The Elliot

A Member of SOLUTIONHEALTH

A3 Thinking – Acute Care

A philosophy for problem solving, learning and leadership

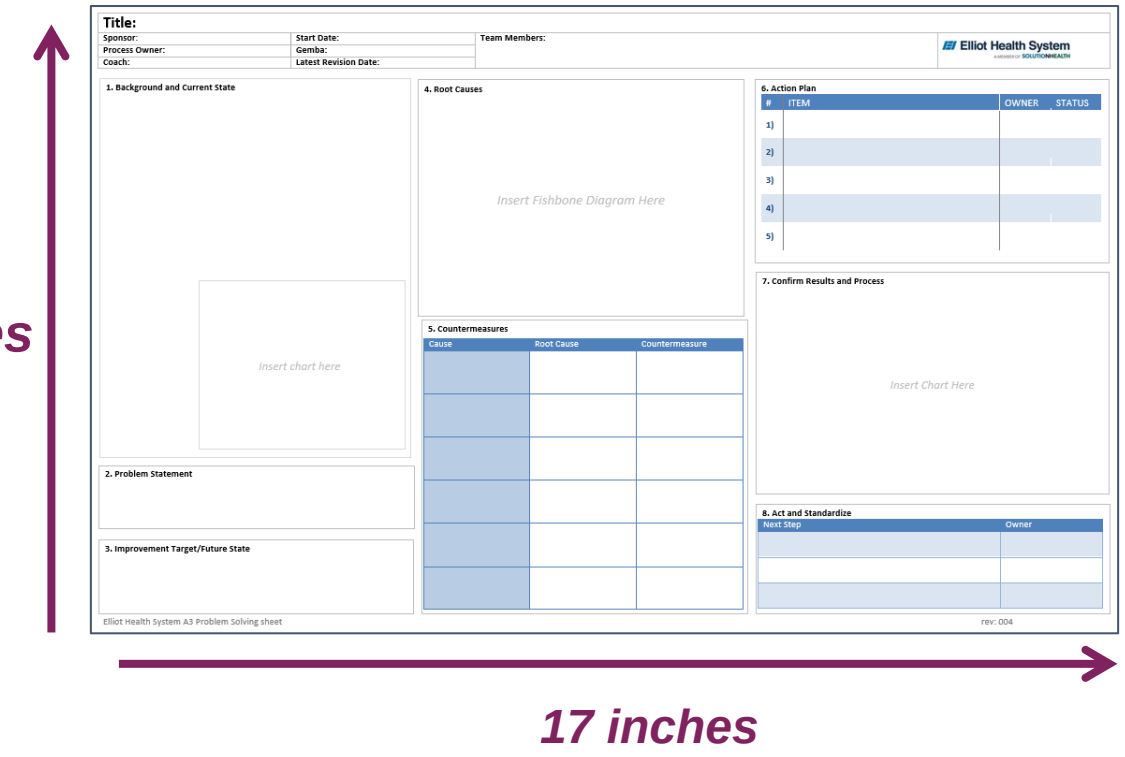
Rev date: 03.22.2024

Participants will be able to:

1. **Describe** a new way of thinking that can help solve problems
2. **Learn** how to use a problem-solving approach and philosophy for leadership
3. **Connect** the problem-solving approach to other continuous improvement tools
4. **Understand** how this thinking process can be communicated and documented in a one-page tool

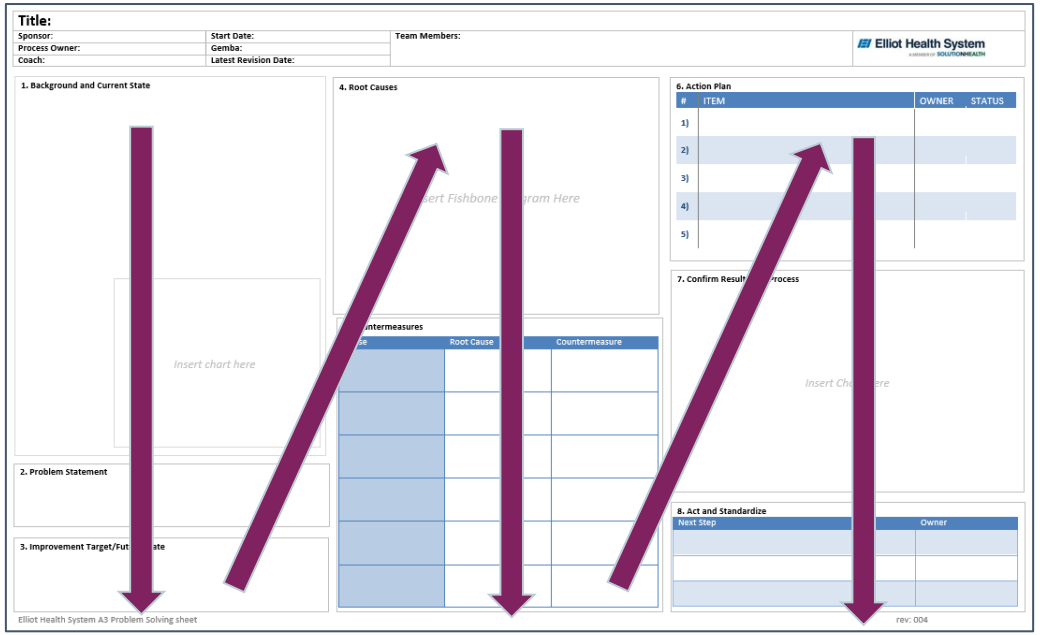
A tool to tell our story – A3

- What is an A3?
- Format is flexible but process is standard
- Elliot has a template



Typical A3 Format

- Easy to read, logical, tells a story
- Typically read upper left corner down, then up right and down
- Visuals really help (diagrams, charts, graphs, pictures)



Team Exercise – 10 minutes

Appreciative Inquiry

In a small group:

- Think about a time when you solved a really tough problem
  - Could have to do with patient care, your personal life, etc.
- Talk about what made you successful
  - Could be tools, mindset, process, questions asked, help received, etc.

Then:

- Create a list of things that made the other person successful
- Report out on the top 3 things that helped to solve the problem(s)
- We will come back to these success factors as we move through the framework.

00:23:00

Top factors for successful problem solving:

Report your ***Factors to Success***

Future Problem Solving

Imagine if there is a way to solve problems that:

- Developed individual and teams' capability by using a shared framework
- Truly addressed the root cause of the problem
- Followed a scientific method
- Prevented the problem from happening again
- Documented every step in a concise and shareable format

A3 Problem Solving Framework

Team Exercise – 5 minutes

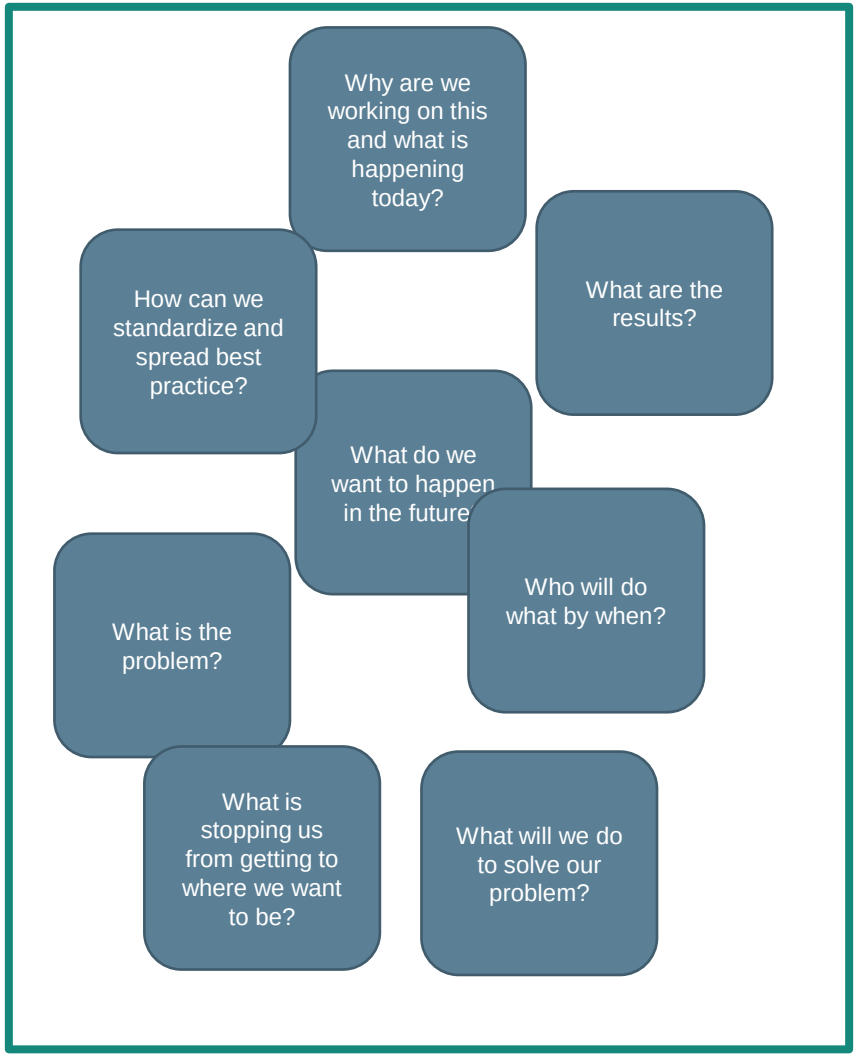
A series of thoughtful questions…

In the center of the table, you will find an envelop inside are eight (8) squares, each has a question.

As a group:

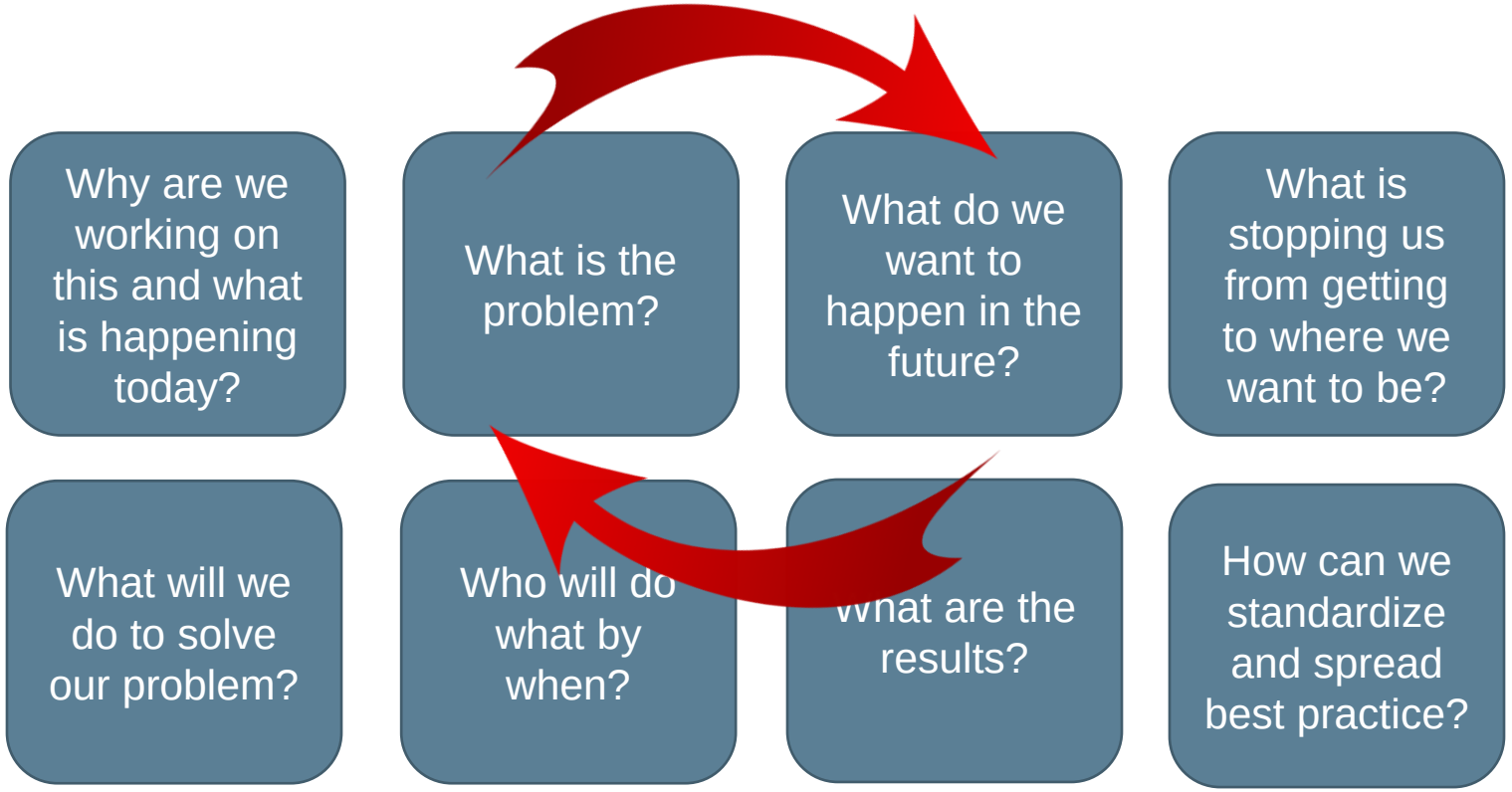
- Read the questions
- Arrange the questions in the correct order
- How should these questions flow and why?

Be prepared to participate in a large group discussion



Problem Solving Framework:

A series of thoughtful questions…



Typical A3 Format

A3 Title; Owner; Team; Revision #

Why are we working on this and what is happening today?

What is the problem?

What do we want to happen in the future?

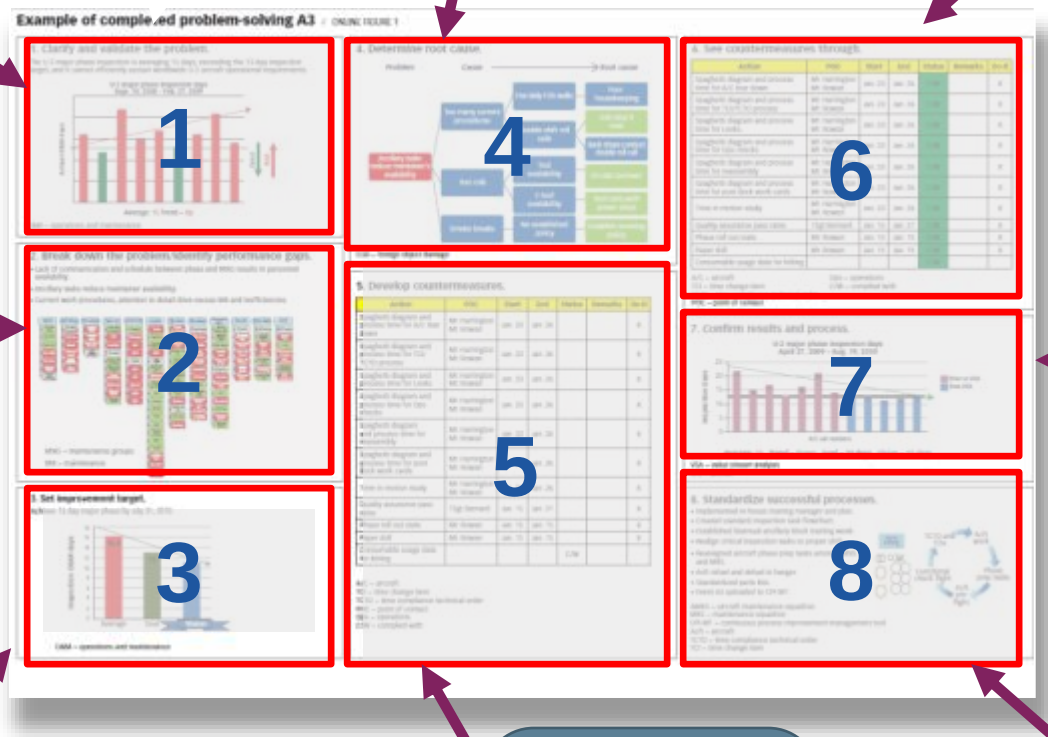
What is stopping us from getting to where want to be?

What will we do to solve our problem?

Who will do what by when?

How can we standardize and spread best practice?

What are the results?



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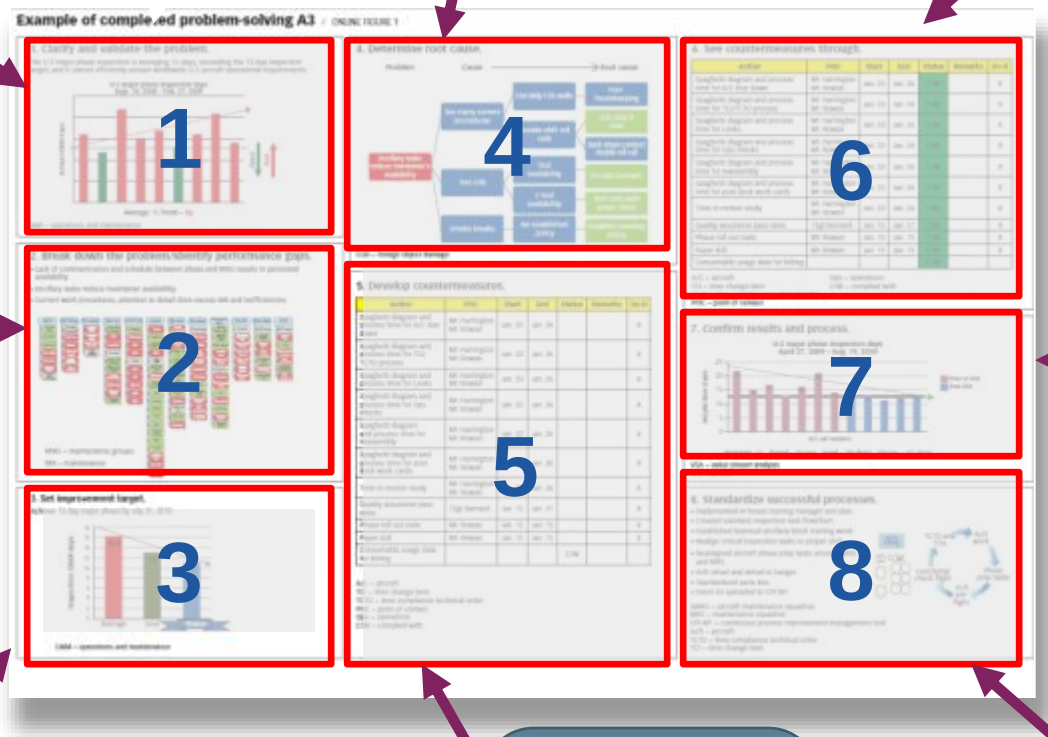


Applying A3 Thinking - CASE STUDY

Current State

Why are we working on this and what is happening today?

- Describe the current situation in terms of factual information; use data to describe:
  - What is actually happening NOT what you think is happening.
  - What we know and how do we know it?
  - What do we need to know and how do we learn it?
- Why are we working on this and why now?
  - What bigger goals does it fit into?
  - What is your ‘reason for action’?
- Use graphs, charts tables, diagrams to tell the story.
  - Does the main problems stick out in the way you have presented the data?
- Will have to do some digging, fact-finding, data collection and analysis to understand the current state.

Team Exercise – 5 minutes

Developing a Current State & Problem Statement

Review the **Eastside Medical Practice Case Study**; discuss as a group and describe the current state:

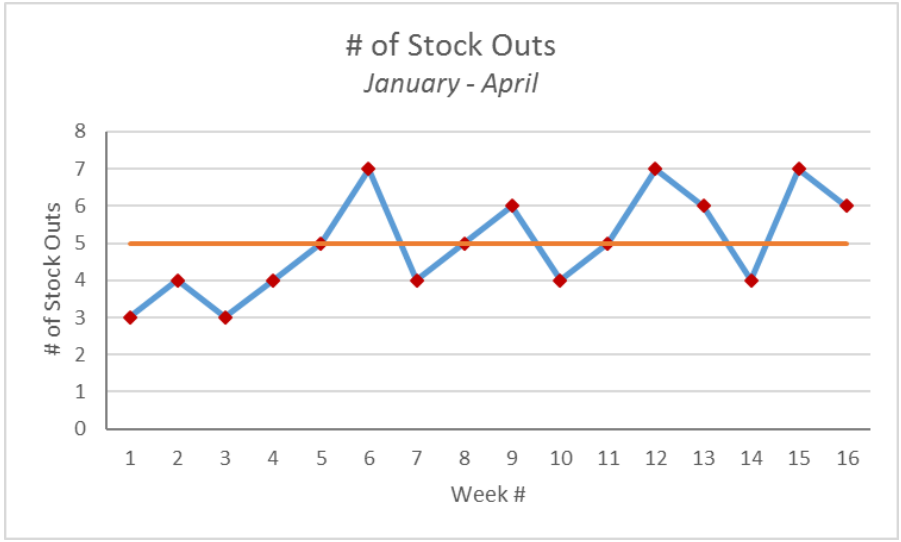
Current State

- What is actually happening?
  - What do we know and how do we know it?
  - What do we need to know and how do we learn it?
- Why are we working on this?

Current State

Eastside Medical Center's Graban unit has been experiencing an increasing number of stock-outs over the past 4 months. A stock-out is defined as the unplanned running out of supplies.

Recently, the unit had a stock-out of a three-way foley catheter, which resulted in a patient waiting for the appropriate catheter to be found on another unit.



Team members complained about the time they spend searching for supplies, the increasing number of resulting "work-arounds", and the increasing frustration felt when trying to navigate the supplies closet. The team is concerned that **5 stock-outs per week** is too much to manage and will have a serious impact on patient care.

