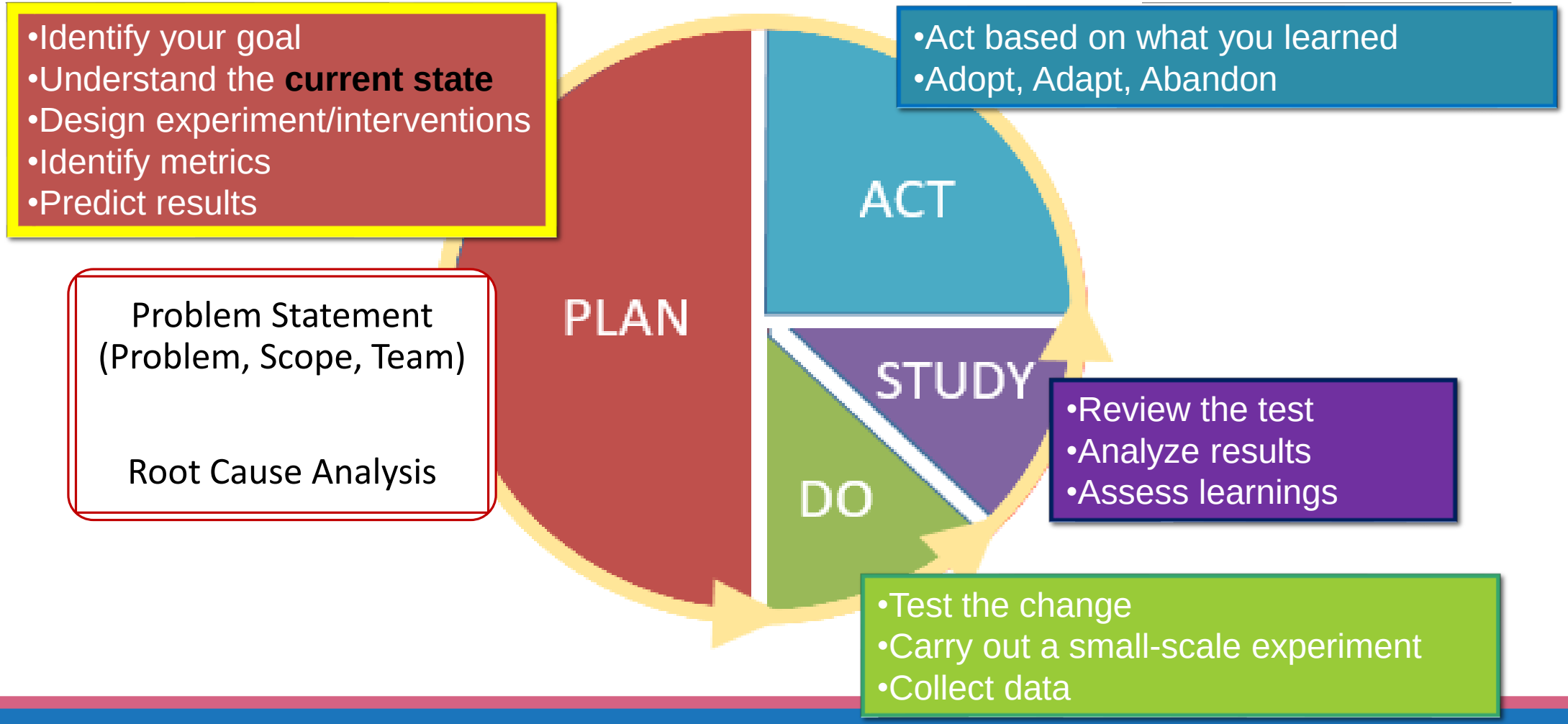
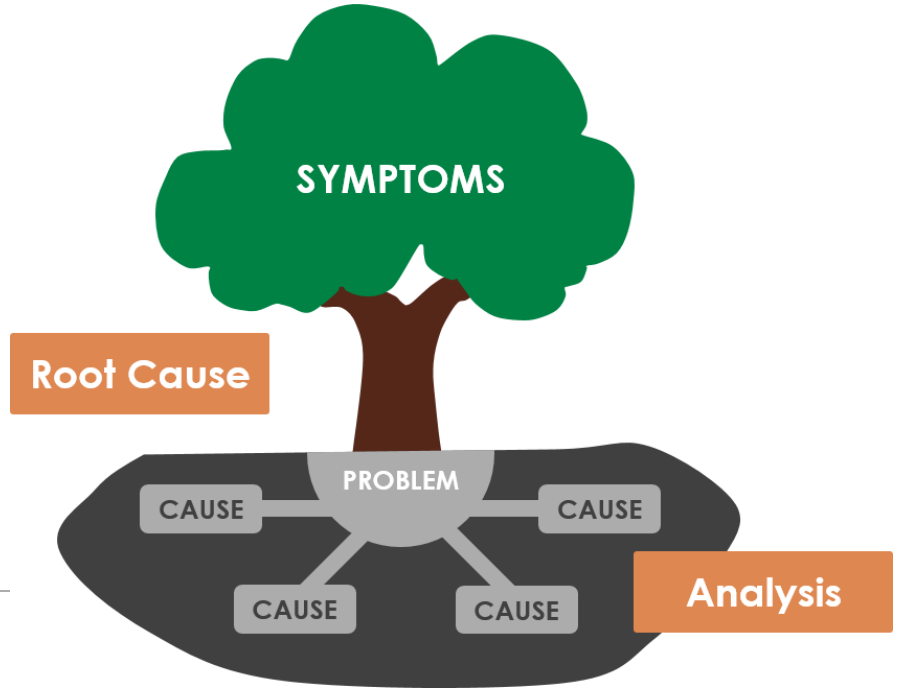
loser to

From Current Condition to Future State

An approach to standardizing problem solving



Understanding the Current Condition through Root Cause Analysis



Poll Question #2:

Have you used a **root cause analysis tool**?

