

# Quality Improvement 101 for Healthy Start Grantees



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Supporting communities to  
give every child a Healthy Start.

Healthy Start EPIC Center

# Welcome



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# Webinar Objectives

- Outline basic principles of quality improvement
- Examine why quality improvement is important to Healthy Start grantees now
- Introduce four basic quality improvement tools
- Demonstrate application of basic quality improvement principles and tools to a case example
- Provide an opportunity to ask questions



# Poll Question

What percentage of the changes made at your program are improvements that can be proven with data?

- Less than 10%
- Greater than 10% and less than 25%
- Greater than 25% and less than 50%
- Greater than 50% and less than 75%
- Between 75% and 100%



# Basic Principles of QI

In public health, QI is responsive to population health, focused on increased equity, and results in measurable improvements in efficiency, effectiveness, performance, accountability and outcomes.

- Starts with an understanding of the system
- Is data driven
- Includes and encourages staff involvement
- Examines program components and processes rather than individuals
- Includes an emphasis on the consumer/participant
- Is part of an ongoing process



Quality Assurance	Quality Improvement
Reactive	Proactively selects a process to improve
Works on problems after they occur	Works on processes
Regulatory usually by State or Federal Law	Seeks to improve (culture shift)
Led by management	Led by staff
Periodic look-back	Continuous
Responds to a mandate or crisis or fixed schedule	Exceeds expectations
Meets a standard (Pass/Fail)	Exceeds expectations



# Why is QI important for Healthy Start grantees now?

- Reduced budgets
- Increased stakeholder demand for accountability
- Increased community need
- Aging workforce
- Accreditation
- Central focus of the Healthy Start Program
- Requirement of the Healthy Start FOA



# Understanding the System: THE 5 P's

## 1. PURPOSE

- Why do we exist as an organization/program?
- Which services do we provide to support our Healthy Start mission?
- What policies/mandates impact our work?

## 2. PEOPLE /PARTICIPANTS

- Who do we serve?
- What does our participant population look like?
- Who benefits from our services/initiatives?

## 3. PROFESSIONALS/STAFF

- Who is involved in the “work” of delivering Healthy Start services in our organization?

## 4. PATTERNS

- What happens over and over again that shows what works and what does not work?
- How well are our processes working (and how do you know? – [data])?
- What patterns emerge (or may emerge) from data about how we provide Healthy Start services?

## 5. PROCESSES

- What processes are in place?
- How do we do our work?
- What can we do to improve?



# Use of Data for Decision Making

- Use performance assessment data to target improvement
- Use data analysis tools to develop information
- Analyze data to identify root cause
- Use data to monitor performance outcomes



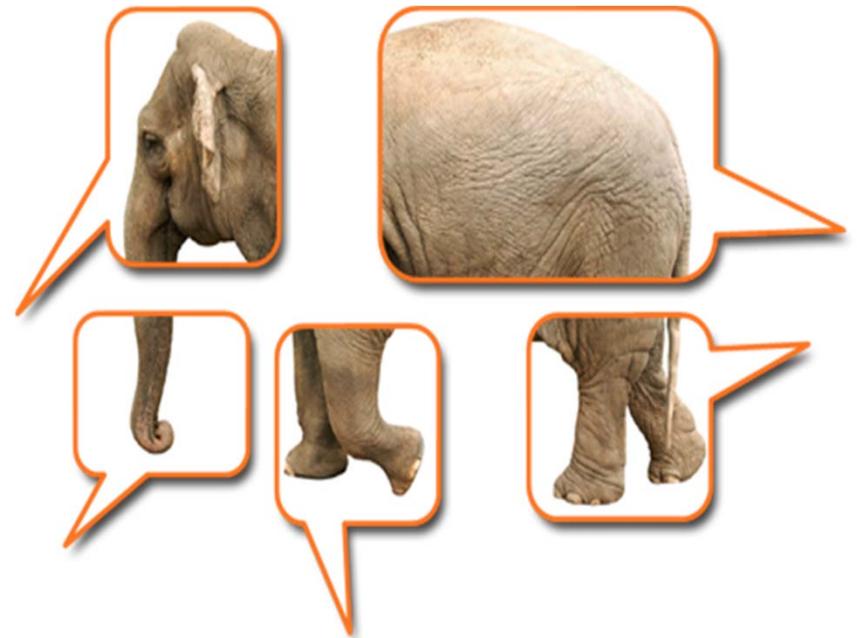
# Examples of Data Sources

## Qualitative & Quantitative

- Participant records
- Data reports
- Financial indicators
- Participant satisfaction results
- Staff interviews
- Fact finding phone calls
- CBA Worksheets

