

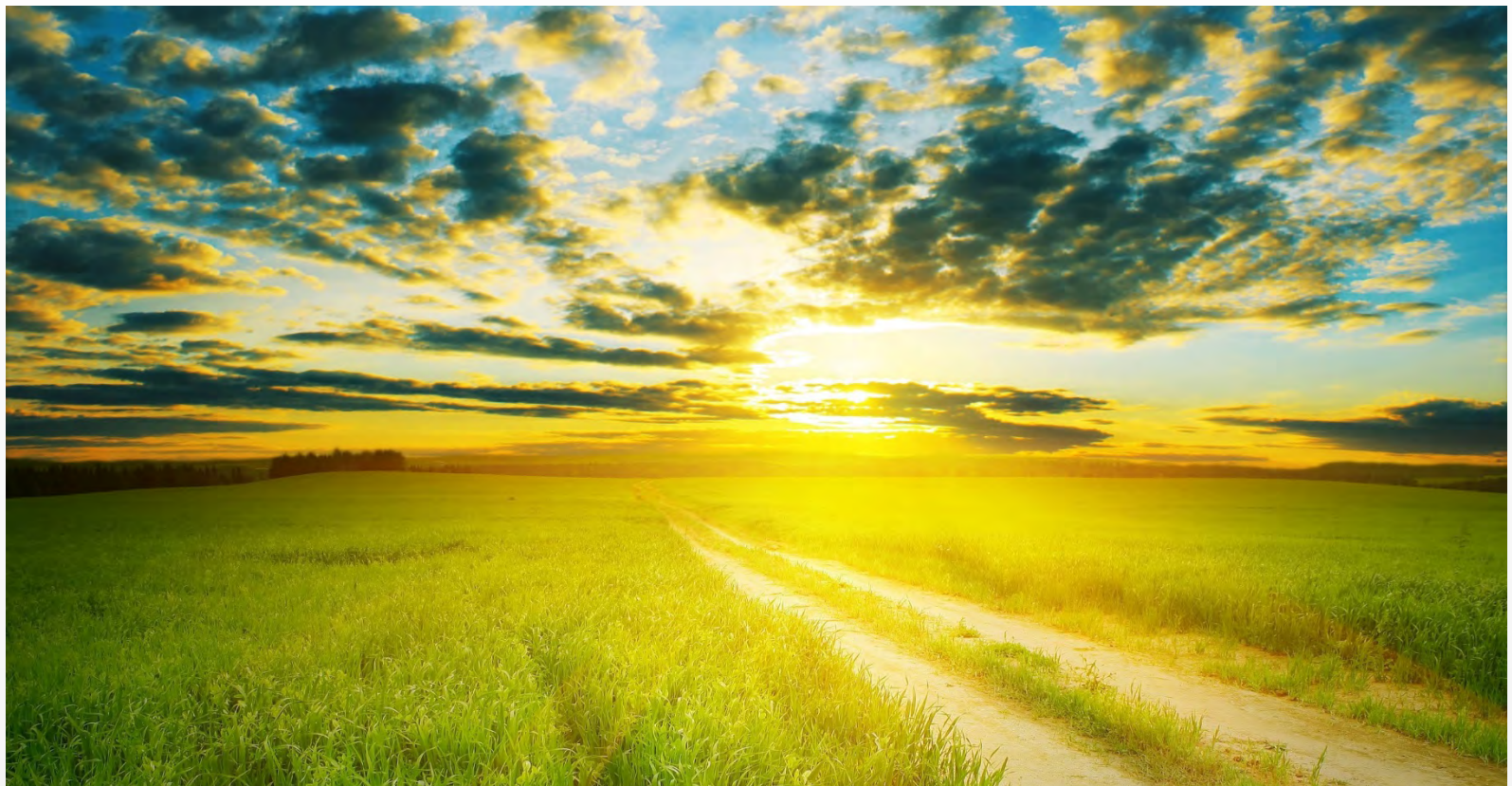
# Quality Improvement in Public Health: Beginning your Quality Improvement Journey



National Tribal Forum for Excellence in Community  
Health Practice  
August 31, 2016



# Welcome & Introductions



# Training Objectives

1. Describe what quality improvement is.
2. Describe and begin to apply the Plan-Do-Study-Act (PDSA) cycle methodology for conducting formal quality improvement efforts.
3. Describe and begin to apply a few fundamental quality improvement tools.



# Discussion

*What brought you to this training session today?*



# Introduction to Quality Improvement (QI)



# What is Quality?

- “...the standard of something as measured against other things of a similar kind; the degree of excellence of something.”
- “...the non-inferiority or superiority of something.”
- “...a characteristic of a product or service provided to a customer.”



# Discussion

*What does quality mean to you  
and your work?*



# QI in Our Terms

“QI is the use of a ***deliberate and defined improvement process***, such as **Plan-Do-Study-Act**, which is focused on activities that are responsive to community needs and improving population health. It refers to a ***continuous and ongoing effort to achieve measurable improvements*** in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community.”

Bialek, R., Beitsch, L. M., Cofsky, A., Corso, L., Moran, J., Riley, W., & Russo, P. (2009). Proceedings from Accreditation Coalition Workgroup: *Quality Improvement in Public Health*.