Current State

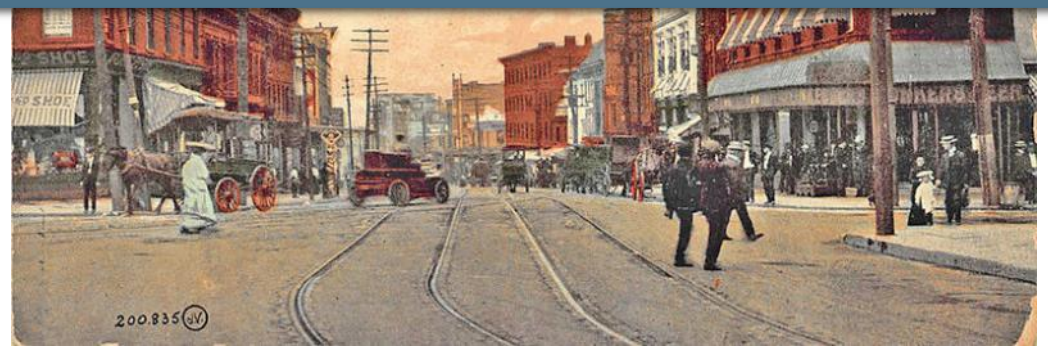
- Why are we working on this?
- Describe the current situation in terms of factual information.
- What do we know and how do we know it?
- What do we need to know and how do we learn it?

Problem and Aim Statements

CHARLES STEINMETZ (1865 – 1923)

Before long, Charles Steinmetz was keeping company with some of greatest engineering minds of the era.

and knowledge.

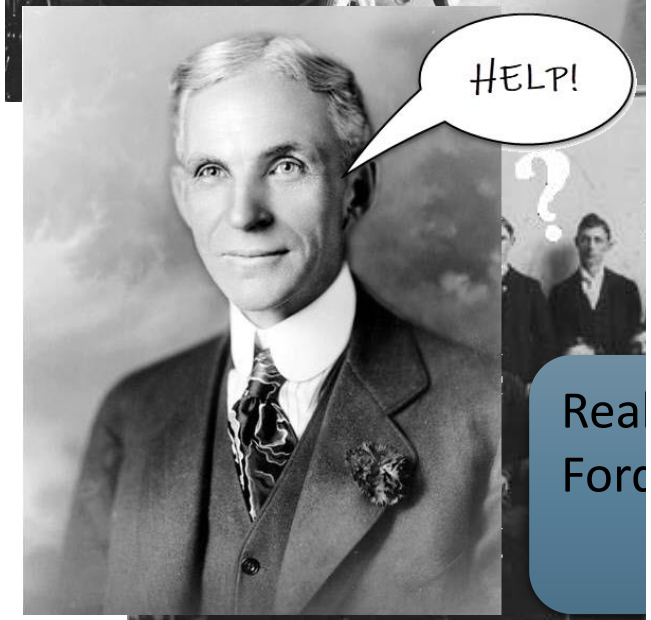


ame renowned for his work in electrical engineering, ompany in Yonkers NY, where his ideas spear-headed breakthroughs in alternating and direct current systems.

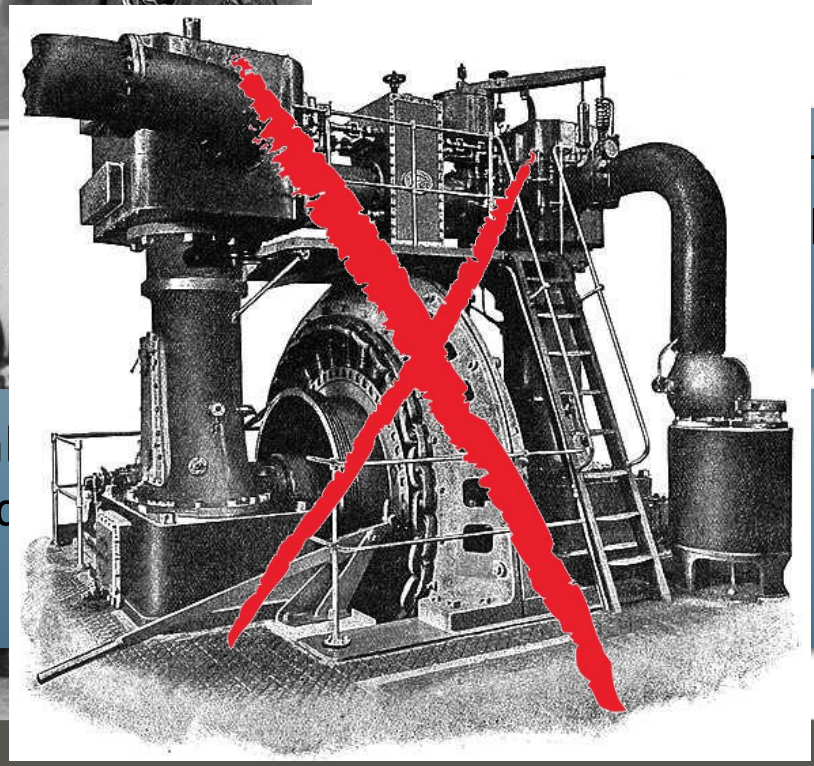
United States as the country was e
"Golden Age" of electrical engineering.

The Dilemma

Henry Ford, founder and owner of Ford Motor Co., had a problem at his River Rouge plant located outside of Dearborn Michigan.



Real
Ford



It seems one of his gigantic electrical generators wasn't working properly…

ped, Henry

The solution

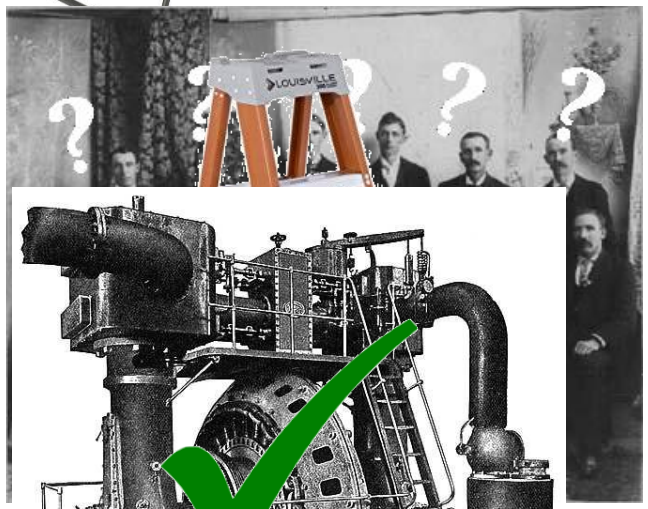
When Steinmetze arrived at the Dearborn plant, all he asked for was a notebook, a pencil and a cot.

For two straight days, Steinmetz listened to the generator and scribbled notes on his notepad.

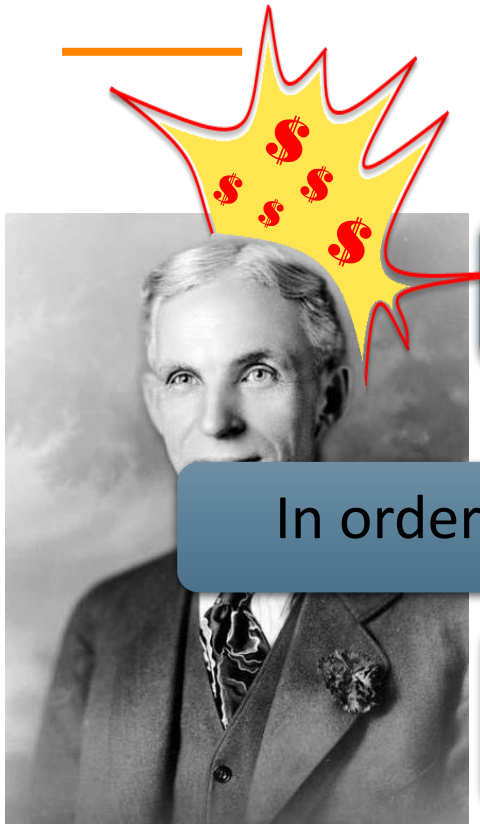
At the end of the second day, he asked for a ladder, climbed up the generator and made a chalk mark on its side.

plate at the mark and replace sixteen windings from the field coil.

They did as Steinmetz directed, and the generator performed to perfection.



Knowing the Problem



Ford was thrilled with the results, until…

… he got the bill!

In order to solve the problem… on roblem!

Ford baulked at the amount and demanded an itemized invoice…

Ford paid the bill.

What is the problem?

Tend to focus on the ‘results’ and not the actual problem

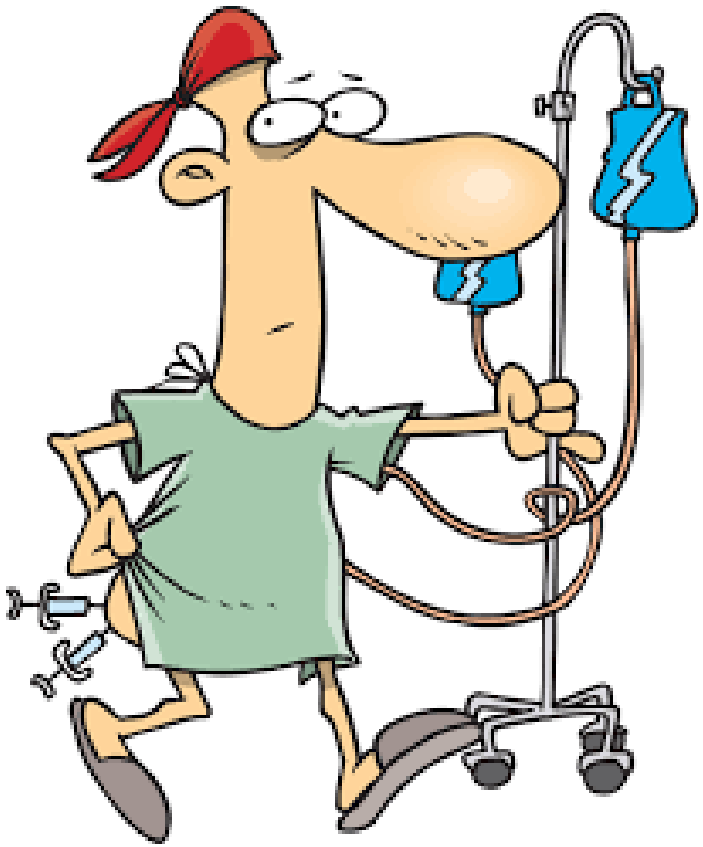
- Referred to as ‘solutioning’

‘Solutioning’ is based on hearsay and lacks data

- They are like the flower on a plant
- It’s what you see

Problems are in the roots

Classic examples of ‘solutioning’



The problem is the PATIENT:

High acuity

Not prepared

Lacks awareness

Doesn’t care

Won’t listen

Doesn’t show up

Classic examples of ‘solutioning’

The problem is the STAFF:

Don’t listen

Don’t do their job

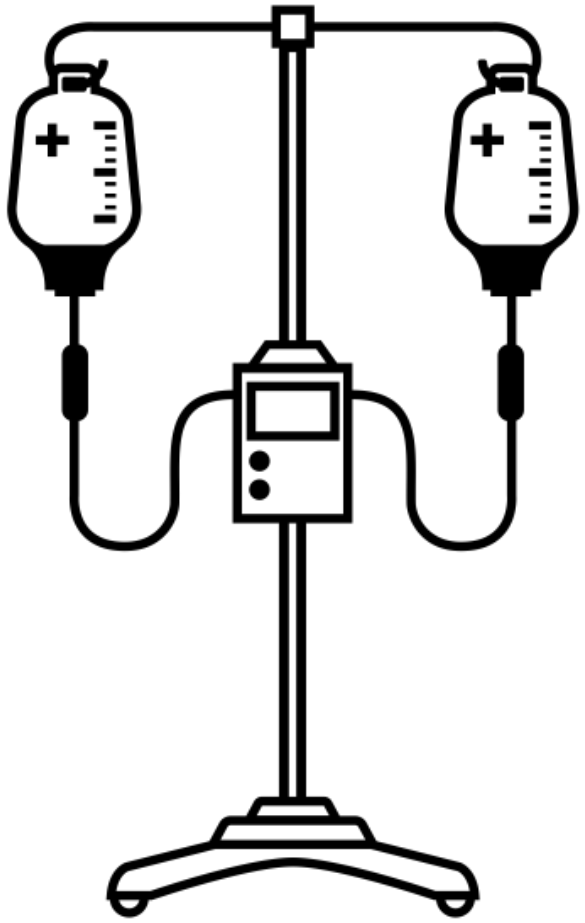
Too busy

Not prepared

Lacks awareness

Don’t care

Classic examples of ‘solutioning’



The problem is the EQUIPMENT:

Doesn’t work

Not enough

Can’t find it

Classic examples of ‘solutioning’

The problem is TIME & MONEY:

Not enough!

Classic examples of ‘solutioning’

The problem is the work is not STANDARDIZED:

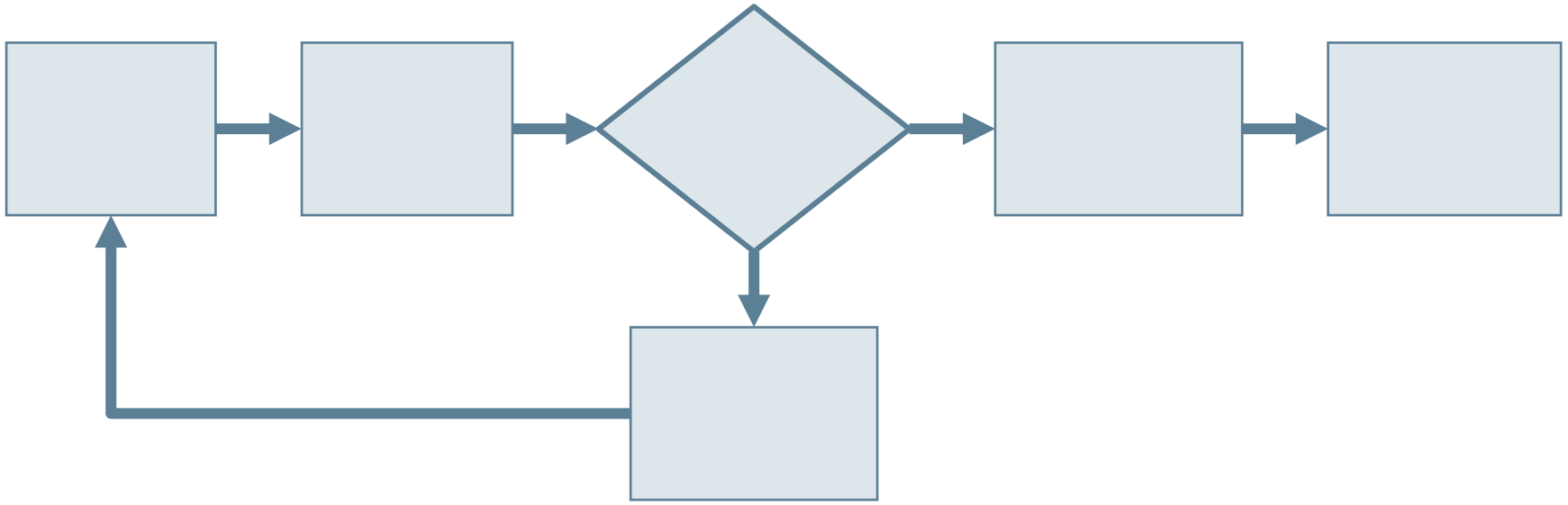
Standardizing without fixing the problem

- To consistently not meet the customer’s requirements!

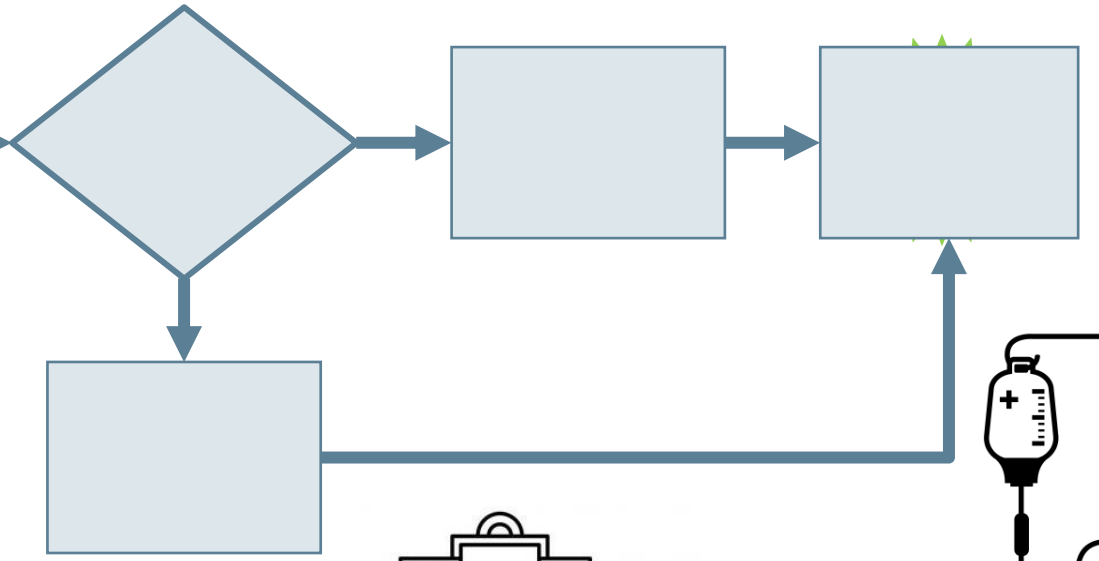
The ‘real’ problem

The problem is the PROCESS

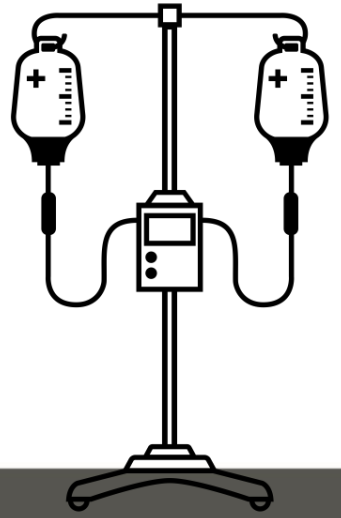
Not able to meet the customer’s demand



The ‘real’ problem



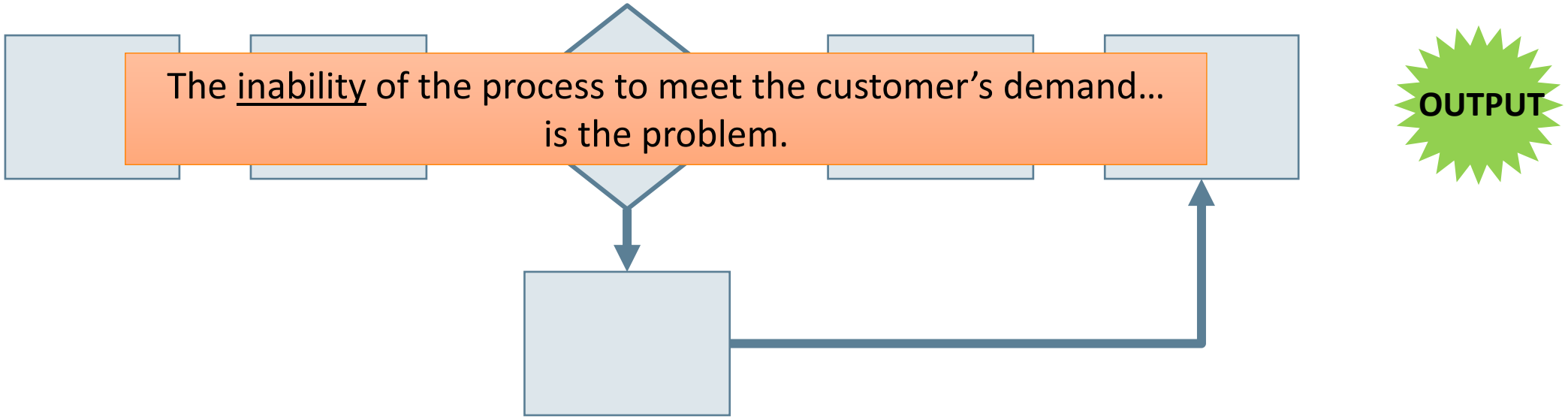
OUTPUT



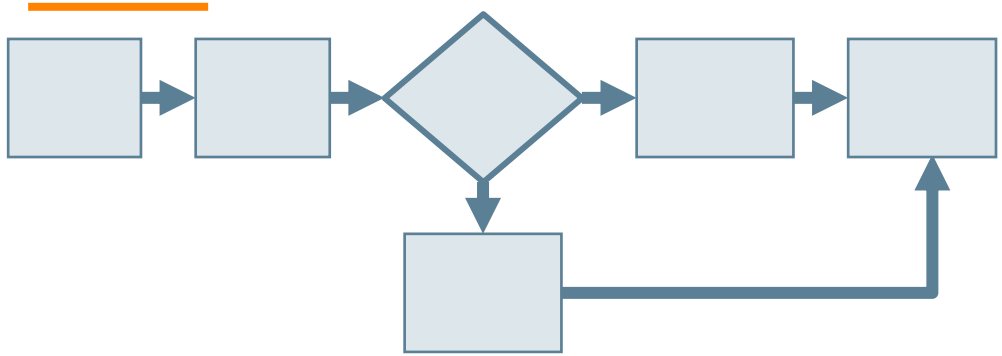
The ‘real’ problem

QUESTION?
Does the process produce its output:

- Fast enough?
- Accurate enough to meet the customer’s demand?