# QI is a Team Activity

- Improvement requires multiple perspectives
  - Leadership endorsement is essential
  - Quality Improvement Champion
  - Administrative staff with authority to make decisions
  - Content experts
  - Front-line staff who understand the ins-and-outs of specific processes

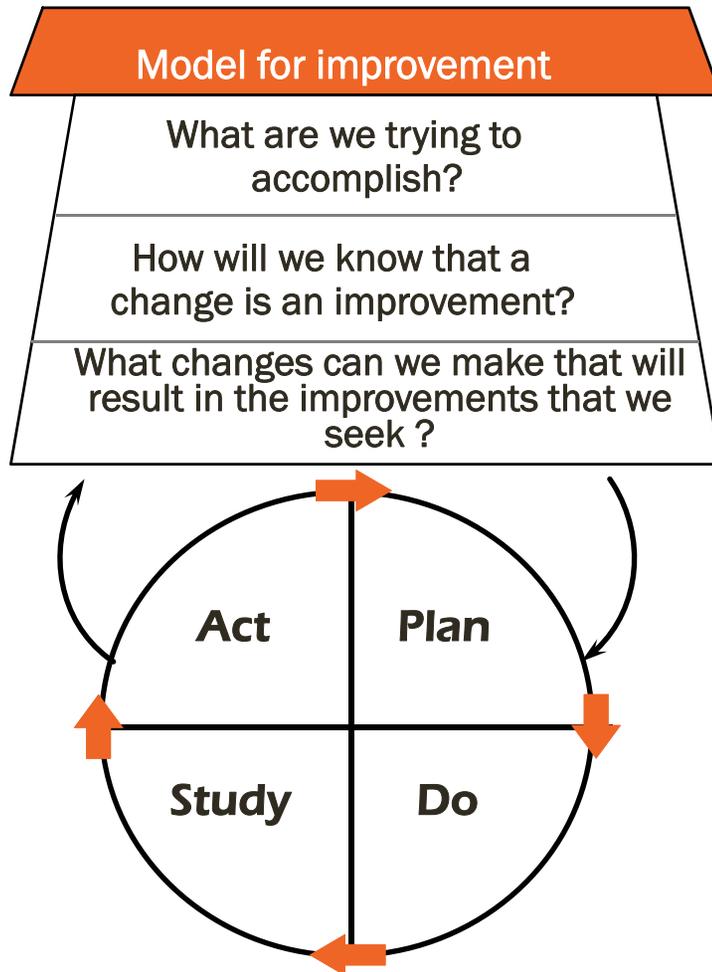


# “Check in” along the way

- Know if you are on track to reach your destination
- Make mid-course adjustments
- See how factors affect each other



# Model for Improvement: (AIMS, Measurements & Change Ideas)



## Model for improvement

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 the improvements that we seek ?