# QI Is:

- Cyclical
- Built on group consensus not hierarchy
- Supportive not punitive
- Focused on communities improving their services from within
- Rooted in a desire to learn, improve, and ultimately serve customers in a good way



# QI Can...

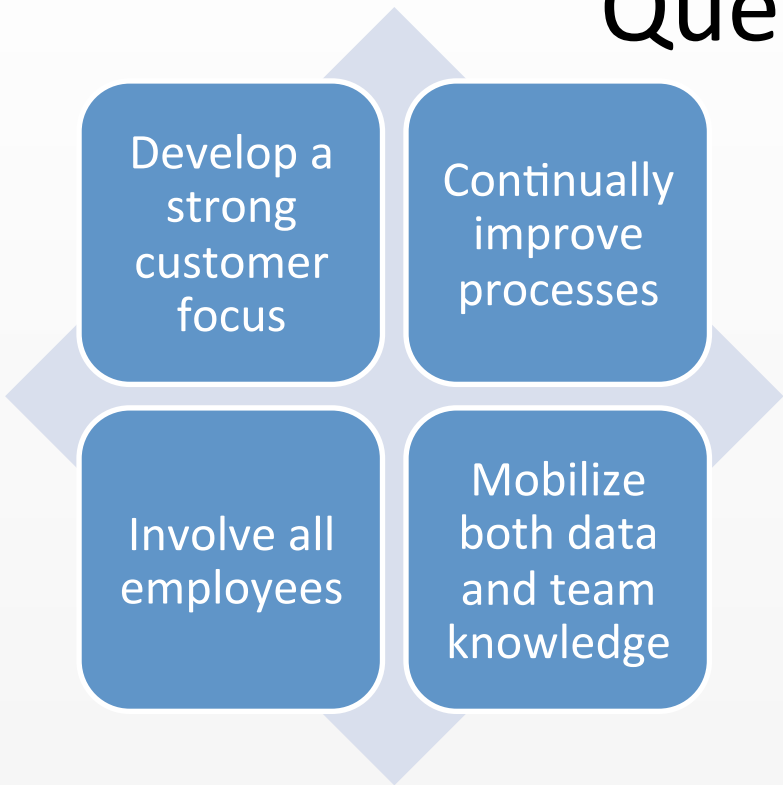


- Streamline processes
- Reduce redundancies
- Cut down on costs
- Eliminate waste
- Enhance ability to meet the needs of internal and external customers/clients
- Increase customer/ client satisfaction with services
- Improve outcomes!

# QA and QI are Not the Same

Quality Assurance	Quality Improvement
Guarantees quality	Raises quality
Relies on inspection	Emphasizes prevention
Uses a reactive approach	Uses a proactive approach
Looks at compliance with standards	Improves the processes to meet standards
Requires a specific fix	Requires continuous efforts
Relies on individuals	Relies on teamwork
Examines criteria or requirements	Examines processes or outcomes
Asks, “Do we provide good services?”	Asks, “How can we provide better services?”

# Four Basic Principles & Three Key Questions



# PLAN - DO - STUDY - ACT OVERVIEW

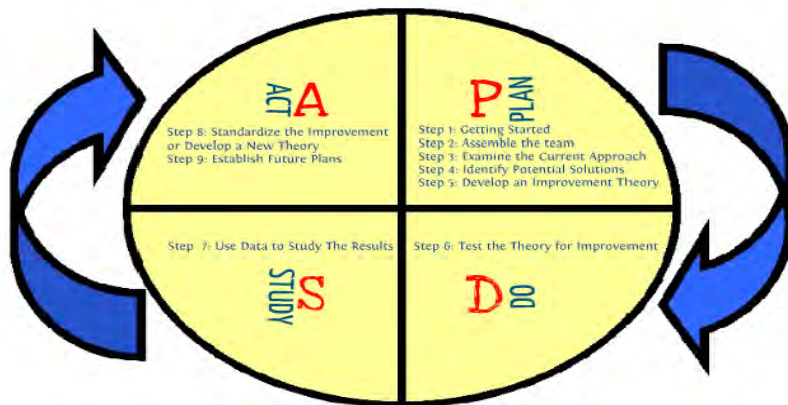
## FOUNDATIONS OF QI

**Four basic Principles**

- Develop a strong customer focus
- Continually improve all processes
- Involve employees
- Mobilize both data and team knowledge to improve decision making

**Three Key Questions**

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?



## FOUNDATIONS OF QI

QI is about:

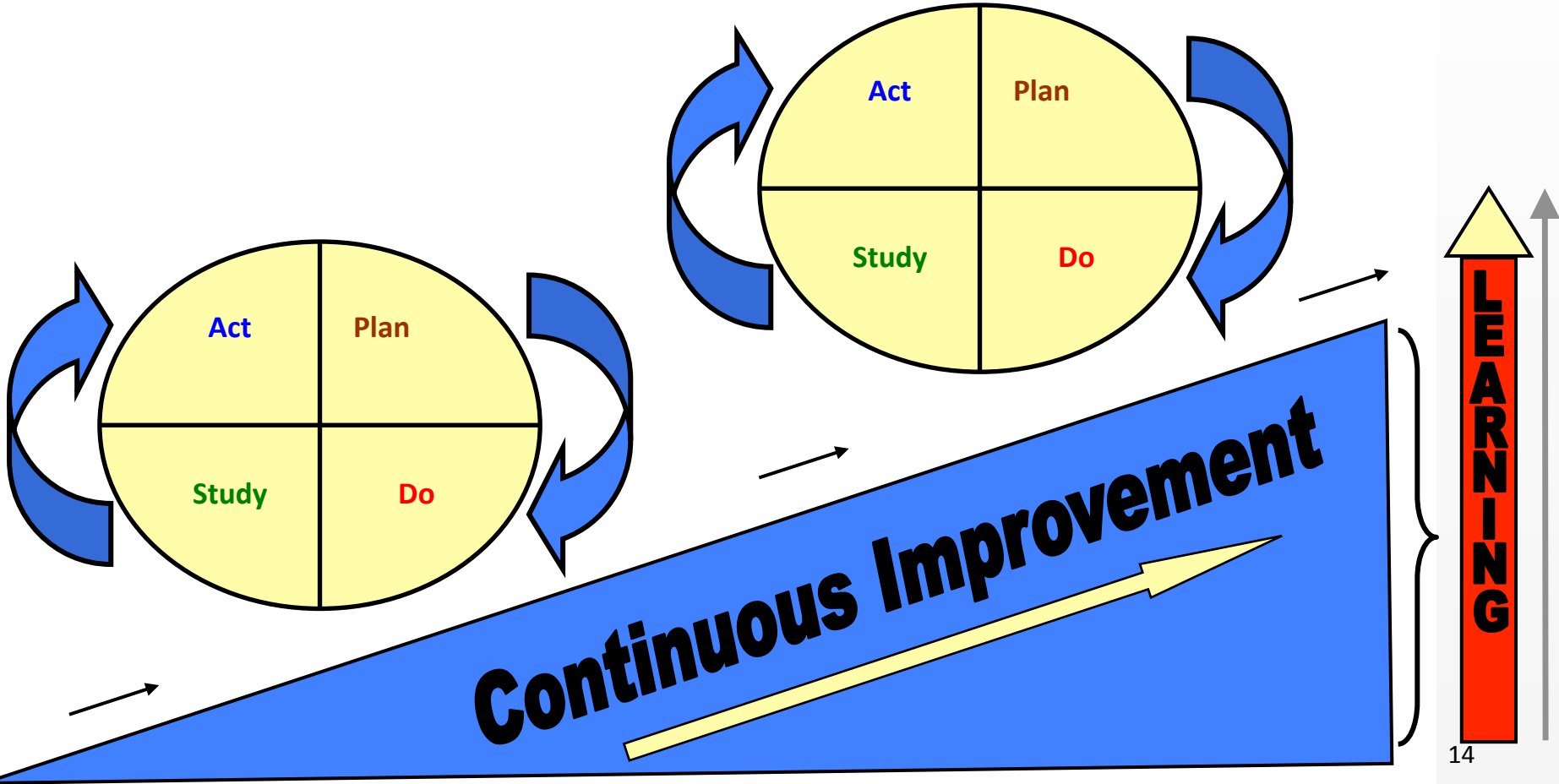
- Process
- Data
- Learning

PDSA is...

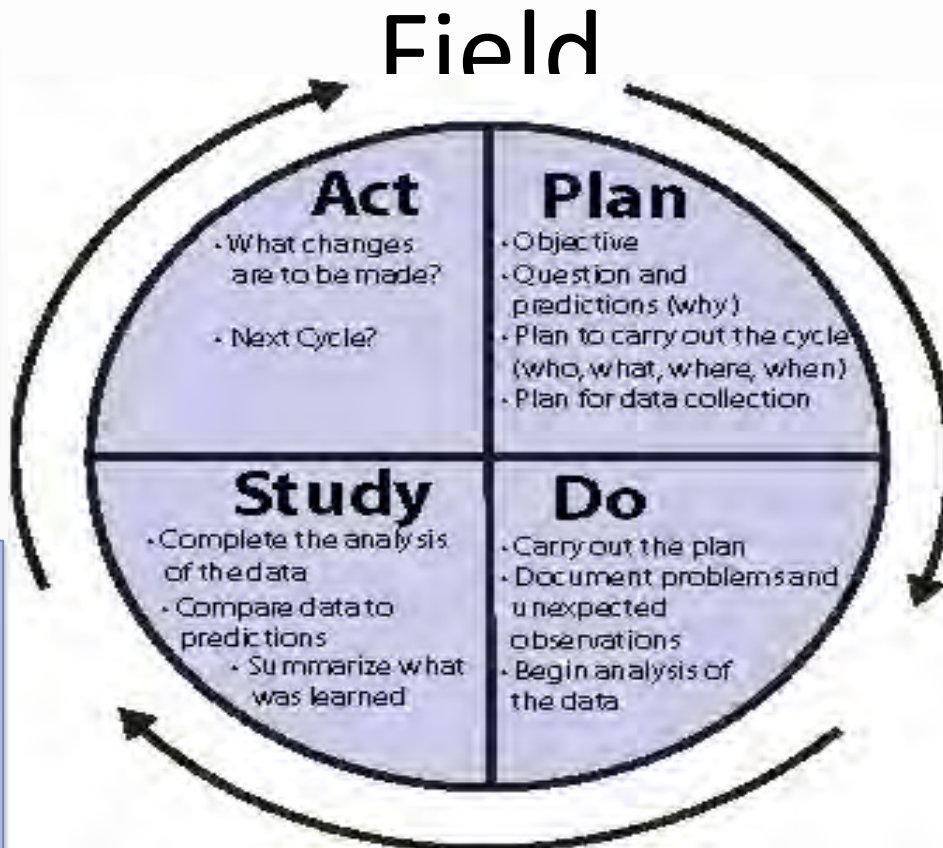
<b>4</b>	Stages	Designed to improve existing processes.	Rooted in data.
<b>9</b>	Steps		

**Start now.**  
**Start today.**  
**Just start.**  
**Public health will be better because you did.**  
**Best wishes on your quality journey!**

