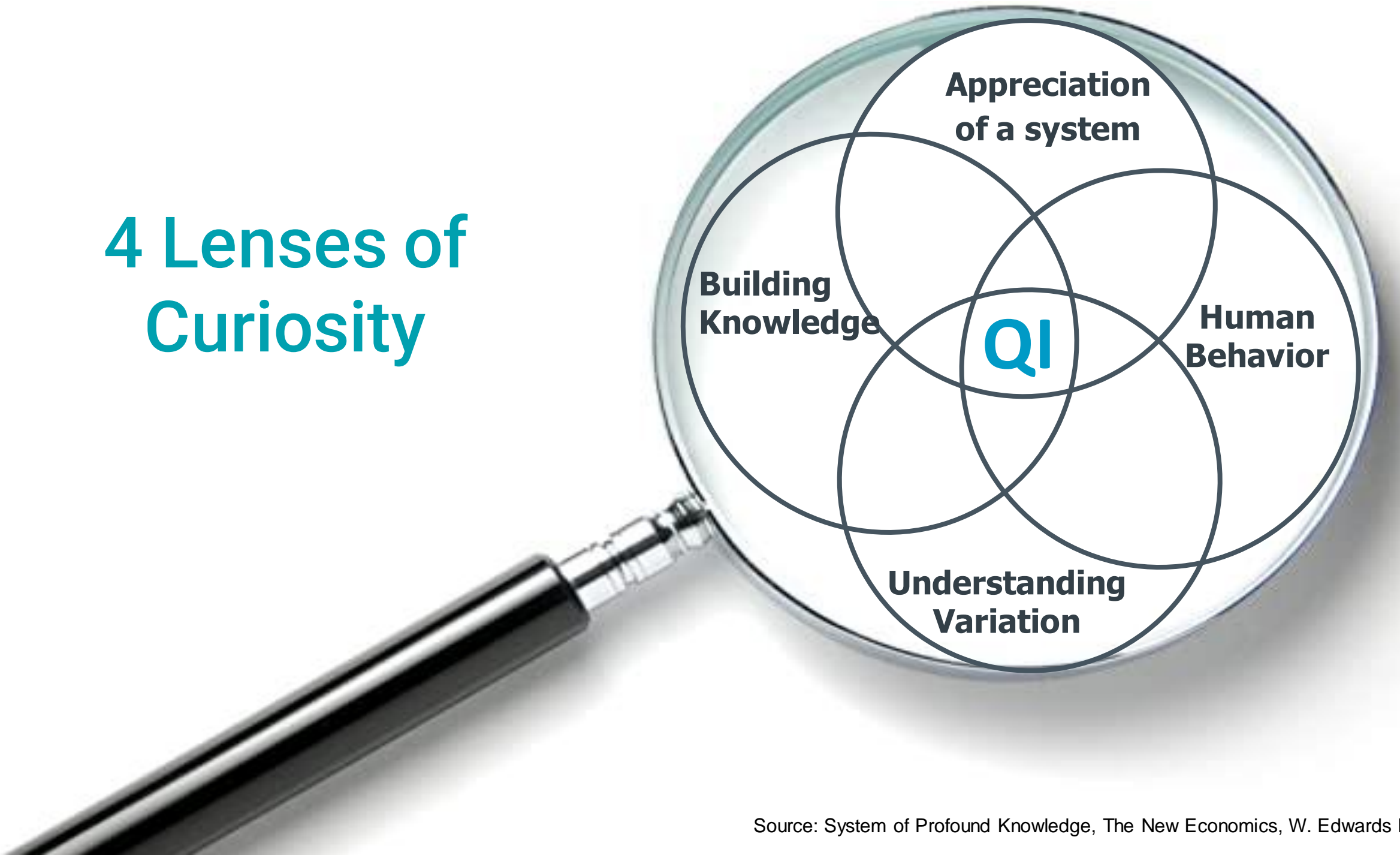


# 4 Lenses of Curiosity





**Marissa Reddy**  
Director of Quality  
G.S. Haly Company



# Reflection

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- What's changed about the global shipping system or some of the things that were specifically related to or caused by the pandemic that impacted the system?
- How did this change how you had to work with your partners, brokers, clients, customers, co-workers? How did those relationships change?
- In what ways did you and your team learn to get smart quickly about how things were working? What changes did you make in the way you work based upon that learning?
- What changed about how you had to analyze information?
- What are some of your "If I knew then what I know now, I would have \_\_\_\_\_" learnings?



# Appreciation of a System



- Finite number of containers in the world became much more apparent and also the path of that container became much more apparent, and how everyone is just waiting with their goods for that container.
- The interrelated parts of the system became much more crucial - knowing how a container gets off the ship and onto the port, knowing how it gets to a warehouse.
- Realization that deteriorating Infrastructure only compounded the problem.  
(chassis and cranes and rail yards)

# Understanding Variation



- While the Suez Canal bottleneck crisis of March 2021 was one big special cause in the system, it was actually a compounding series of smaller, shortsighted fixes that has caused intense variation (e.g., zero tolerance COVID labor policies in some countries; sending all available containers to China and the impact on other international ports)
- Price of containers went up from \$3,000 - \$5,000 per 40 ft container to \$15,000 per container. All of that is trickling down through the supply chain (and now hitting consumers)
- There is no central data system for global shipping - the system relies on paper and overnight mail, on calling people at ports and at tea gardens, and piecing together the data.

# Building Knowledge



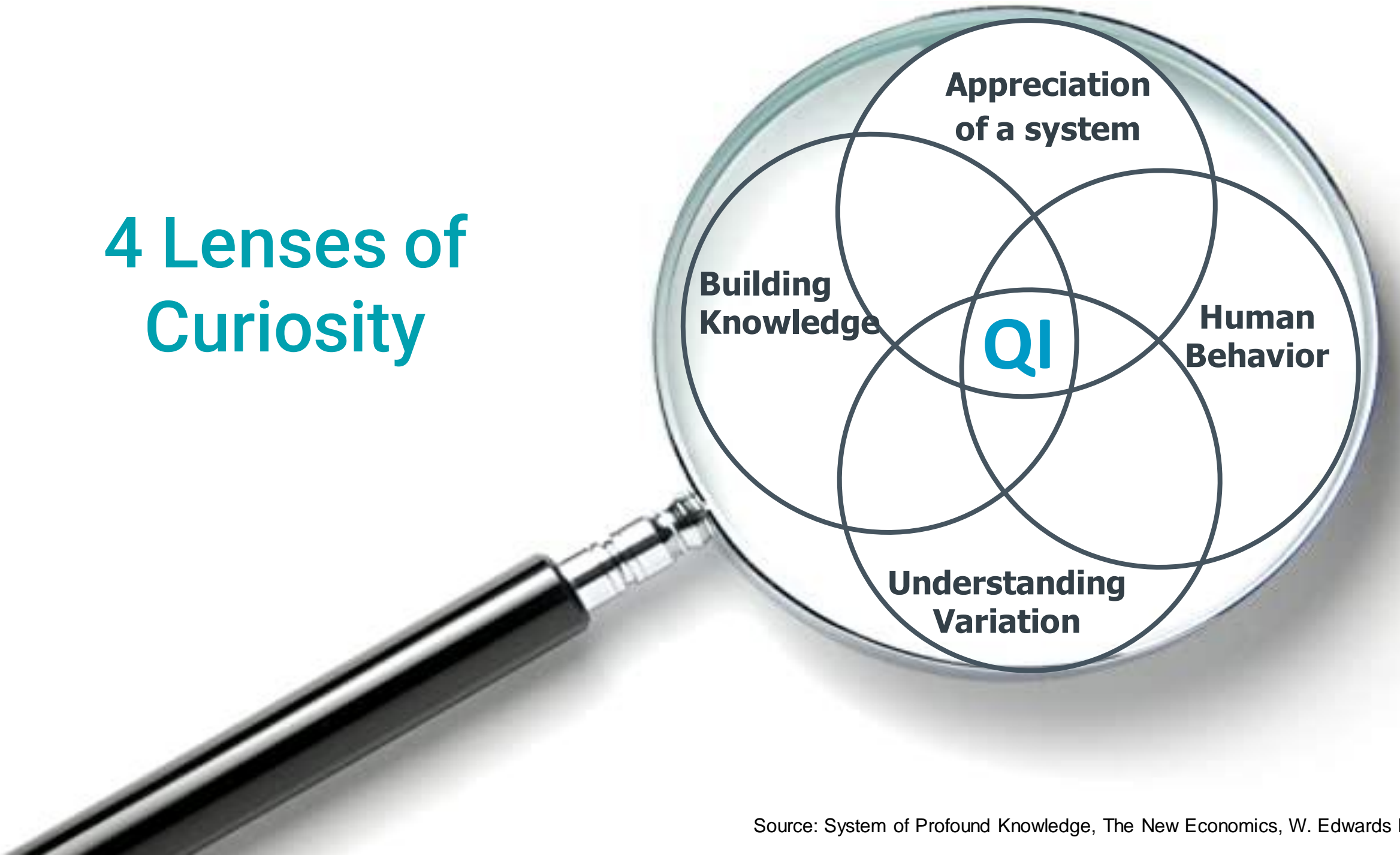
- The tea industry has a “storied history” and thus a story driven way of sharing information and knowledge. Institutional knowledge that has been past down from generations has been rendered null in the face of this unprecedented set of circumstances.
- Leaned on a real-time updating with cross-industry players and pieced together across geographies (“our contact that buys and sells garlic saw this coming before anyone else”) - the entire world came together to share their most up to date information.
- Instituted daily huddles (of sorts) as an internal team to track who would “hear things first”

# Human Behavior



- It is an entire system driven by relationships - by networks, and who knows who, who has leverage to move through their contacts.
- Everyone is burned out and no one has answers.
- The power dynamics are on display - for example, there is a dock workers union in the US but no truckers union in the US, which has brought about a lot of power struggle at the ports.