- Yes
- No

Poll Question #3:

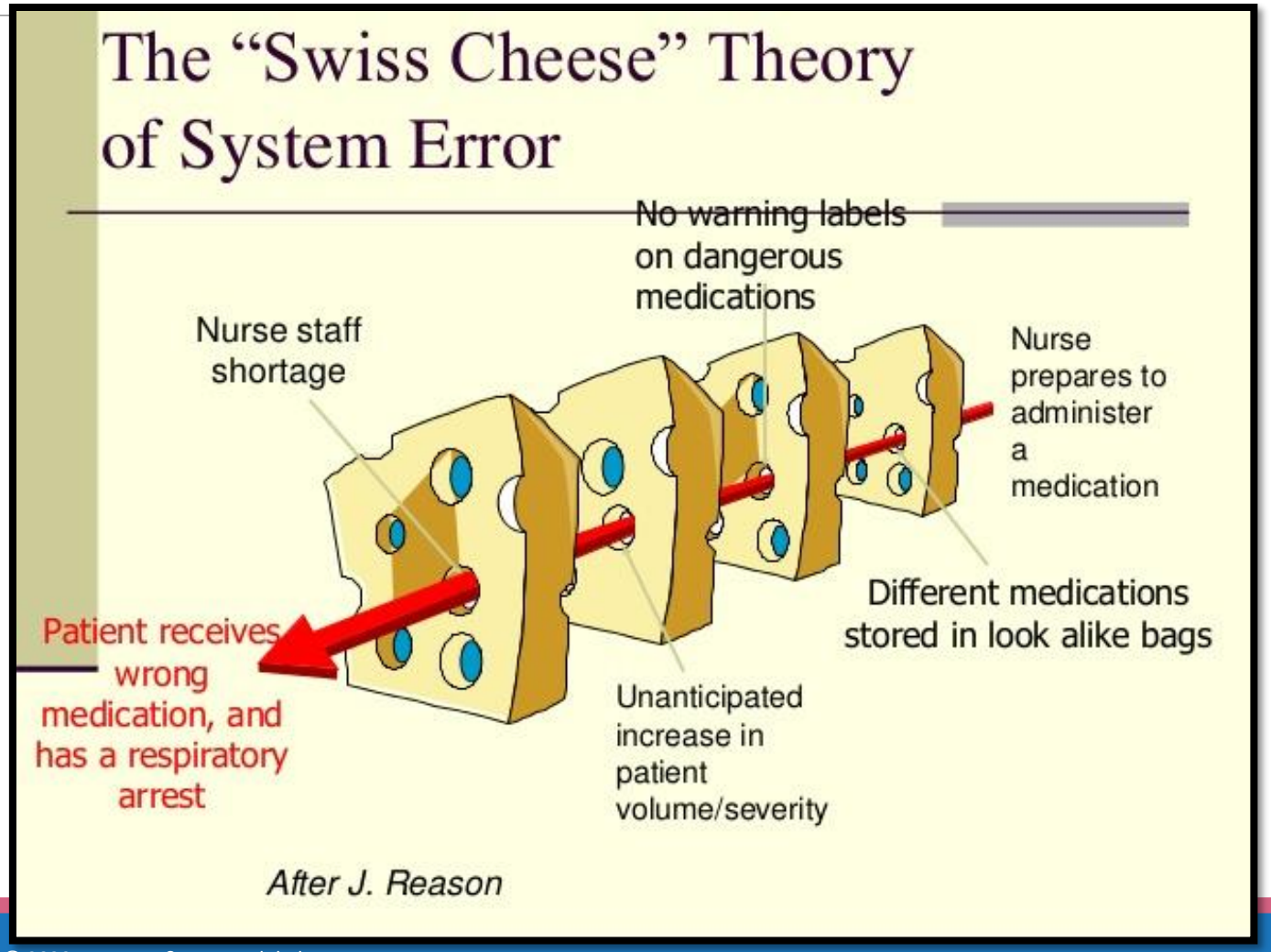
If yes, what did you find to be **most beneficial** in your experience?

- Being engaged in the process/heard
- Expanded my understanding of the problem and complexity
- Appreciated the need to look beyond the symptoms
- Enabled me to focus on process not people

Broken Systems and Processes

Something is broken… even when we're fully staffed or have the best employees, or try to be really careful and mindful of our work

ERRORS HAPPEN



Blaming vs. Explaining

Focus on the process

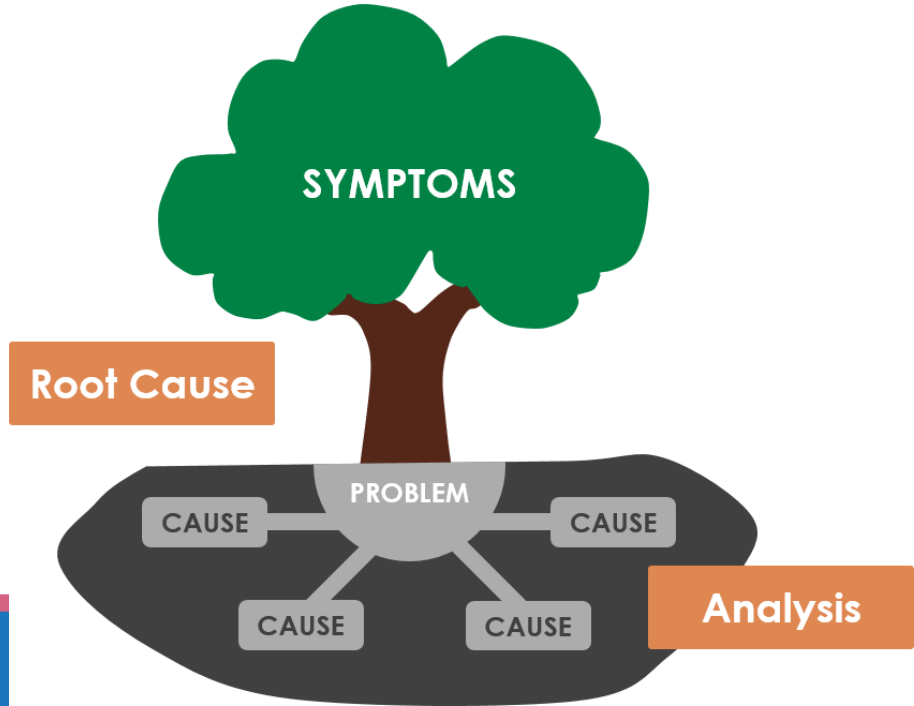
These are **not** root causes …

"Staff negligence"