# Continuous Improvement/Learning



# PDSA Example: Story from the Field



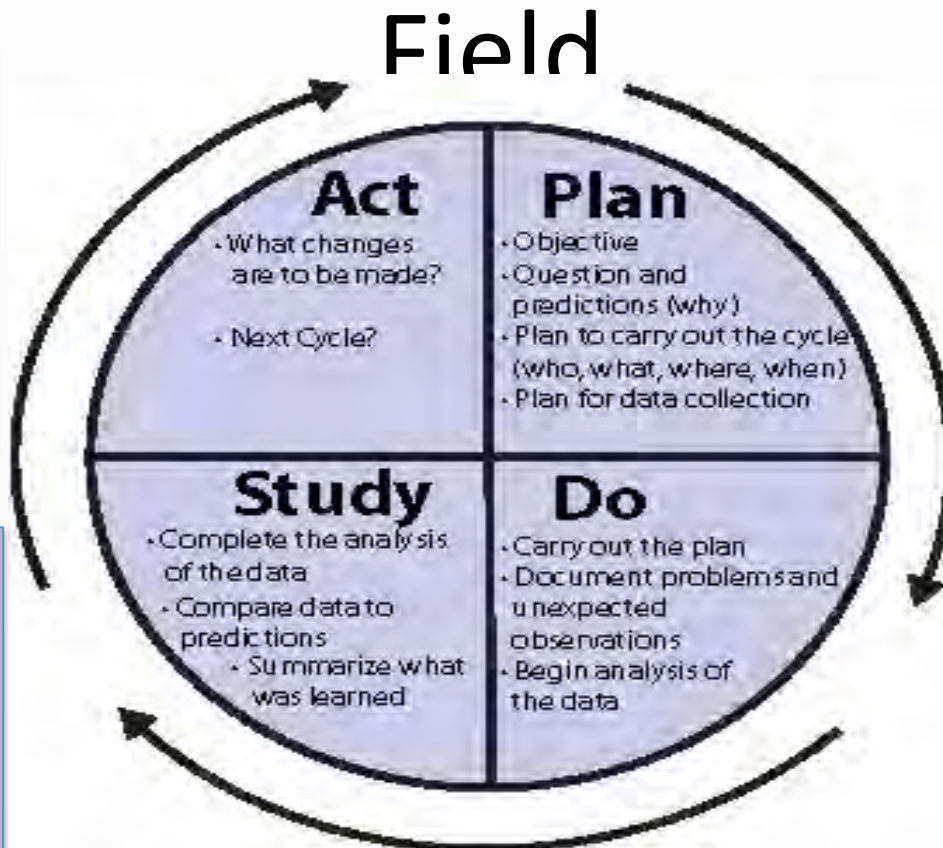
**A:** Process change showed some success, change will be kept in place and tested for a longer period of time to determine if gains can be sustained.

**P:** The QI team believed that mammogram screening rates were low due to a lack of standard office procedures for scheduling Women's Health Clinic appointments.

**S:** 5 women between the ages of 40-49 successfully completed annual mammogram screenings as compared to 0 at the beginning of the cycle.

**D:** Receptionists asked women about health insurance when scheduling their appointment, rather than waiting to assess health insurance upon appointment arrival.

# PDSA Example: Story from the Field



**A:** Process change showed some success. Team will continue use of the ticklers to determine if gains can be sustained.

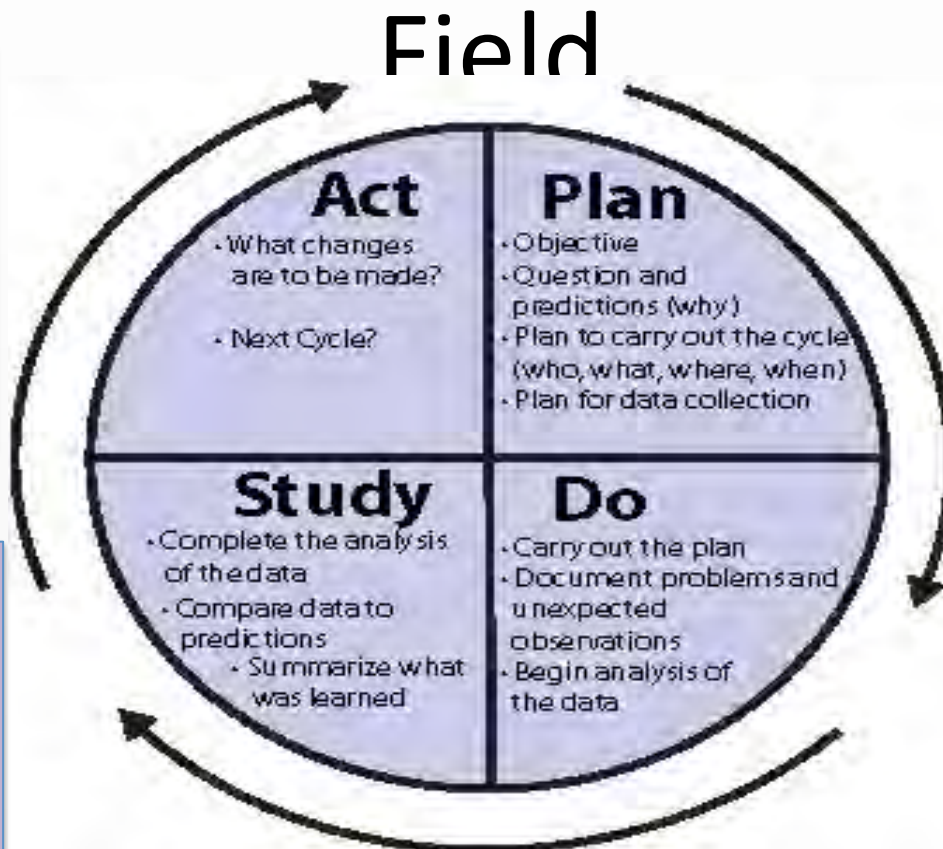
**P:** The QI team believed that developmental screenings were not being completed because nurse home visitors were experiencing challenges tracking when they were due.

**S:** Monthly ticklers coupled with regular discussions during supervision meetings showed an increase in the percent of developmental screenings being completed each month.

**D:** Program Coordinator ran and provided a tickler to nurse home visitors' each month outlining which children were due for a developmental screening that month.



# PDSA Example: Story from the Field



**A:** Process change showed success, changes were standardized and customer satisfaction continued to be monitored to ensure gains are sustained.

**P:** The QI team believed that customer satisfaction with the health department could be increased by improving the department's automated phone system.

**S:** The percent of correctly routed calls increased from 69.5% to 80%. Updates to the phone menu options and the addition of staff who could receive calls were successful!

