Department of Health

Quality Improvement Bootcamp

Session Four

Ryan White Part B Quality Management Program

Welcome

COMMUNITY AGREEMENT

Be **present**

Actively **participate**

Ask questions

Reflect on **your own experience**

Be **respectful** of other's experiences

Seek to maintain a **growth mindset**

Root in respect

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SESSION FOUR AGENDA

Introductions and Review

The Model for Improvement

5 Whys

Plan, Do, Study, Act (PDSA)

Review and Closing

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INTRODUCTIONS

Please introduce yourself with:

- Name & Pronouns
- Agency or Affiliation
- Role
- **Fun Fact**

The Earth is 4.543 billion years old.

Seahorses mate for life.

Australia is wider than the moon.

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Quality Improvement – The Model for Improvement

THE MODEL FOR IMPROVEMENT

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that we result in improvement?

thinking part

1. **Set the Aim**
2. **Select Measures**
3. **Develop Change Ideas**

PDSA Cycles

doing part

Four steps for <u>TESTING</u> the change ideas you we develop

Plan it, try it, observe the results, and act on what is learned

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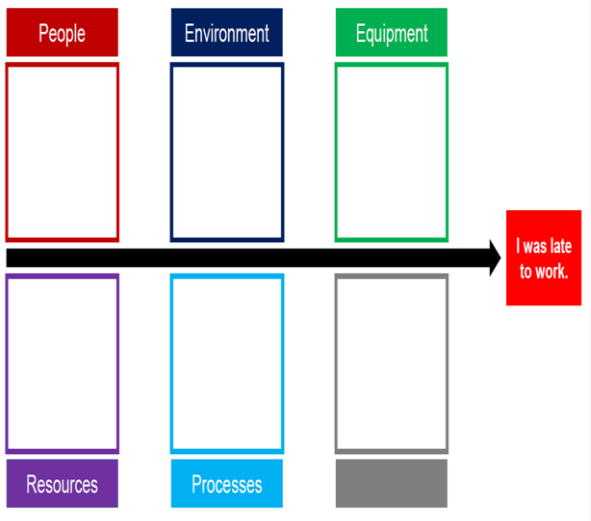
REVIEW FROM LAST SESSION

Process Mapping

Instructions

1. Select a routine process for mapping (for example, screening for food insecurity, conducting an intake, developing a care plan, etc.).
2. Identify the 5-7 key steps in the process and using the chart below, document the steps.
3. Once you have identified the 5-7 key steps, brainstorm the key activities for each step and document under the step.

PROCESS:							
Step							
Activities							



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Causal Chains
The 5 Whys

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THE 5 WHYS - INVESTIGATING THE CAUSAL CHAIN

The 5 Whys is a facilitated process which helps to identify the **contributing factors** to a specific outcome you are seeking to avoid (i.e., your problem).

The 5 Whys helps to avoid "*quick fixes*" and instead focus on changes that will have **greater impact** by affecting the root cause of a defined problem

The 5 Whys is a **systems-level tool** which means it's **not intended to identify bad people but rather bad processes creating an environment of risk**