"User error"

"They doesn't care"

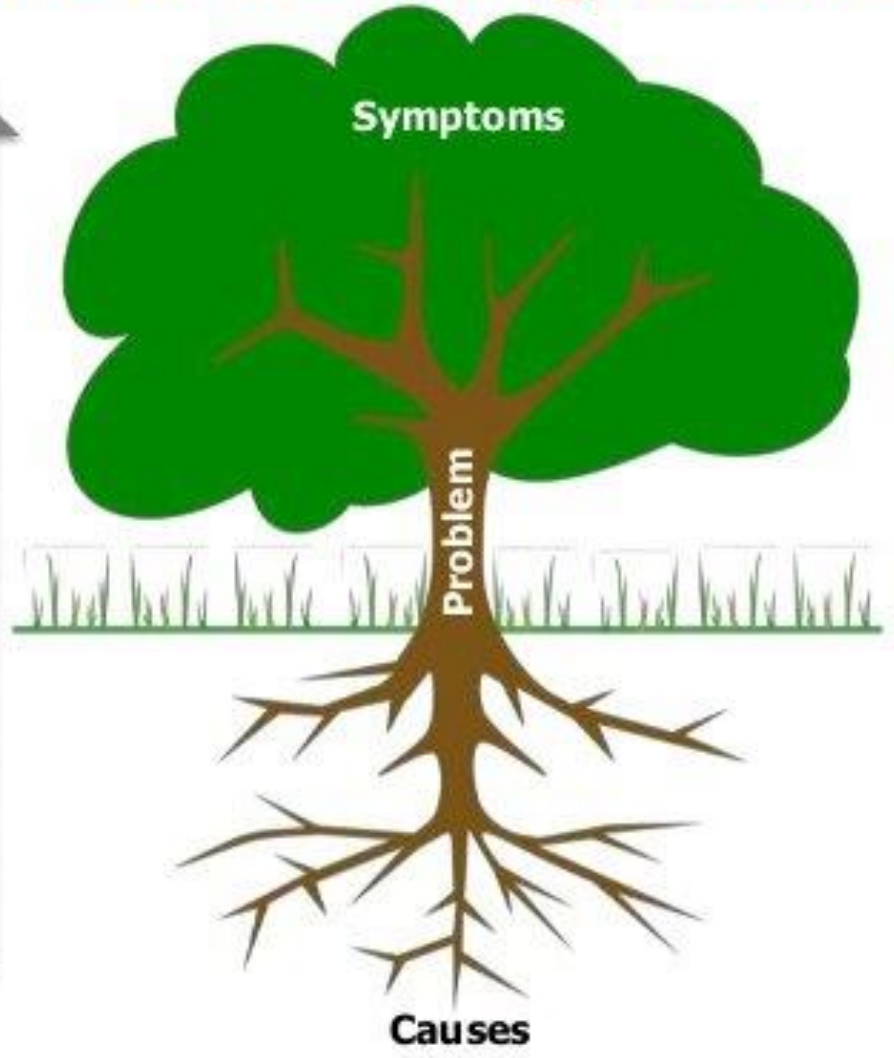
"Someone else did it"



Understanding Root Causes

Later

As a result...



Because...

Sooner

Symptoms
- Result or outcome of the problem
- What you see as a problem *(Obvious)*

Achy, weak, tired

The Problem
- Gap from goal or standard

Fever

Causes
- "The Roots" – system below the surface, bringing about the problem *(Not Obvious)*

Infection

How do you determine the root cause?