## Aims:

Guides activities, Determines focus of measures

Measurements

Change ideas

Testing ideas before implementing changes

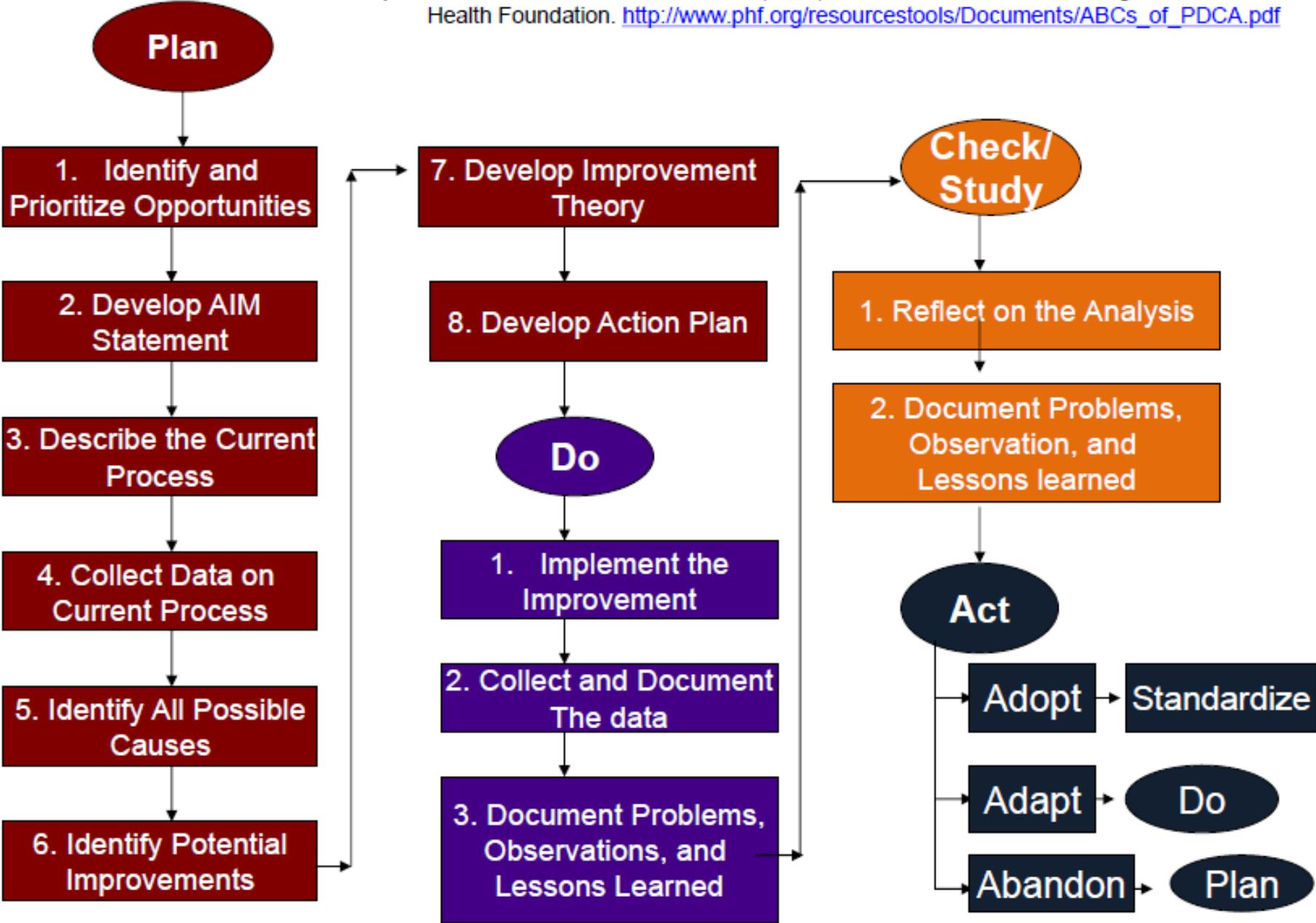
Act

Plan

Study

Do

Adapted from Gorenflo, G. & Moran, J.W. (2010). *The ABCs of PDCA*. Washington, DC: Public Health Foundation. [http://www.phf.org/resourcestools/Documents/ABCs\\_of\\_PDCA.pdf](http://www.phf.org/resourcestools/Documents/ABCs_of_PDCA.pdf)



# AIM Statement

A commitment to achieve measured improvement:

What?

- Change/intervention you will implement

For whom?

- Target population

By when?

- Deadline when the aim will be achieved

How much improvement (goals)?