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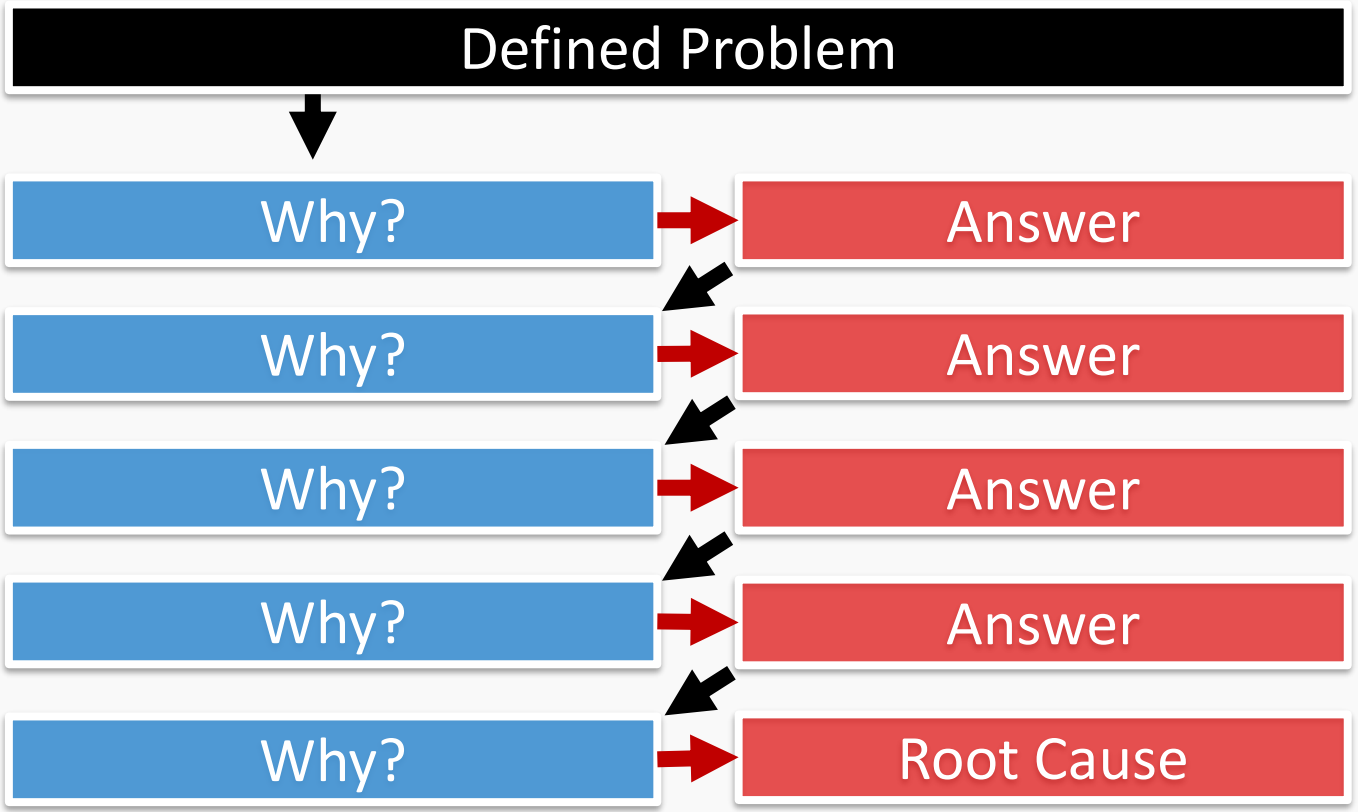
THE 5 WHYS



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Problem

25% of people with HIV who are unstably housed are not receiving routine viral load monitoring tests

THE FIVE WHYS EXAMPLE

Why are 25% of unstably housed PWH not receiving viral load monitoring tests

They can't schedule appointments

Why can't they schedule appointments?

All the appointment slots are filled, and they won't use walk-in slots

Why won't they use the walk-in appointments?

They have tried but the wait is unpredictable & they say they can't wait

Why can't they wait?

The food kitchen where some of them get their meals has strict serving times and it's far away – they say they get nervous about missing a meal

Why aren't we closer to where they are?

Because we don't offer access to street medicine services

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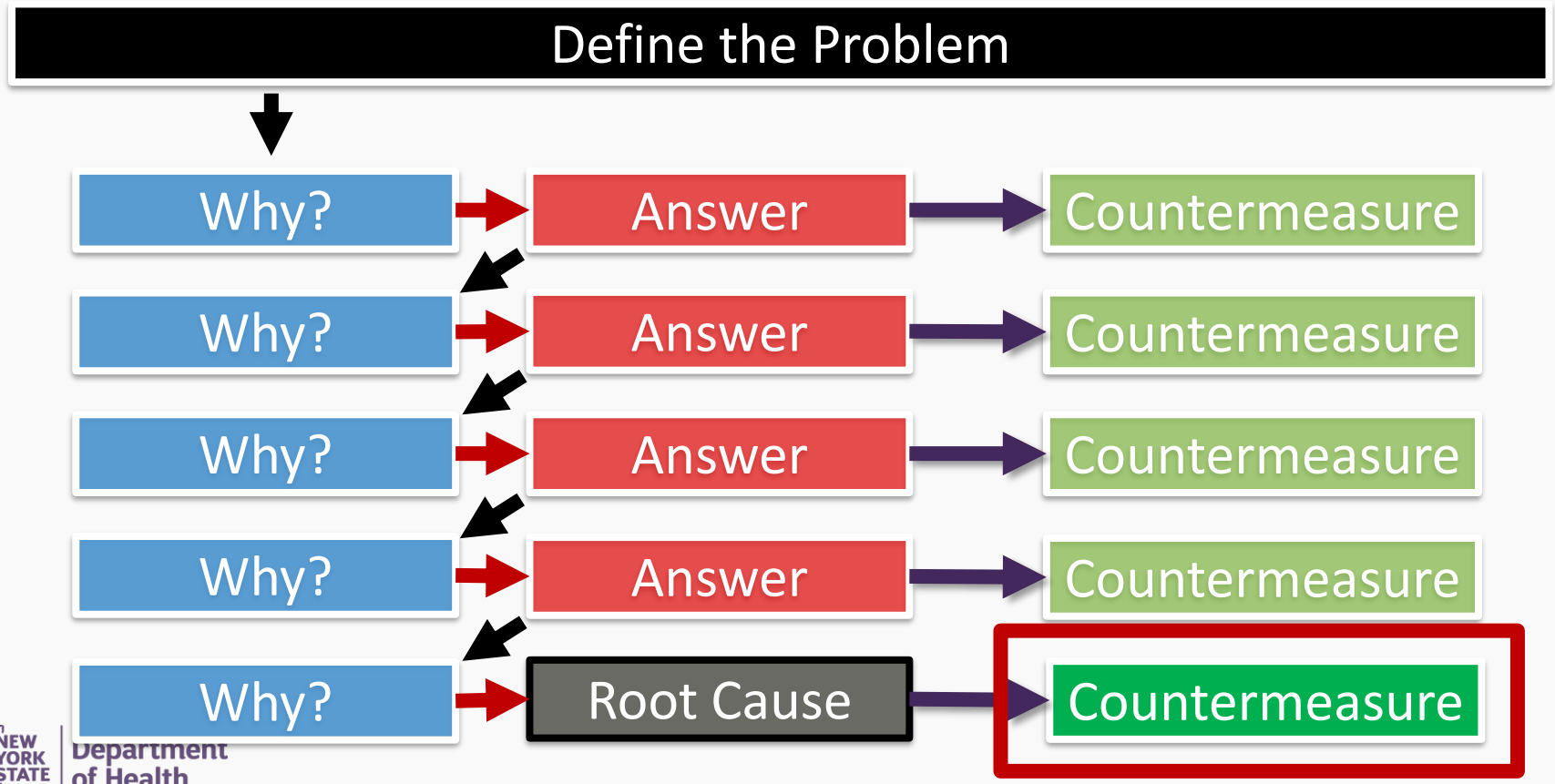
Root Cause