Root Cause Analysis Tools

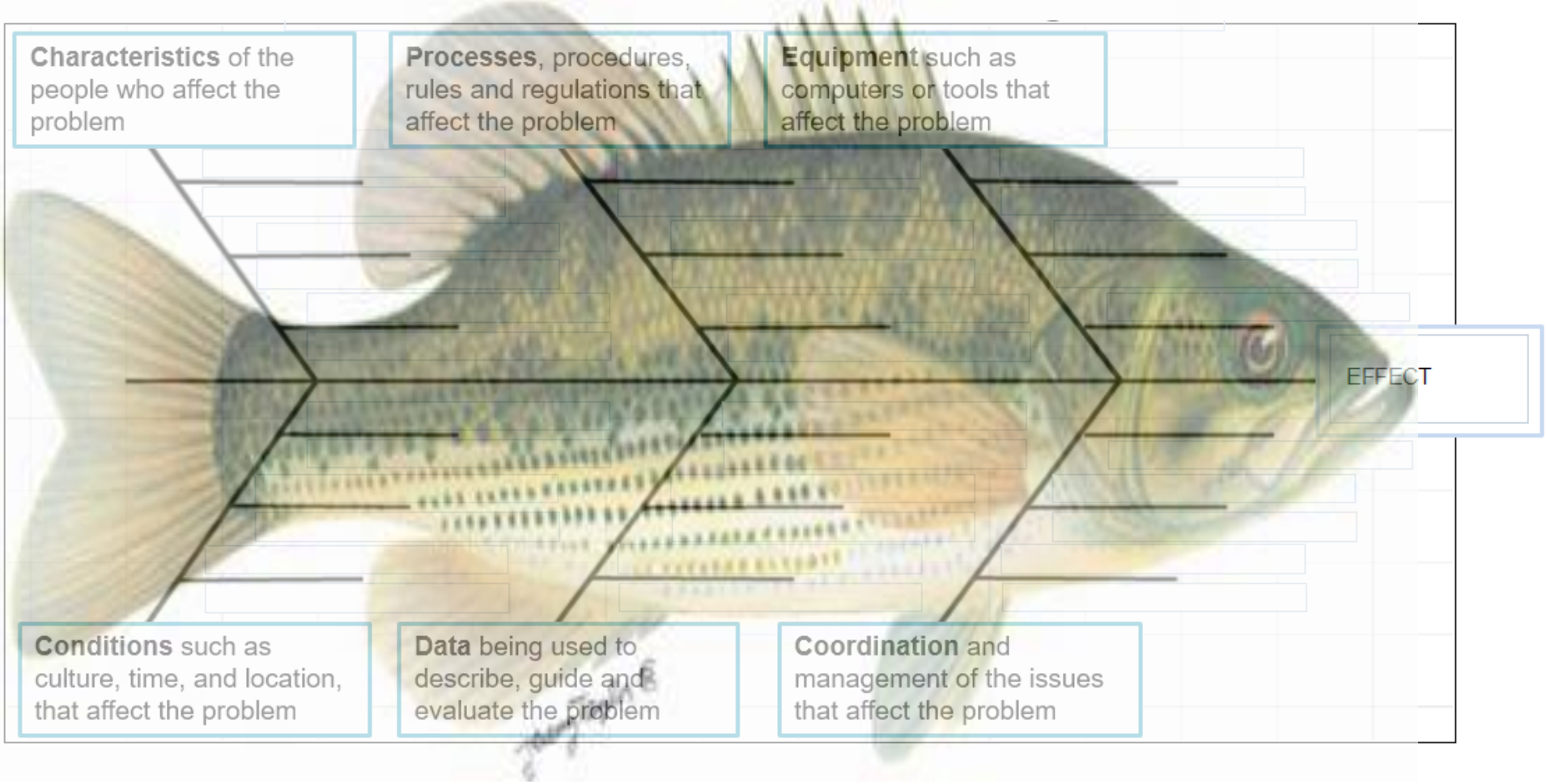
"Fishbone" Diagram

- Get the whole team to contribute their ideas about the causes.
- Go fishing!

5 Why's

- Get to the true causes by asking ***why*** the problem occurred.
- Drill down **deeper!**