# 4 Lenses of Curiosity

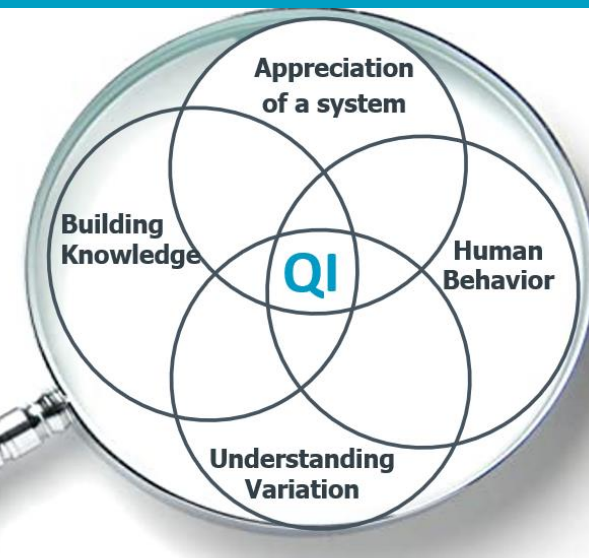




# Let's Reflect Together

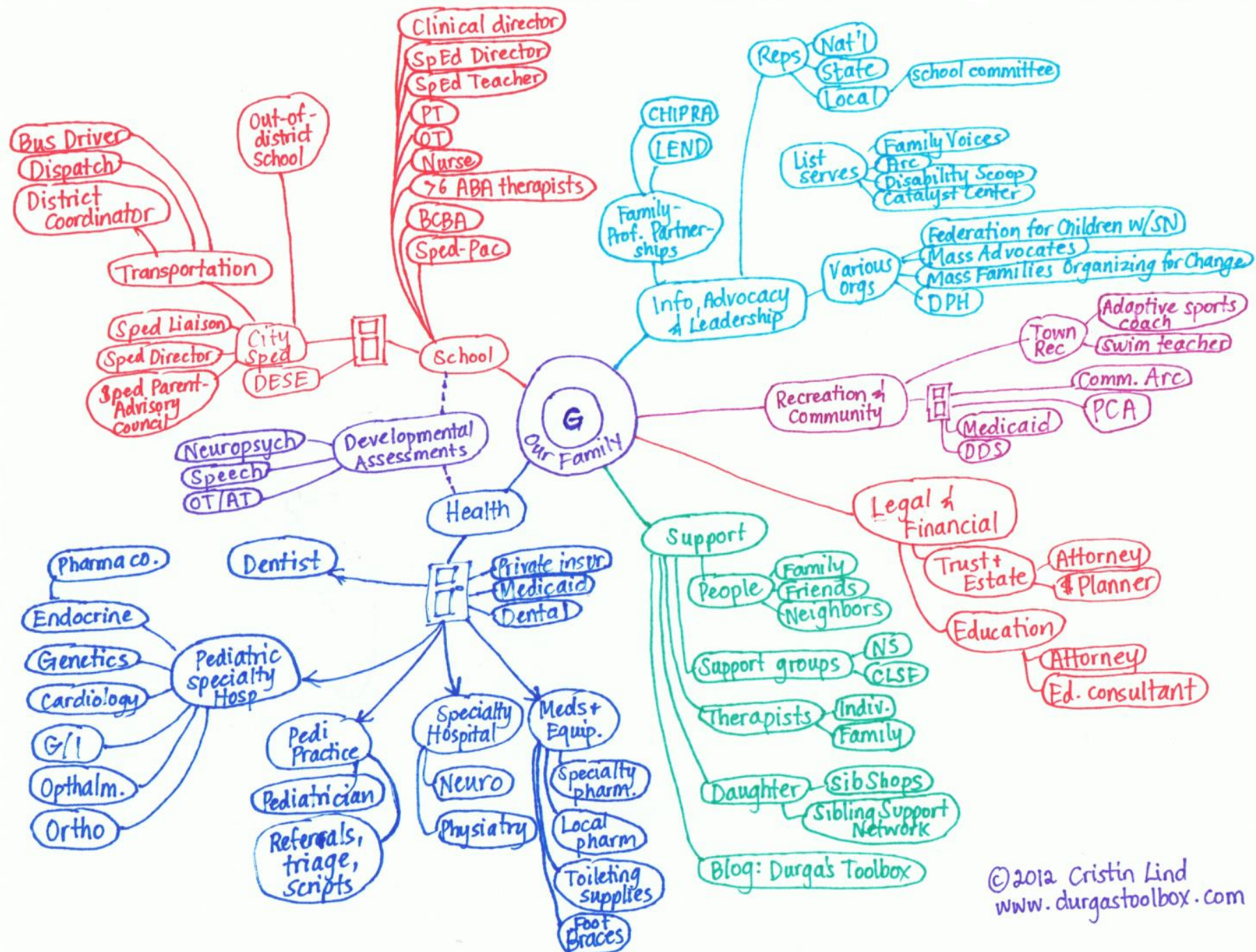
- Get up and find one other person from tables within your Focus Area – someone you didn't sit with yesterday or today.
- Share with your partner:
  - Which of the four lenses resonates most with you and your work?
  - Which one feels new to you and your life/work? Why?

4 Lenses of  
Curiosity



# Introduction to the Model for Improvement (MFI)

A Model for Learning & Change



© 2012 Cristin Lind  
[www.durgastoolbox.com](http://www.durgastoolbox.com)

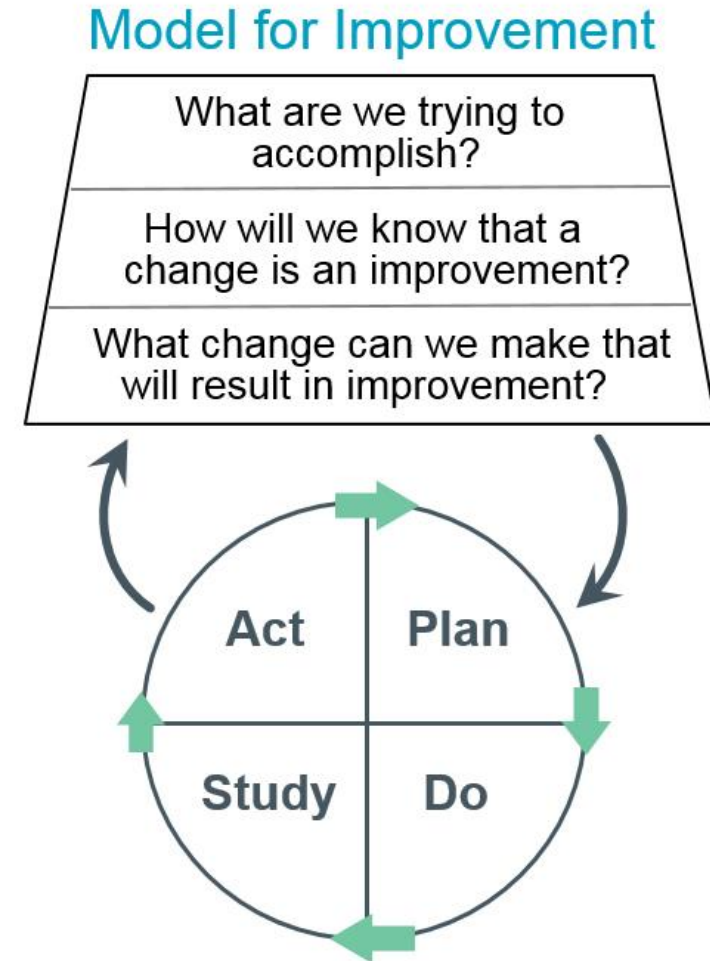


# A Model for Learning and Change

Model for Improvement is a model or framework

It was developed by Associates in Process Improvement (API)

It's comprised of 3 questions and a learning cycle





# Where IHI has used QI as a model for learning and change with communities

- Health Care Delivery
- Public Health
- Housing and Homelessness
- Economic Self Sufficiency
- Job Creation
- Early Childhood Development
- Early Education
- Higher Education
- Justice System
- Mental Health
- Social Services
- Ambulance Service
- Food Systems
- And more!



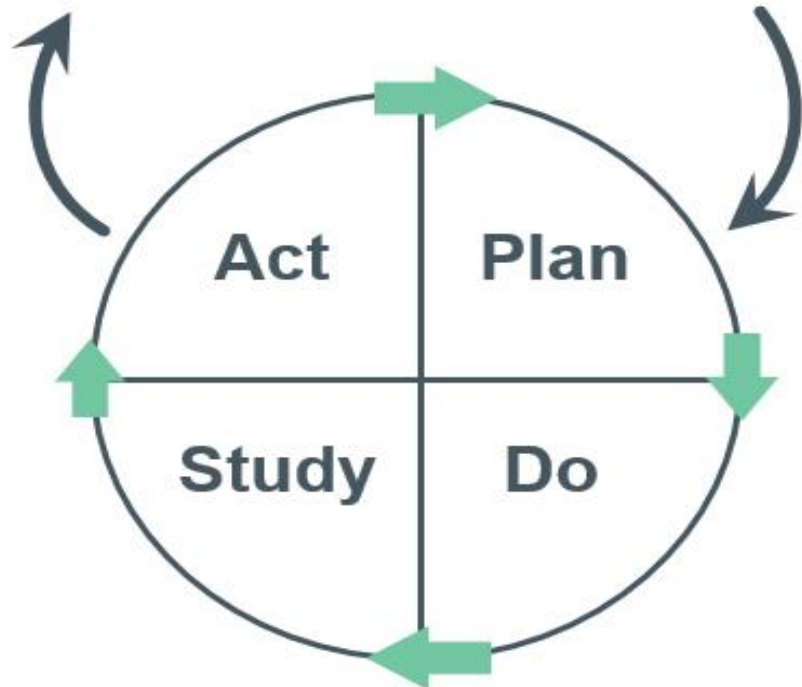
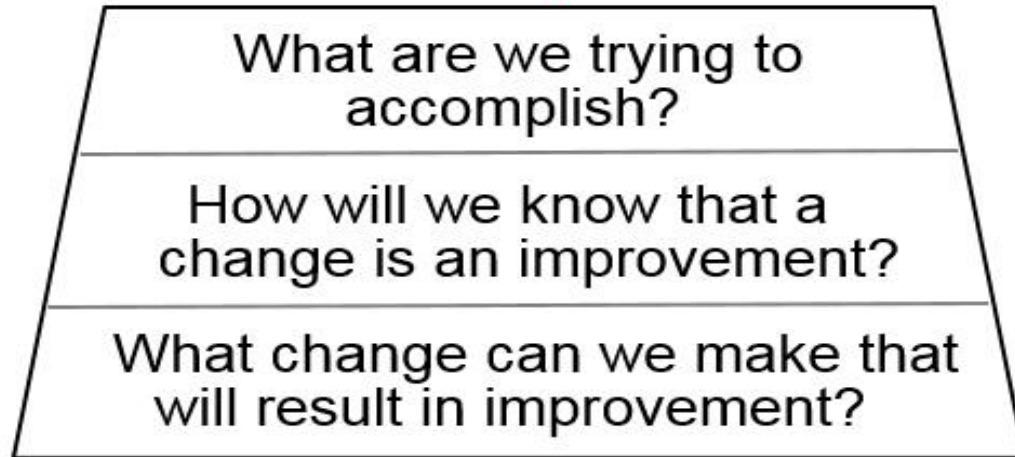
# Why this Model for Improvement?

---

- Is applicable to all types of organizations.
- Is applicable to all groups and levels in an organization.
- Facilitates the use of teamwork to make improvements.
- Provides a framework for the application of statistical tools and improvement methods.
- Encourages planning to be based on theory.
- Emphasizes and encourages the iterative learning process.
- Provides a way to empower people in the organization to take action.