The clinic does not offer access to street medicine services (i.e., off-site phlebotomy) which are more culturally responsive services to persons experiencing housing instability

THE 5 WHYS



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THE 5 WHYS - IMPLEMENTATION STEPS

1. Identify a potential problem to investigate
2. Formulate a problem statement
3. Ask stakeholders “why” the problem is happing

   - Focus on what is happening instead of what might be occurring

4. When a potential root cause has been identified, ask whether addressing this issue, **will fix the problem permanently**?

   - If yes, then you have identified the root cause

   - If no, revisit the causal chain and if needed, continue to ask why until a root cause has been identified

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THE 5 WHYS

Do I always have to ask “why” five times?

No, in fact, sometimes you might not need to ask “why” five times and sometimes you might need to ask more than five times

Asking whether the countermeasure addressed the problem permanently is the best way to know whether you have asked “why” enough times

Will my root cause always be apparent?

Usually, but sometimes you might identify a root cause when the next answer to “why” is something outside the control of the system

The root cause should be actionable and something the system can affect

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MULTI-CAUSAL PROBLEMS

Many healthcare problems are complex and wicked which means you might find more than 1 valid and reasonable answer to your “why”

When a team has more than 1 “why” to choose from – the team can ask:

Is the problem well defined? A poorly defined problem can lead to the 5 Whys exercise being too broad; ask the team to revisit the problem statement

Are the responses to “why” drawn from data and experience or beliefs? Theorizing about all the potential causes of a problem is unhelpful; ask them to focus on answers that they can justify with data

MULTI-CAUSAL PROBLEMS

Is one of the proposed answers more associated with the problem than the other?

If so, it is likely important to focus on the answer that has the greatest association with the problem; the tool is intended to help teams think through to a most likely answer