Cause and Effect or “Fishbone” Diagram



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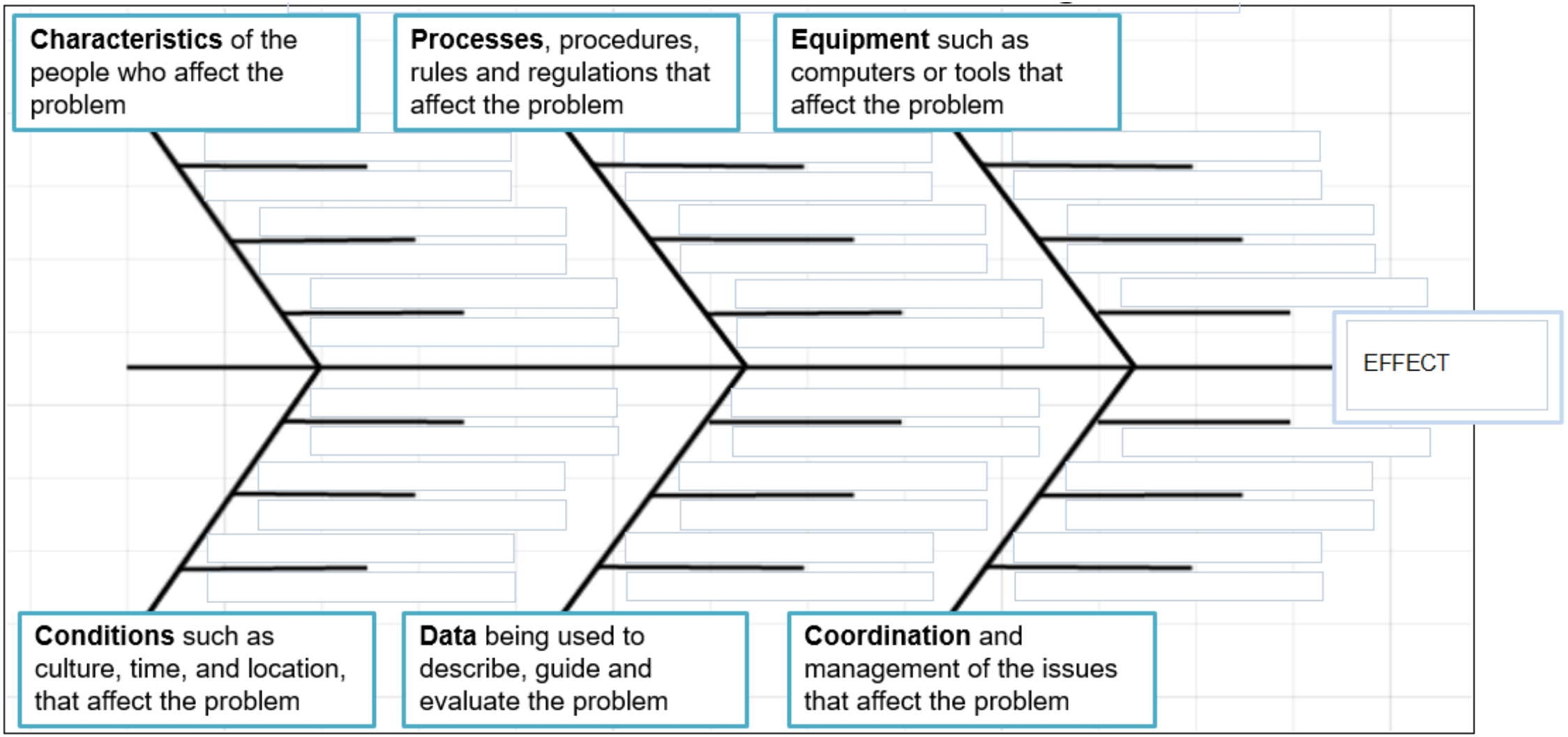
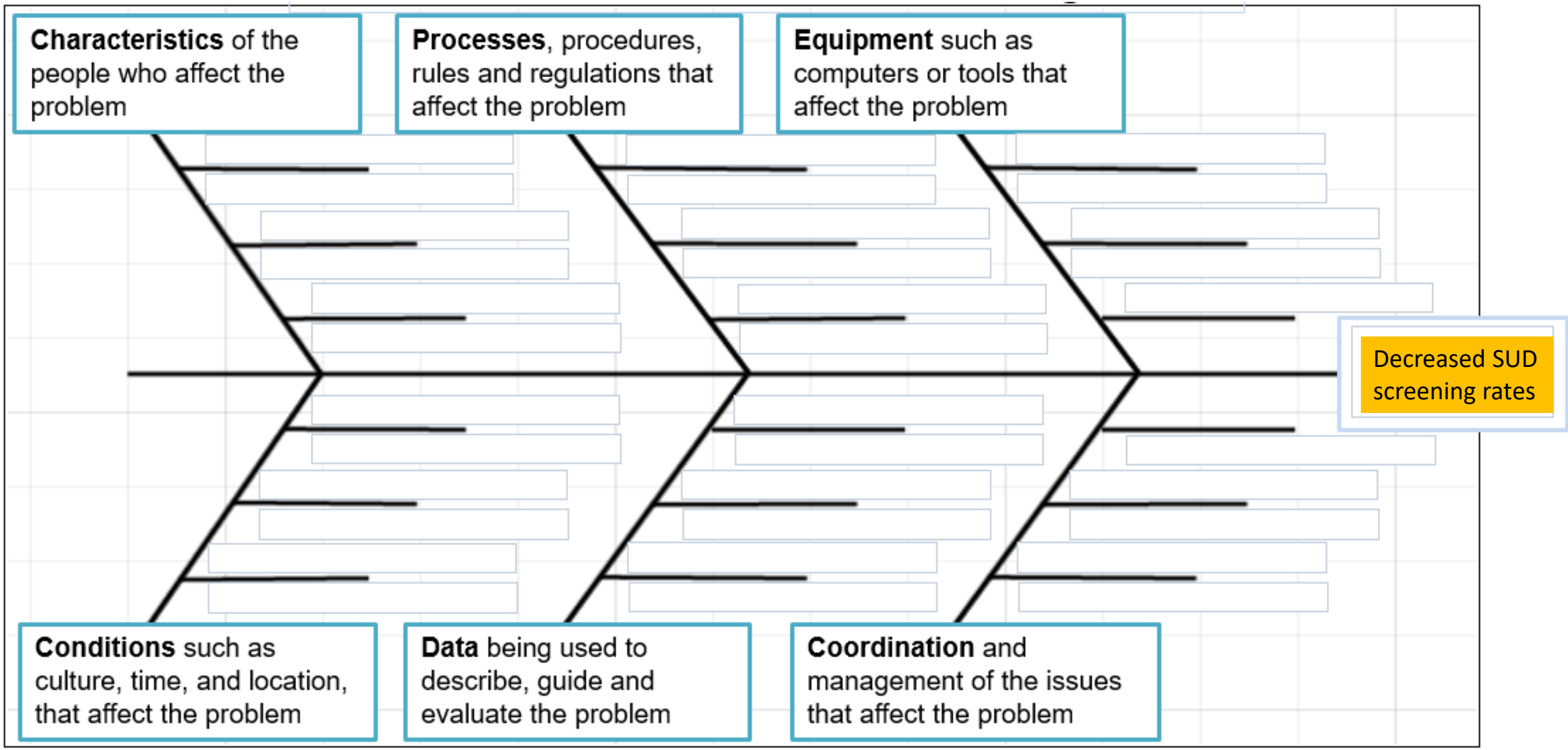
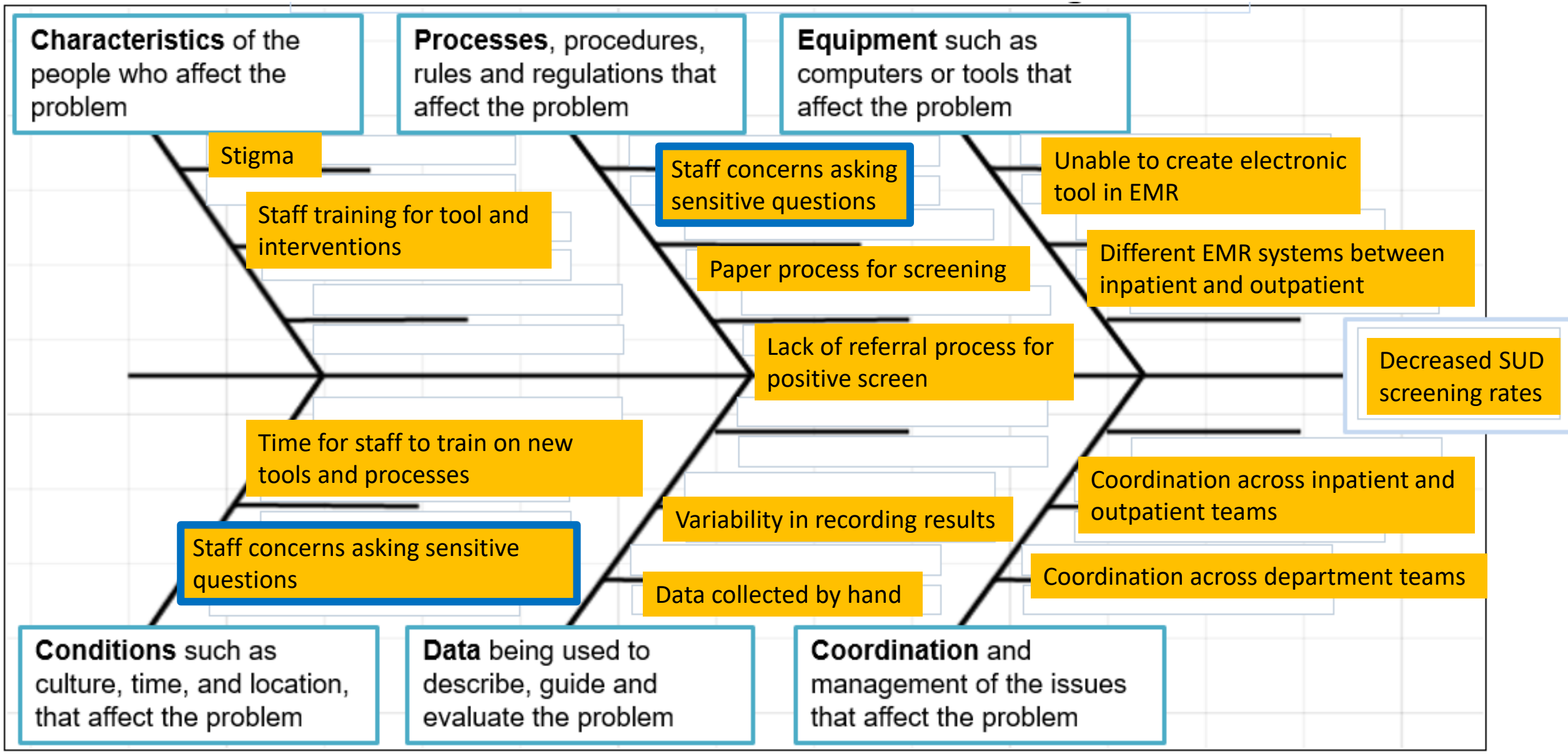