**D:** Phone menu options were expanded and clarified and the number of staff receiving calls for certain programs increased from one staff member to two.



# Tools to get Started with your QI Journey



# The Guidebook and PDSA Checklists

## EMBRACING QUALITY IN PUBLIC HEALTH



A Sequel to  
Embracing Quality in Local Public Health:  
Michigan's Quality Improvement Guidebook

Debra Scamarica Tews  
Julia Heany  
Jessie Jones  
Robin VanDerMoere  
Kusuma Madamala

## PLAN-Do-Study-Act

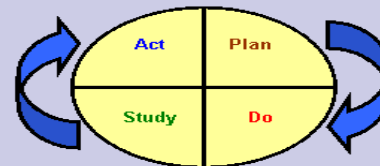
### Identify an Opportunity and Plan for Improvement

#### Step One: Getting Started

- ✓ Identify area, problem, or opportunity for improvement
- ✓ Estimate and commit needed resources
- ✓ Obtain approval (if needed) to conduct QI

#### Step Two: Assemble the Team

- ✓ Identify and assemble team members (including customers and/or stakeholders)
- ✓ Discuss problem or opportunity for improvement
- ✓ Identify team member roles & responsibilities
- ✓ Establish initial timeline for improvement activity and schedule regular team meetings
- ✓ Develop Aim Statement
  - ✓ What are we trying to accomplish?
  - ✓ How will we know that a change is an improvement?
  - ✓ What change can we make that will result in improvement?



# Step One: Getting Started

- Identify an area, problem, or opportunity for improvement
  - Consider: What opportunities for improvement exist in your organization?
    - Are current processes in place?
    - What data do you have? What is your data telling you? What data do you need?
- Develop a problem statement
  - A concise statement that describes
    - The problem that will be addressed by your team through your PDSA cycle
    - Why the QI project is needed

# For Example...

- Customer satisfaction data are valued and important but very few customers complete and return satisfaction surveys.
- Families enrolled in the home visiting program are not receiving the number of home visits they should per month.
- Women between the ages of 40 and 59 are not receiving their annual mammogram screenings.
- The employee travel approval process is cumbersome making it challenging for staff to get travel approved in a timely manner.

# Activity

*What opportunities for improvement exist in your own organization?*



# Establishing a Baseline

- Gather baseline data about:
  - The implementation of the process (what you are doing now)
  - The outputs of the process (the results you are getting now)
- Baseline data/information help you determine:
  - Do we really have a problem?
  - What problem do we really have?
- Your QI team may already have baseline data



# Step Two: Assemble the Team

- Identify and assemble team members
  - Discuss and determine team member roles and responsibilities
- Discuss problem or opportunity for improvement
- Establish initial timeline for improvement activity and schedule regular team meetings
- Develop a SMART aim statement
  - Keep in mind the 3 key questions!

# QI Team

- It's very important to have a well-rounded team!
  - Mix of management and front-line staff
- Each team member should take on a role to support the QI effort
- The team should meet on a regular basis
  - Recommendation: bi-weekly during Plan, monthly during the rest of the cycle

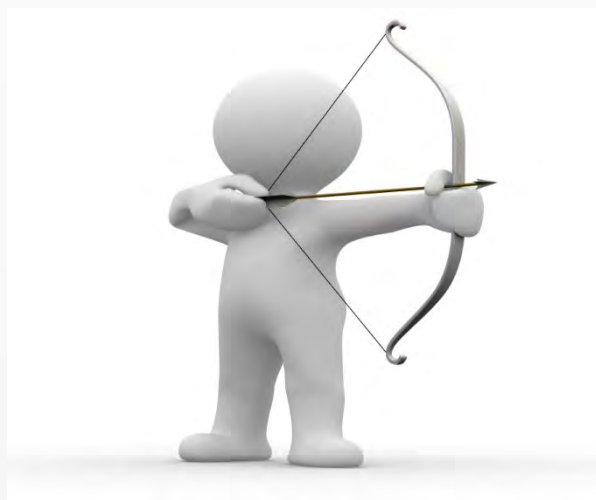
# Tool to Keep the Team Organized: QI Team Charter

- **This is your roadmap**
- Reduces the “now what?” feeling
- Helps the team come to agreement regarding:
  - Purpose
  - Improvement opportunity
  - Roles and responsibilities
  - What happens next
  - Communication
  - Accountability
- Used from day one through the end of the PDSA cycle

QI TEAM CHARTER		
1. Team Name:	2. Version:	3. Subject (What aspect of your work are you focusing on? E.g. Outreach, Training, Referrals, Screenings, etc.):
4. Problem / Opportunity Statement (What problem will be addressed by the team?):		
5. Team Sponsor (The person who gives you the “green light” to do the work):	6. Team Leader:	
7. Team Members:	Role on QI Team:	
	Facilitator	
	Meeting Scribe	
	Data/Information Liaison	
	Document Manager	
	Meeting Scheduler	
	Subject Matter Resource	
	Other:	
8. Process Improvement Area (What is the specific <u>current</u> process that you hope to improve through this QI project? Describe the <u>current</u> process, not how you plan to make an improvement or your ideal process.):		
9. Data (What data will you use to establish a baseline AND study whether or not the change resulted in an improvement?):		
Measure(s) (What will the team specifically measure to know whether or not you are making progress toward your aim statement?):		
Numerator:		Denominator:
Frequency Data is Collected and Analyzed (i.e. Monthly, bi-weekly, etc.):		
10. Initial Aim Statement:		
11. Revised Aim Statement (s):		
12. Scope/Team Authority (What is within your team's control? What is outside of your team's authority?):		
Within Scope:		
Outside of Scope:		

# Aim Statement

A concise, specific, written statement that defines precisely what the team hopes to accomplish with its QI efforts.