- Measurable goals



# Analysis Tool: Flowchart

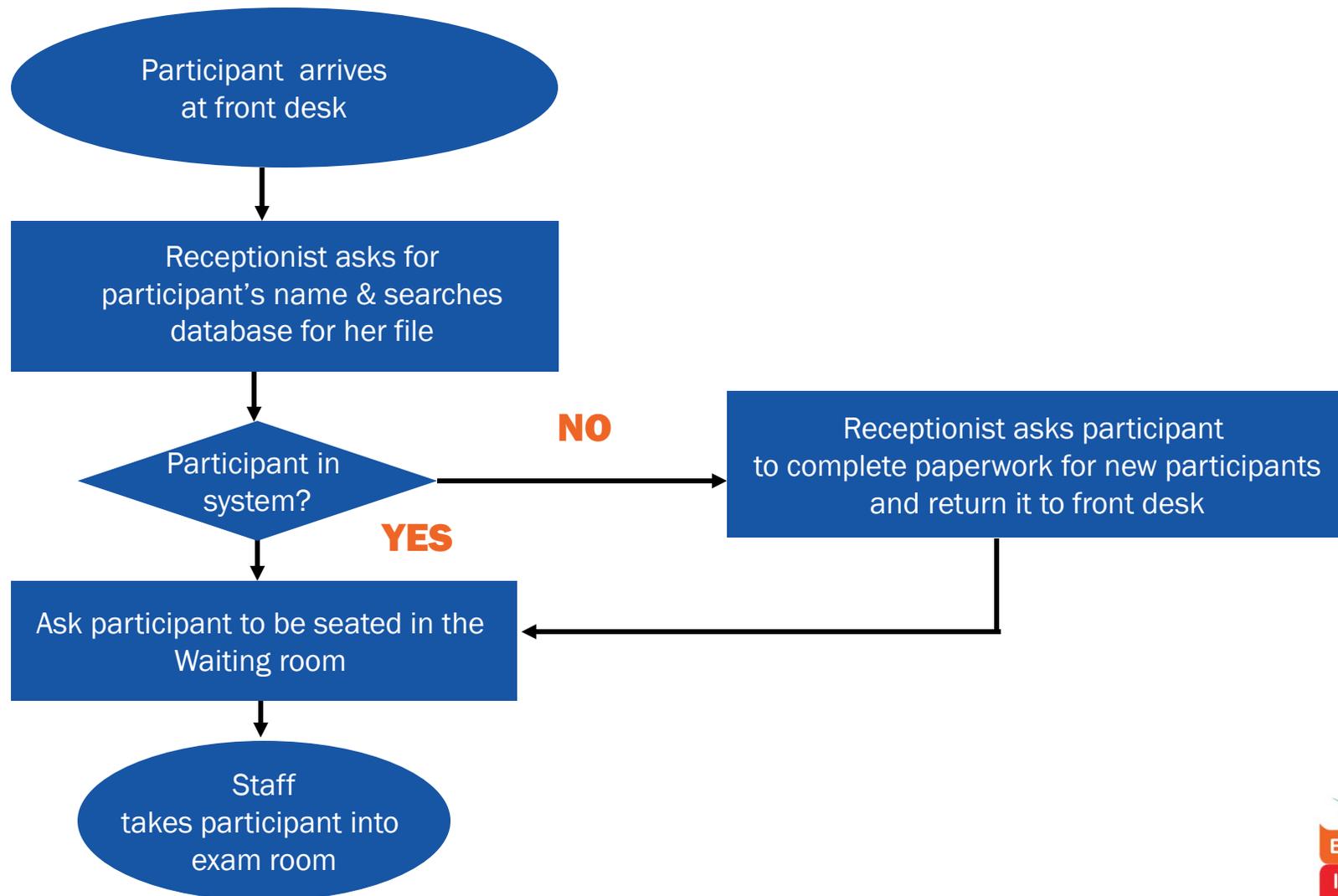
Facilitates an organizational focus on your work processes.

Useful to:

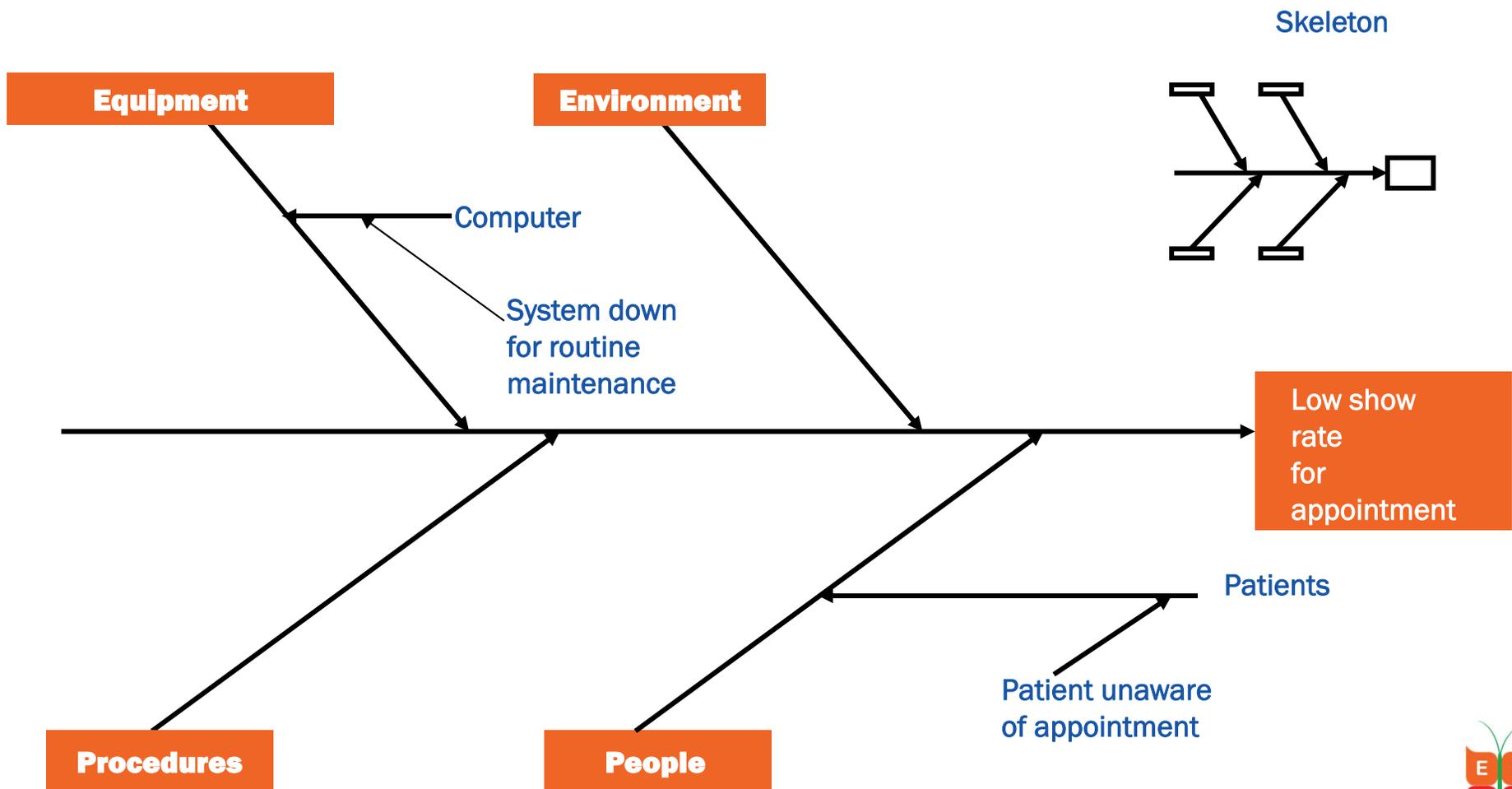
- Describe or document new or existing processes
- Highlight bottlenecks, duplication, areas of complexity
- Organize participant flows, strategies, decision rules.
- Begin to make a detailed plan of what each step looks like
- Identify key problems/unclear areas within system to determine focus for “test” ideas