Deciding Where to Focus Improvement Efforts

Prior Efforts	prior efforts to work on this issue → -1 (unsuccessful), +1 (successful), or 0 (none)	
Magnitude of Threat	level of danger to the organizational mission, staff or clients	0 is lowest 5 is highest
Likelihood of Harm	probability of harm to organization, staff or clients	
Treatability	likelihood that problem will respond to intervention	
Urgency	level of urgency to deal with problem	
Readiness	availability of staff, resources, skills, and time	

Decreased SUD screening rates	Prior Efforts	Magnitude of Threat	Likelihood of Harm	Treatability	Urgency	Readiness	Total
Causes	-1 to +1	0 to 5	0 to 5	0 to 5	0 to 5	0 to 5	
Staff concerns asking sensitive questions	-1	2	2	2	4	2	11
Unable to create electronic tool in EMR	0	2	1	2	2	3	10

5 Why's

- Method to pursue deeper, systematic causes of a problem
- Narrow the field and focus on the most significant potential causes
- Create a causal chain by asking a series of "Why" questions

"The important thing is not to stop questioning."
-Albert Einstein

Root Cause Analysis: *5 Why's Example*

Problem: Flight 1549 landed in the Hudson river

Root Cause Analysis: *5 Why's Example*

Problem: Flight 1549 landed in the Hudson river

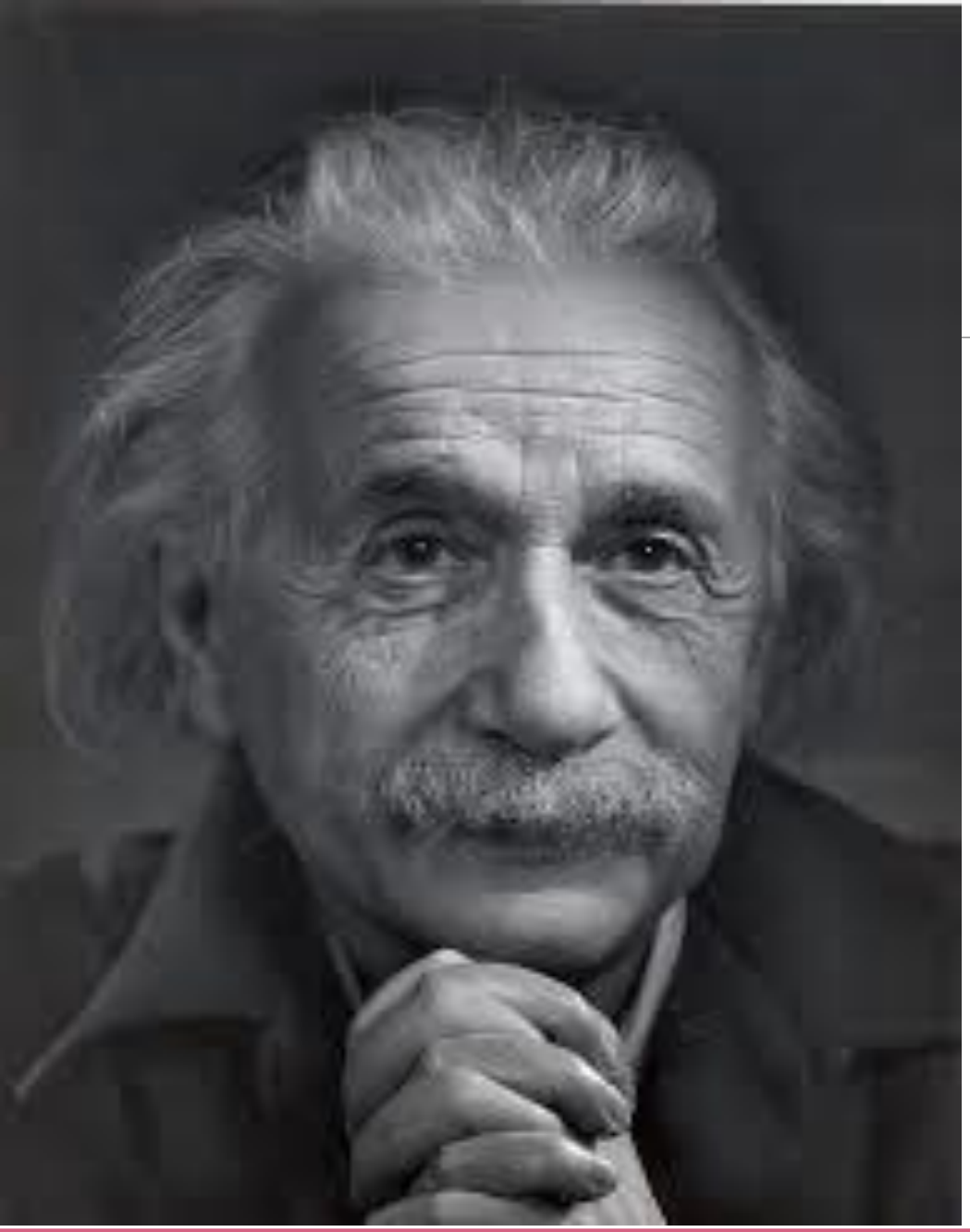
Why? Because the pilot had to do an emergency landing