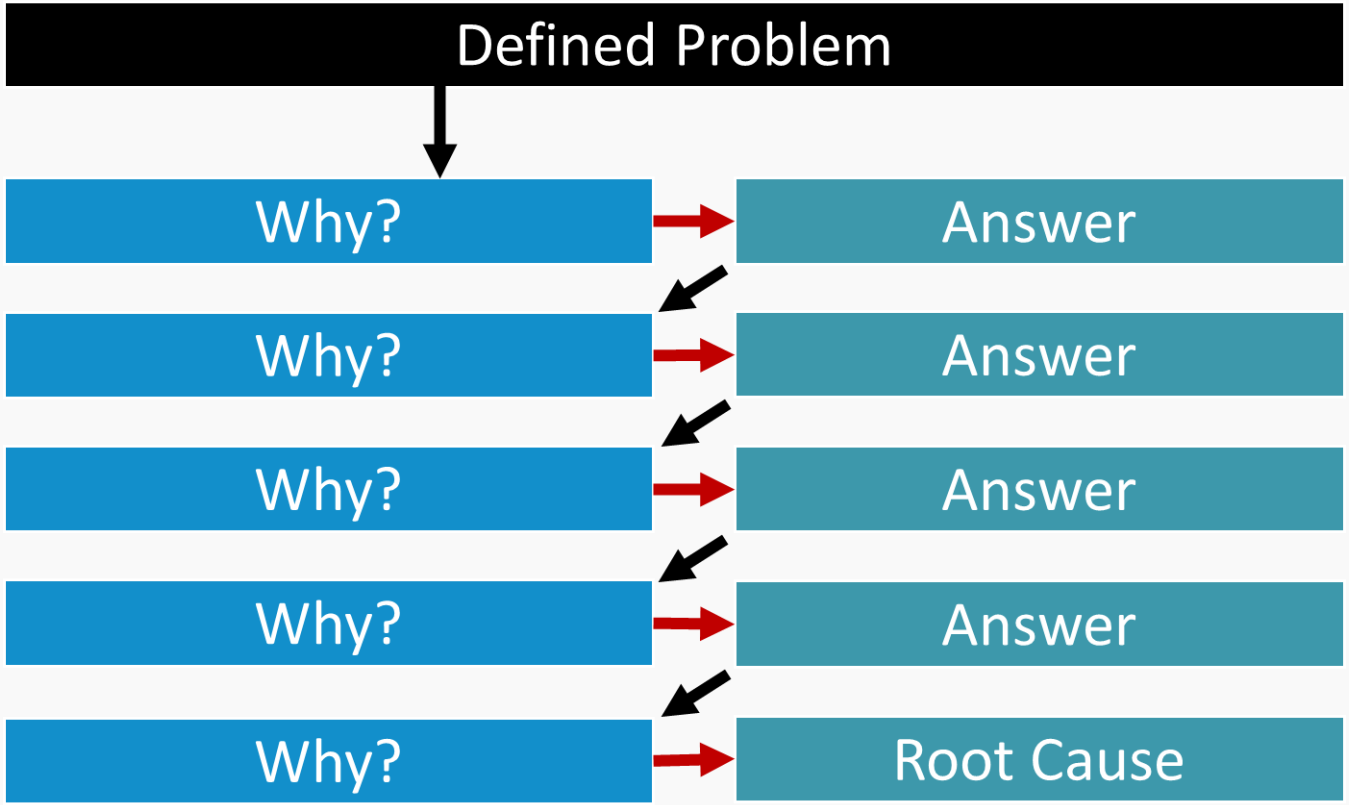
Is the proposed answer likely to show up as the answer to a future why?

If so, ask the team to focus on the current answer and revisit the other answer further down the chain

Is the additional answer worthy of its own causal chain?

If yes, then the team should continue with their current 5 Whys interrogation and then conduct a second 5 whys investigating the additional causal chain

THE 5 WHYS



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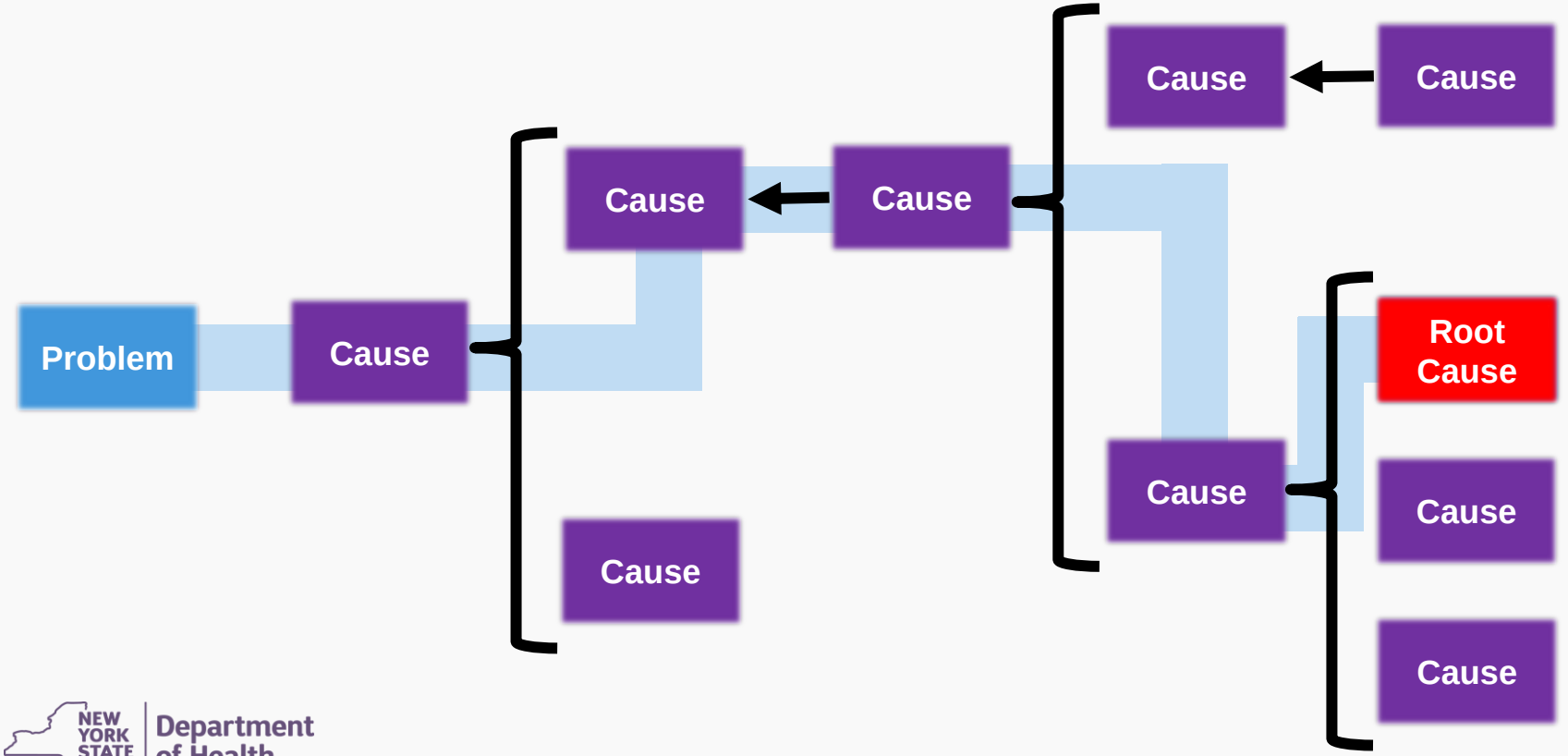
THE 5 WHYS IN PRACTICE