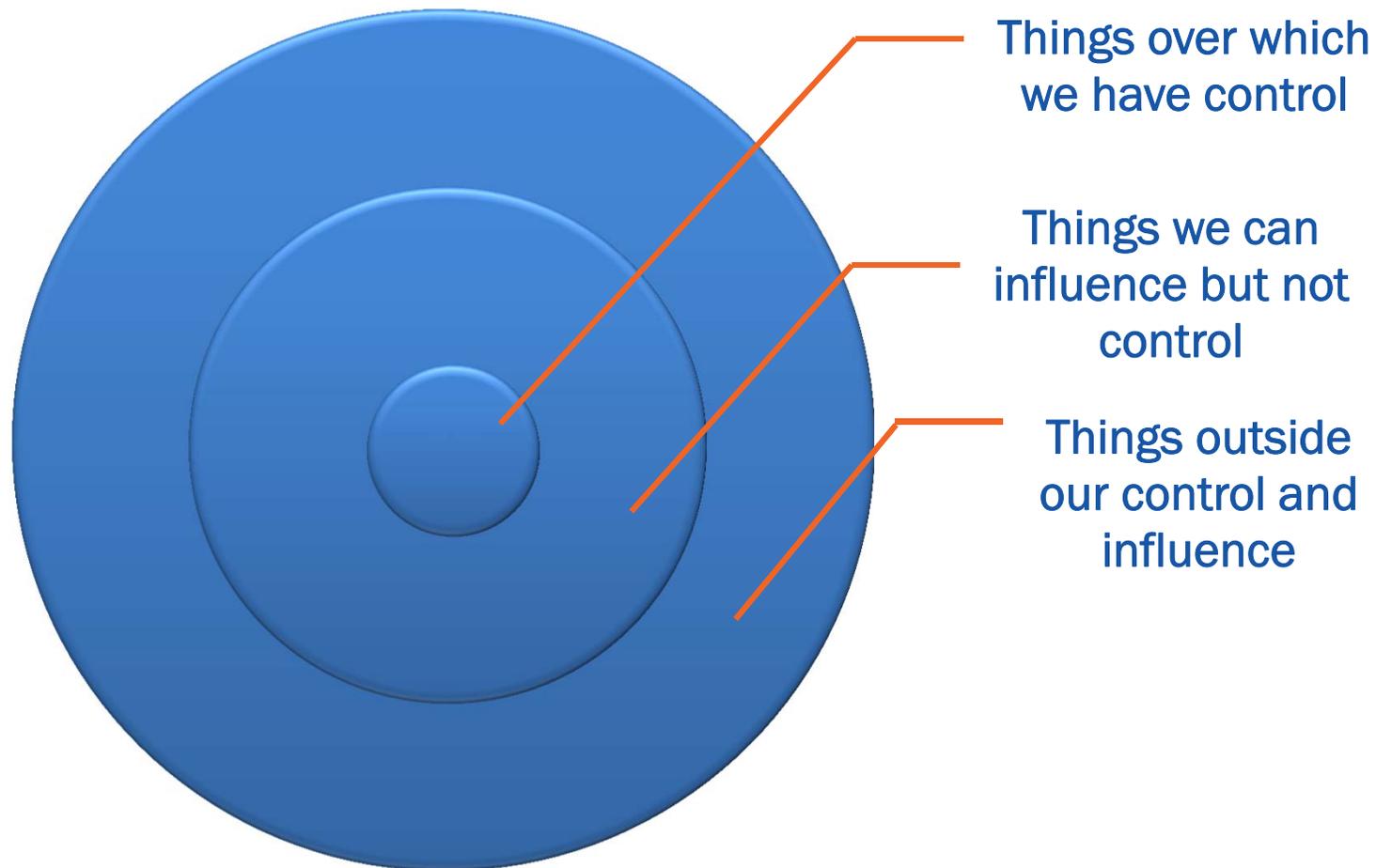
# FLOWCHART EXAMPLE



# Analysis Tool: Fishbone or Cause-and-Effect Diagram



# Prioritizing Factors Using the Sphere of Influence



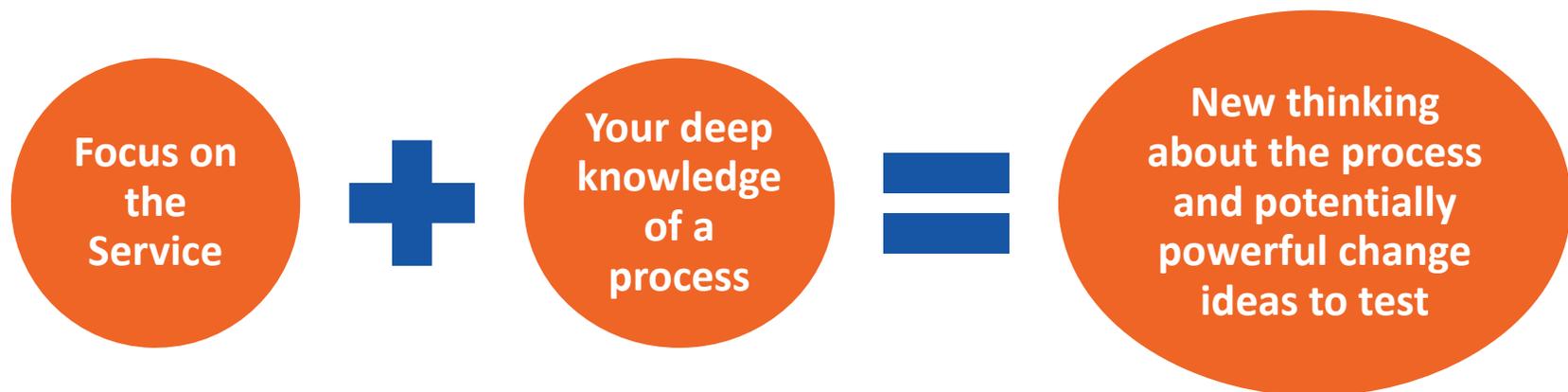
# Where Do Change Ideas for Improvement Come From?

- Understanding of processes and causes
  - Data, consumer/participant feedback
- Evidence-based practices, guidelines
- Benchmarking – superior performers
- Brainstorming, judgment, ‘best-guess’
- Creative thinking, innovation
- Expert opinion
- “Change concepts”



# Change Concepts

- Eliminate Waste
- Improve Workflow
- Optimize Inventory
- Change the Work Environment
- Enhance health worker/participant relationship
- Manage Time
- Manage Variation
- Design Systems to Avoid Mistakes



(Institute for HealthCare Improvement)



# Tips to Maintaining Successful Change Processes

- Set a focus - Is this a focused intervention?
- Maintain regular focus, meetings e.g., use of TIP cards, staff meetings
- Create a sense of urgency – Is this important?
- Engage everyone in the process – are the key players involved? Is there anyone else who should be part of this process?
- Provide resources – Flow chart, TIP sheets, TA
- Empower staff and leadership – is this doable?
- Practice fact-based decision-making





# Example: Healthy Baby US

# Data Driven Process

## Late Entry into Prenatal Care (after 1st trimester):

- 20% for Hispanics
- 26% for black/African Americans
- Both rates are  $\geq$  than the national benchmark of 16% and the severe benchmark of 20%.