Why? Aircraft unable to maintain altitude

Why? Aircraft lost both engines

Why? Bird strike

Why? Nesting area on flight path

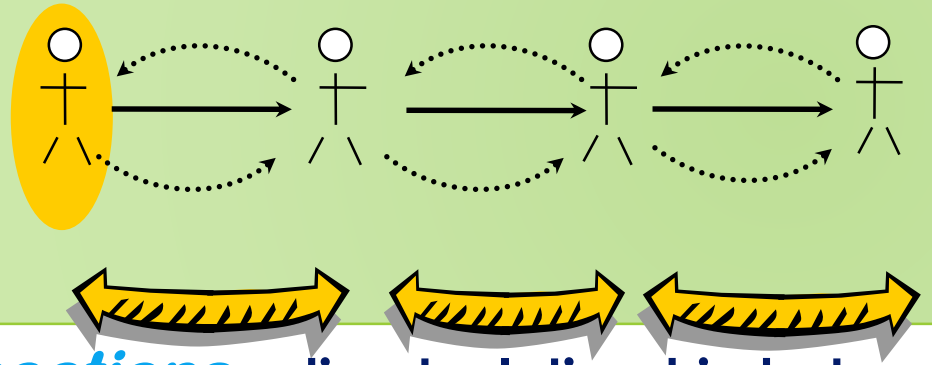


The significant problems we have cannot be solved at the same level of thinking with which we created them.

--Albert Einstein

Roadmap: Work Design Principles

Rule 1: *Activities* - highly specified work of a position (content, sequence, timing, location)



Rule 2: *Connections* – direct relationship between people or processes (unambiguous)

Rule 3: *Pathways* – process is defined & simple

Rule 4: *Improvement* - respond to problems immediately, where they occur, design an experiment, with those doing the work, with a teacher

Source: S. Spear and H. Kent Bowen, "Decoding the DNA of the Toyota Production System", Harvard Business Review, Sept.-Oct., 1999, p. 96.

Rule 4: One Rule of Improvement

Improvements are:

- Direct responses to a problem
- Made as close as possible to the problem
- Experiments using PDSA thinking
- Made by those doing the work
- Guided by a teacher/coach
- Made aiming toward perfection

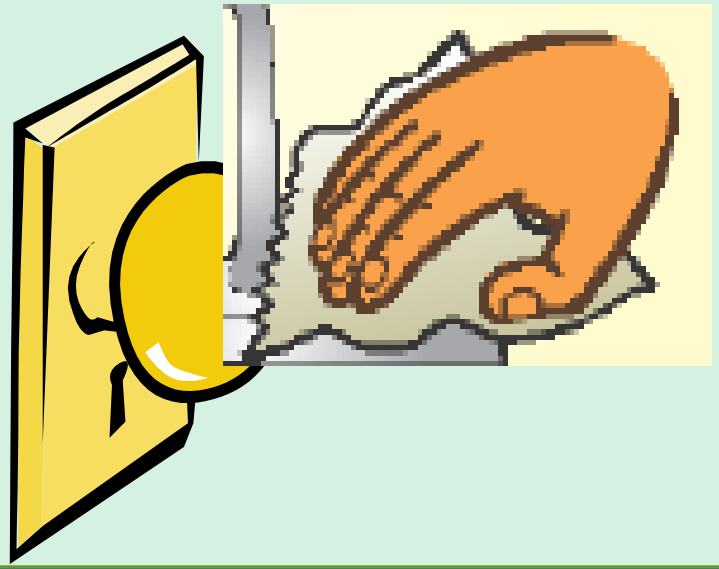
Improvements

Rule of Improvement…in the spirit of quality improvement, never say the project is finished! You still need to monitor, create the standard work and sustain the gains.

Always strive for continuous improvement.