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QUESTIONS OR COMMENTS

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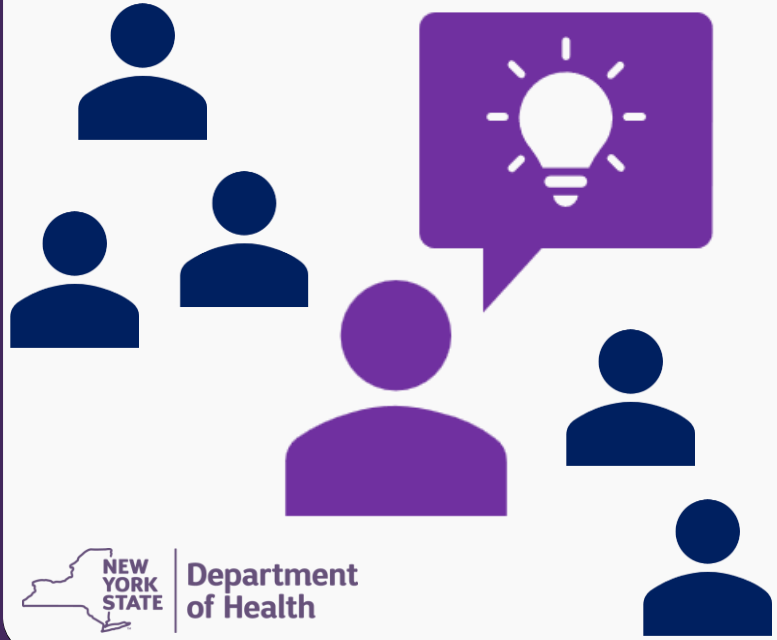
BREAKOUT DEBRIEF



Debrief

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Root Cause Mapping
The 5 Whys Activity

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INSTRUCTIONS

1. Select 1 of the key causes identified in your fishbone diagram
2. Use the 5 Whys method to uncover potential root causes to the problem (**arriving at work late**)
3. Investigate the causal chain until you can identify a counter-measure that will solve your problem **permanently**

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Change Idea to PDSA Cycles

QUESTIONS OR COMMENTS

How do change ideas become improvement?

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The Plan-Do-Study-Act Cycle

THE MODEL FOR IMPROVEMENT: THE DOING PART

PDSA Cycles

doing part

Four steps for TESTING the change ideas you we develop

Plan it, try it, observe the results, and act on what is learned

The "**doing**" part of the Model for Improvement uses of **Plan-Do-Study-Act** or **PDSA Cycles** to test changes prior to implementation.

PDSA Cycles are the **engine that drives ongoing learning** as an intervention is adapted for use in a specific agency.

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WHY USE PDSA CYCLES?

The purpose of the PDSA method lies in (1) **learning as quickly as possible** whether an intervention works in a **particular setting** and (2) making adjustments accordingly to **increase the chance of delivering and sustaining the desired improvement**.