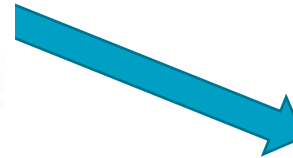
## Model for Improvement



Setting Aims



Tracking Progress toward Our Goals

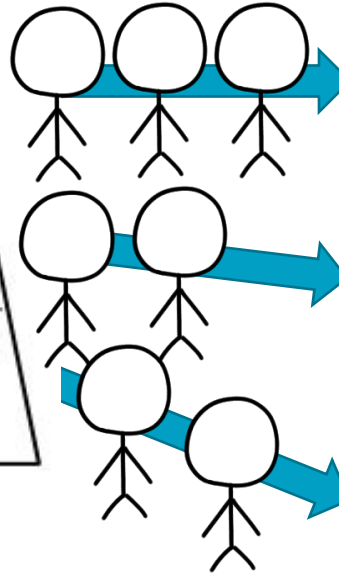
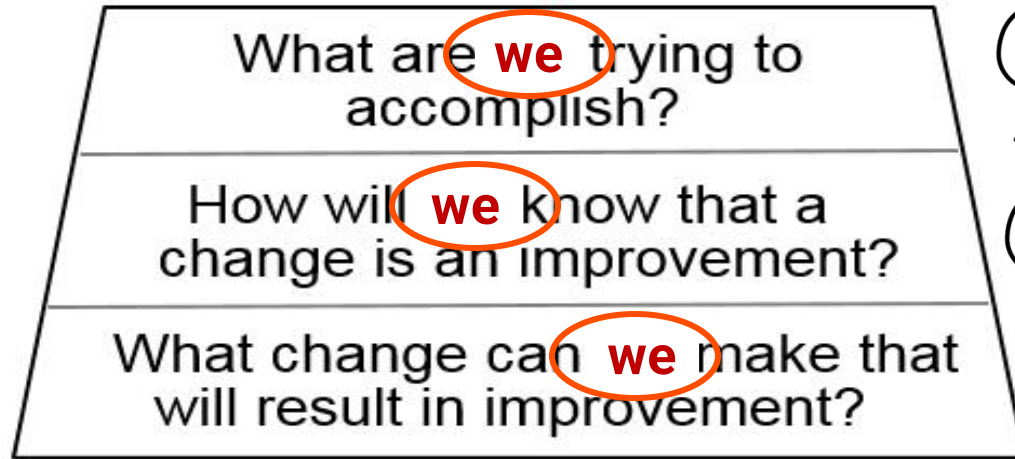


Developing a Change to the System to Try Out in the Work



Trying it Out

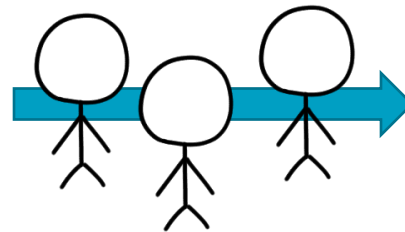
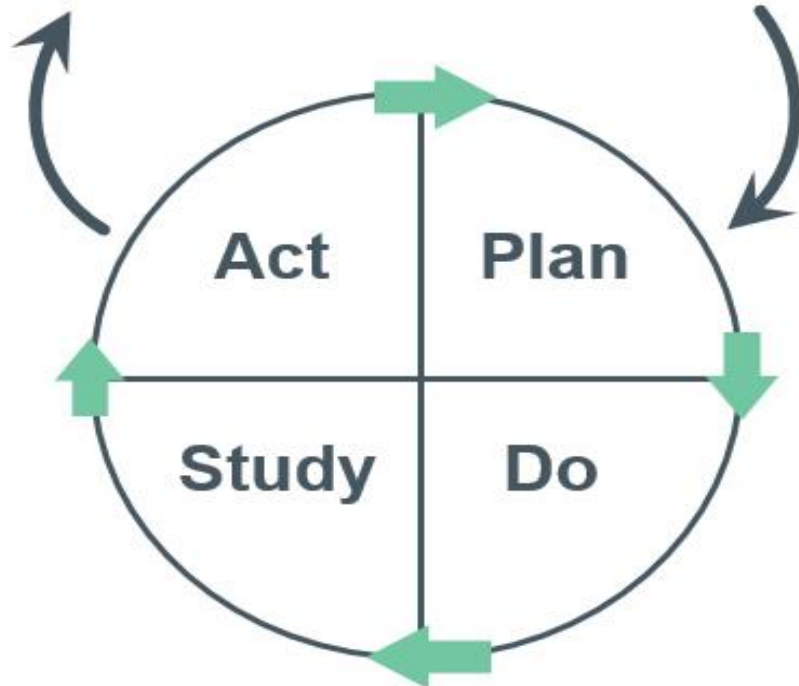
# Model for Improvement



Setting Aims

Tracking Progress toward Our Goals

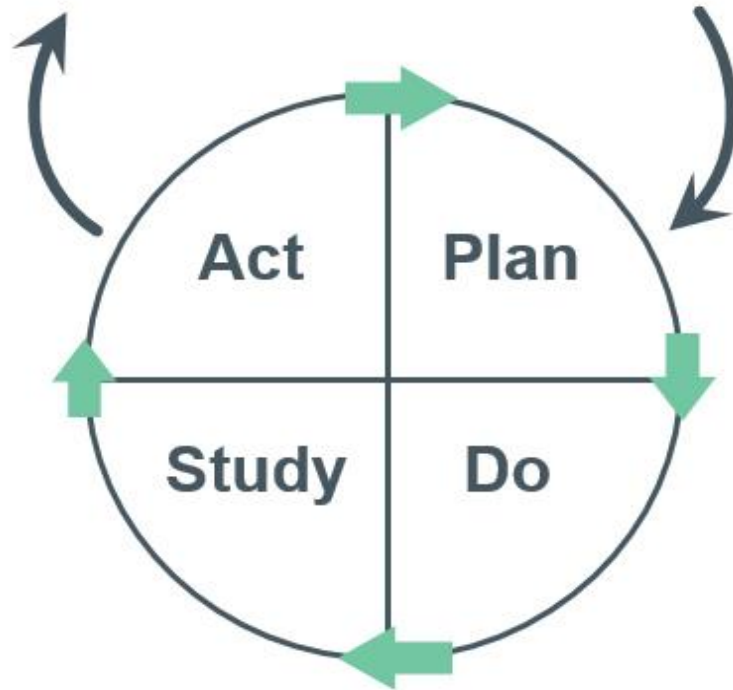
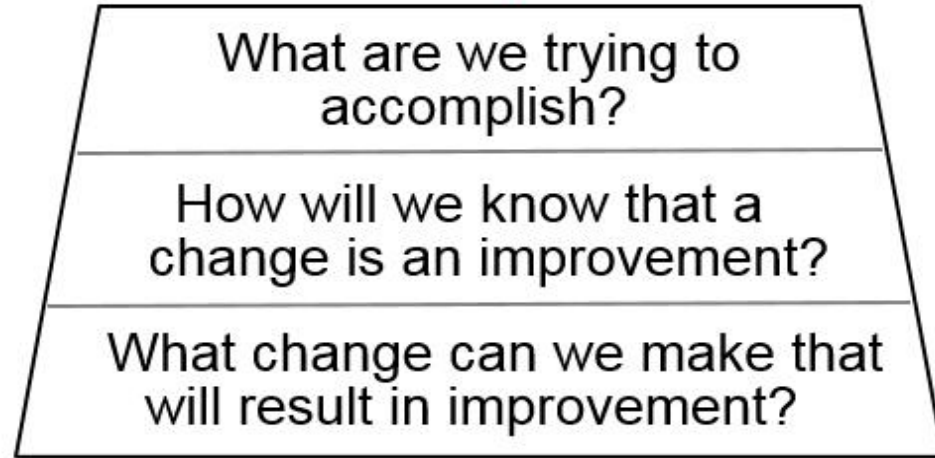
Developing a Change to the System to Try Out in the Work



Trying it Out



## Model for Improvement



# The 5 Key Principles for Improvement

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Knowing why you need to improve.

Having a way to get feedback/information to know if improvement is happening.

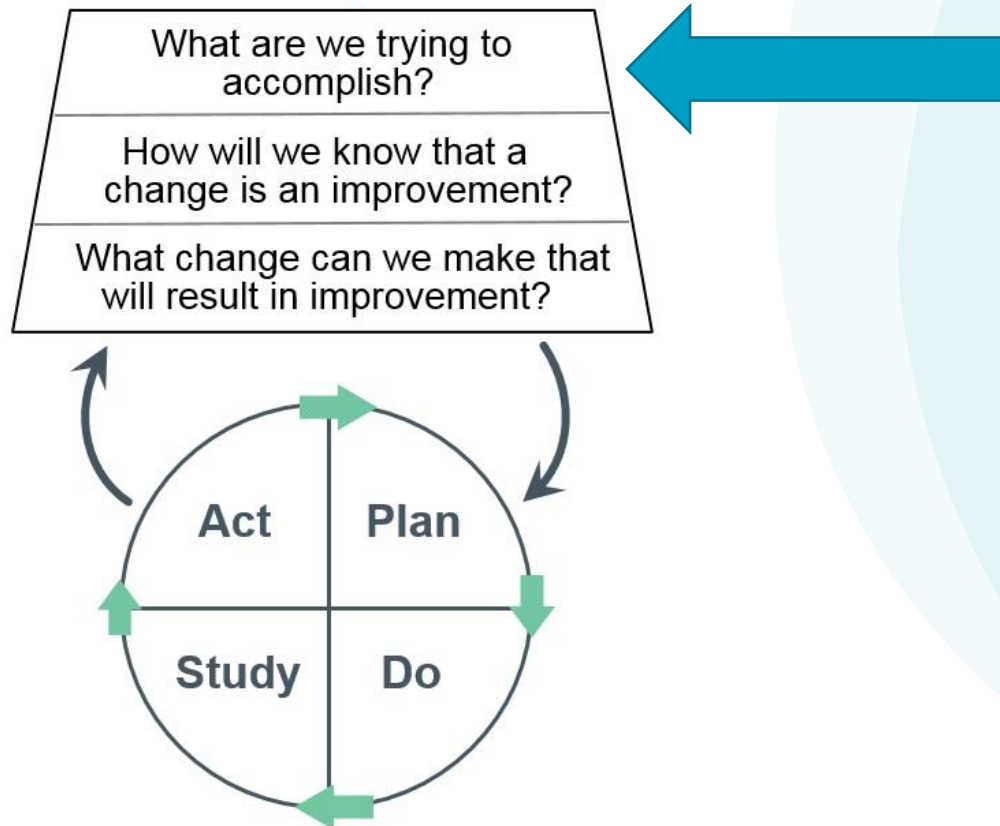
Developing an effective change that will result in improvement.

Testing a change before attempting to implement.

Knowing when and how to make the change permanent.



### Model for Improvement



# What are we trying to accomplish?

# Why set an aim?

---

- Everyone in the community understands what our community is trying to do
- Different aims require different designs
- The power of writing down goals and telling others





“Hope” is not a plan.

“Some” is not a number.

“Soon” is not a time.



# Essential Components of an Aim Statement

---

What is **expected to happen** (the outcome of interest)

**Timeframe** (by when is improvement desired?)

The **system to be improved** (local boundaries)

**For/with whom**: those who benefit from the effort

Specificity is incredibly helpful in generating focus for the effort being undertaken



# Let's Review Some Aims Together

---

## Aim 1:

- Our network aims to improve educational outcomes for children in the k-12 environment by decreasing racial and socio-economic disparities

It's not great.

Notice the lack of specificity, and the broad range of possible activity. This example has no measurable outcome and no timeline considered. No topic area chosen and we are unsure where the work will take place. The aim begins to state an associated theory, though.