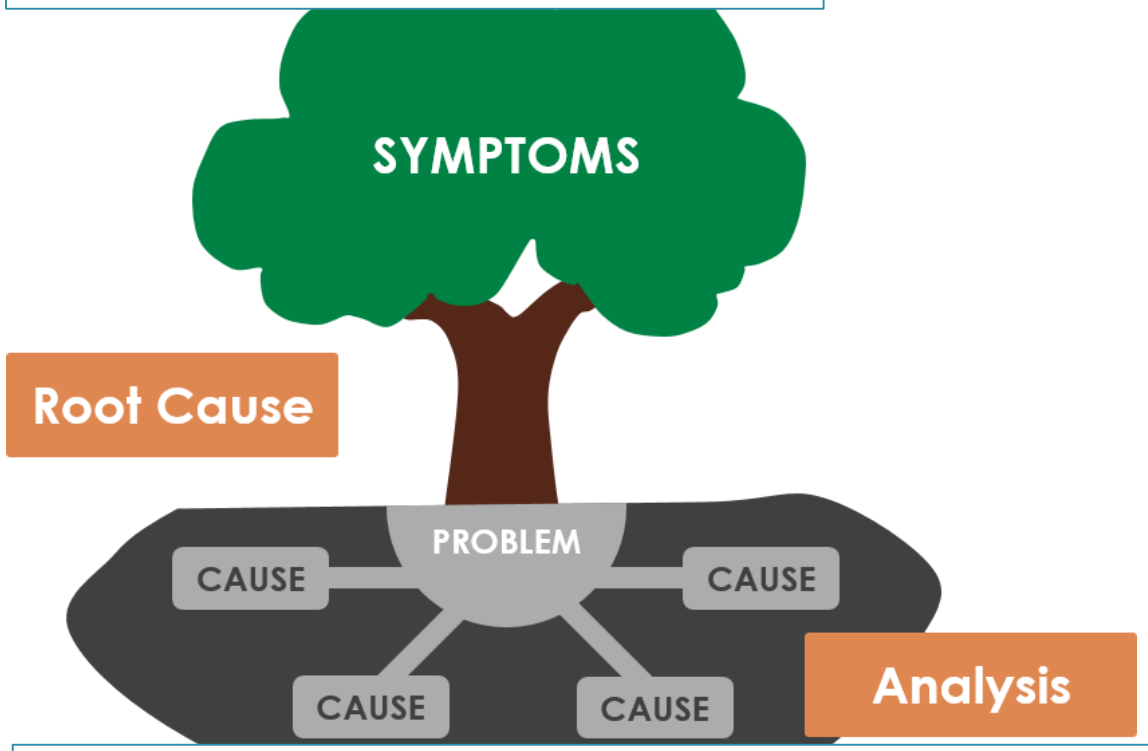
Improvement

7 Use the Paper towel to open the door



Root Cause Analysis in Summary

Addressing symptoms will allow continued *recurrence* of the problem



Addressing the root cause will *eliminate* the problem

Listen to the people on the front lines, especially staff and consumers

Explore each suggestion, rather than judging it

Identify the causes of the problem not the symptoms

Tools: fishbone diagram, 5 WHY's

WHY, not Who

It's the process, not the people

An approach to standardizing problem solving

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- Understand the **current state**
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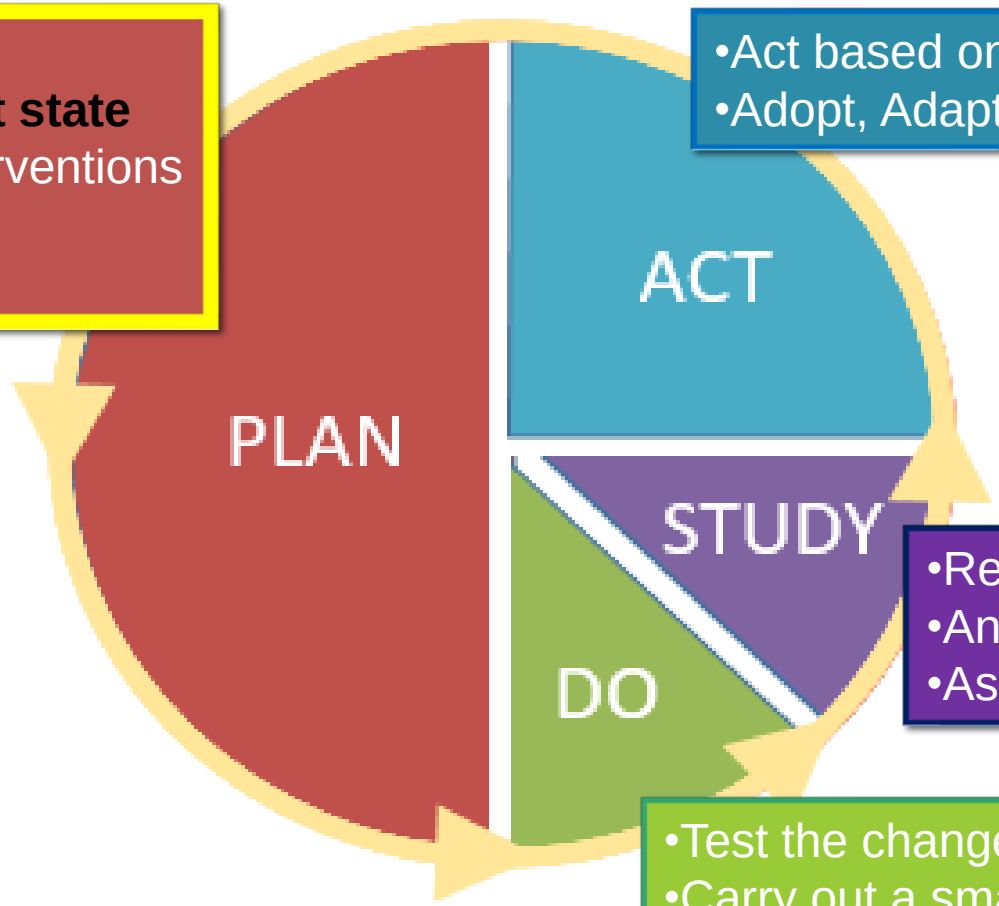

- Act based on what you learned
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- Review the test
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- Test the change
- Carry out a small-scale experiment
- Collect data

Tips for PDSA Problem Solving

Use **data** to understand the current condition and measure your experiments

Make **incremental improvements** to move closer to the target condition

Measure success of the improvements—do the improvements move you closer to the target condition?

Use tools to make work easier and processes flow more smoothly- **standard work**

Involve the people who do the work– "the experts"—in work redesign

"Every process is perfectly designed for the outcomes you get"

Create a Learning Organization

- ✓Create a community of scientists
- ✓Look at work with a new perspective
- ✓Perform continual experiments that improve the ***system***
- ✓Challenge the most basic assumptions about what can and cannot be changed
- ✓Learn by doing

Everyone, everyday, closer to better

Poll Question #4:

What **gets in the way** of applying quality improvement methodology?

- Knowing where to start
- Time
- Comfort in applying QI techniques
- Resources/team
- Other *(share in the chat)*