2 types of quality problems - TIME

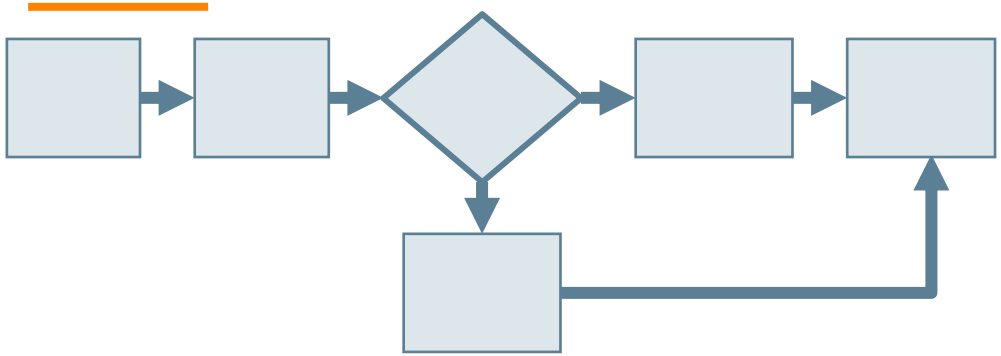


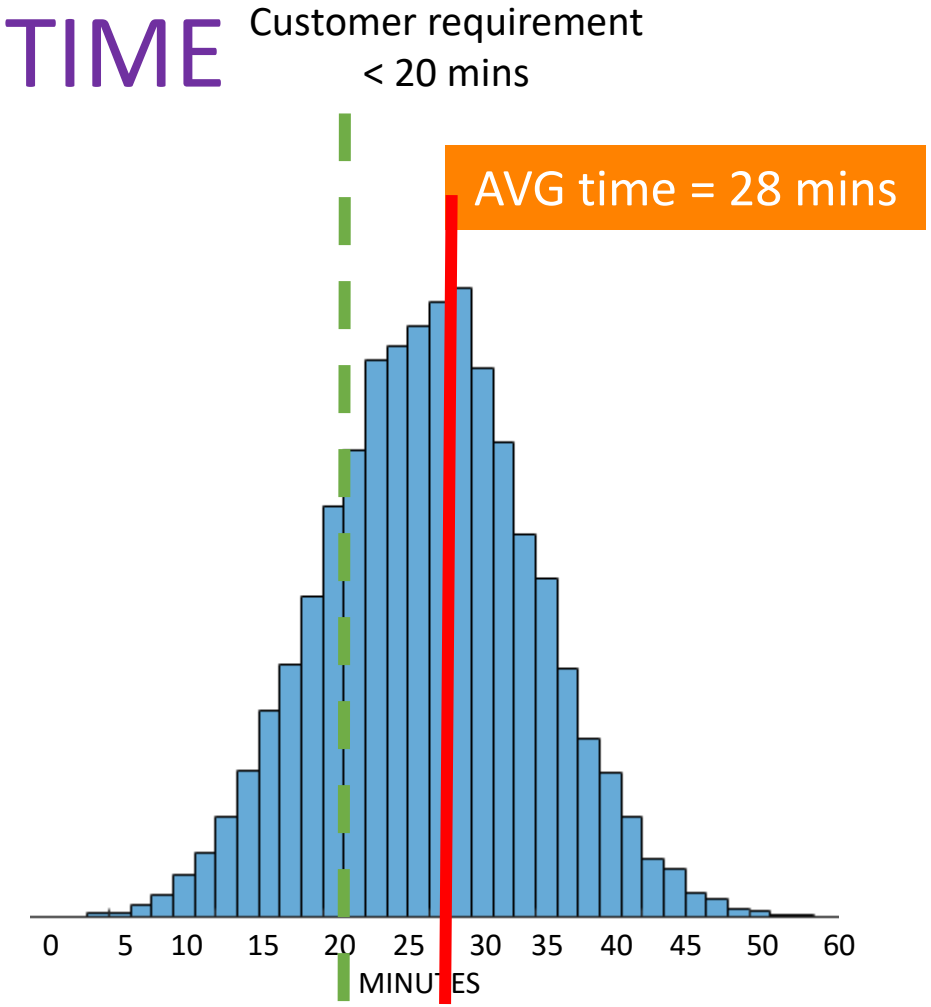
QUESTION

Is the process able to produce its output within the timeframe of the customer?

- Hours
- Minutes
- Seconds
- Days
- Weeks

2 types of quality problems - TIME





QUESTION

Is the process able to produce its output within the timeframe of the customer?

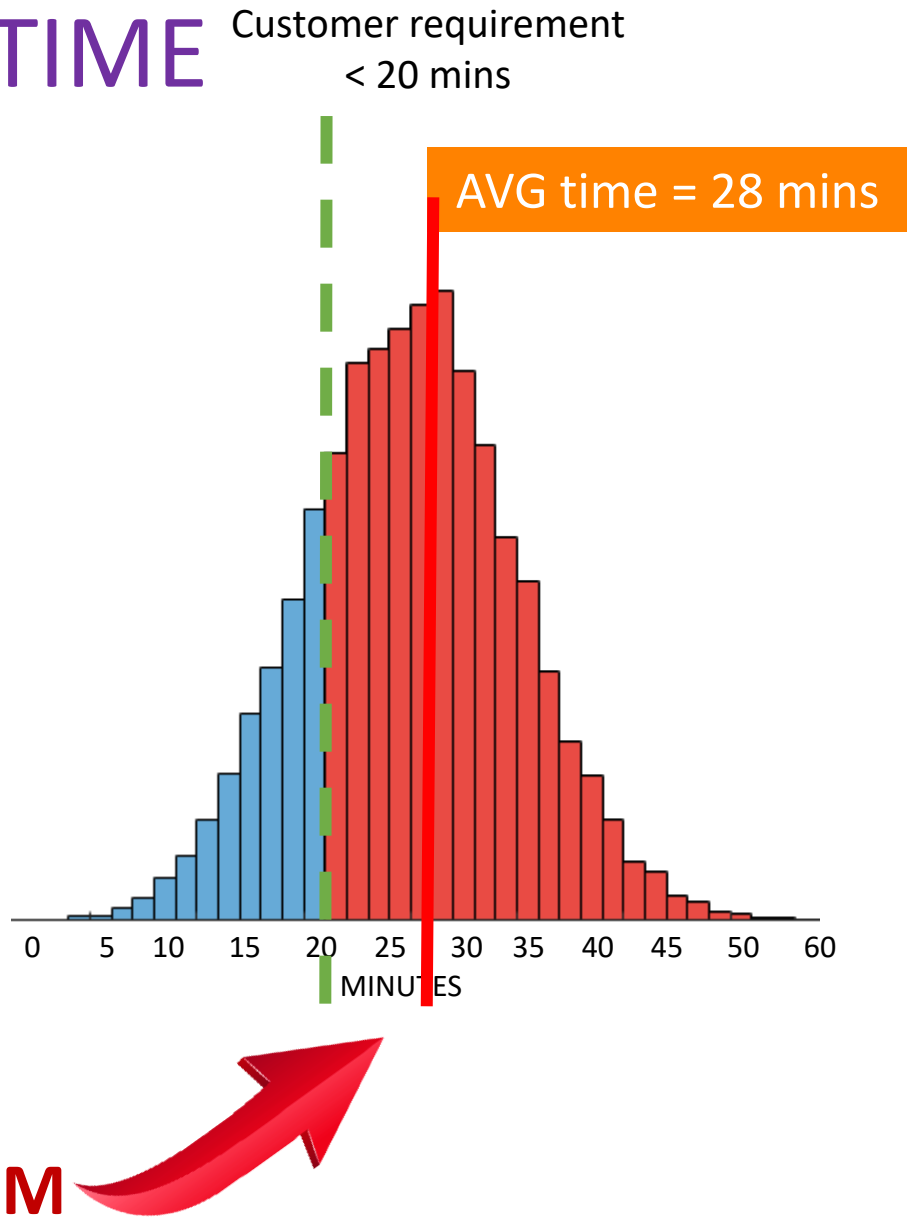
- Hours
- Minutes
- Seconds
- Days
- Weeks

2 types of quality problems - TIME

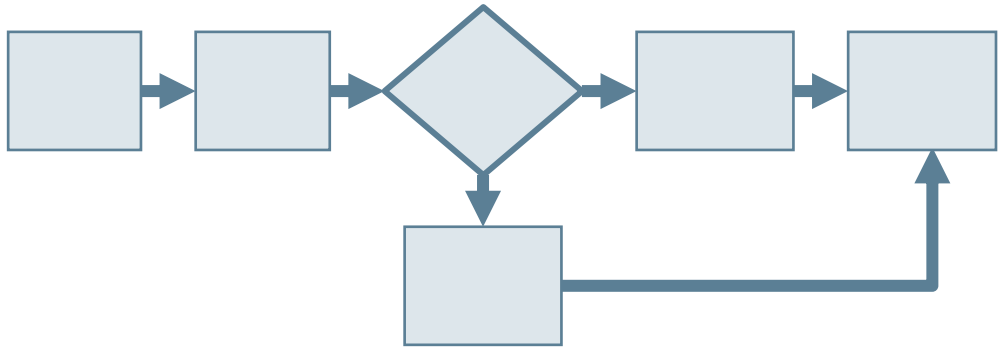
The problem is:

The process takes too long produce its output.

The GAP between the customer's requirement and the process's abilities to meet that requirement is the **PROBLEM**



2 types of quality problems - ACCURACY

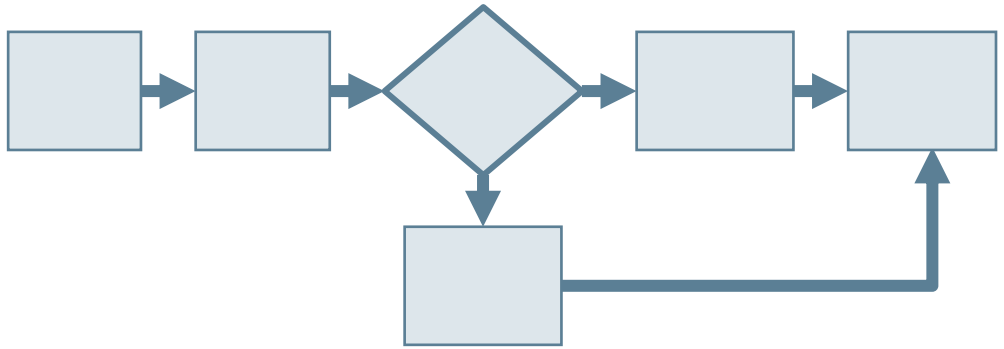


QUESTION

How capable is the process to produce an output the customer wants?:

- Broken
- Missing
- Incorrect

2 types of quality problems - ACCURACY



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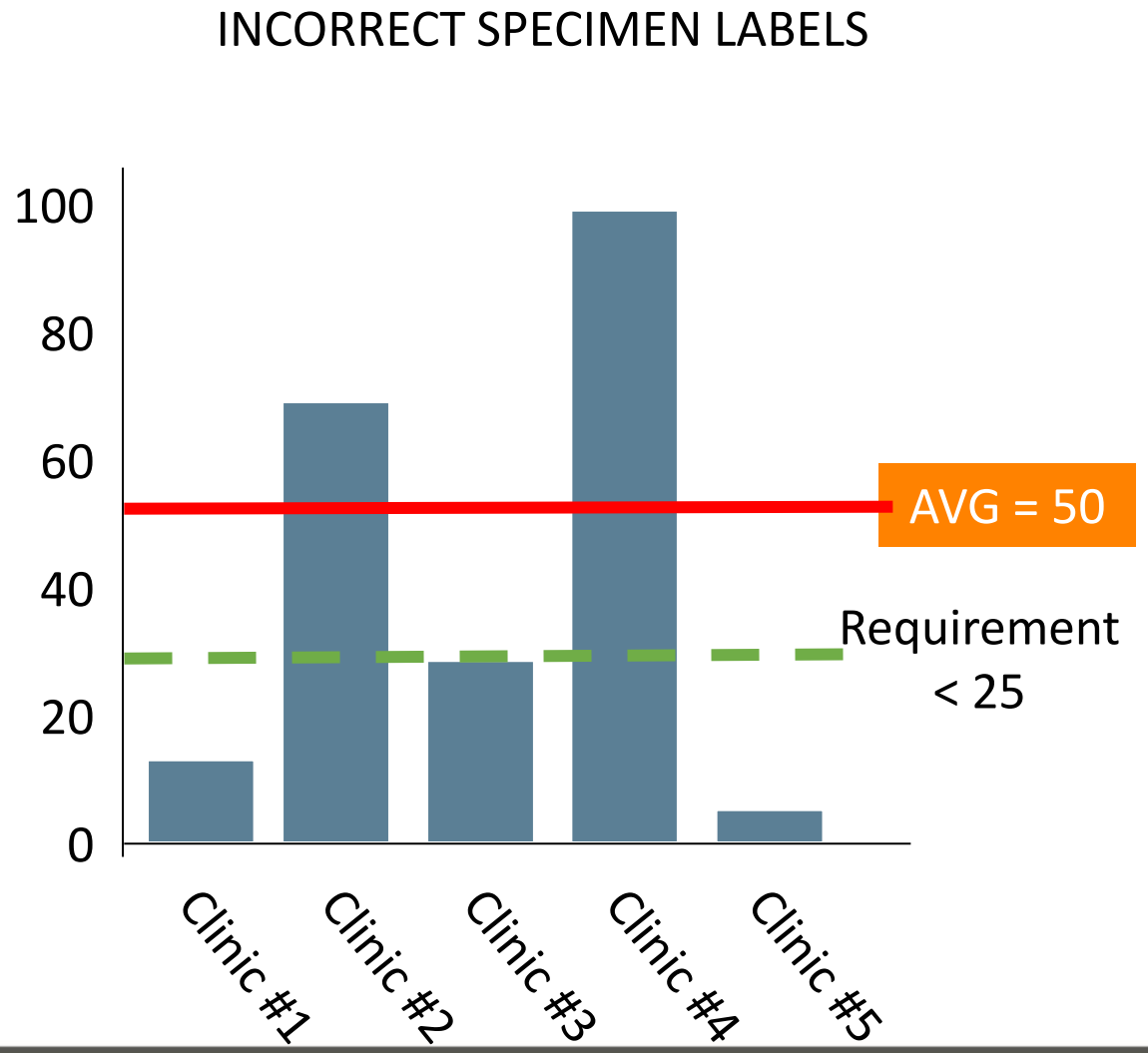
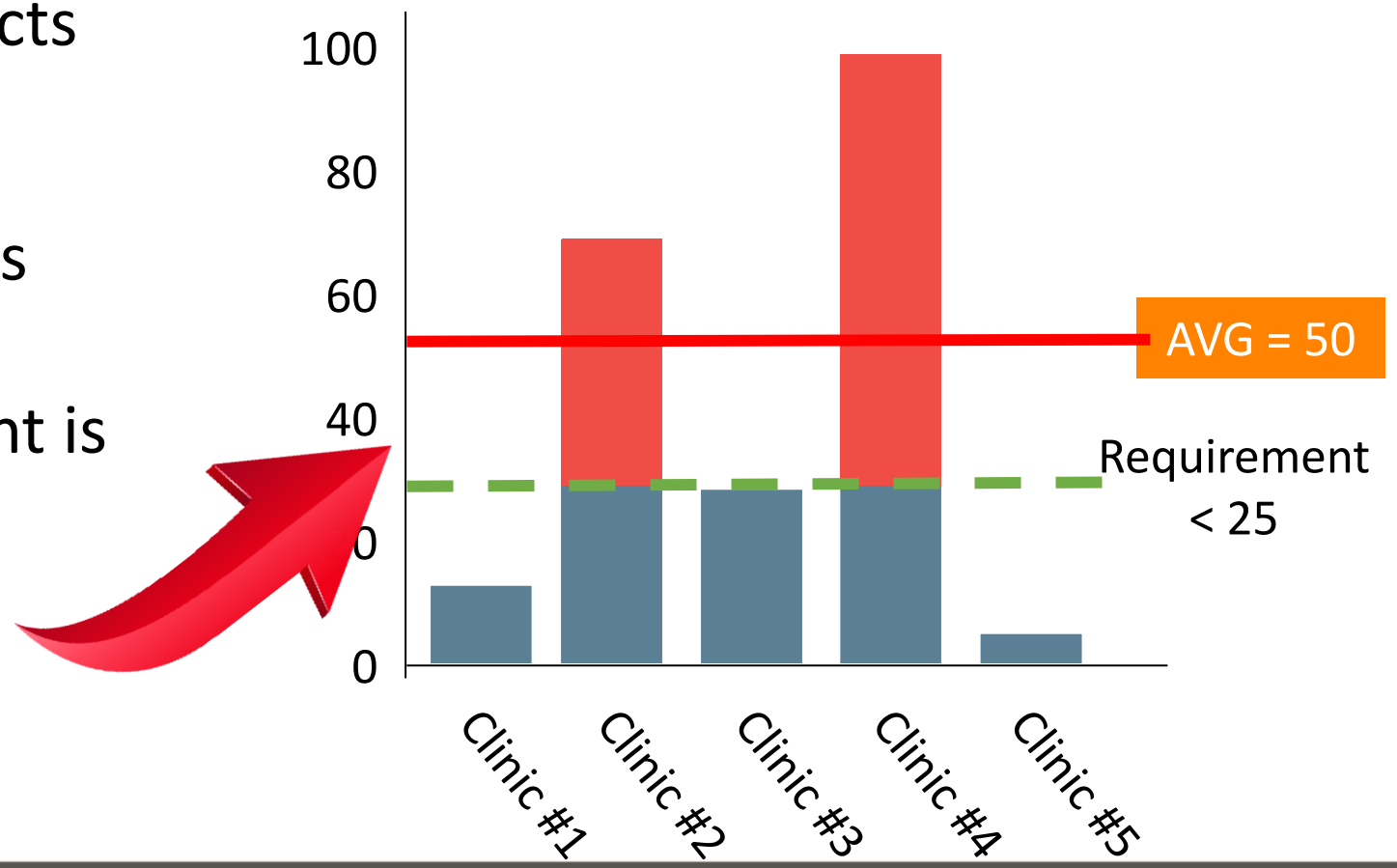


2 types of quality problems - ACCURACY

The problem is:

The process produces more defects than the customer can accept.

The GAP between the customer's requirement and the process's abilities to meet that requirement is the **PROBLEM**



Target/Aim State

What do we want to happen in the future?

This will be the ‘new’ version of your current state.

Presents the future of this process in measurable terms.

Target/Aim Statements should be **SMART**:

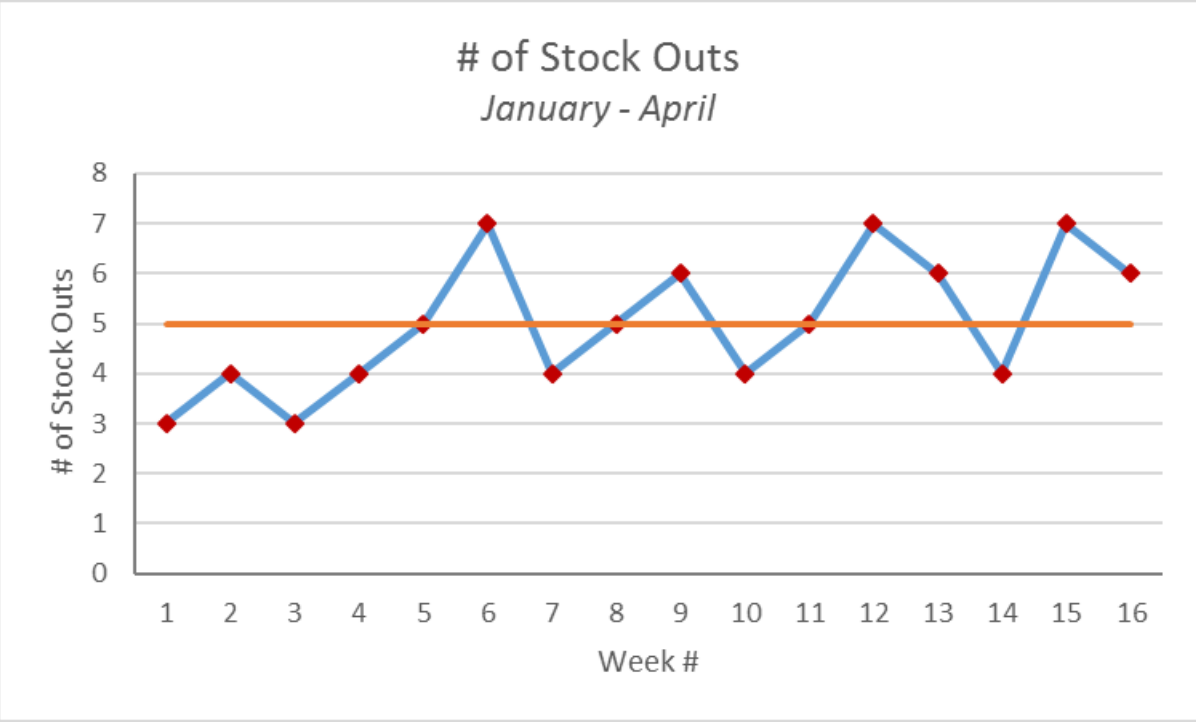
- **S**pecific
- **M**easurable
- **A**chievable but still Aggressive
- **R**elevant
- **T**ime-bound

Determining the Target/Aim

1. **Benchmarking**

- Using internal/ external sources

2. **Use the data**



Problem Statement

What is the problem?

The problem statement provides clear, concise understanding of the gap between the process's ability and the customer's requirement.