# Example aims

---

## Aim 1:

- *Our network aims to improve educational outcomes for children in the k-12 environment by decreasing racial and socio-economic disparities*

## Aim 2:

- Our networked improvement team aims to improve graduation rates for minority students and students from low socio-economic backgrounds in 3 districts, representing 30 high schools, by reducing disparities

Specificity has improved. We can now start to see some boundaries (3 districts, 30 high schools). We know what sub-population we are interested in seeing improvement . And we have the beginnings of a metric that feels relevant (graduation rates).





# Example aims

---

## Aim 3:

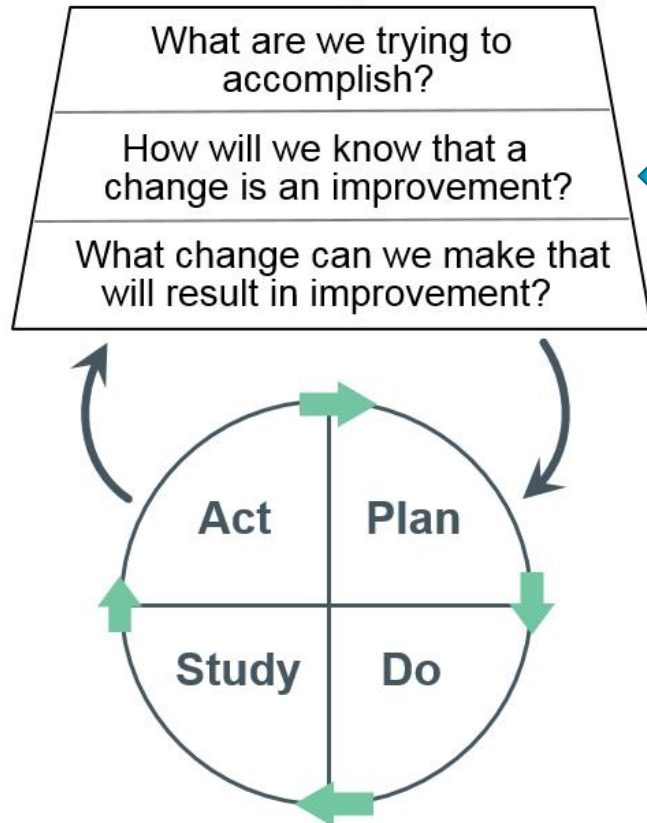
- Our networked improvement community aims to improve graduation rates from an average of 50% to 85%, for minority students and students from low socio-economic backgrounds, in 30 high schools across 3 participating districts (x, y, and z) by June 2023.

This is a pretty great aim!

We have good specificity represented here. We have our sub-population including boundaries (districts by name), our measurable outcome, a time by which we would like to achieve and a vision of the system to improve.



### Model for Improvement



# How will we know a change is an improvement?

# Different measurement roles

---

**Measurement for accountability**

**Measurement for research**

**Measurement for improvement**  
(Tracking whether we are making effective change)



# How do we know that a change is an improvement?

---



Improvement is not just about measurement



However, without measurement you won't know...

“have we made a difference?”

“is this change making a positive impact?”

“have we met the aim of our project?”

“what is the best next action to take?”



You need a balanced set of measures, linked to the team aim, to determine if the process has improved, stayed the same, or gotten worse

# Common Reactions to Data

**The data is wrong!**

The data is right, but it is **not a real problem**

The data is right, it's a real problem  
but it's **not my problem**

The data is right, it's a real problem  
AND **it's my problem**

The data is right, it's a real problem  
AND it's my problem BUT....  
**I'm not sure what to do about it**

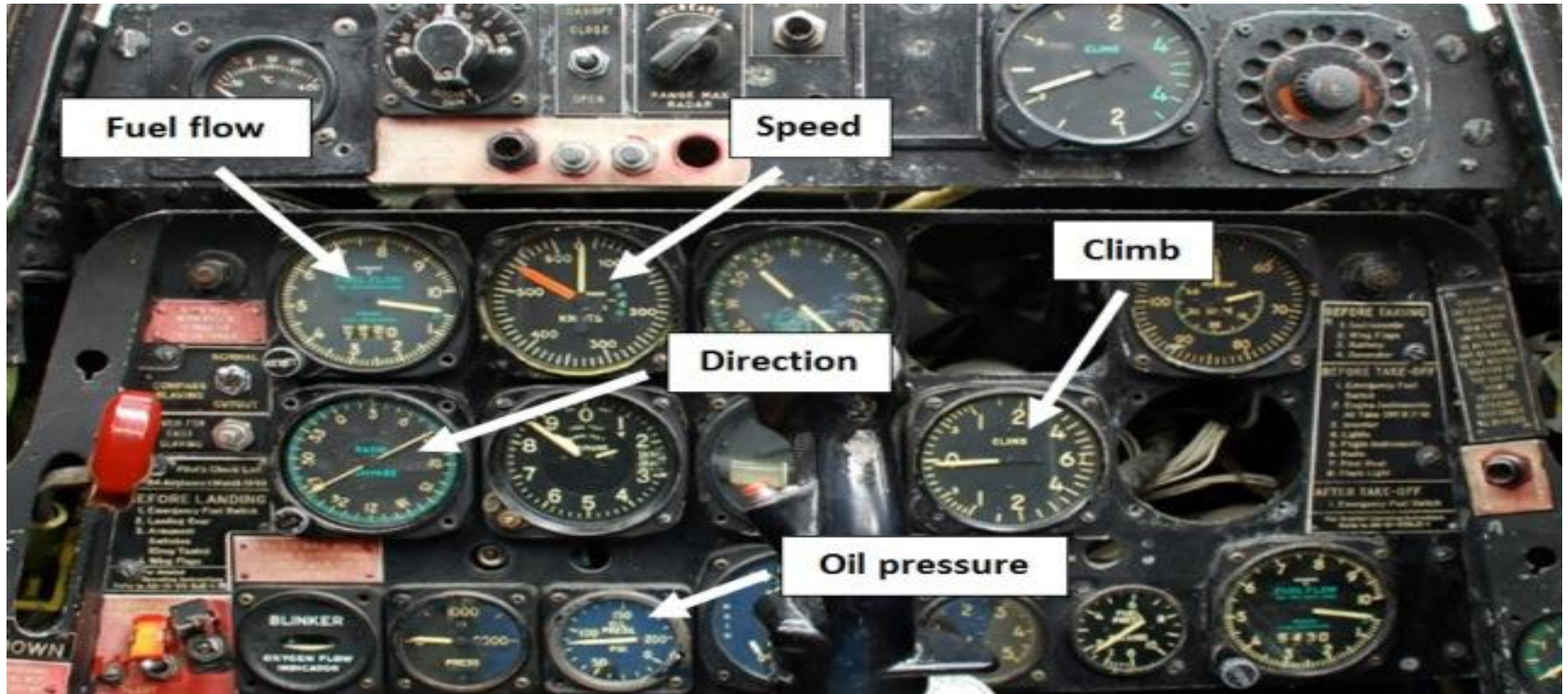






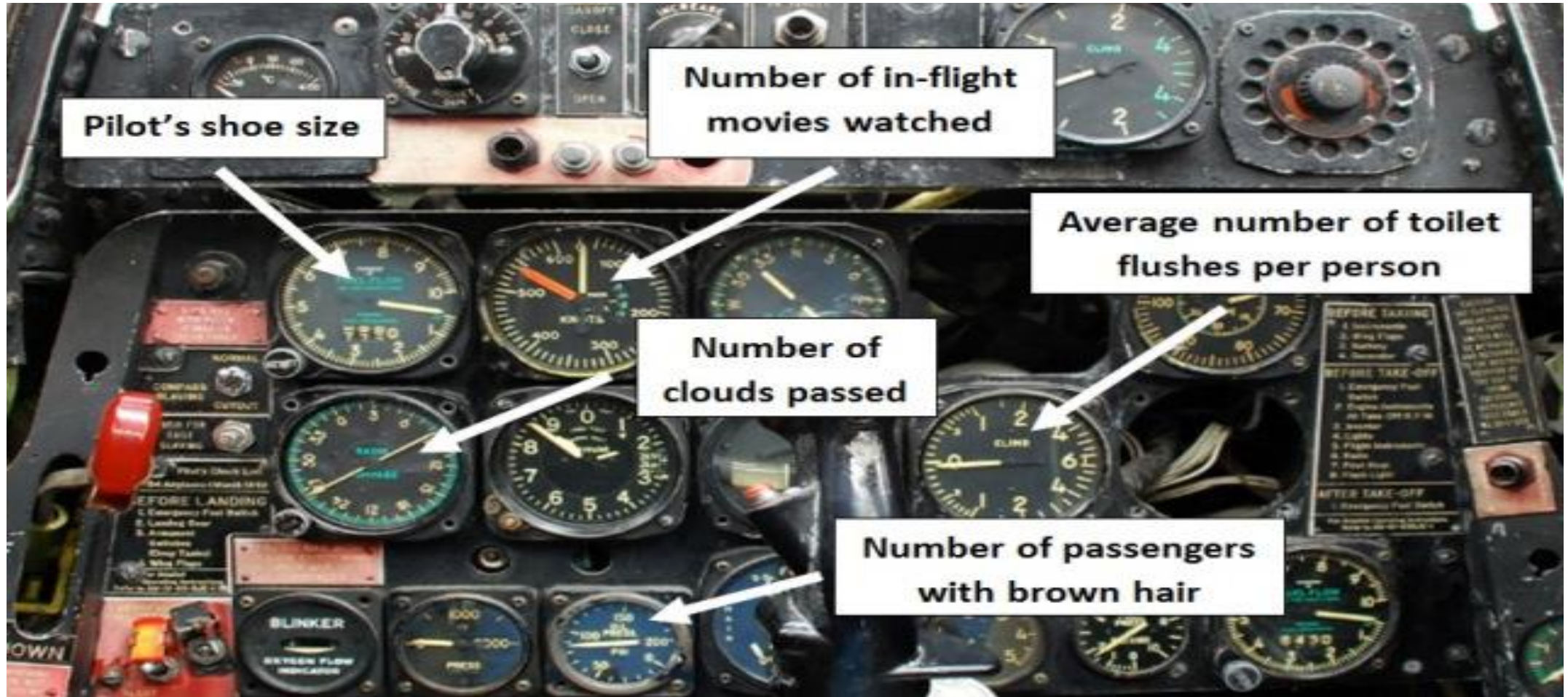


The right measures are the ones that come from *purpose*...