Remember the three key questions when writing your aim:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?

# Aim Statements

- Include a **numerical** measure for the target
- Are **time specific** and **measurable**
- Define the **specific population** that will be affected

Structure of an aim statement:


*By (month) (day), (year), (organization name) will (increase or decrease) the (process/outcome targeted for improvement) from (# or %) to (# or %).*

# For Example...

- By December 31, 2015, KBIC Women's Health QI team will increase by 20% the number of women between the age of 40 -49 who receive a mammogram screening during the months of October, November, and December 2015.
- By January 1, 2017, the rate of response to the Springfield Community Health Interest survey will increase from 35% to 50%.
- Between July 1, 2015, and March 30, 2016, the Smart Steps Program will decrease the number of errors and missing data from 13% of all submitted data to 5% of all submitted data.
- By August 1, 2016, the percent of East Bay community members with a diabetes diagnosis who have attended a health education course on managing DM will increase from 12% to 25%.

# Developing a SMART Aim

- The SMART method facilitates a clear picture of exactly how you will meet your goal.
- The method is reliable and useful in writing aim statements.

Developing a <b>SMART</b> Aim Statement Worksheet	
<b>Aim Statement Criteria:</b>	<b>Developmental Questions:</b>
<b>S</b> pecific	Who are the target population and persons doing the activity? What is the action or activity?
<b>M</b> easurable	How much change is expected? Will there be an increase or decrease? Can you measure it?
<b>A</b> chievable	Can it be done? Can you accomplish it in the prescribed timeframe? Do you have resources?
<b>R</b> elevant	Does the action relate to what you want to accomplish? Is it important & meaningful? Does it relate to broader program or organizational goals?
<b>T</b> ime-Bound	What is the timeline for change? When will this be accomplished? Month, day, time, or year?
<b>Aim Statement</b>	Write your SMART aim statement below:
	

# Aim Statement Considerations

- Aim statements should change over the course of the PLAN stage as your team:
  - Gathers baseline data
  - Conducts root cause analysis
  - Gets smarter about how to make it SMART!
- Leave your solution out!
  - *Example: By September 1, 2014, the Sunny County BCCCP will increase timely submission of office visit and follow-up forms by 20% through ~~implementation of a new standardize procedure for form completion and submission.~~*





**Pause**

---

**Break**

# Examine the Current Approach: Questions to Answer

- What are we doing?
- How do we do it?
- What are the major steps?
- Who is involved?
- What do they do?
- What is being done well?
- What could be done better?



# QI Works on Existing Processes

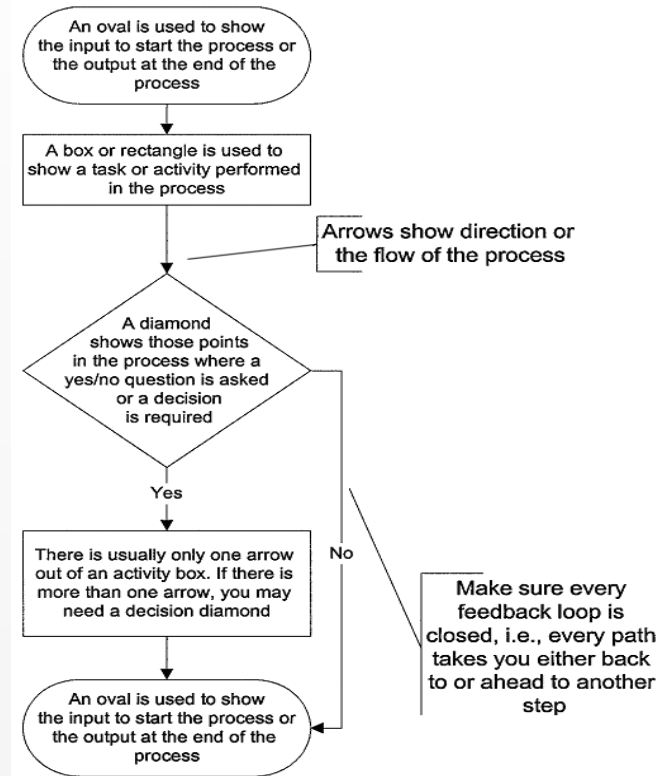
- A process is a series of steps or actions performed to achieve a specific purpose.
- A process describes the way things get done.
  - For example:
    - Steps taken to get travel approved
    - Steps taken to provide a service to a customer
    - Steps taken to document an encounter with a customer
- Your work involves many processes.
  - For example:
    - Answering the phone
    - Responding to emails
    - Writing reports

*What existing processes do you work with regularly at work?*

# A Tool to Examine Process Flow: Process Mapping

- A diagram of the steps you take to get a job done.
- Sometimes called flowcharting

Guidebook, 2<sup>nd</sup> Edition, pages 59-61



# Process Maps are Used to:

- Document the way we do our work
  - Provide a reference to discuss how things get done
  - Describe and understand the work we do
  - Identify the connections between activities
- Analyze and improve processes
  - Identify areas of complexity and re-work
  - Generate ideas for improvement
  - Illustrate process improvements

# Why is Process Mapping Important?

Dr. W. Edwards Deming said:

*“You cannot improve a process until you understand it!”*

*“If you can’t describe what you are doing as a process, you don’t know what you’re doing.”*

- Most processes today are undocumented or evolving.

# Preparing to Process Map

1.

- Assemble your QI team

2.

- Determine which process needs to be documented

3.

- Agree on where the process begins and ends

4.

- Agree on the level of detail that will be displayed

5.

- Create a list of the steps taken in the current process

6.

- Construct your process map by ordering the steps

7.

- Identify additional staff to review or provide input on your process map



# Symbols used to Process Map

- **Start & End**: An **oval** is used to show the materials, information or action (inputs) to start the process or to show the results at the end (output) of the process.