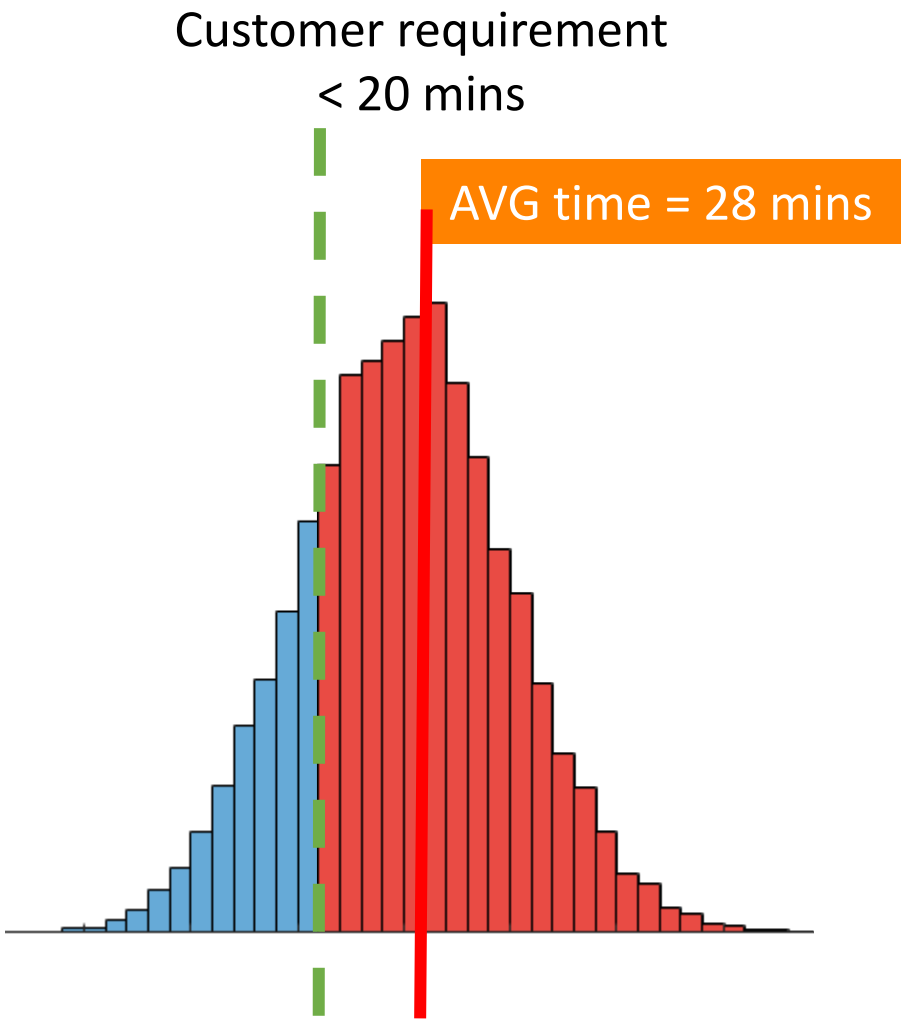
- It gives specificity to the issues
- Does not use anecdotes or hearsay
- Describes the pain of the current state
- Focuses on the process, not the people
- May evolve over time
  - May have to use variables (e.g. "X") until baseline data is collected

Tips for writing a problem statement

Defines the gap in **quantifiable** terms.

- **W**hat is happening or not happening?
- **W**ho is affected by this problem?
- **W**here is this occurring?
- **W**hen is this happening?
- **W**hy is this a problem for patient care?

Be specific – but do not describe "How"



Team Exercise – 5 minutes

Developing a Problem & Aim Statement

Review the **current state of Eastside Medical Practice Case Study**; discuss and develop the following:

Problem

What is happening or not happening?

Who is affected by this problem?

Where is this occurring?

When is this happening?

Why is this a problem for patient care?

Aim

Specific

Measurable

Achievable but still Aggressive

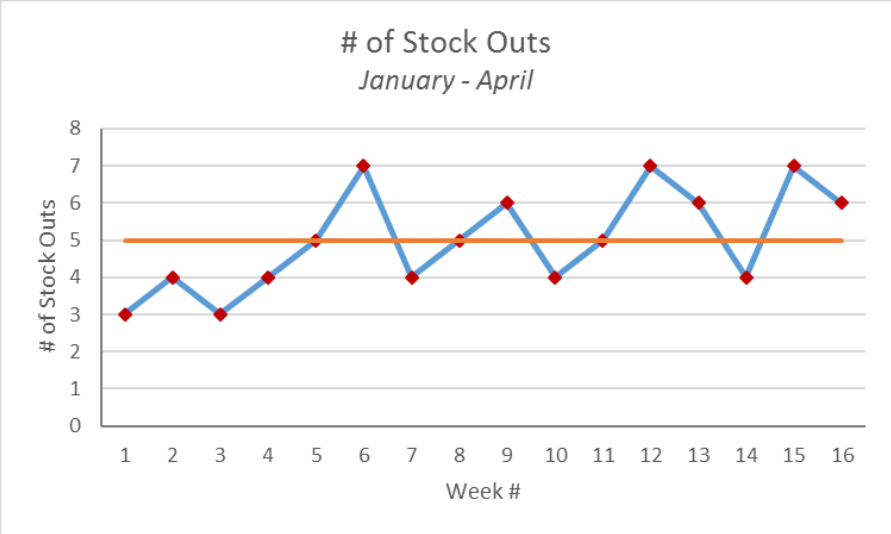
Relevant

Time-bound

Current State

Eastside Medical Center's Graban unit has been experiencing an increasing number of 'stock-outs' over the past 4 months. A stock-out is defined as the unplanned running out of supplies.

Recently, the unit had a stock-out of a three-way foley catheter, which resulted in a patient waiting for the appropriate catheter to be found on another unit.



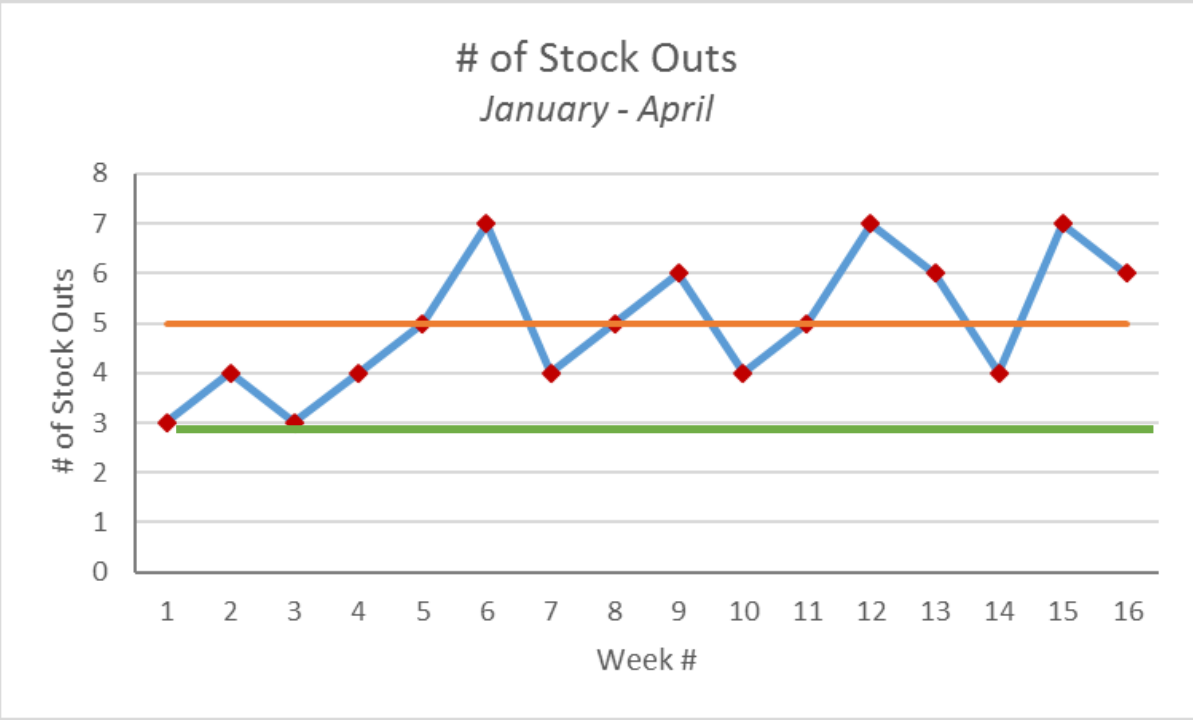
Team members complained about the time they spend searching for supplies, the increasing number of resulting "work-arounds", and the increasing frustration felt when trying to navigate the supplies closet. The team is concerned that a median number of **5 stock-outs per week** will have a serious impact on patient care.

Current State

- Why are we working on this?
- Describe the current situation in terms of factual information.
- What do we know and how do we know it?
- What do we need to know and how do we learn it?

Target Statement

The Graban unit will reduce the number of stock-outs to **≤ 3 per week** by December 31st.



The target statement:

S – specific

M – measurable

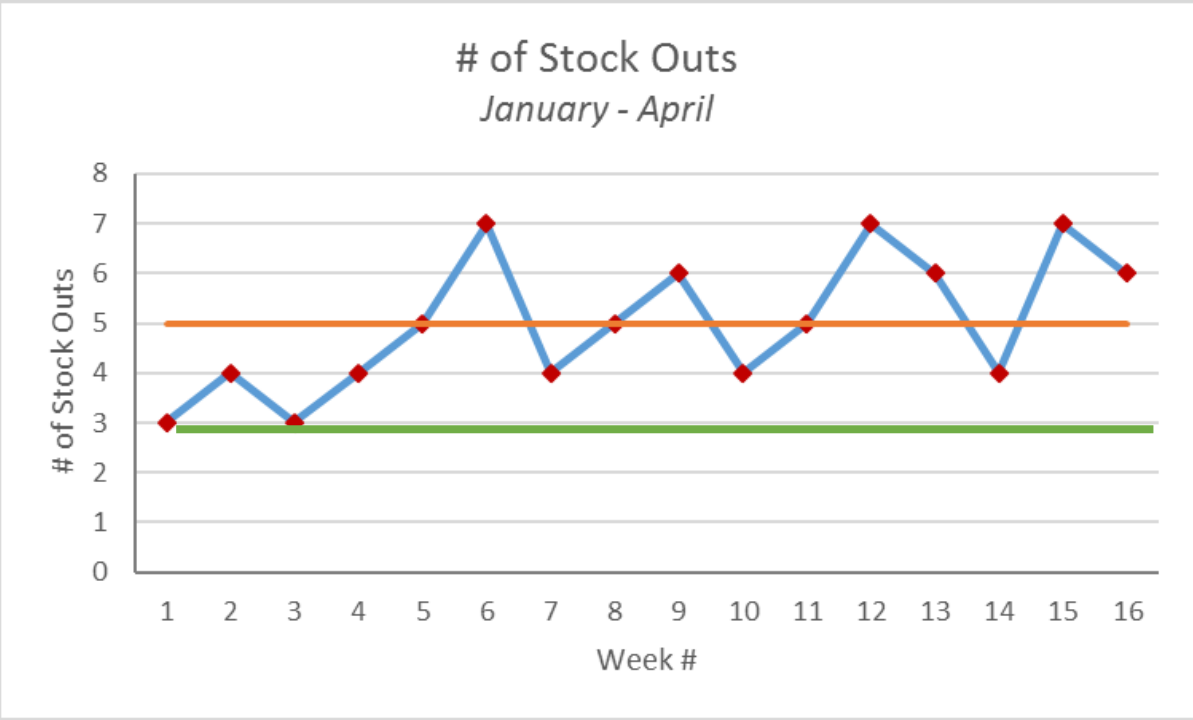
A – aggressive

R – relevant

T- time bound

Problem Statement

'Stockouts' on the Graban unit occurs **2 more** times per/ week than the team can properly manage.



The problem statement:

- Describes the gap.
- Describes what is being affected and where it is occurring.
- Is specific.
- Does not include an implied solution.
- States "what" not "why".
- Does not include goals.

Root Cause Analysis

Root Causes

What is stopping us from getting to where want to be?

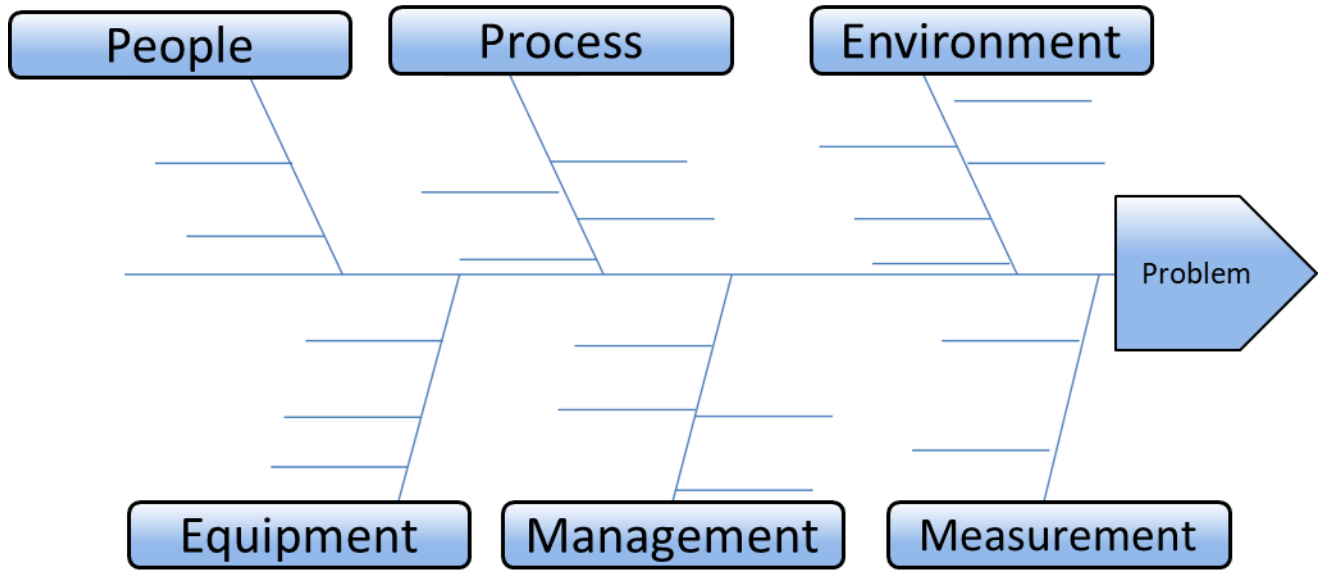
- Seeks the real problem, not a symptom.
- Root cause(s) are solvable and will point the way to your countermeasures.
- Identifying root causes is an iterative process that requires the knowledge and experience of subject matter experts (people who do the work).
- Tools:
  - Fishbone diagrams
  - 5 Whys

Fishbone Diagram

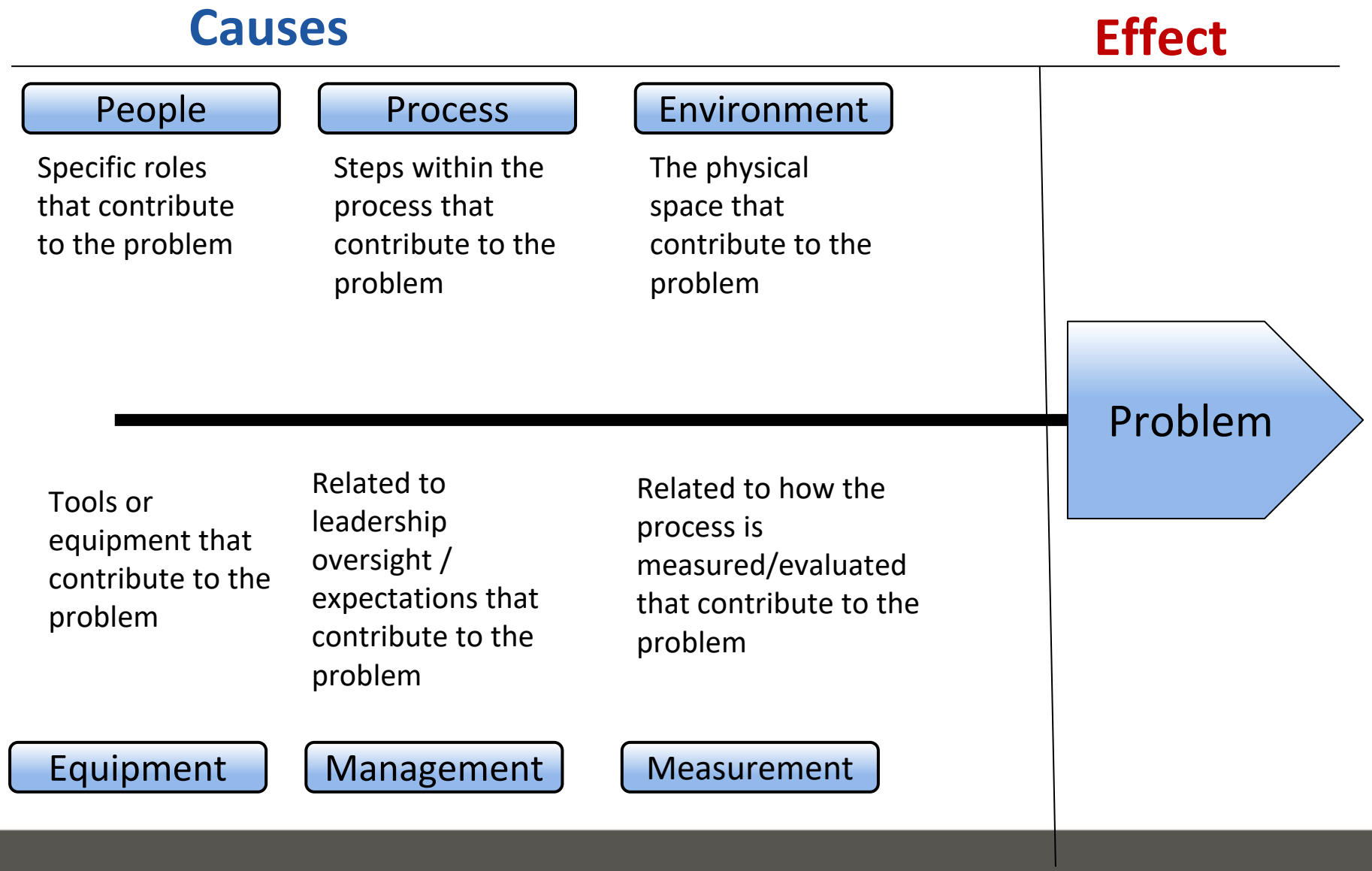
A fishbone diagram is a tool used to brainstorm and organize all of the possible causes of a problem.