# What if you use the wrong measures?



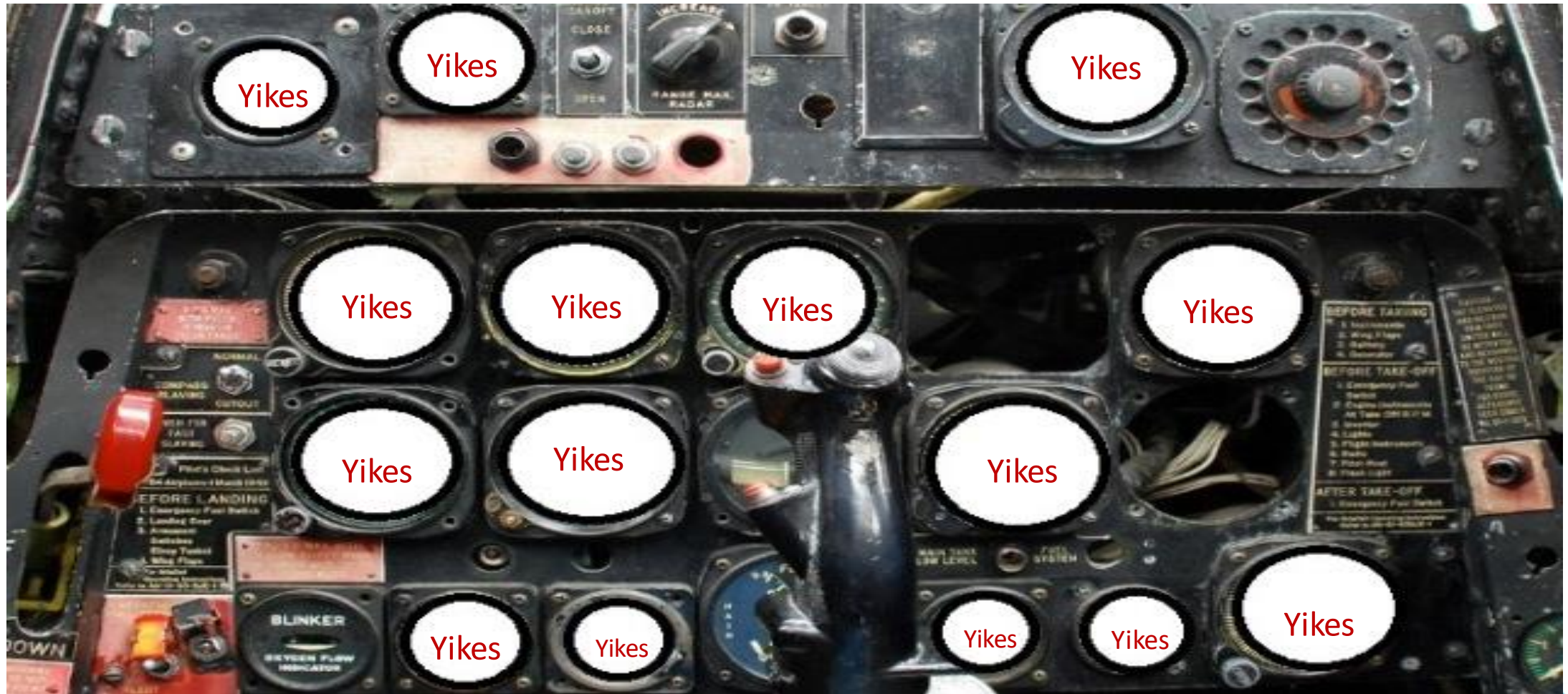


# What if you measure the right things, but in the wrong way?





# And if we didn't measure anything?





## **Outcome Measures**

- Tell a team whether the changes it is making are actually leading to improvement — that is, helping to achieve the stated aim

## **Process Measures**

- Tell a team whether a specific process change has been accomplished and whether it is having the intended effect

## **Balancing Measures**

- Make sure that changes to improve one part of the system aren't causing new problems in other parts of the system



# Measurement for Improvement: What can we measure?

**Counts** – e.g. number of individuals experiencing homelessness

**Rates** – e.g. number of housing placements per month

**Percentages** – e.g. % outreach coverage

**Values** (time, distance) – e.g. time to house



# Definitions matter...

An “operational definition” is a description, in quantifiable terms, of what to measure and the steps to follow to measure it consistently.



It gives communicable meaning to a concept



Is clear and not vague



Specifies measurement methods and equipment



Identifies criteria

# Definitions: Measures

What is your definition of an “on-time arrival” of your airplane?



# All work is a Process:

## Processes Related to an Aim

**Aim:** For individuals experiencing poverty within the XYZ learning Center, increase the number achieving GEDs by 20% (over the average achieved for the last three years) by December 2016.

### Processes that could impact the Aim?

- Recruiting individuals
- Enrolling individuals
- Developing the curriculum
- Teaching
- Supporting students



# Share with your table...

---

- What are some processes that you engage in in your work, in the services you access, or in your life in general?
- How do you know that the changes you make to that process are making a difference? Do you measure things? If so, what?



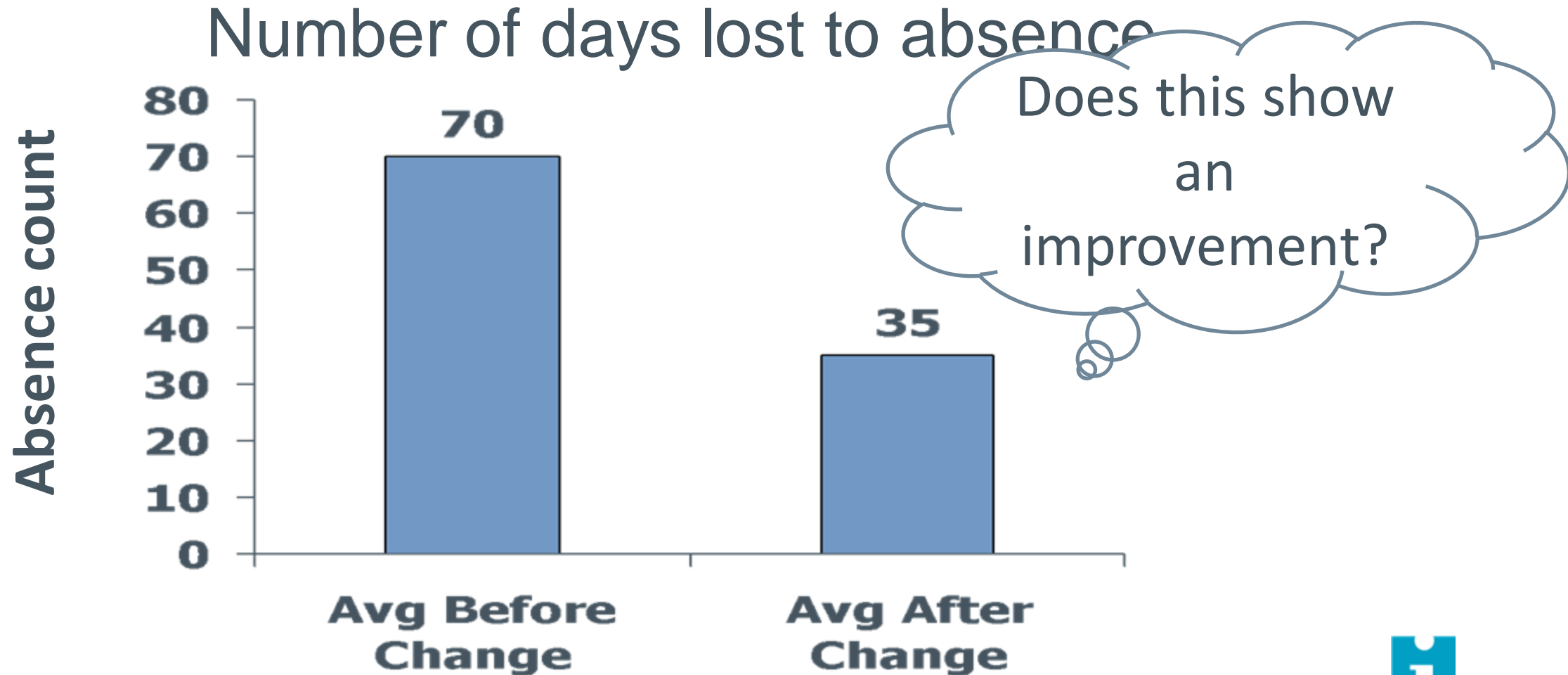


Getting Curious:

Before and After vs. Data Over Time

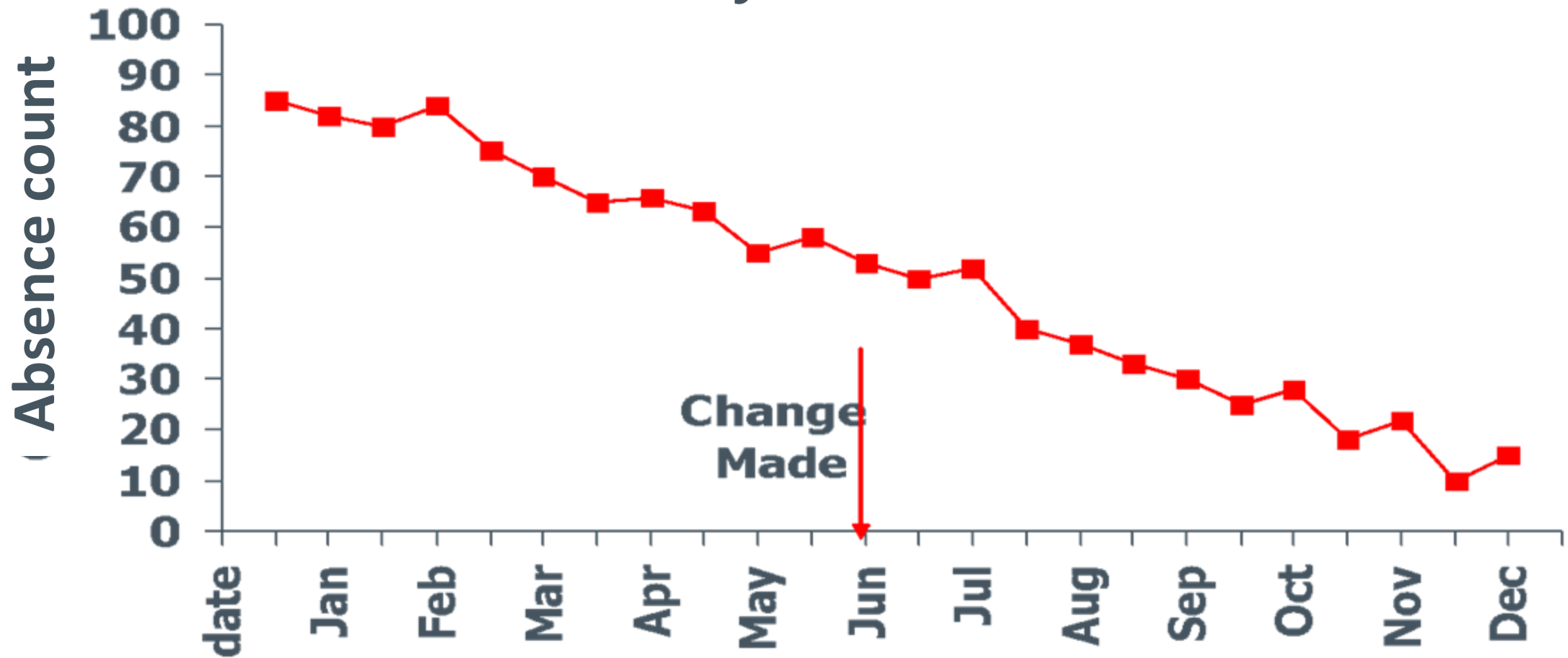
# A better approach?