Indicator	Agency Data	Healthy People 2020 Goal
Low Birth Weight (% < 2,500 grams)	8.3%	7.8%
Premature Births (< 37 weeks gestation)	13.6%	11.4%
Fetal Death Rate (rate per 1,000 deliveries ["fetal" is defined as > 20 weeks gestation until the absence of life at delivery])	6.5	5.6
Neonatal Death Rate (rate per 1,000 live births ["neonatal" = from the time of birth through the first 28 completed days of life])	4.7	4.1
Infant Death Rate (rate per 1,000 live births ["infant" is defined as from the time of birth through the first year of life])	6.3	6.0
*significantly worse for the black/African American population (15.3 ), > than double the rate for the white and Hispanic population subsets.		

# Improvement Theory

"if... we reduce barriers to accessing care, then... we will have a positive effect on women obtaining earlier prenatal care.

This in turn will have a positive impact on reducing poor birth outcomes."



# AIM Statement

## AIM:

By November 2014, agency Healthy Baby US will improve access to prenatal care services by increasing the percentage of pregnant women receiving their initial prenatal medical exam within 2 weeks of a positive pregnancy test, from a baseline of 4% to 75%.

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## What:

- Improve access to prenatal care services

## For whom:

- Pregnant women receiving their initial prenatal medical exam within 2 weeks of a positive pregnancy test