Cause are generally grouped into categories:

- People
- Processes
- Environment
- Equipment
- Management
- Measurement



Mechanics of a Fishbone Diagram



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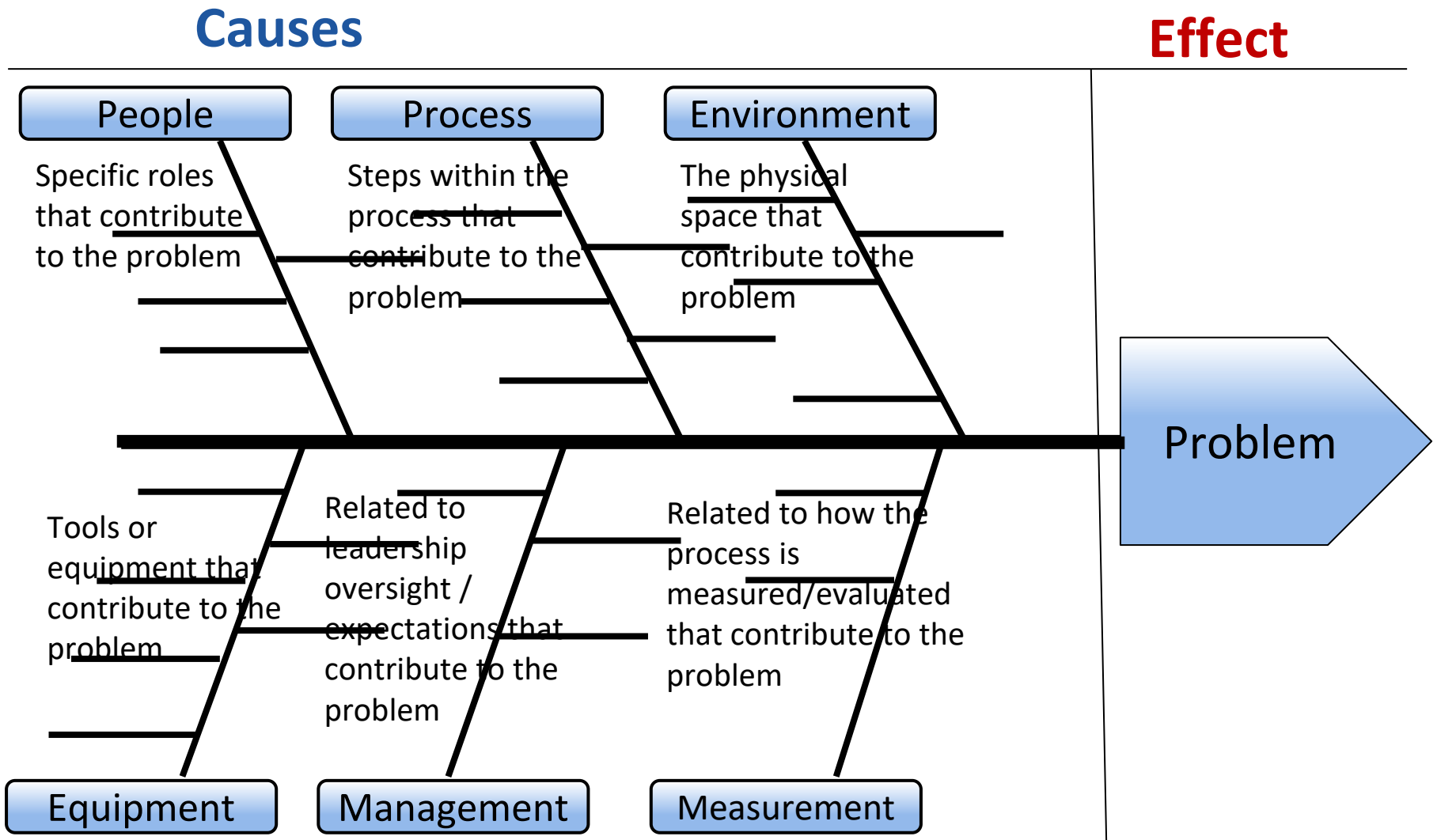
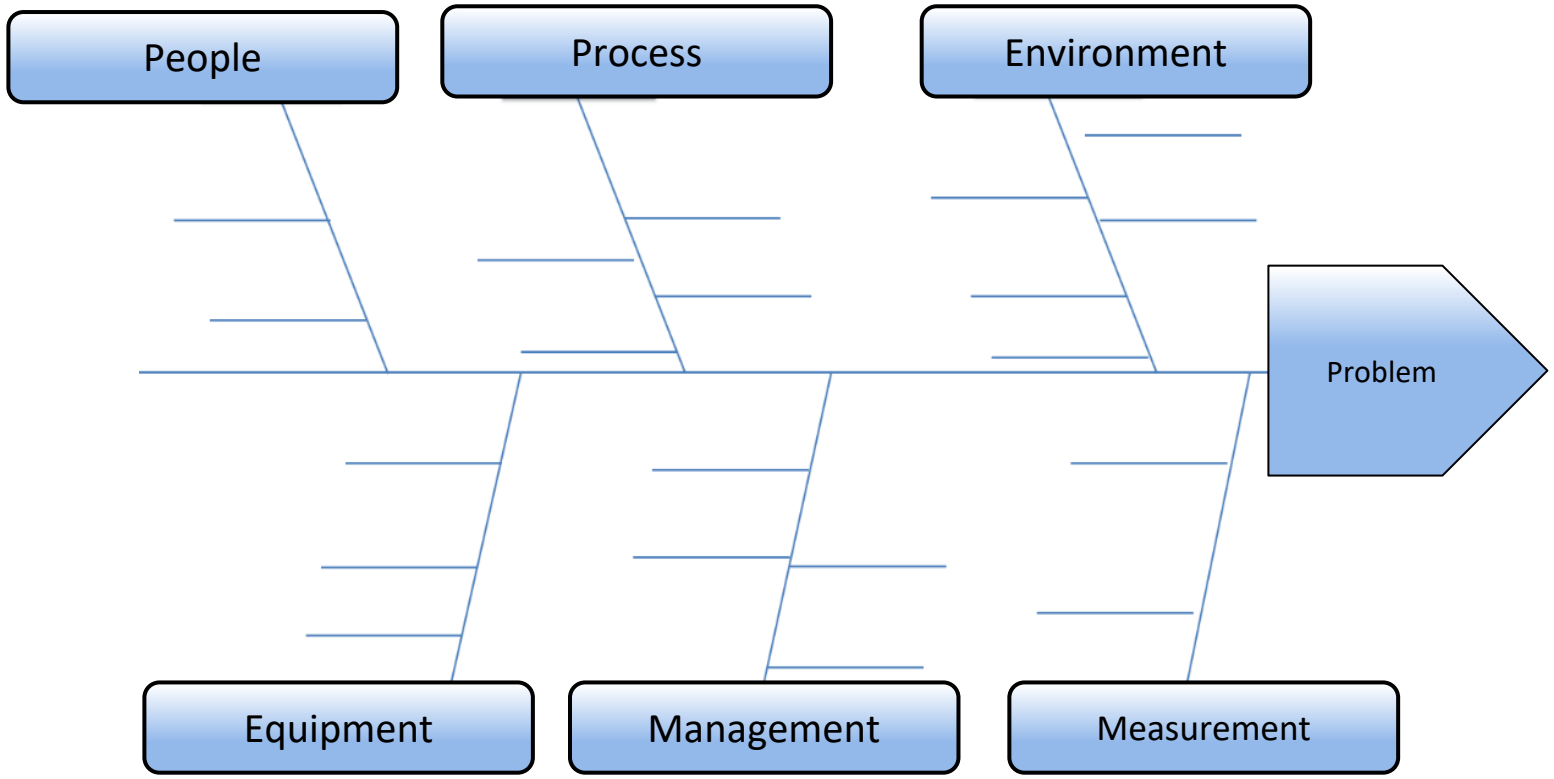


Team Exercise – 5 minutes

Fishbone Diagram - Causes



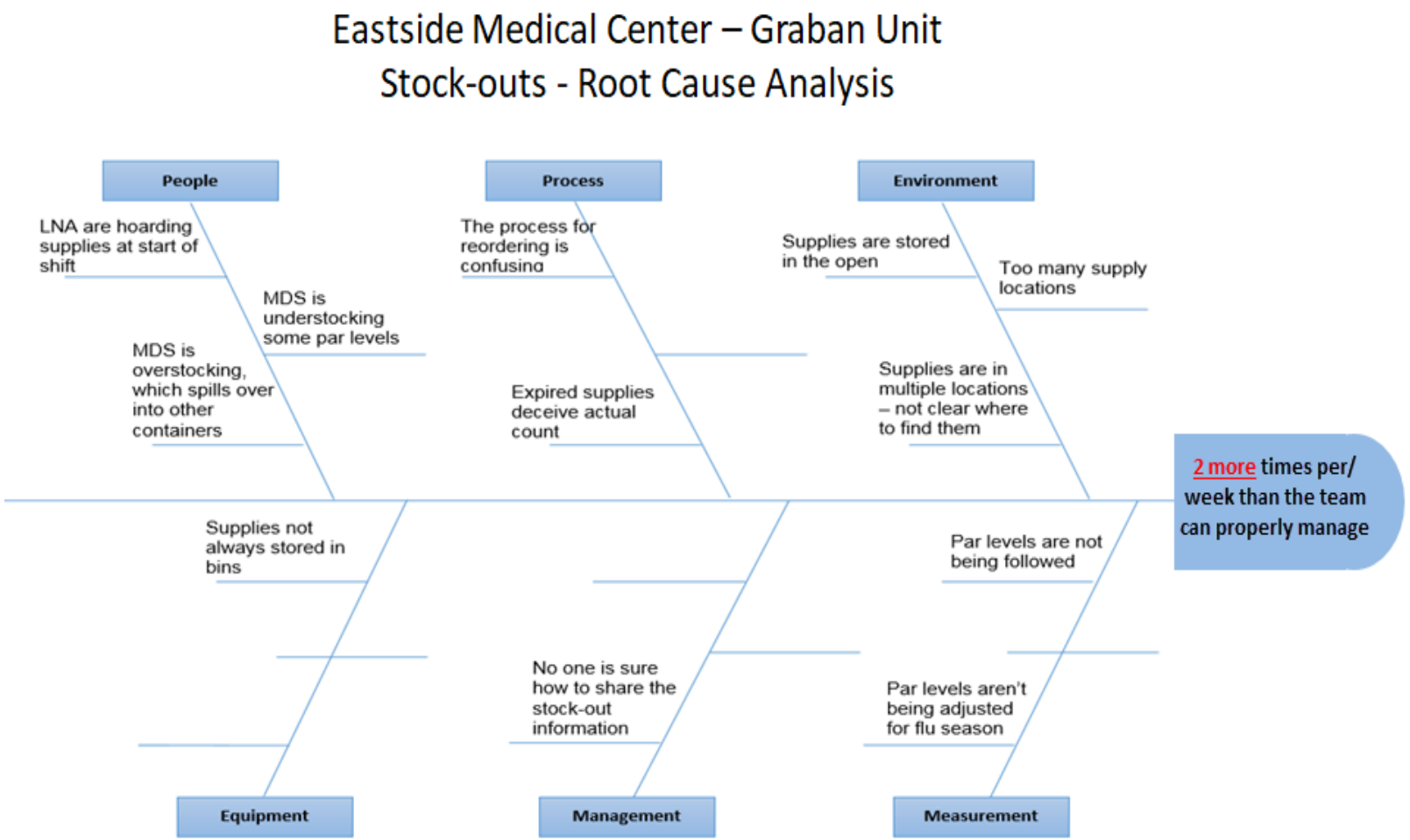
In your groups:

Problem: 'Stockouts' on the Graban unit occur **2 more** times per/ week than the team can properly manage.

Brainstorm possible causes

- Identify the categories (bones)
- List the causes

Fishbone Diagram - Causes



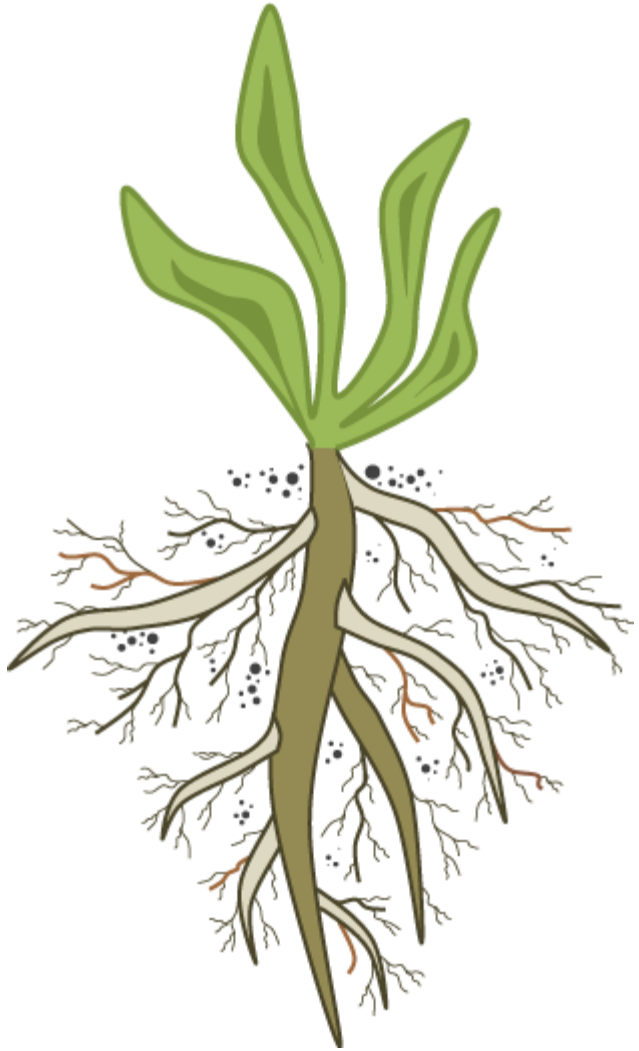
Cause(s):

- Problem defined
- Causes defined
- Causes separated into categories

HOWEVER, not necessarily the root cause(s)

Getting to the Root Cause

- A **root cause** is the factor that causes a nonconformance.
- The goal is to identify the **root cause** and permanently eliminate it through process improvement.
- **Root cause** analysis is a collective term that describes a wide range of approaches, tools, and techniques used to uncover **causes** of problems.



Getting to the Root Cause – 5 Whys

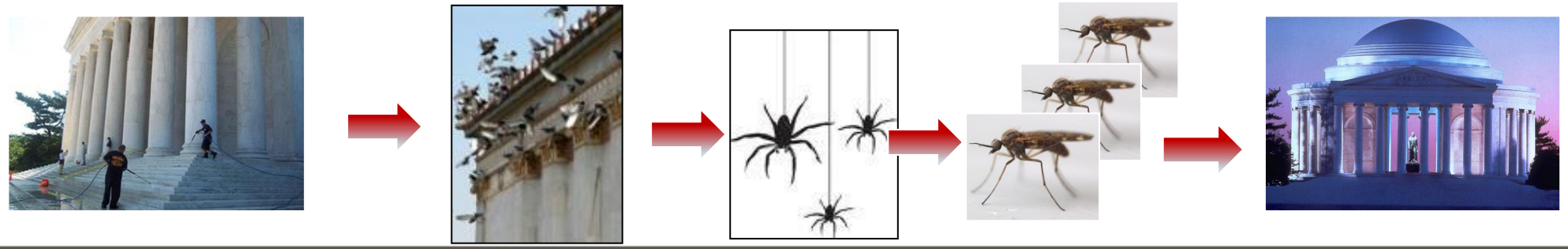
Problem: The Jefferson Memorial is crumbling at a rate greater than any other site.

Why?

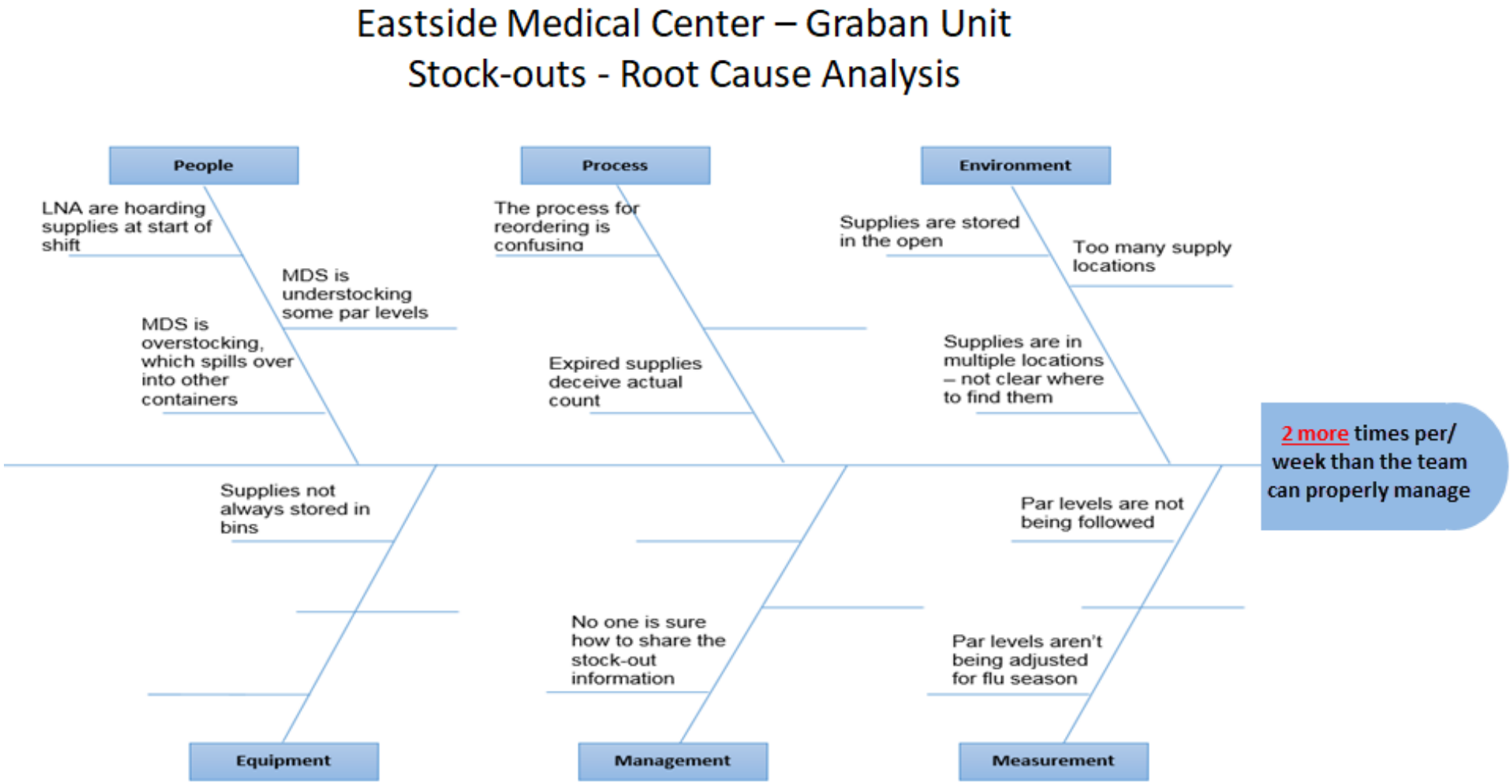
Keep asking why!

1. Because it was being washed frequently… **Why?**
2. Because of the large amount of bird waste…**Why?**
3. Because of the number of spiders that the birds eat increased… **Why?**
4. Because of the number of midges increased…**Why?**
5. Because midges are attracted to the lights - which are turned on before dusk.

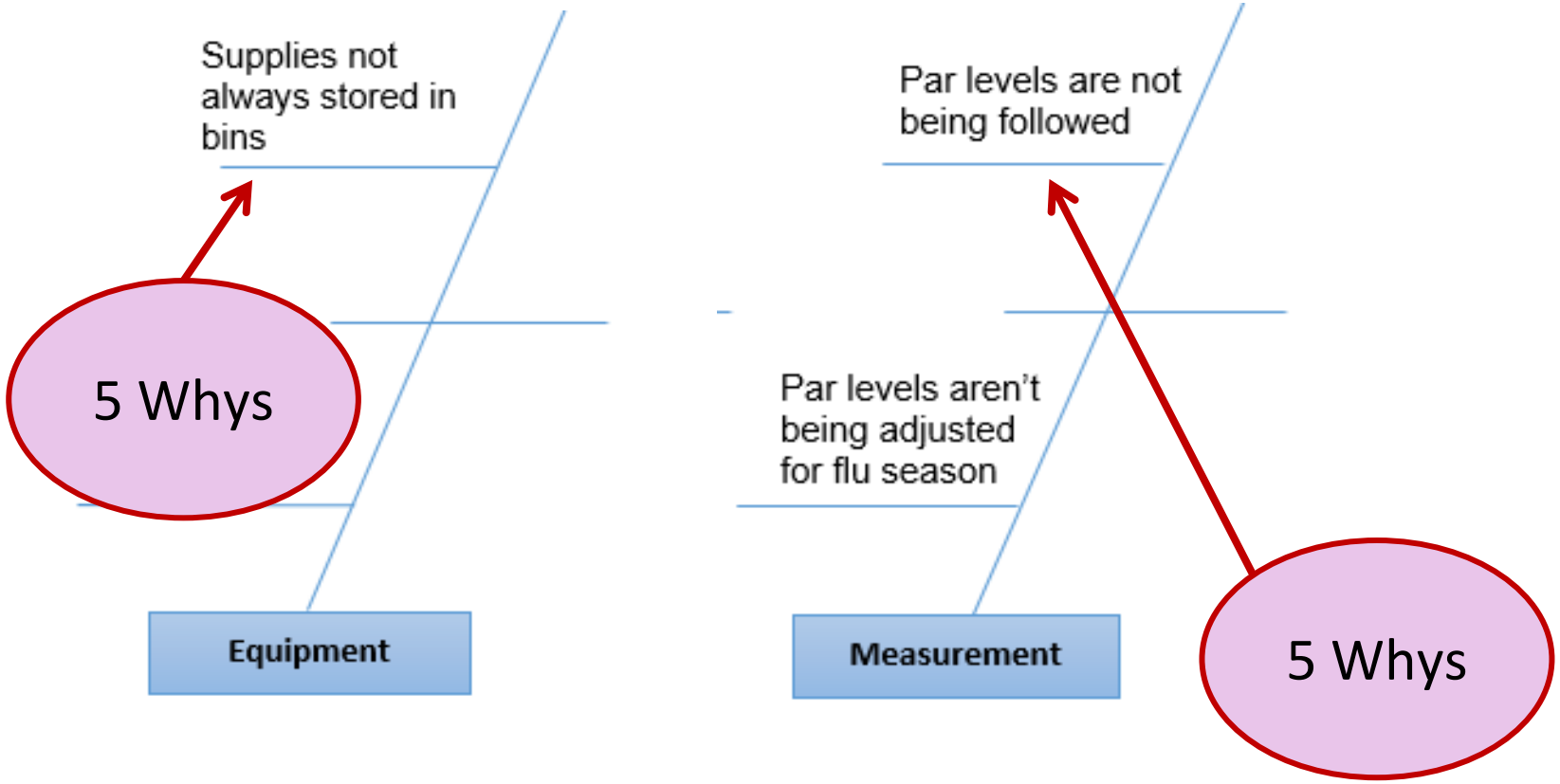
   … which are turned 30 minutes earlier than any other Memorial site.