PDSA Cycles allow teams to reach their QI goals more efficiently and thoroughly

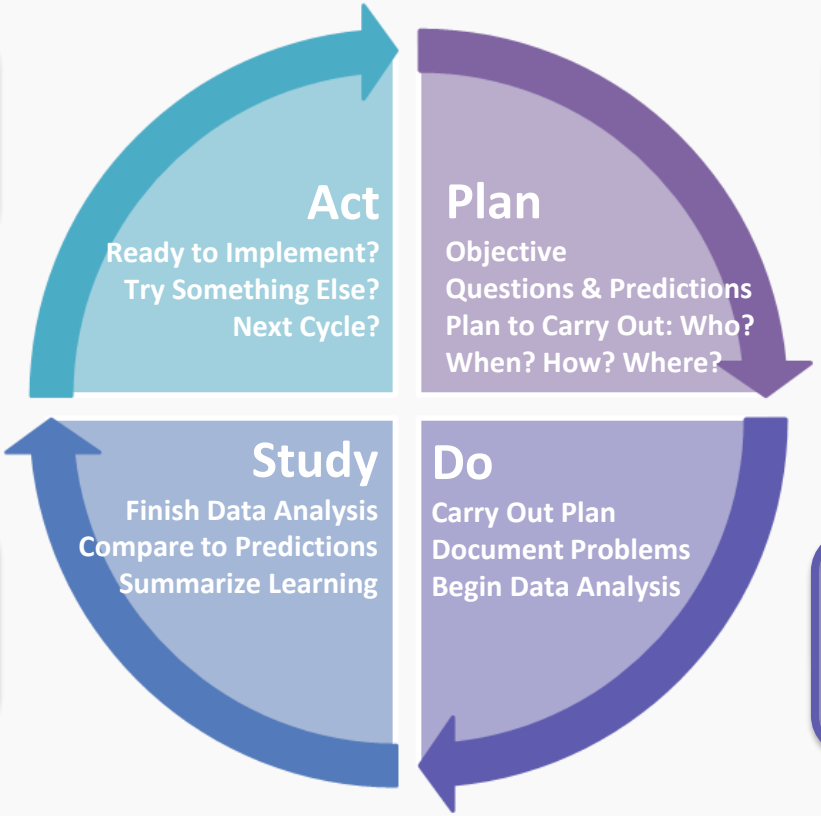
> PDSA Cycles can save wasted effort by **revealing QI goals that cannot be achieved under realistic constraints** or if it identified **new problems to tackle** instead of the originally identified issue.
>
> A well conducted PDSA cycle **promises learning**; a successful PDSA cycle does equal a successful QI Project

Reed, J. E., & Card, A. J. (2016). The problem with plan-do-study-act cycles. *BMJ quality & safety*, *25*(3), 147-152.

THE PLAN-DO-STUDY-ACT CYCLE OR PDSA CYCLE

What's Next?

What will happen if we try something different?



Did It Work?

Let's try it!

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WHY TEST A CHANGE BEFORE IMPLEMENTING?

Increase your **degree of belief** that the change will result in improvement

Opportunity for learning from "**failures**" without impacting performance

Document **how much** improvement can be expected from the change

Learn how to **adapt** the change to conditions in the local environment

Evaluate **costs and side-effects** of the change

Minimize **resistance** upon implementation

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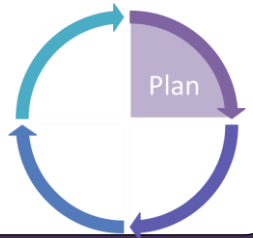
Plan

Target one step to improve—keep it simple
Collect and plot data—as limited as it is.
Identify process variables—what worked, what didn't
Develop a prediction – what does your team think will happen.

Be specific – how many, what will the change feel like to those impacted?



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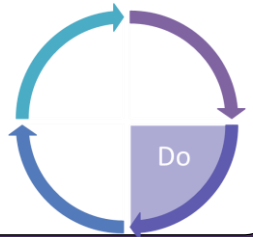
Do

Try out the test **on a small scale**
Document **problems and unexpected observations**
Begin **analysis** of early results
Don’t **overcomplicate**!

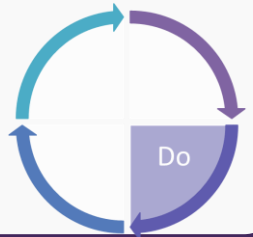


Conduct the Test

… with 1 staff member

… with 1 client

… on 1 day



Study

REFLECT, REFLECT, REFLECT

Set aside time to analyze the data and **study the results**

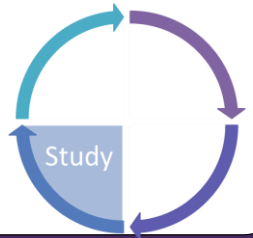
What did we see, what worked/didn't work, and **why**?

Compare the **results** to your **predictions**

Summarize and reflect on what was learned

- **Learn more from what didn't work**, than what did

Remove "failure" as a term for evaluation



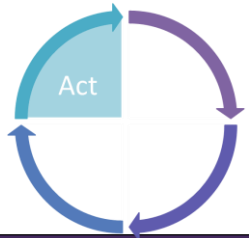
Act

Refine the change, based on what was learned from the test.