## Averages before and after the change

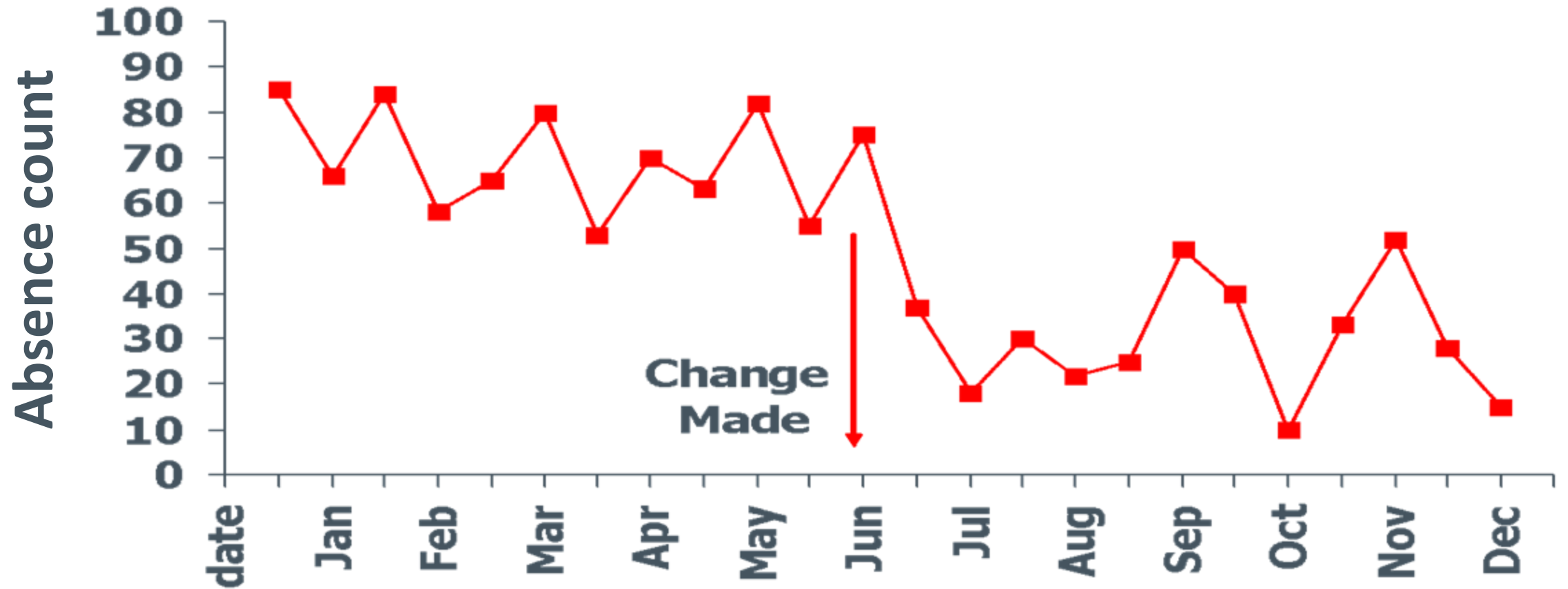




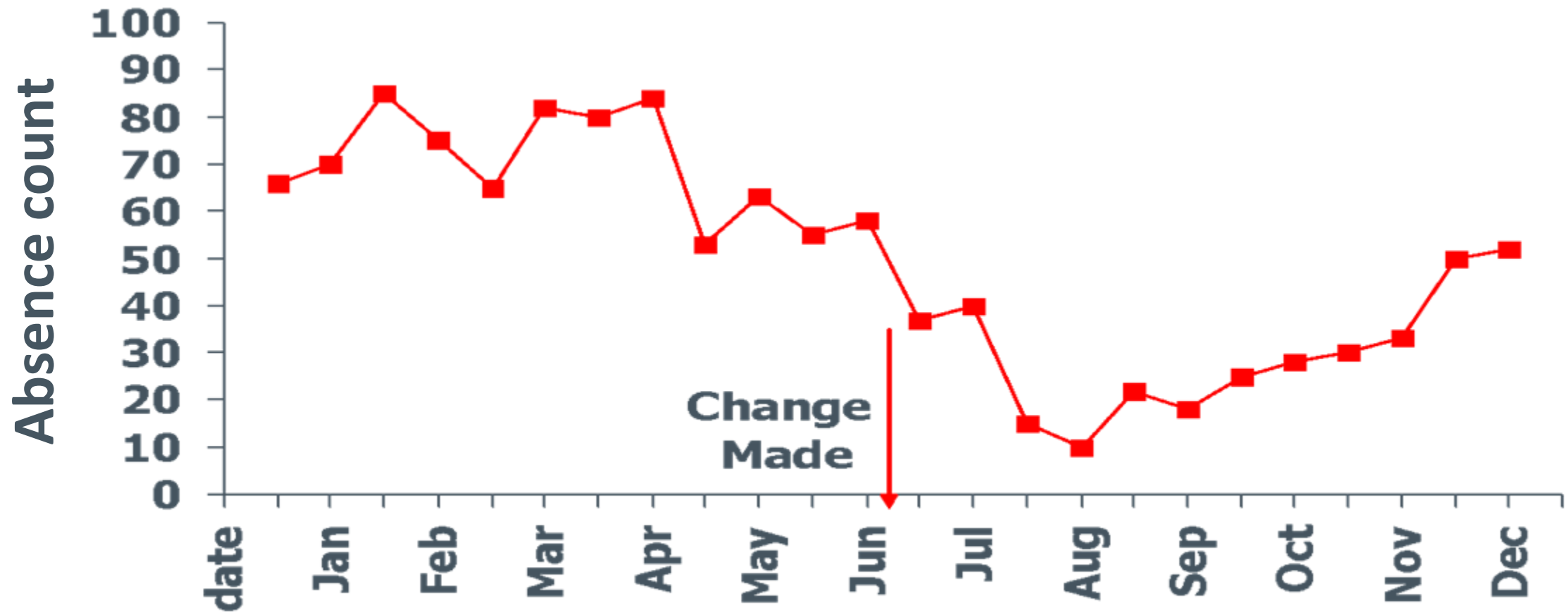
# Number of days lost to absence



# Number of days lost to absence



# Number of days lost to absence





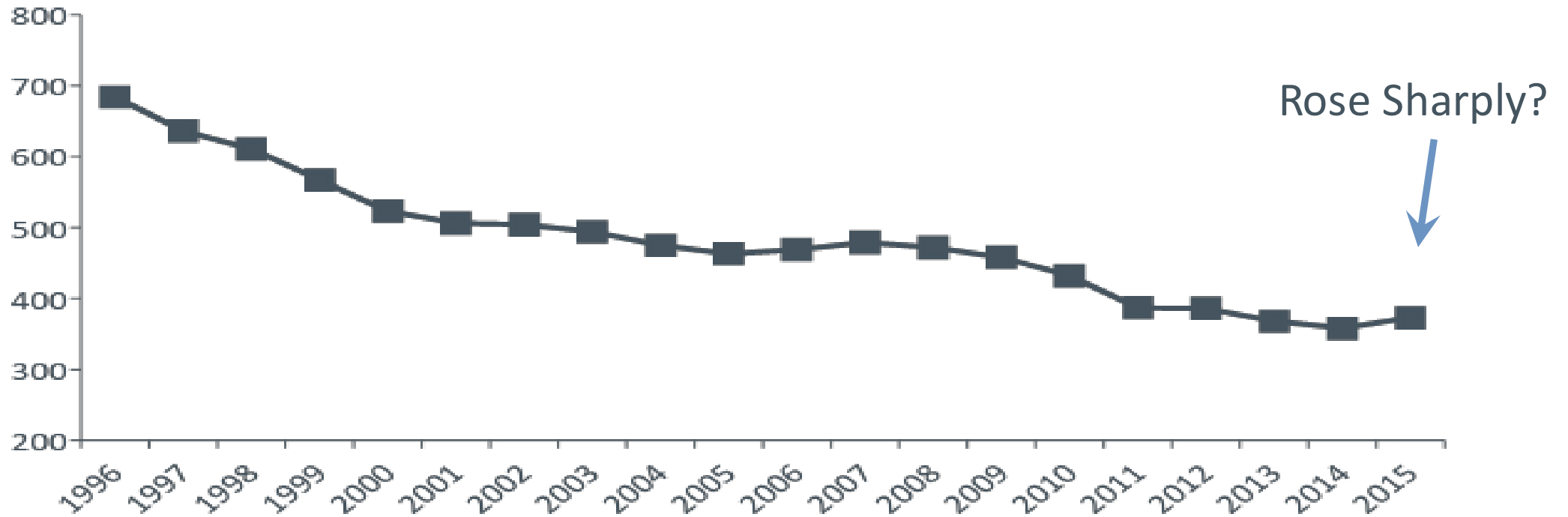
# Getting curious...

47



# US Violent Crime Rate per 100,000 Residents

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# Measures: How will we know that a change is an improvement?

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49

- The purpose of measurement in improvement work is for learning not judgment
- All measures have limitations, but the limitations don't eliminate their value for learning
- Measures should be:
  - Linked to your aim
  - Used to guide improvement and test changes integrated into your daily routine
  - Just a “vital few”
- Data should be plotted over time on annotated graphs



# Tips:

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Remember you are measuring for learning and improvement

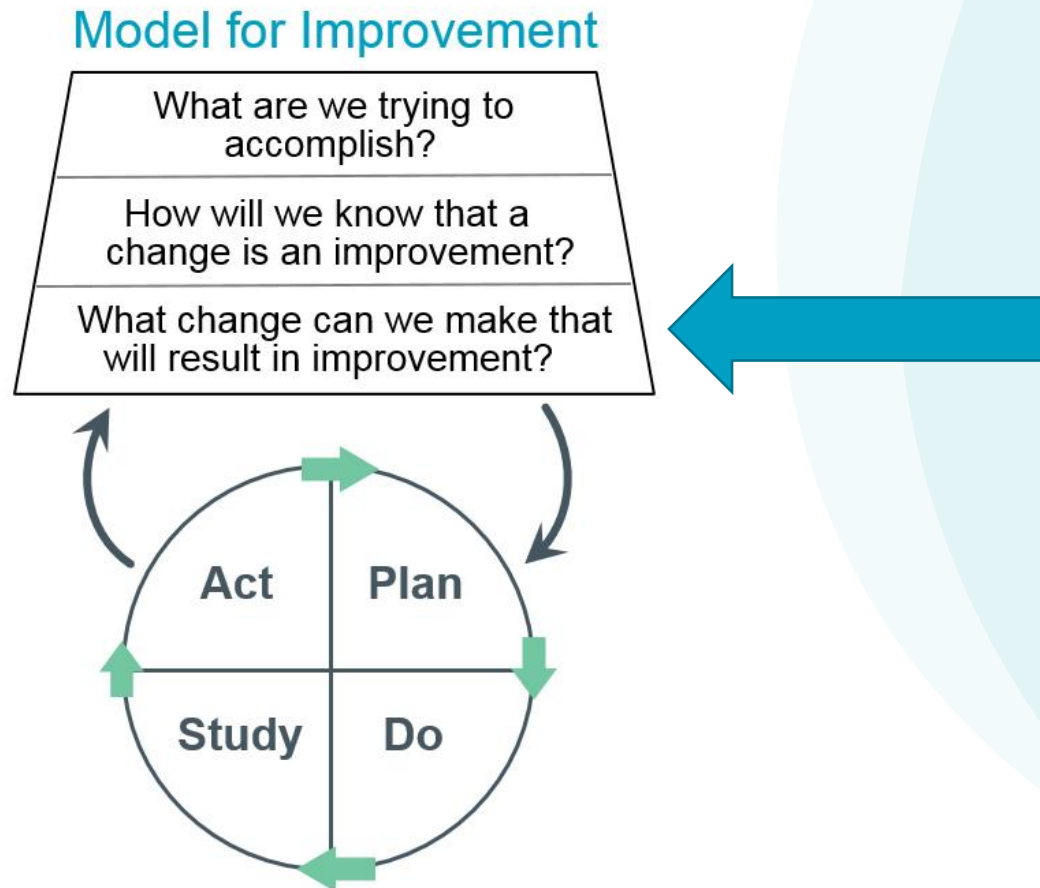
Ideally use existing measures if/when you have them

Use qualitative and quantitative data

Use Race/Ethnicity and Language (REaL) data when you can, or consider how you will stratify your data in service of equity

Look to others in the community who have done this well!