Getting to the Root Cause



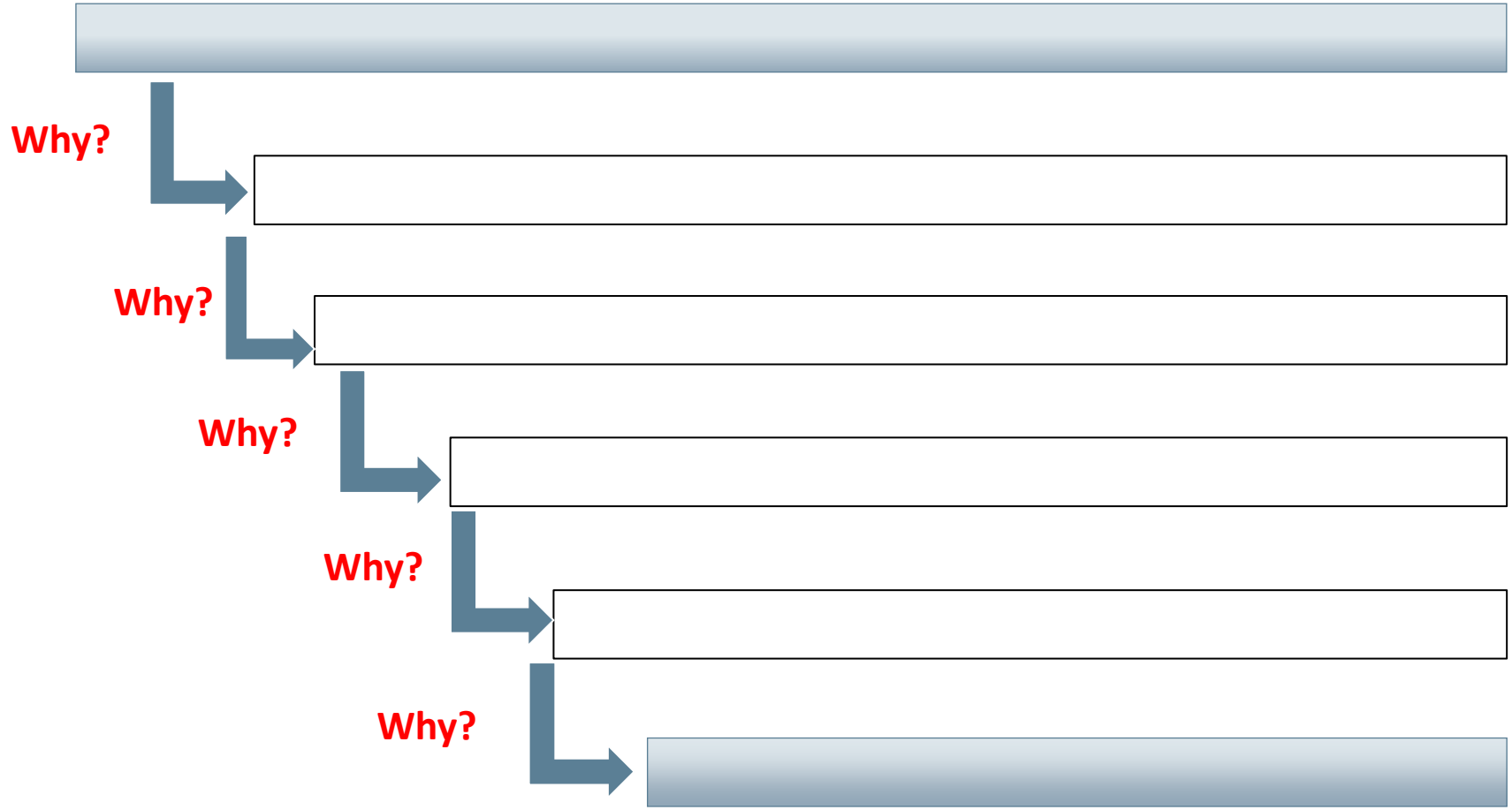
Getting to the Root Cause



Team Exercise – 5 minutes

Getting to the Root Cause – 5 Whys

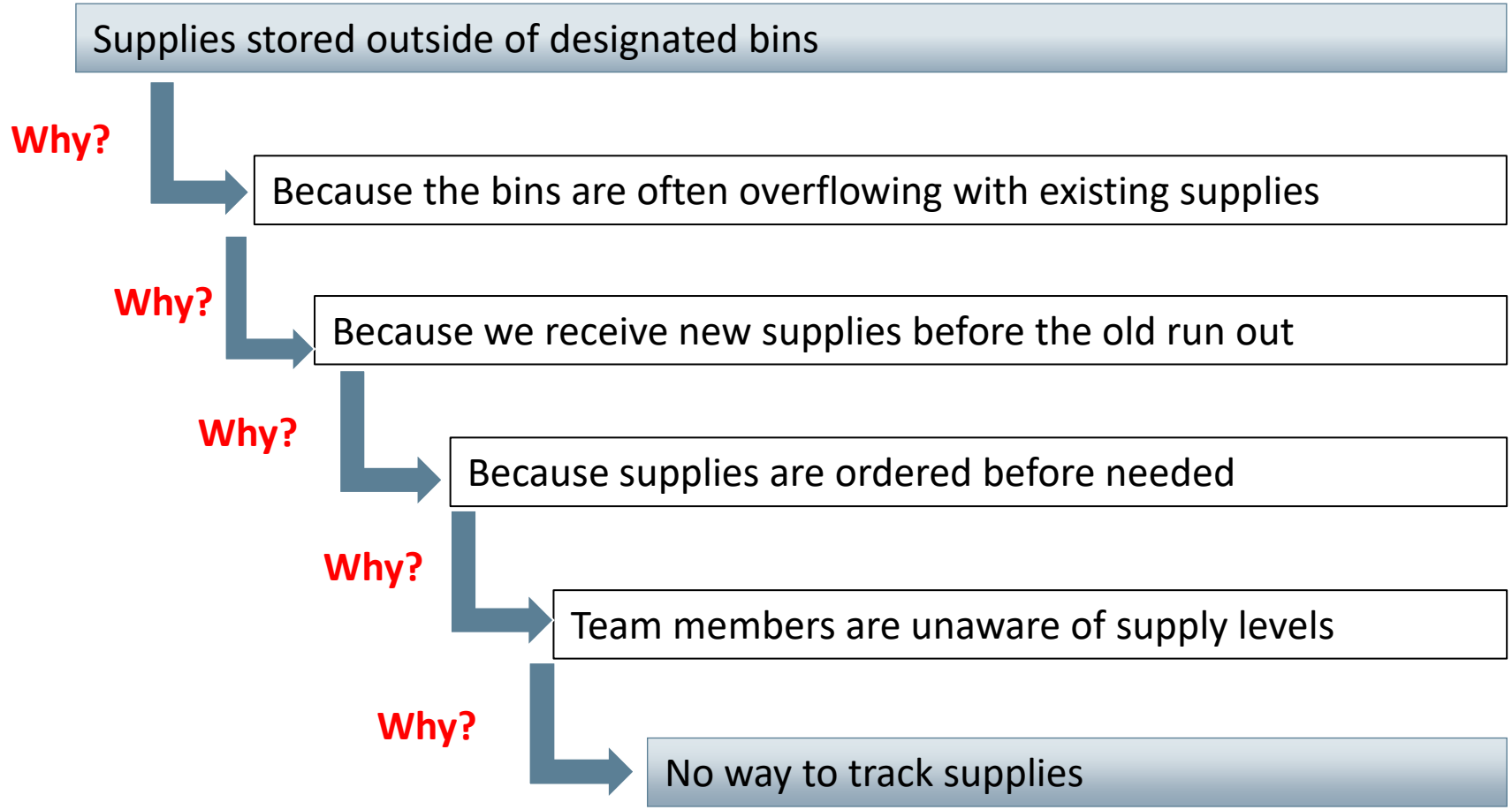
Choose a cause of your problem and complete a ***"5 Whys"*** analysis.



Team Exercise – 5 minutes

Getting to the Root Cause – 5 Whys

Choose a cause of your problem and complete a ***"5 Whys"*** analysis.



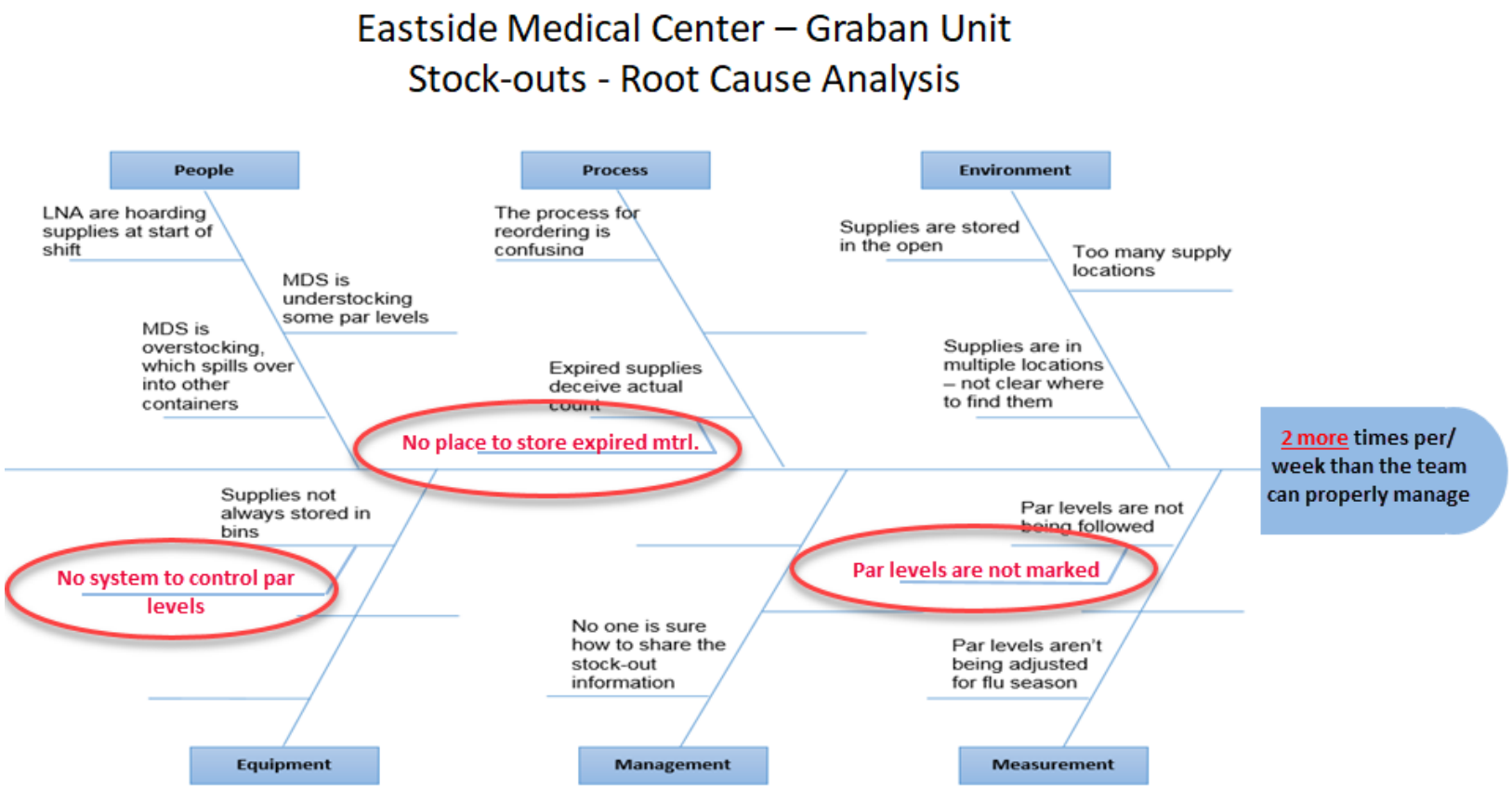
Pitfalls to 5 Whys

- Confirmation bias - Preconceive root cause
- Multiple causes to a problem
- Blaming people not processes
- Not arriving at an ‘actionable’ root cause
- Not taking that analysis far enough – need to ask more than 5 whys

When the ***5 Whys*** lead you to an area out of your control ask;

“Why don’t we know when they send us defects?”

Root Cause Analysis



The root cause:

- Explains why the problem exists
- Not a symptom
- Points the way to a countermeasure
- Solvable
- Will result in fixing the problem by applying a countermeasure

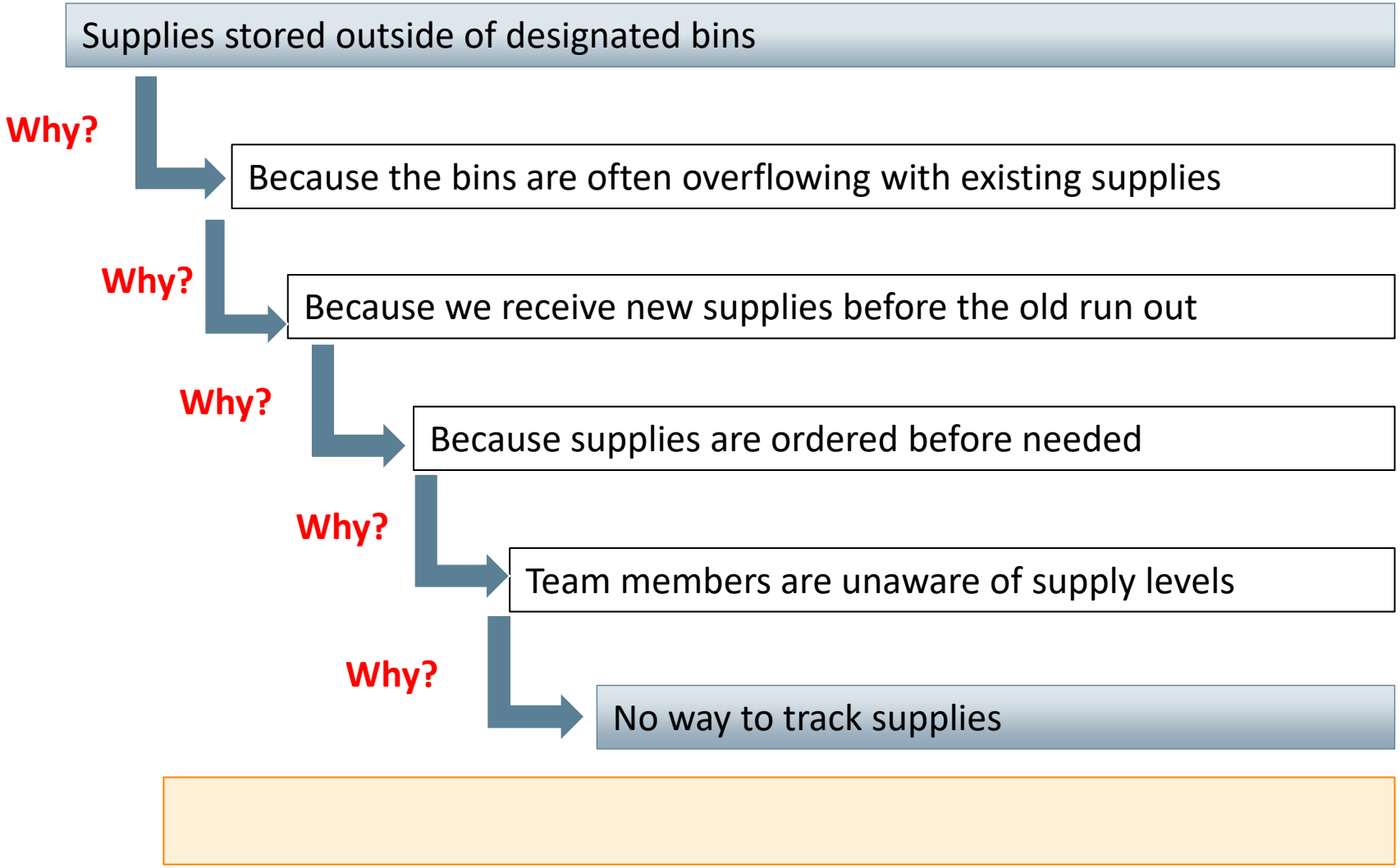
Countermeasures

What will we do to solve our problem?

- Countermeasures are not necessarily solutions…
- Countermeasures target the root causes identified in the analysis.
  - Focus on improving the process
- Involve the people affected by the process (upstream and downstream).
  - Go to the gemba in search of good countermeasures.
- Proper implementation may require the PDSA cycle.

Team Exercise – 5 minutes

Select a Countermeasure



Countermeasures

- ✓ **5S** the supply room.
  - Create designated ‘expired’ bin.
  - Label par levels on bins
- ✓ **Establis**h a weekly mtg with MDS supervisor.
- ✓ **Update** the Daily Status sheet to include a supply related question.

Countermeasures

- Directly addresses one of their root causes.
- Easy to implement and measure.
- Focused on the process.
- More than ‘education’
- Low cost.

Action Plan

Who will do what by when?

- Define “how” you are going to execute implementing the proposed countermeasures.
- Specifically define the:
  - Who
  - What
  - How
  - When
  - Status
- Tools:
  - Use a table to communicate in a way that is easy to check and understand.

Action Plan

Develop and document an ***action plan*** that will demonstrate how the team implements its countermeasure(s).

Specifically define the:

- Who
- What
- When
- Status

What	Who	When	Status

Action Plan

What	Who	When	Status
Bring together a team to sort supplies to arrange in closets, gather feed-back from team, reorganize for final location.	Ross	9/15/19	Complete
Label supplies and post supplies locations on closet doors.	Ross	9/25/19	Complete
Purchase a bin to be the designated “expired’ bin	Phoebe	10/5/19	Complete
Reach out to the MDS manager to set up a meeting.	Rachel	10/10/19	Complete
Guide MDS contact through a tour of the newly arranged closets.	Monica	10/17/19	Complete
Add a supply related question to the huddle.	Monica	10/25/19	Complete

Action Plan:

- Includes who will do what by when.
- Clear, visual, easy to understand and assess progress
- Removes the need for any questions.

Monitor and Confirm Results

What are the results?

- Have your countermeasures been successful?
- How well did the proposed countermeasures affect:
  - Future State
  - Goals
  - Targets
- How do the actual results from the countermeasures/experiments compare with what you thought would happen?

Evaluating Box 7 and Box 8

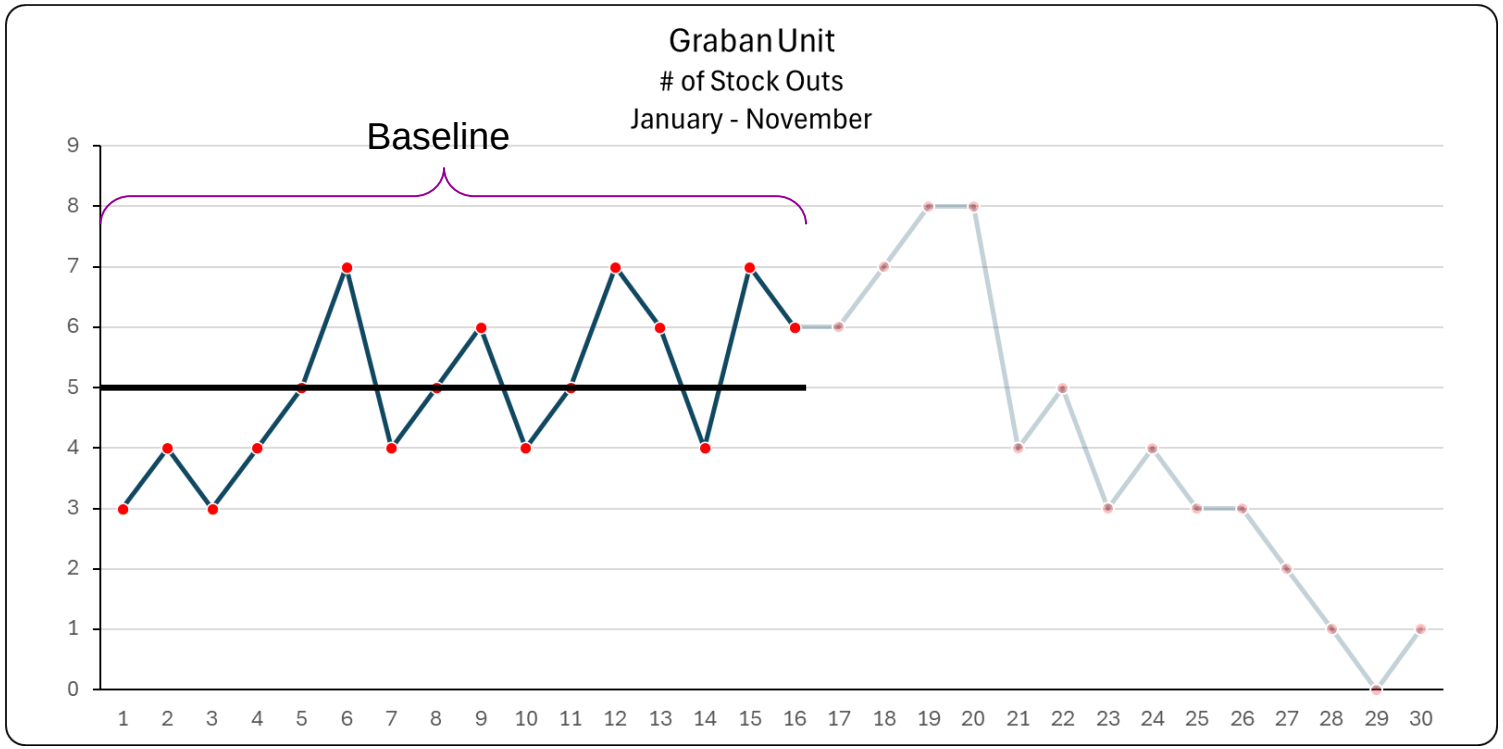
Review the Results in Box 7:

1. Did your countermeasure get you closer to your target state?
    - 5S the supply room
        - Create designated ‘expired’ bin.
        - include proper labeling of par levels on bins)
    - Weekly mtg with MDS supervisor.
    - Update the Daily Status sheet to include a supply related question.