Determine what modifications should be made.

Prepare a plan for the next PDSA.

Keep small, but gradually increase as lessons learned are identified



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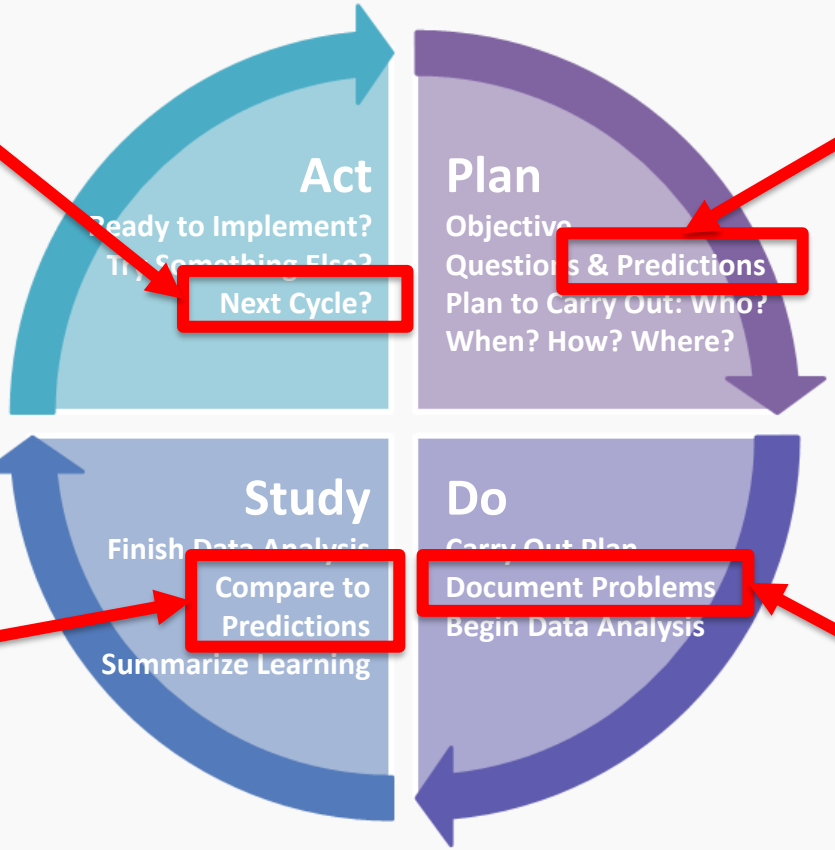
THE PLAN-DO-STUDY-ACT CYCLE OR PDSA CYCLE

This comparison/ examination generates knew knowledge about what change might work or what modification is needed



Most important part of any PDSA cycle is the **Prediction** as it represents current knowledge about how a process or system will behave in the future.

When predictions are compared with actual outcomes they can reveal gaps in our current understanding of why a process or system behaves the way it does

Inductive learning begins here

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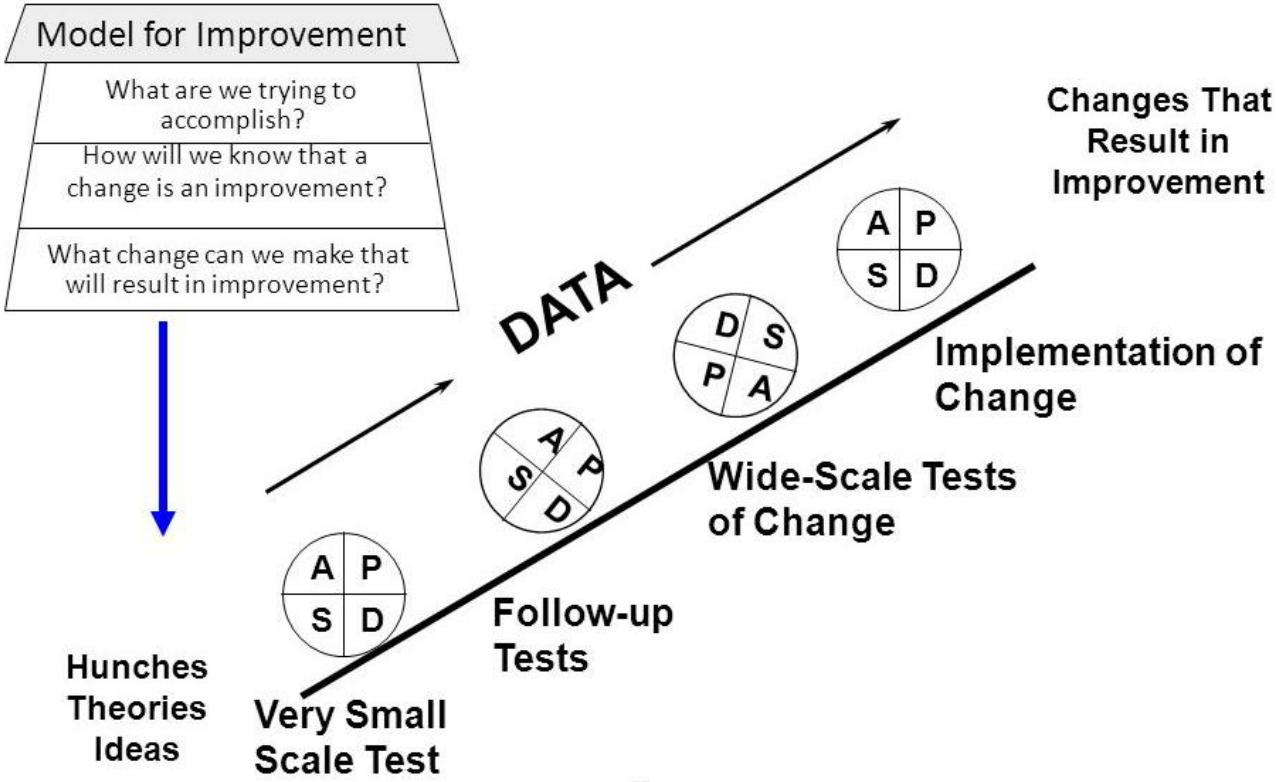
Langley, et al.