**What change can  
we make that will  
result in  
improvement?**

# Reactive vs. fundamental change

---

Reactive Change (First order change)	Fundamental Change (Second order change)
<ul style="list-style-type: none"><li>• Often routine</li><li>• Solve problems or react to special circumstance</li><li>• Keeps the system running or return it to its prior condition</li><li>• Immediate but short-term impact</li><li>• <b>Often MORE</b> &gt; Training, Resources, Rules, Audits, Flyers, etc.</li></ul>	<ul style="list-style-type: none"><li>• Creates a new system (process, product or service)</li><li>• Alters how work gets done (process) and what people do (behavior)</li><li>• Necessary for improvement beyond problems</li><li>• Changes the system in a visible, measurable way</li><li>• Creates sustained long-term impact</li></ul>





# Tools for Generating Ideas for Change

---

Logical thinking about the current system (observation, describe a process through flow charts and/or process mapping)

Cause & effect/fishbone diagram

Refer to your Driver Diagram and change package

Benchmarking or learning from others - Bright Spots

Learn from those with lived experience (client interviews; 7 stories exercises)

Creative thinking

Using change concepts

















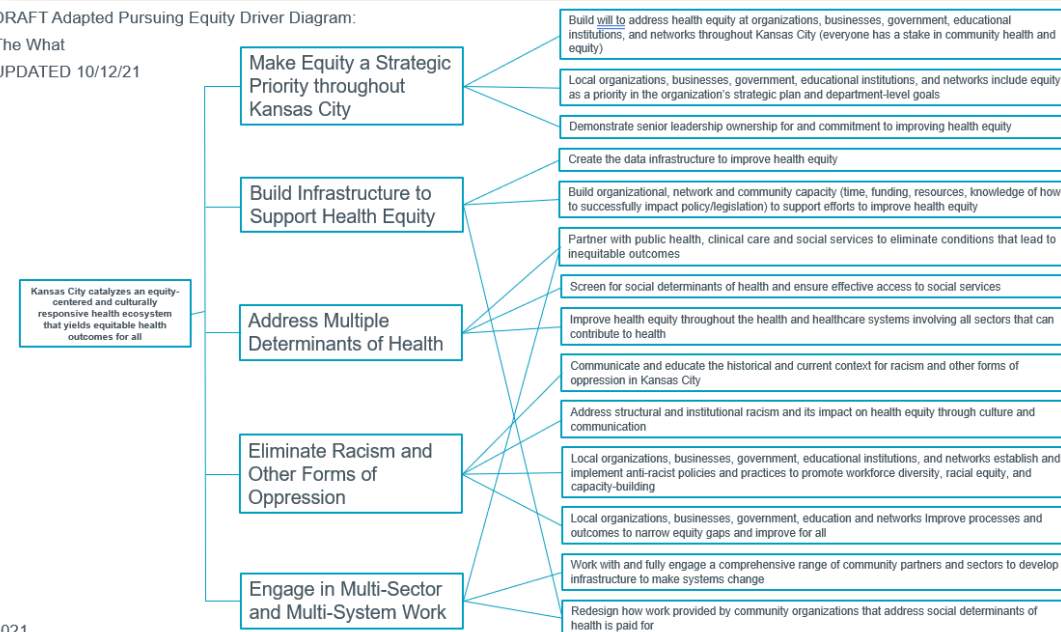




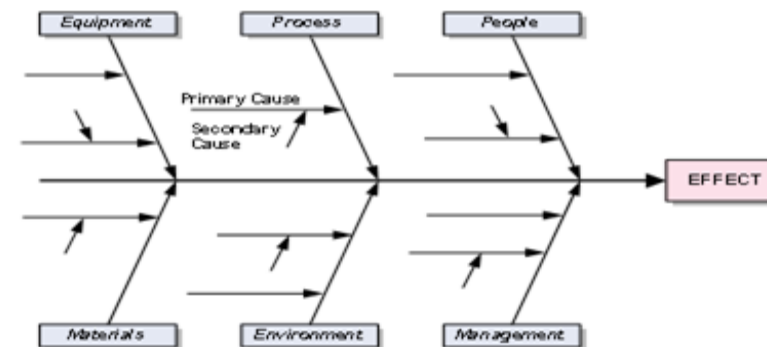
DRAFT Adapted Pursuing Equity Driver Diagram:

The What

UPDATED 10/12/21



2021





# Turn to 2 People and Discuss...

---

- What is a change that you tried out in your work or life lately to make it better?
- How did you identify that change as an idea to try?



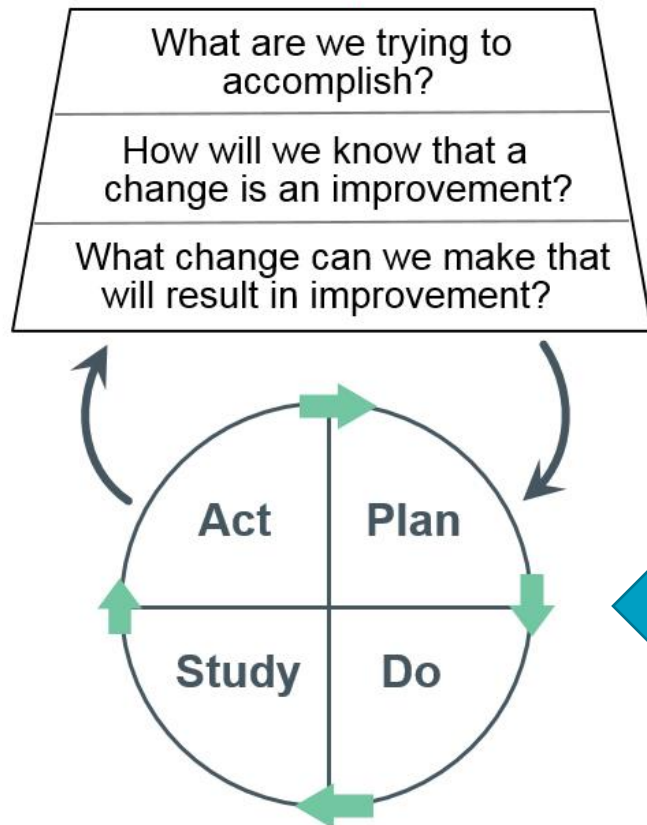
# But remember...

---

A change is different from a TEST  
of a change



### Model for Improvement



Trying out our  
ideas to see if  
they lead to  
improvement...

# A Change vs. a Test of Change

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Change: Placing a salad bar in a cafeteria



Placement of bar  
near entrance



Plan a classroom  
competition of  
salad consumption



Recruiting students  
to be initial testers



Awareness signs  
around school



Placement of salad  
bar in front of less  
healthy foods

# A Change vs. a Test of Change

Change: Use a standard common assessment tool



Test with One Agency



Use with Outreach Teams

**The Structure of the VI-SPDAT**

The VI-SPDAT is organized across four domains. Each domain is directly aligned with the domains of inquiry used in the SPDAT.

- 1. History of Housing
- 2. Risks
- 3. Socialization and Daily Functions
- 4. Wellness

Each question within the VI-SPDAT is directly related to one or more components within the SPDAT. The "components" are the subsections of each domain area.

Domain Area	Components within the SPDAT
History of Housing	<ul style="list-style-type: none"><li>• History of Housing and Homelessness</li></ul>
Risks	<ul style="list-style-type: none"><li>• Risk of Harm to Self or Others</li><li>• Involvement in High-Risk and/or Explosive Situations</li><li>• Interactions with Emergency Services</li><li>• Legal Issues</li><li>• Managing Tenancy</li></ul>
Socialization and Daily Functions	<ul style="list-style-type: none"><li>• Self-Care and Daily Living Skills</li><li>• Personal Administration and Money Management</li><li>• Meaningful Daily Activities</li><li>• Social Relations and Networks</li></ul>
Wellness	<ul style="list-style-type: none"><li>• Mental Health and Wellness and Cognitive Functioning</li><li>• Physical Health and Wellness</li><li>• Medication</li><li>• Substance Use</li><li>• Experience of Abuse and/or Trauma</li></ul>



Public-funded Programs and Services i.e. Mental Health



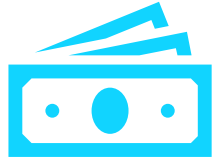
Implementing with Shelter programs





# PDSA Cycles: Why Test?

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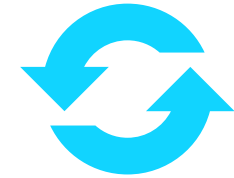
Use resources  
wisely