Populate Box 8 based on your results:

2. How will the team proceed?
    - Capture the teams learning and next steps
    - If applicable, identify how the team will sustain their gains
    - Provide evidence of standardization

Monitor and Confirm Results (Outcome)



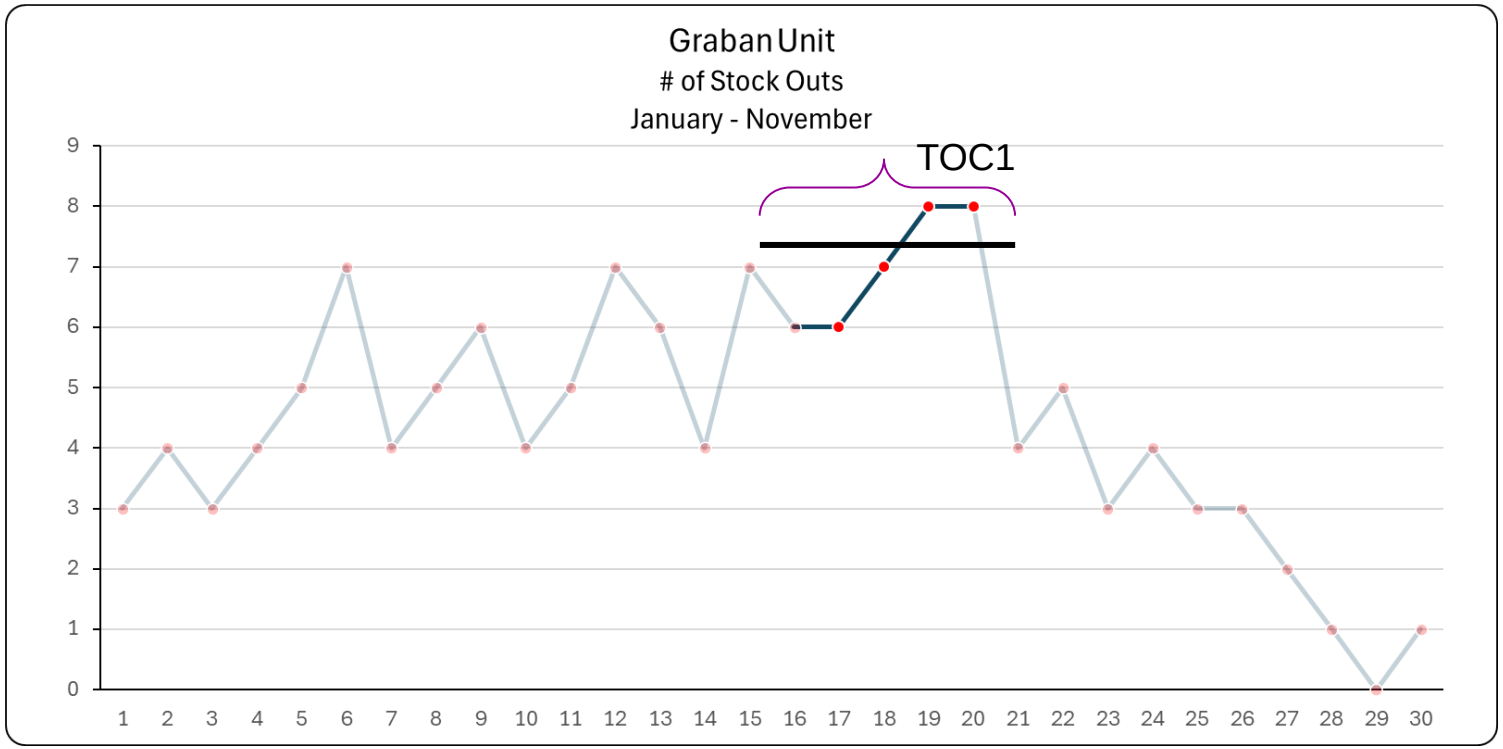
Monitor and Confirm Results

Did your countermeasure get you closer to your target state?

Baseline Results:

Median of 5 stocks per/ week.

Monitor and Confirm Results (Outcome)



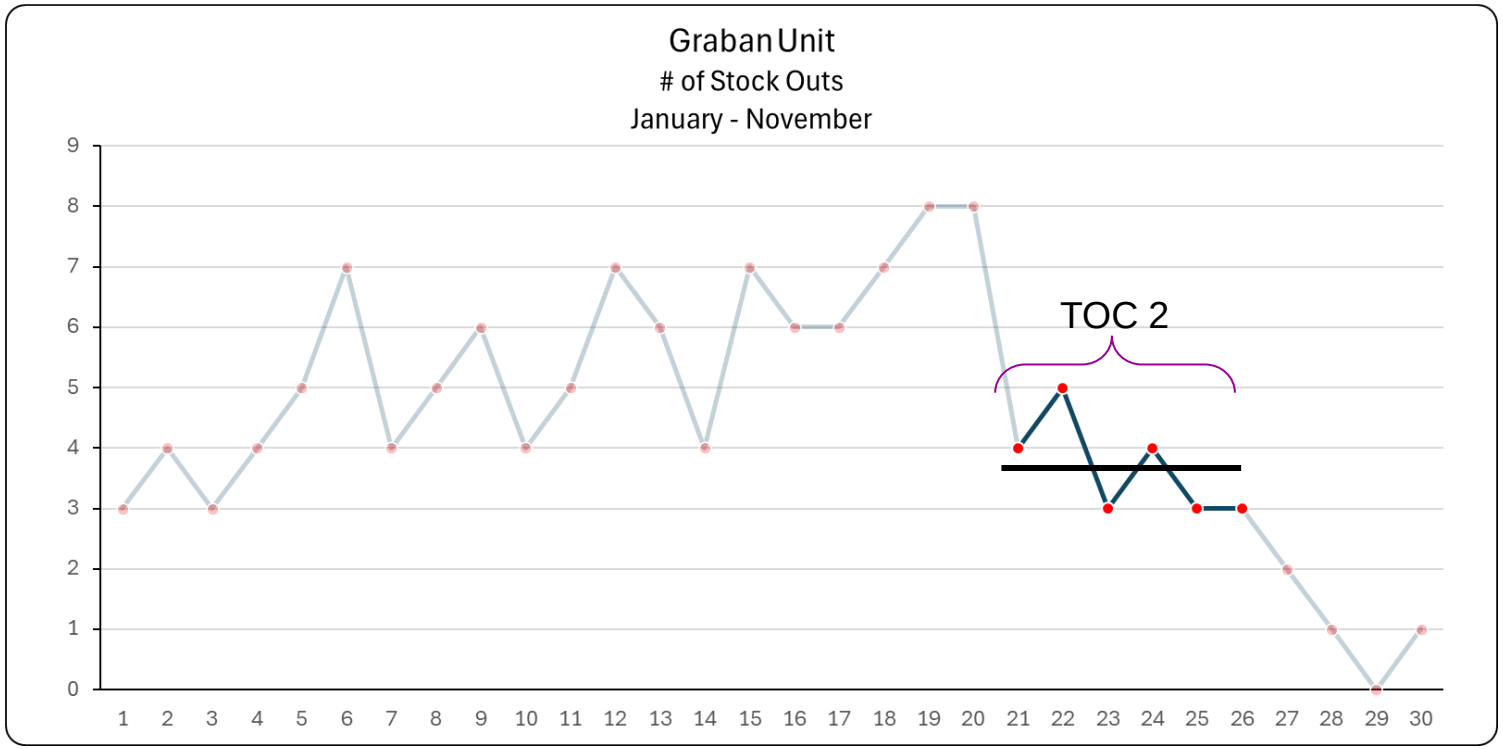
Monitor and Confirm Results

Did your countermeasure get you closer to your target state?

Test of Change #1:

- 5S Supply Room
  - Expired bin
  - Label par levels
- Stock Out Median = 7.5

Monitor and Confirm Results (Outcome)



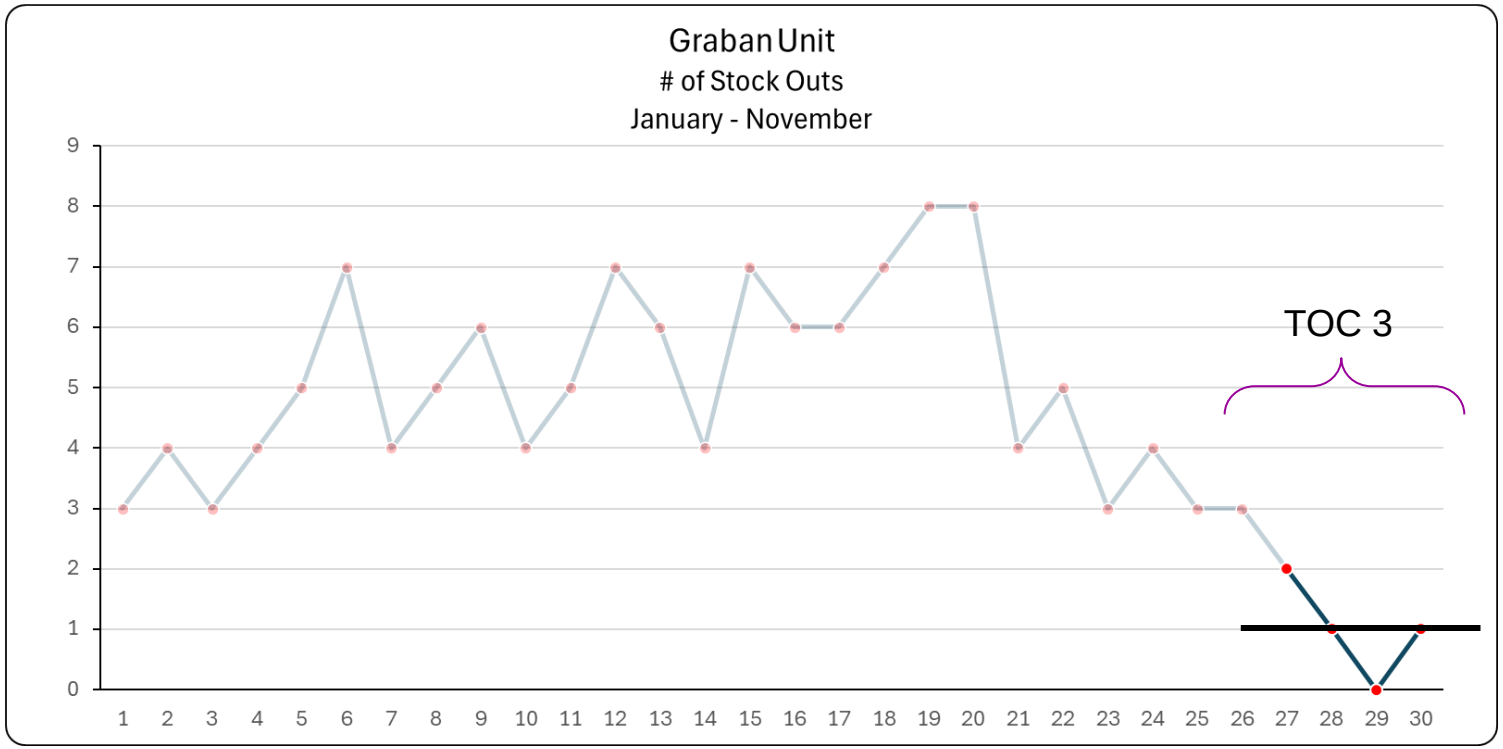
Monitor and Confirm Results

Did your countermeasure get you closer to your target state?

Test of Change #2:

- Weekly mtgs with MDS Supervisor
- Stock Out Median = 2

Monitor and Confirm Results (Outcome)



Monitor and Confirm Results

Did your countermeasure get you closer to your target state?

Test of Change #3:

- Revise the Daily Status Sheet
- Stock Out Median = 1

Act and Standardize

How can we standardize and spread best practice?

- Documents how best practices & shared learning are captured and spread.
- Provides evidence of standardization; including
  - Documentation of standard
  - Staff training on standard
  - Staff following the standard

Act and Standardize

Discuss:

1. How will the team proceed?
2. How will you capture and share learning?
3. What issues can be anticipated?
4. How will you continuously improve?
5. Document the new standard

Act and Standardize

- ✓ **Develop** daily audit tool to visually track compliance with the supply management process
- ✓ **RRN** will complete a daily audit of the supply closet to ensure proper organization.
- ✓ **Report** the status of the supplies at the Daily Huddle to promote situational awareness about supplies.

Act and Standardize:

- Evidence of Standard Work and a method to sustain the new process.
- Utilizing their management system to sustain the change.
- Evidence that the team is thinking of the next PDSA

A3 Journey

Title: Stock out Reduction

Owner: Monica Geller
Sponsor: Rachel Green
Facilitator: Chandler Bing
Start Date: August 28, 2019
Latest Revision Date: September 23, 2019
Subject matter experts: Ross Geller, Phoebe Buffay

Eastside Medical Center

1. Current State

Eastside Medical Center's Graban unit has been experiencing an increasing number of stock-outs over the past 4 months. A stock-out is defined as the unplanned running out of supplies. Recently, the unit had a stock-out of a three-way foley catheter, which resulted in a patient waiting for the appropriate catheter to be found on another unit. This prompted many staff to vocalize concerns with stocking.

Staff have complained about the time they spend searching for supplies, the increasing number of resulting "work-arounds", and the increasing frustration felt when trying to navigate the supplies closet.

Most importantly, staff are concerned that a median number of **5 stock-outs per week** may begin to have a serious impact on patient care if it continues.

2. Problem Statement

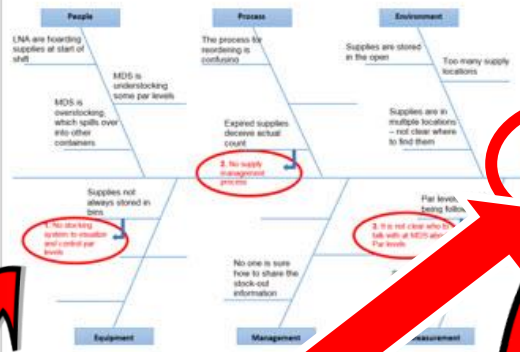
Over the past 4 months, the Graban unit experienced a median of 5 stock-outs per week.

Stock outs are concerning as they lead to delays in necessary care, workarounds that result in a lower level of care, and they limit the provider's ability to provide appropriate care to a patient in need, greatly impacting patient safety and experience.

3. Target State

The Graban unit will reduce the number of stock-outs to **< 2 per week** by December 31, 2019.

4. Root Causes



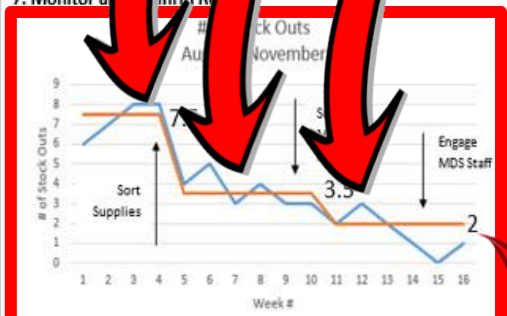
5. Countermeasures

bins	control par levels	unnecessary
expired supplies deceive actual count	No place to place expired items	Create an "expired" bin to place supplies that have passed their expiration date.
Par levels are not being followed	It is not clear who to talk with at MDS about Par levels	Engage MDS staff to learn why par levels are not being followed Invite a stakeholder to take part in monitoring the stocking outcomes

6. Action Plan

#	Owner	Dates	Description	Status
1	Ross	9/15/19	Bring together a team to sort supplies to arrange in closets, gather feedback from team, reorganize for final location.	Complete
	Ross	9/25/19	Label supplies and post supplies locations on closet doors.	Complete
	Phoebe	10/5/19	Purchase a bin to be the designated "expired" bin	Complete
4	Rachel	10	Reach out to the MDS manager to set up a meeting.	Complete
5	Monica	19	Guide MDS contact through a tour of the newly arranged closets	Complete
6	Monica	/19	A ply related question to the huddle.	Complete

7. Monitor a firm R



Medians after Test of Change (TOC)

TOC1 = 7.5

TOC2 = 3.5

TOC3= 2

8. Act and Standardize

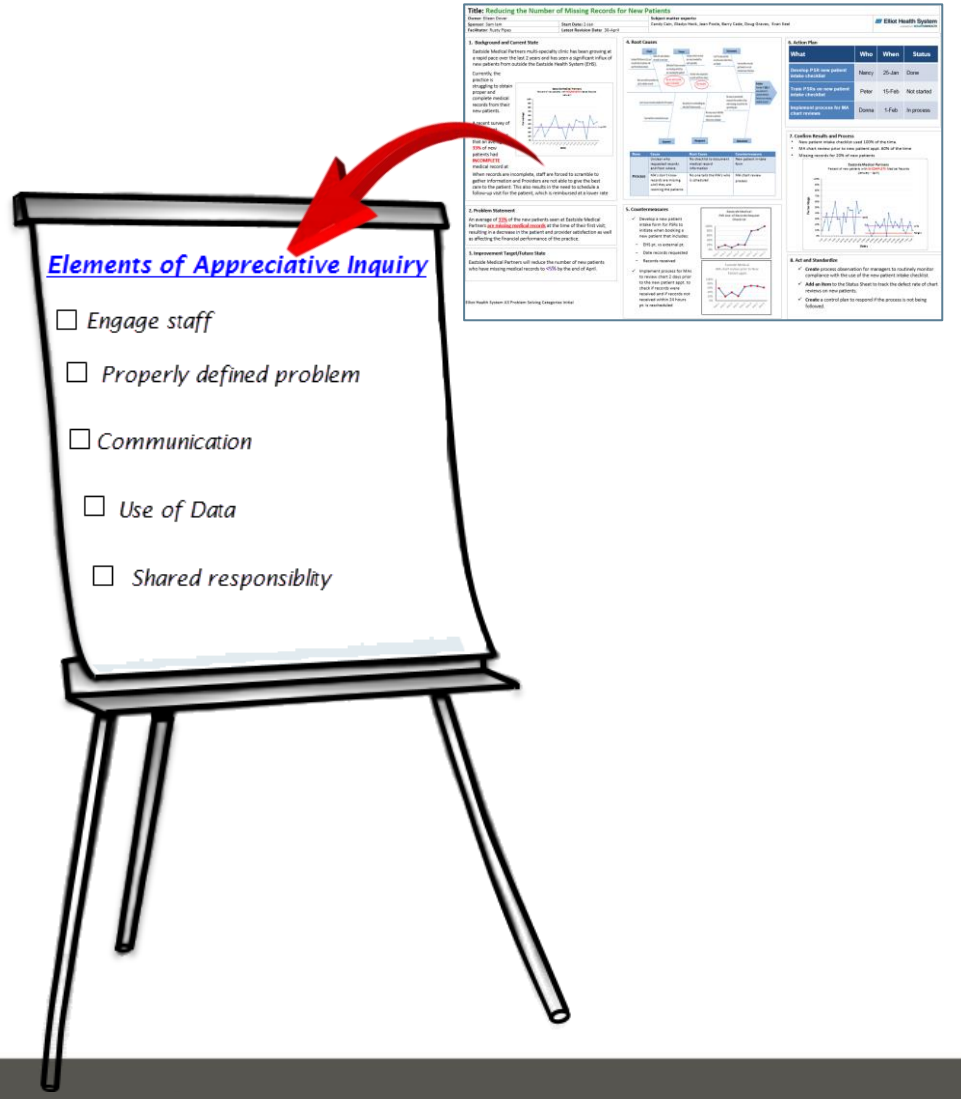
RRN will complete daily audit and develop a visual process t rack mpliance with supply management process.

Defining success in a culture of improvement & respect for people

Appreciative Inquiry - Review

Review the elements of a successful problem-solving event

- Does the A3 problem solving format align?
- Do you see any additional benefits?



Wisdom…

"The ultimate goal of A3s is not just to solve the problem at hand, but to make the process of problem solving **transparent** and **teachable** in a manner that creates an organization full of thinking, **learning problem solvers**.

In this way, the A3 management process powerfully embodies the essence of operational learning."

~John Shook

EXAMPLES OF COMPLETED A3’s

Title: Pathways Team Huddle Improvement Project

Version: 005

Owner: Heidi St. Hilaire, Lisa Armes

Sponsor: Andria Dobberstein, Santharam Yadati

Start Date: 6/29/18

Facilitator: Duncan Phillips & Jay Michaud

Latest Revision Date: 11/19/2018

Subject matter experts: Melinda Chernev, Ashley Cote, Patti Dill, Shannon Dow, Andrew Frederick, Ondrea Gowern, Chris Nelson, Meghan O'Connor, Beth Roberts Judah Weathers

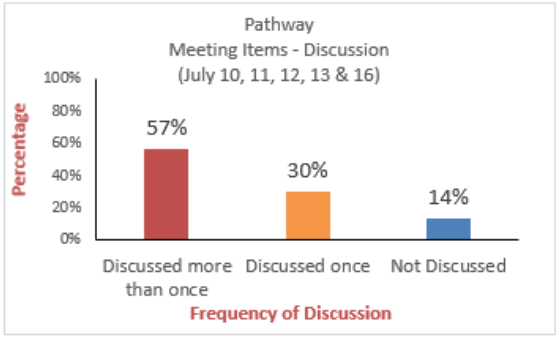
Elliot Health System

1. Current State

The Pathways unit at Elliot Hospital is a 12 bed secure psychiatric unit. Each day the clinical team comprised of a Provider, Resource Nurse, Social Worker, Occupational Therapist, and Case Manager meet to discuss the clinical status of each patient.

This discussion has 31 clinical and non-clinical elements associated with it (i.e. Medical issues, Pt Vitals, Safety Concerns etc.).

A recent five-day survey of a patient clinical status meeting indicated that **57%** of items were discussed more than once, while **14%** of items were not discussed at all.



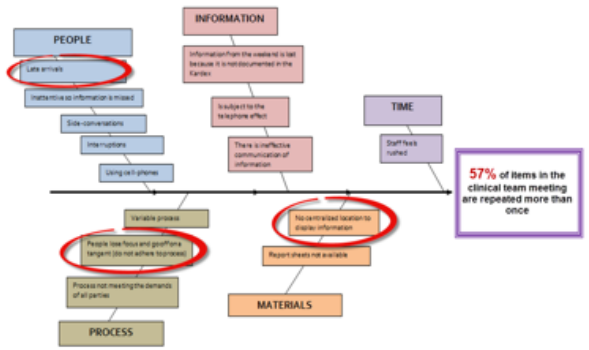
2. Problem Statement

57% of items in a patient clinical status meeting are discussed more than once which leads to extra processing, wasted time, and the potential that relevant items are not discussed.