- **Activity**: A **box or rectangle** is used to show a task or activity performed in the process. Although multiple arrows may come into each box, usually only one arrow leaves each box.



- **Decision**: A **diamond** shows those points in the process where a yes/no question is being asked or a decision is required.



- **Flow**: An **arrow** shows the direction or flow of a process.



# A Few Hints and Tips

- Map the *current* process!
- It's okay if team members have different ideas about how the process works.
- Keep steps simple; begin each step with an action verb.
- Process mapping is *dynamic*!
  - Post-it notes, dry-erase markers, & pencils are your friend!

# Interpret your Process Map

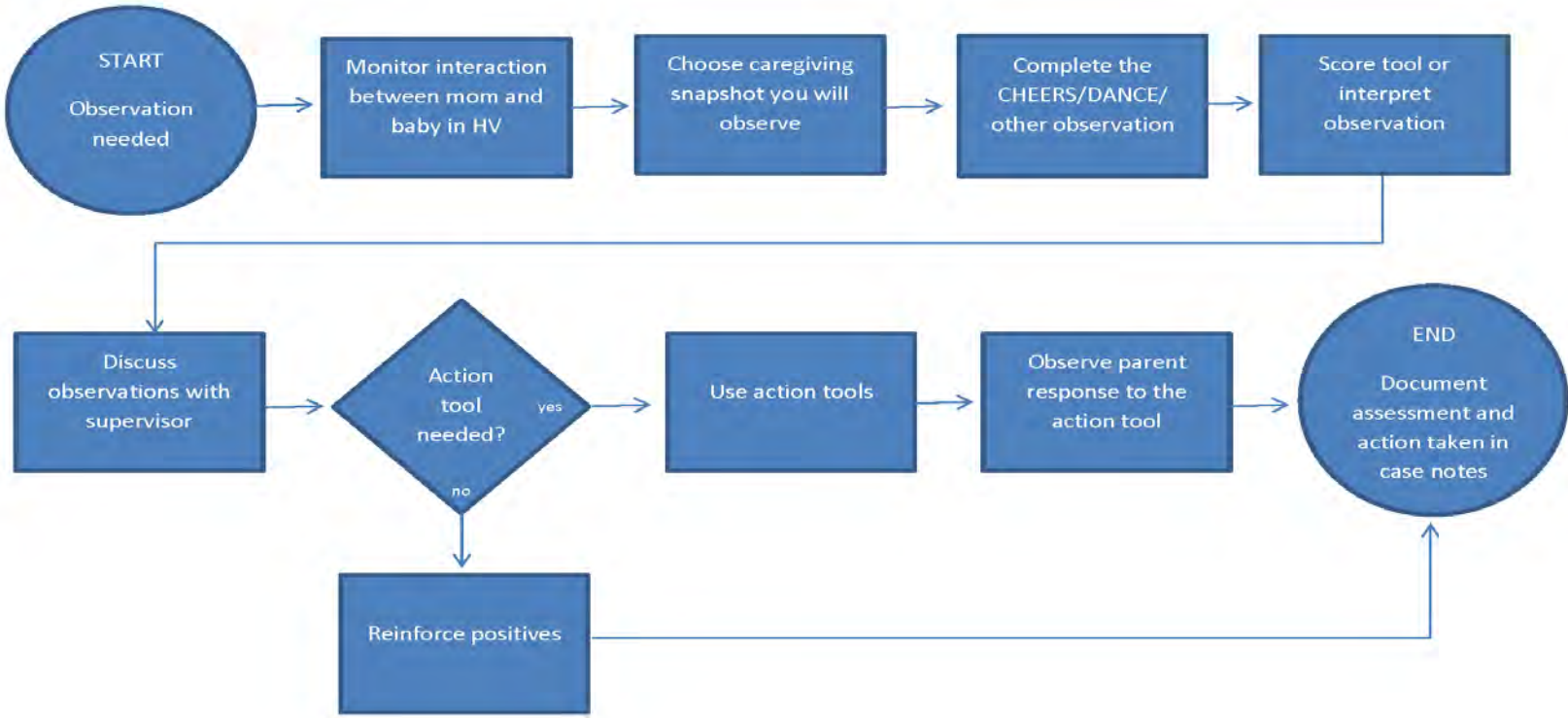
- What steps are done differently by different people?
- What impact do decision points have on your process?
- Where in your process do hand-offs occur?
- What steps are confusing or cumbersome?
- What steps seem unnecessary?

*Make notes of what you learn (item 8 on your QI team charter is a great place) – these conversations could provide direction for your improvement!*