REPEATED USE OF THE PDSA CYCLE



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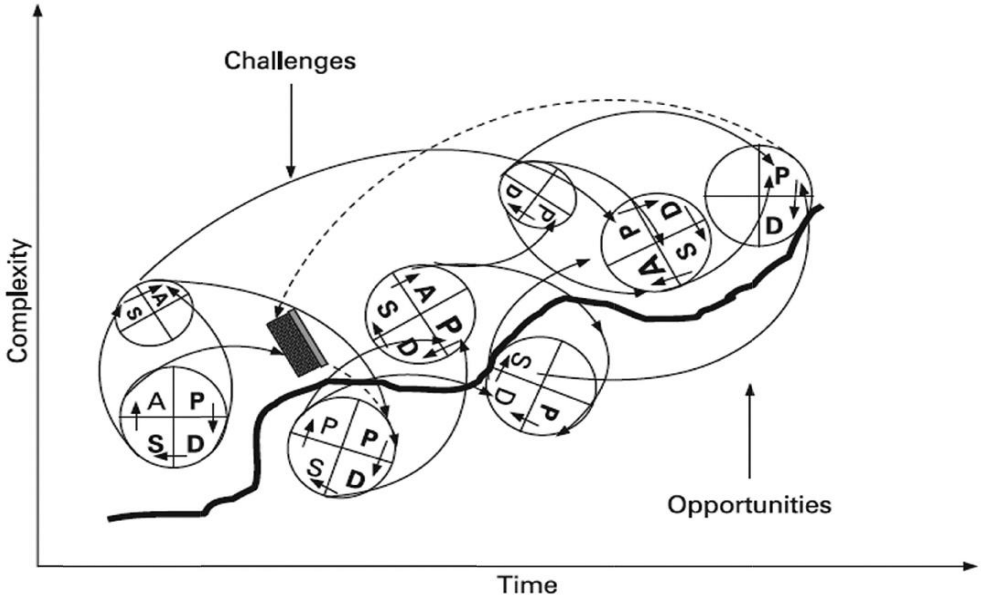
SUCCESSIVE PDSAS



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Tomolo A, Lawrence R, Aron D. A case study of translating the ACGME practice-based learning and improvement requirements into reality: systems quality improvement projects as the key component to a comprehensive curriculum. Postgrad Med J 2009; 85:530–7.

SUCCESSFUL CYCLES TO TEST CHANGES

Plan **multiple cycles** for a test of a change

Think a couple of cycles **ahead**

Scale down the **size of test** (# of clients, location)

Test with **volunteers**

Do **not** try to get buy-in, consensus, etc.

Be **innovative to make test feasible**

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PDSA Cycle Activity

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ACTIVITY INSTRUCTIONS

1. Identify **1 change idea** you would like to implement at your agency
2. List the **components of the change idea**
3. Select **2 components** and plan **1 PDSA cycle** for each
4. Document using the **PDSA Planning Worksheet**

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Quality Improvement – The Model for Improvement

THE MODEL FOR IMPROVEMENT

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that we result in improvement?

thinking part

1. **Set the Aim**
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PDSA Cycles

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QUESTIONS OR COMMENTS

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AHA MOMENTS

Thinking back over today's information and materials, is there anything from today that produced an "**aha**" or "**lightbulb**" **moment** where something made more sense than it did before or something new helped you to better understand?

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Thank You