3. Target State

Reduce the percent of time that clinical patient information is discussed more than once, during a patient clinical status meeting, from 57% to less than 10% by October 31, 2018.

4. Root Causes



5. Countermeasures

Cause	Countermeasure	Expected	Actual	Learning
No central location to display information	Create a whiteboard listing key elements of Pt. Status	All clinically relevant information will be visible to the team	Whiteboard purchased; yet to be created/ hung	It's best to have a standard script to base the WB on
Late Arrivals	Adhere to a prompt 8:45 AM start time, with an expectation of a 30 minute huddle	Huddle will start at 8:45, be scripted and valuable to all team members. Post huddling will be available for additional discussion	Team arrives on time and a standard script is used. Post huddling is available	Leadership needs to model attendance expectation/ be careful that Post huddles are not extensions of actual huddle
People lose focus and go off on a tangent	Develop a standard script	Report will follow a standard structure in which all elements will be addressed	Standard script developed	It takes multiple versions to get to the best script

Patient Status – Script

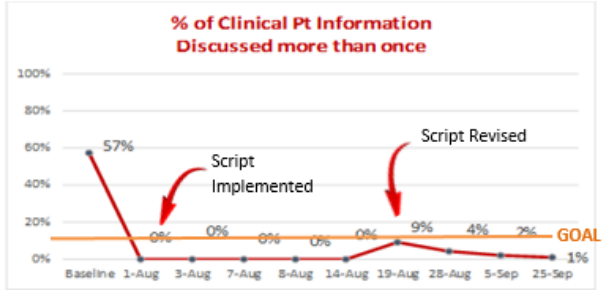
- Nursing – 11 items
- Occ. Therapy – 2 items
- Soc. Work – 3 items
- Provider – 1 item
- Case Mgr. – 1 item
- Team– 1 item

19 Items TOTAL

6. Action plan

	ACTION	OWNER	COMPLETION DATE	
1)	Define the needs	L. Armes	Sept 1st	✓
2)	Develop a script	L. Armes/ H.St. Hilaire	Sept 15th	✓
3)	Educate the script	L. Armes/ H.St. Hilaire	Sept 27th	✓
4)	Refine the script	Team	Oct 15th	✓
5)	Measure compliance	Team	Oct 20th	✓
6)	Develop Pt Status Brd.	L. Armes/ H.St. Hilaire	Oct 31th	✓
7)	Finalize Pt. Status Brd	Team	Nov 2nd	✓

7. Confirm Results and Process

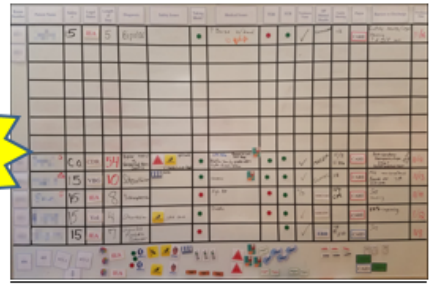


Summary

% of critical clinical patient information:

- Discussed more than once - dropped from 57% of the time to 1% of the time.

8. Act and Standardize



PATHWAYS PT STATUS BOARD

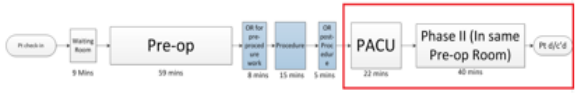
- Visual Mgmt. for patient information
- 17 relevant categories of information
- Linked to the DAILY HUDDLE

Title: Reducing Post Procedure Length of Stay (LOS) for Adult Endoscopy Patients

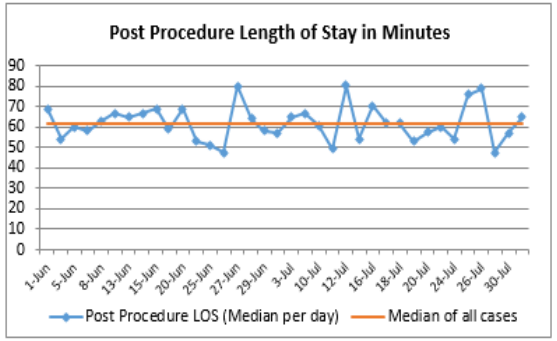
Owner: Lori Pelletier & Susan Allard		**Subject matter experts:** Re	Elliot Health System
Sponsor: Kelley Greulich	**Start Date: 8-14-2018**		
Facilitator: Meagan Smart & Jay Michaud	**Latest Revision Date: 12-5-18**		
In Scope: Adult endoscopy pts at River's Edge 1-day, post-procedure processes only	**Out of Scope:** Pre-op delays, pedi endo, surgical pts		

1. Background and Current State

In April 2018 the River's Edge Endoscopy procedures transitioned from their own space to combine with the 1-day surgery space using OR room 1 and in doing so endoscopy patients began following the same workflow as 1 day surgery patients. On average, there are 9 endoscopy procedures per day done by 1 of 4 providers who perform procedures at this site. Delays have impacted patient and staff satisfaction and in order to appropriately scope the improvement work the team will be narrowing their focus to reducing the post-procedure LOS. The post-procedure length of stay is the elapsed time from when the patient leaves the OR to the time of discharge as shown below in the red box of the process map. From April-July the median for this time was 62 minutes with the minimum being 30 minutes and the maximum being 236 minutes.



Average Post-procedure LOS for per day:



2. Problem Statement

The post-procedure length of stay for Elliot at River's Edge Endoscopy patients is 62 minutes (median) which impedes patient flow and impacts patient and staff satisfaction.

3. Improvement Target/Future State

The post-procedure LOS for adult endoscopy patients at River's Edge will be reduced to 30 minutes by 01/01/2019.

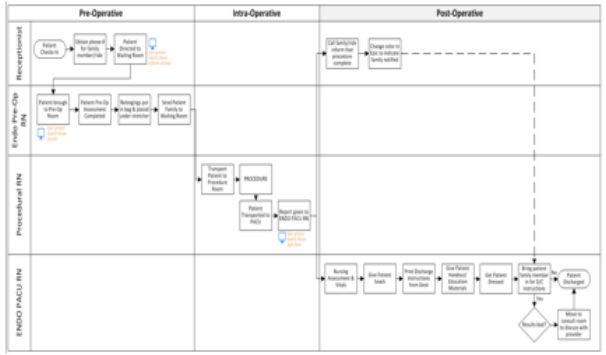
4. Root Causes

High Impact Causes:

1. Pt stops goes to 2 places post-procedure (PACU+Phases II) instead of one
   WHY?
   -Door instead of curtain in phase II increases risk to "skip PACU"
   -PACU not equipped to d/c patients due to lack of:
   -RN staffing, Handouts, monitoring equipment, space, bathroom at far end of the PACU, snacks, no curtains up between bays 1-3, no place to give "bad news" privately
   **Countermeasure: Redesign process/space to d/c from PACU

2. Variability in expectations/standards of nursing care post procedure
   WHY?
   -Endo pts mixed with surgical and default care/doc is surgical
   -Knowledge deficit/limited orientation/plan with move to 1-day
   **Countermeasure: Create standard for assessment, vitals, and timeframe for post-procedure stay

5. Countermeasures (D/C from PACU experiment 11/5/18 to 11/9/18

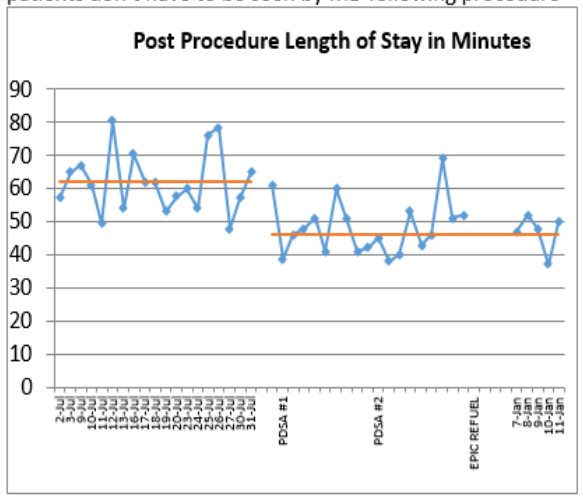


6. See Countermeasures through (action plan)

Action plan for PDSA #2:
-Kelley to review workflow at provider meeting
-Core team to continue to communicate new process to the rest of the team
-Continue to refine standard work for the post-procedure process
-Develop standard work for pre-op process **(Kayla)**
-Kelley to include updates in the newsletter

7. Confirm Results and Process

-PDSA #1 11/5-11/8
-PDSA #2 11/12-12/4 with Debrief on 12/6/18
-Attend February provider meeting to determine if some patients don't have to be seen by MD following procedure



8. Act upon the results and Standardize Successful Processes

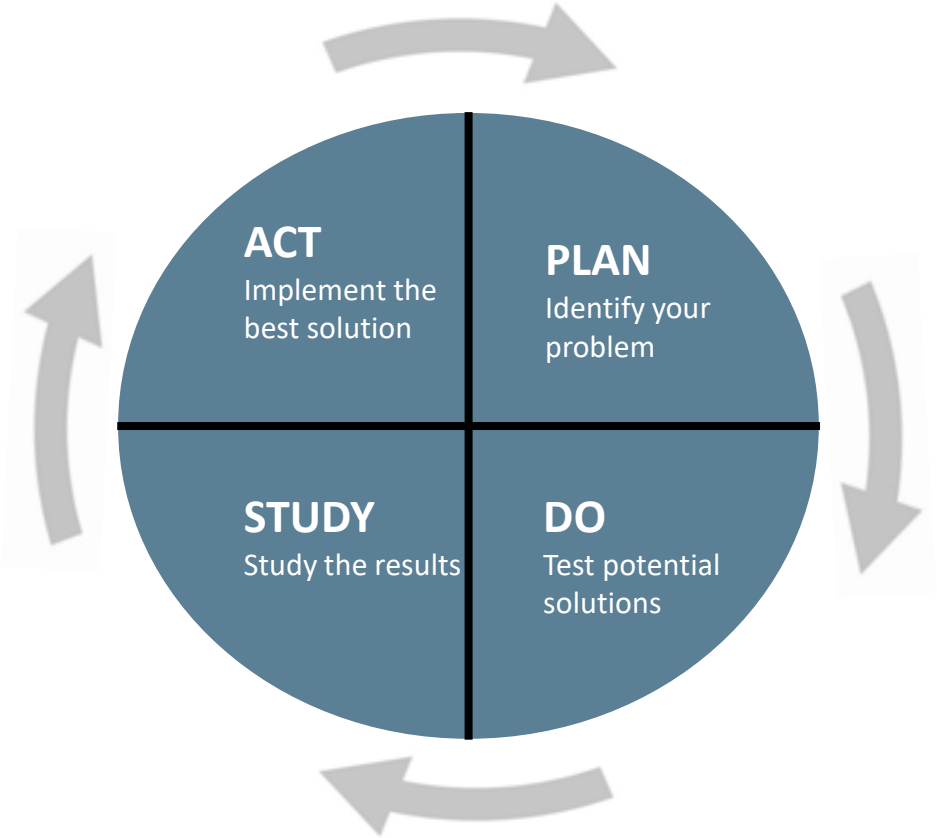
Addendum - PDSA

Attitude of Continuous Improvement

The PDSA approach is a scientific method that is applied to improving daily work

PDSA:

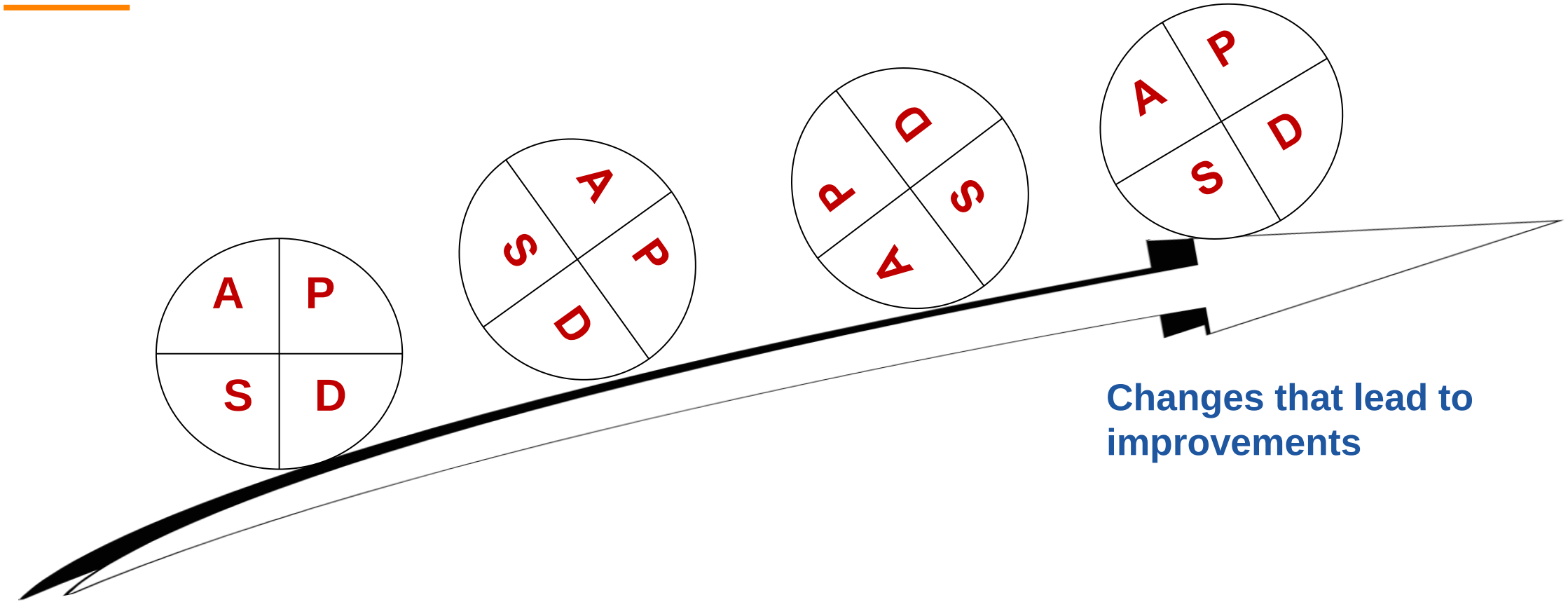
- Identifies the root cause to a problem
- Defines a measurable hypothesis about how a process can be improved
- Objectively tests the hypothesis
- Makes the improved process standard



PDSA Cycle

Countermeasures

May require multiple PDSA Cycles



PDSA in the A3

Title:			
Owner:		Subject Matter Experts:	Elliot Health System
Sponsor:	**Start Date:**		
Facilitator:	**Latest Revision Date:**		

1. Background Current State

2. Problem Statement

PLAN

3. Improvement Target / Future State

4. Root Cause

5. Countermeasures

DO

6. Action Plan

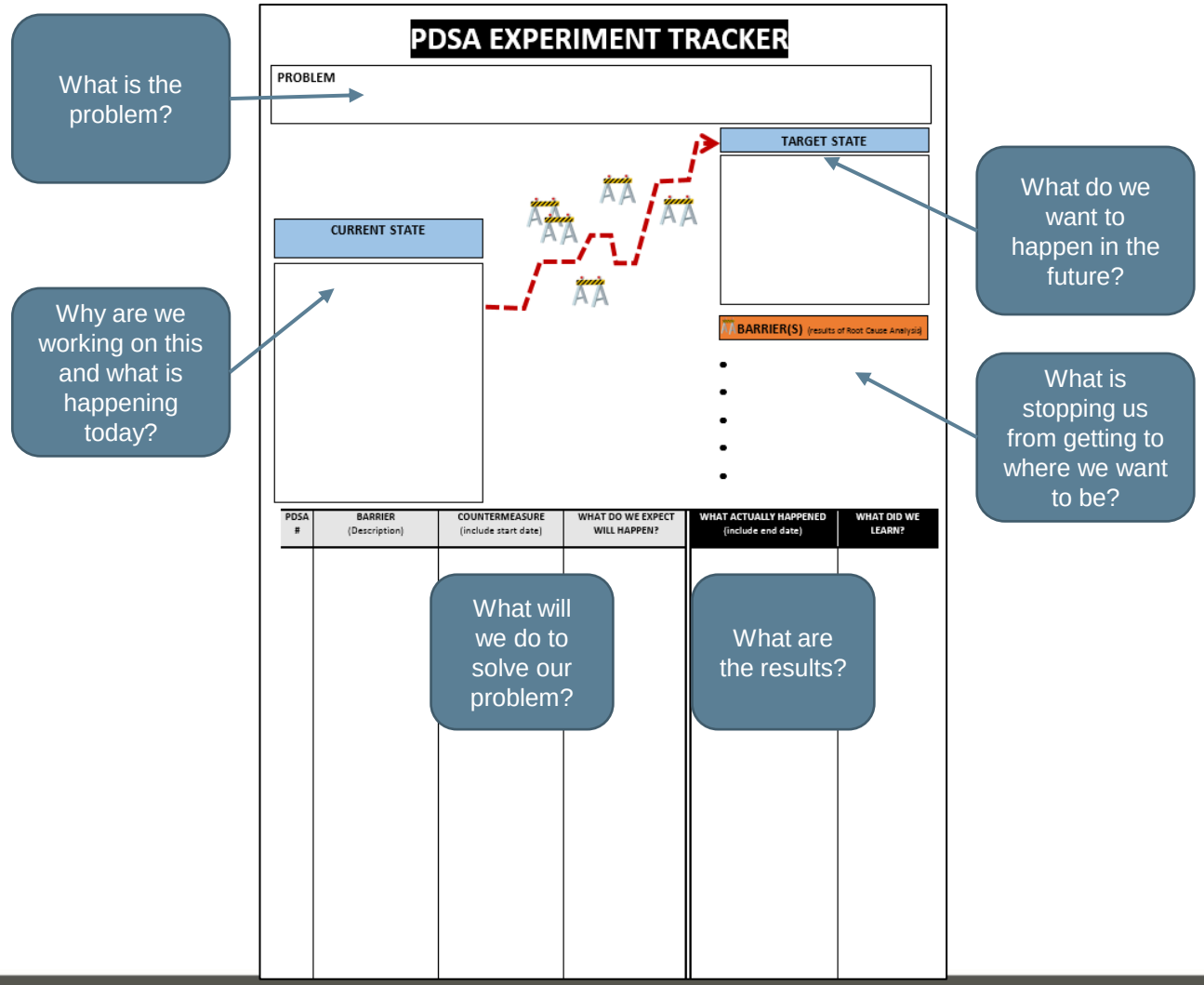
7. Confirm Results & Process

STUDY

8. Act upon the results / Standardize successful processes

ACT

PDSA Experiment Tracker



PDSA Experiment Tracker

- Reflects A3 Thinking
- Documents each PDSA cycle
- Helps to keep the team accountable

Design Your PDSA Experiment

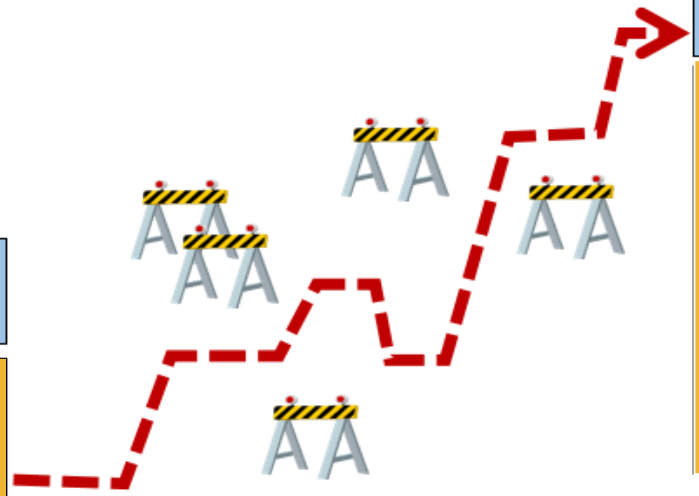
PDSA EXPERIMENT TRACKER

PROBLEM: Over the past 4 months, the Graban unit experienced a **median of 5 stock-outs per week**.

CURRENT STATE

Eastside Medical Center's Graban unit has been experiencing an increasing number of stock-outs over the past 4 months.

Staff have complained about the time they spend searching for supplies, the increasing number of resulting "work-arounds", and the increasing frustration felt when trying to navigate the supplies closet.



TARGET STATE

The Graban unit will reduce the number of stock-outs to ≤ 2 per week by December 31, 2019.

BARRIER(S) (results of Root Cause Analysis)

- Expired supplies deceive actual count
- Supplies not always stored in bins
- Par levels not being followed

Design Your PDSA Experiment

PDSA #	BARRIER (Description)	COUNTERMEASURE (include start date)	WHAT DO WE EXPECT WILL HAPPEN?	WHAT ACTUALLY HAPPENED (include end date)	WHAT DID WE LEARN?
1	Supplies not always stored in bins	(2-Oct) Sort through supplies to eliminate those which are unnecessary.	We will see a reduction in the number of supplies as unnecessary items are removed.	(23-Oct) 15% of supplies were eliminated from the supply system.	There were two different par level lists, that cause confusion about par levels on the unit.
2	Expired supplies deceive actual count	(6-Nov) Create an 'expired' bin to place supplies that have passed their expiration date.	The bin will provide valuable information as to which items are consistently expiring.	(21-Nov) Was able to determine that 4" sterile tubing kits expiring before use.	Adjust par level for 4" sterile tubing kits.
3	Par levels not being followed	(2-Dec) Engage MDS staff to learn why the par levels are not being followed.	MDS staff will have a better understanding of the Unit's supply needs, and we will have a better understanding of MDS's processes.	(23-Dec) Connected with MDS and now have a designated/ permanent MDS staff supporting the unit.	Having a designated MDS staff to support the unit supply needs is critical.