# Example Process Map 1

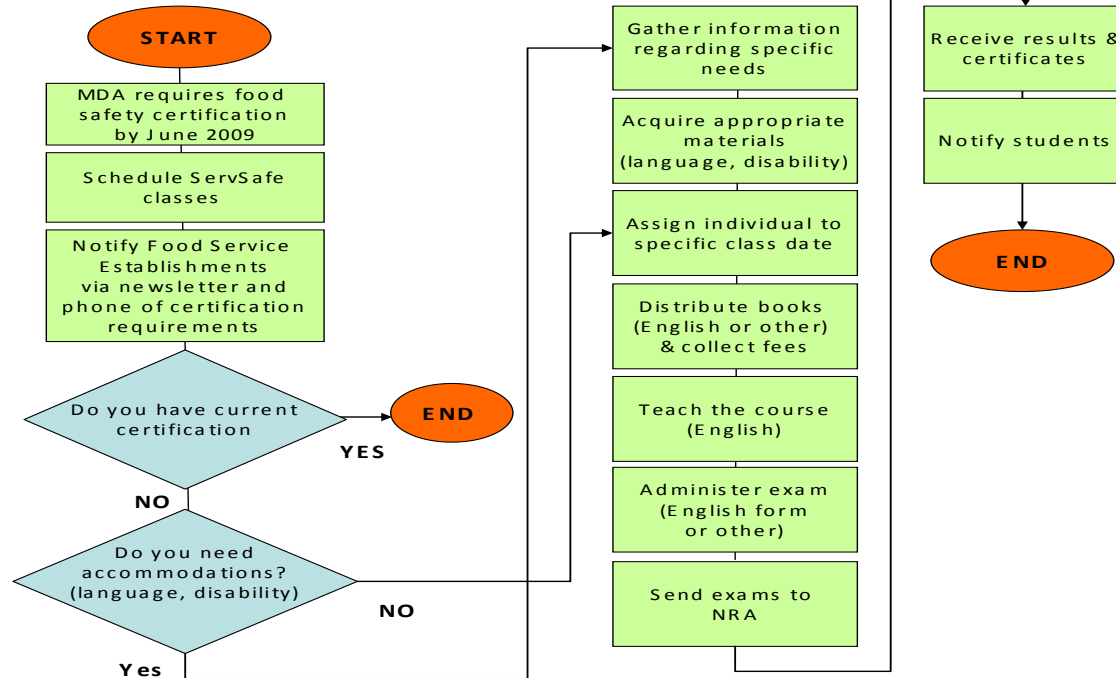


# Example Process Map 2



# Example Process Map 3

## ServSafe Exam Scheduling Process Map

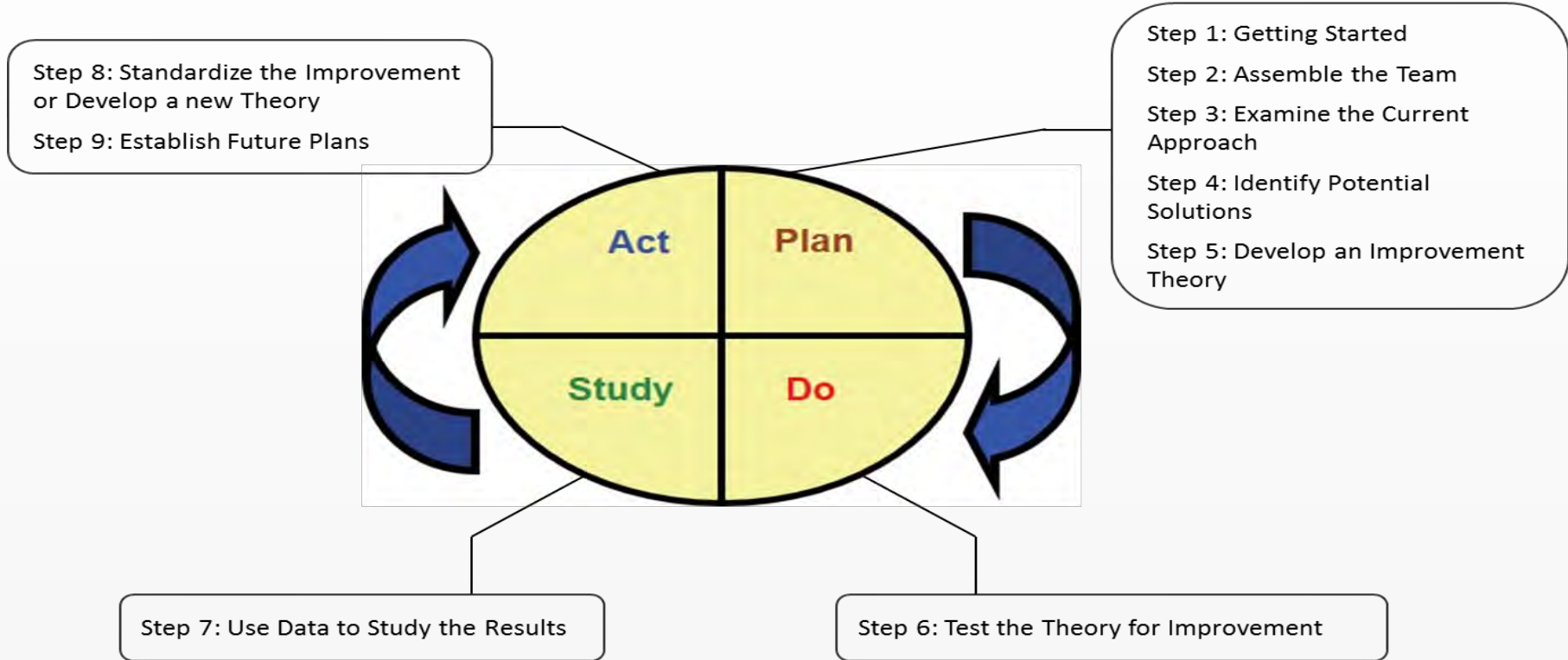


# Activity

## Develop a Process Map

1. Pick one process you work with regularly at work.
2. Develop a process map that outlines the steps you take to carry out the process using the paper and Post-it Notes at your table.







# QI Project Tips

- Think Big but Start Small
- Process Mapping – Document what is, not what you want it to be
- Do not assume you know the solution
- Take time to think about the Aim Statement – Really think about it
- Keep moving forward, test & learn
- Keep others informed about the project – you will need their input

# Quality Improvement Resources

- Embracing Quality in Public Health: A Practitioner's Quality Improvement Guidebook  
<https://www.mphiaccredandqi.org/qi-guidebook/>
- Public Health Memory Jogger II – Public Health Foundation:  
[http://www.goalqpc.com/products\\_detail.cfm?ProductID=41](http://www.goalqpc.com/products_detail.cfm?ProductID=41)
- PHQIX – Public Health Quality Improvement Exchange:  
<https://www.phqix.org/>

# Fitting the Pieces Together





# Thank you!

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*Best wishes on your quality journey!*