Learn more from  
doing than  
planning

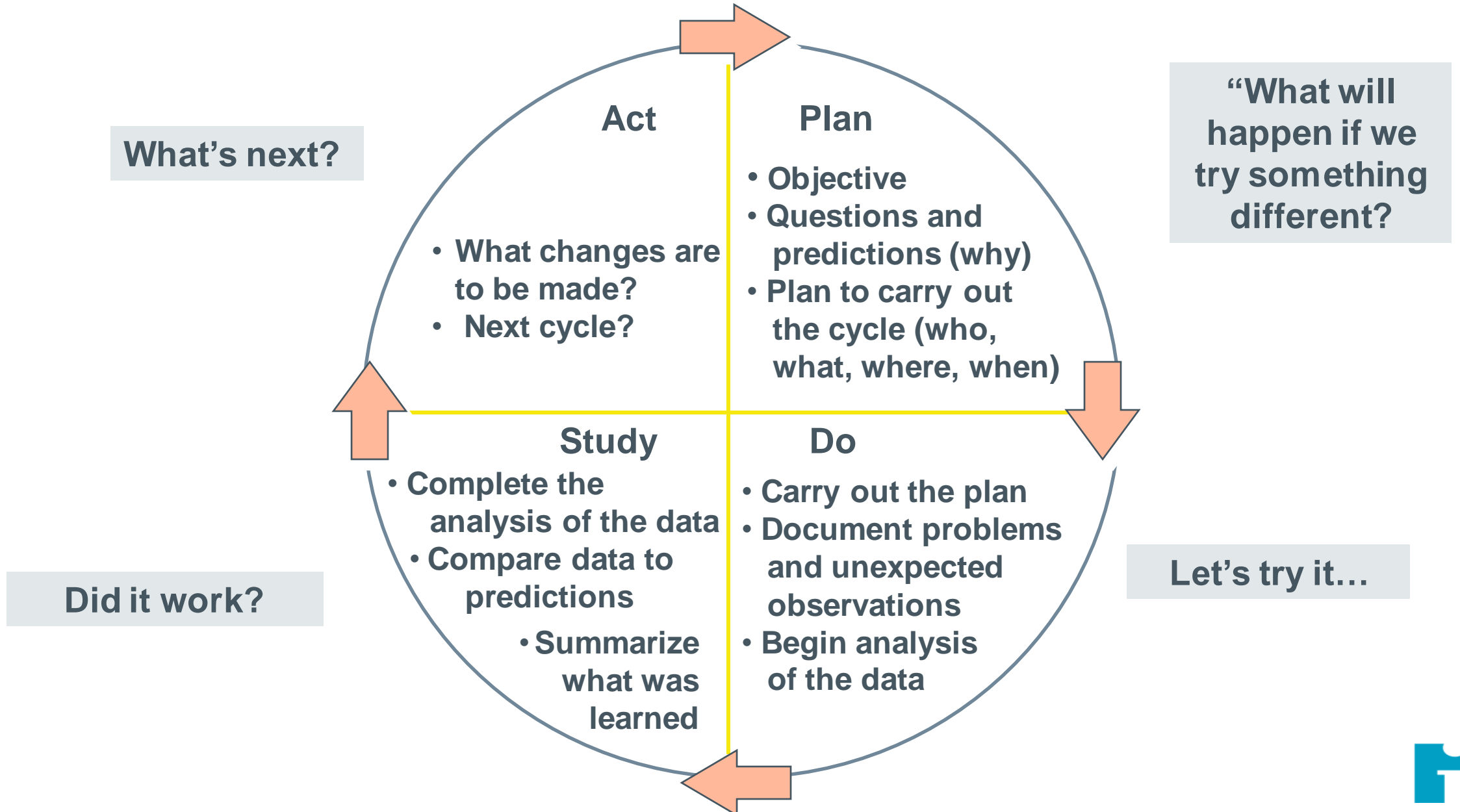


Learn about the  
change:  
Cost, How much  
improvement,  
Side effects

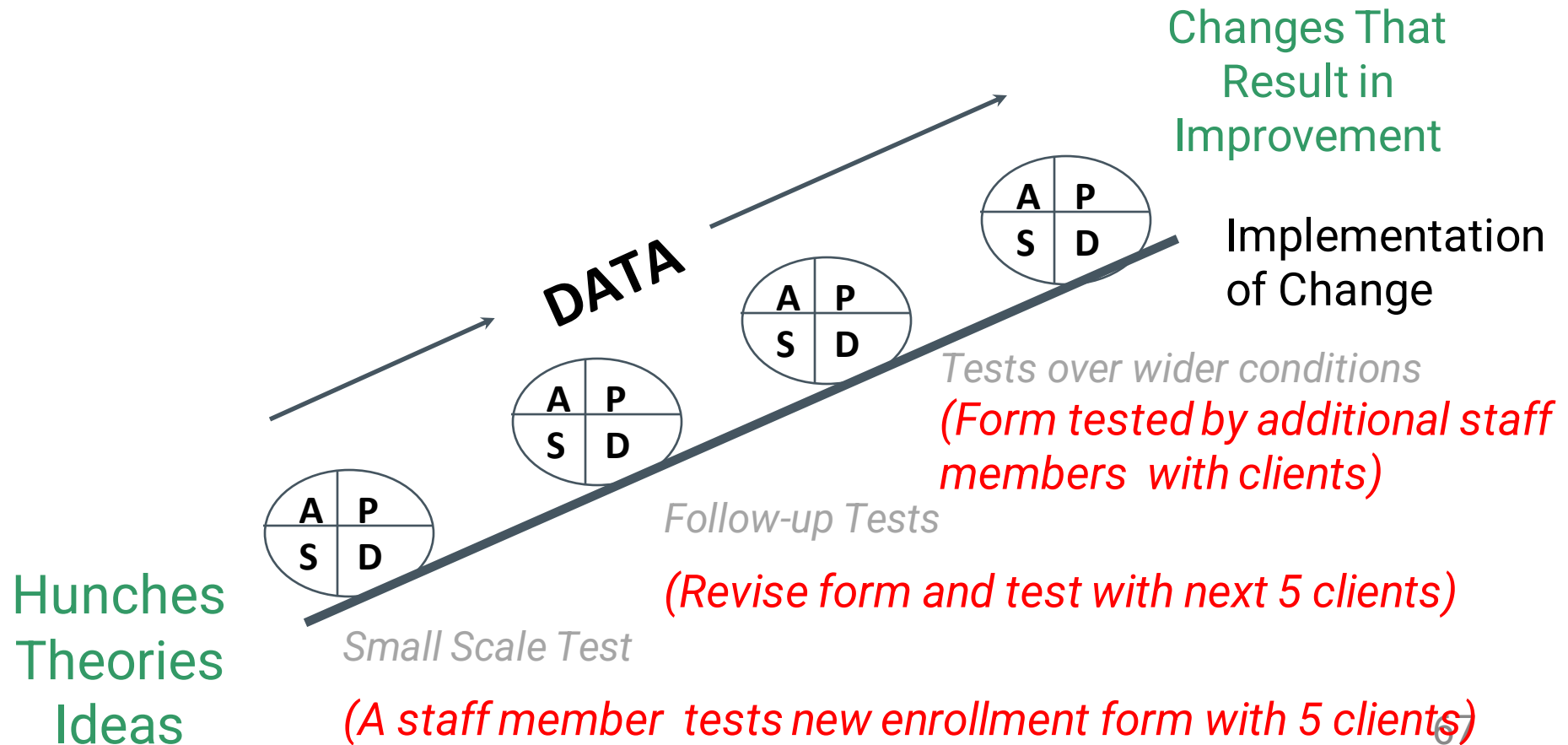


Reduce  
resistance to  
change

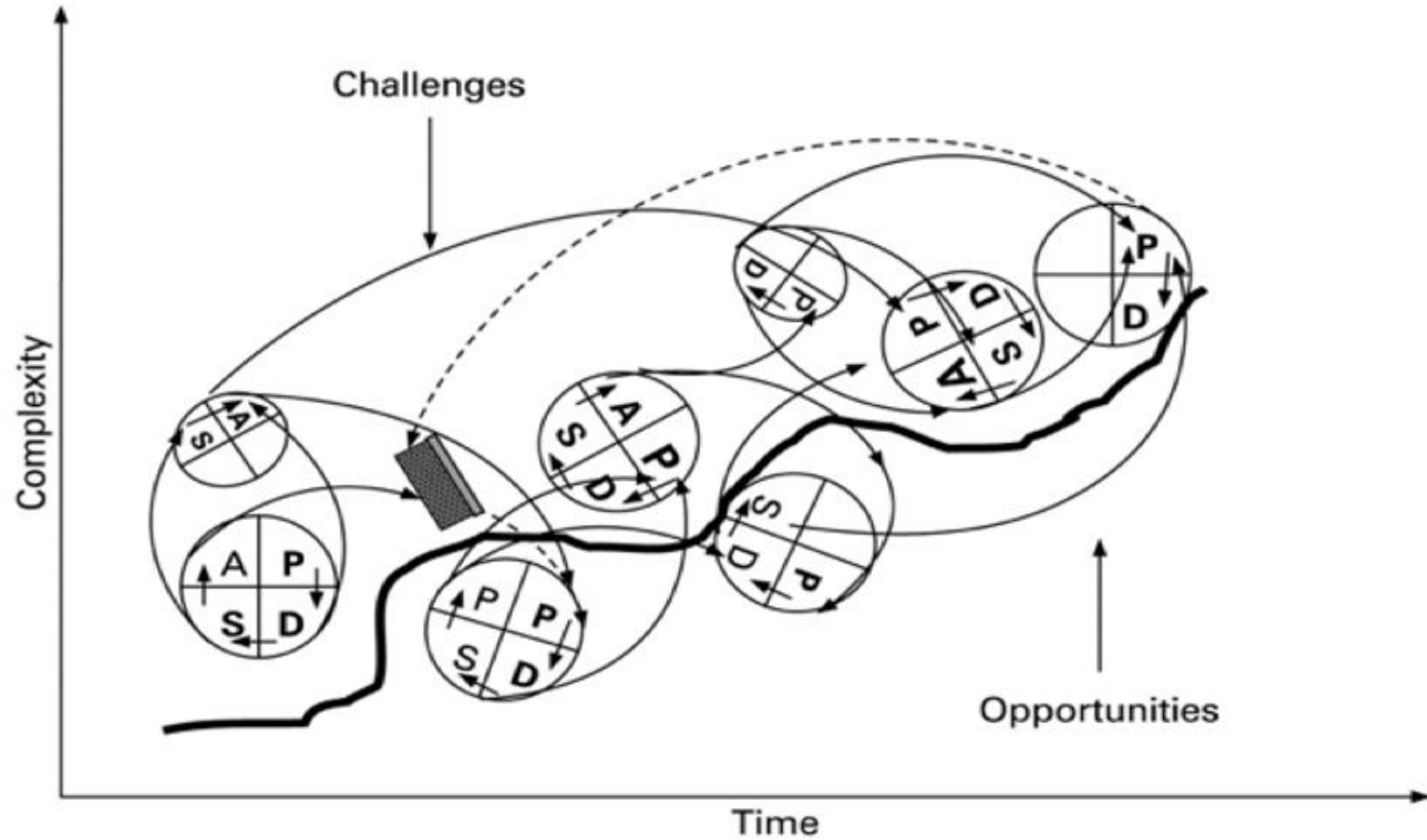
# A PDSA Cycle



# Multiple Plan-Do-Study-Act (PDSA) Cycles



# Early PDSA tests (adopt, adapt, abandon)



Source: A case study of translating ACGME, to a comprehensive curriculum improvement projects as the key component requirements into reality: systems quality practice-based learning and improvement, A M Tomolo, R H Lawrence and D C Aron, *Qual Saf Health Care* 2009 18: 217-224



# The 5 Key Principles for Improvement

---

Knowing why you need to improve.

Having a feedback mechanism to know if improvement is happening.

Developing an effective change that will result in improvement.

Testing a change before attempting to implement.

Knowing when and how to make the change permanent.







***Please evaluate  
this session:***

Aim your phone's camera  
at the code, and a short  
survey will open. Thanks  
for helping us improve.