## By when:

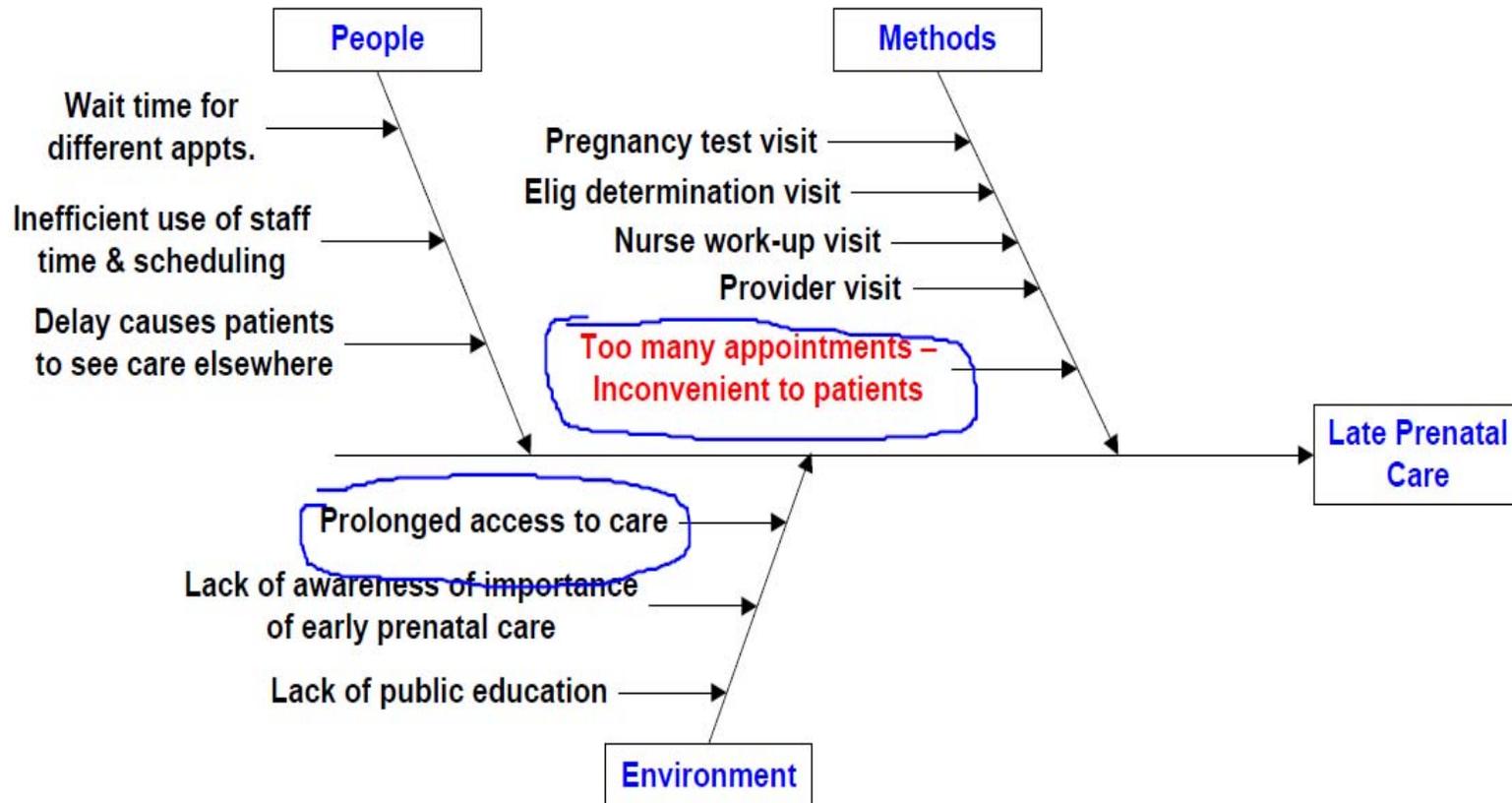
- November 2014

## How much improvement (goals):

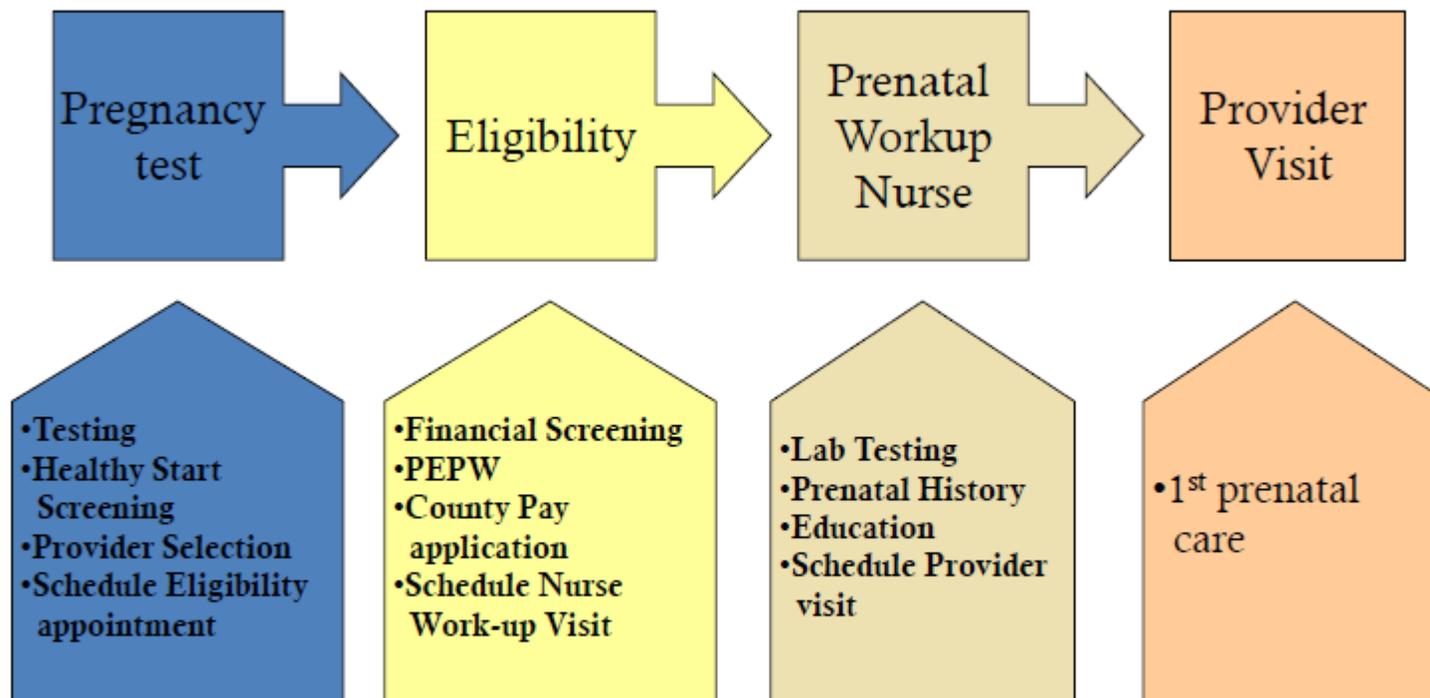
- Increase from a baseline of 4% to 75%



# Fishbone Diagram: Root Cause Analysis



# Initial (Current State) Flow Chart

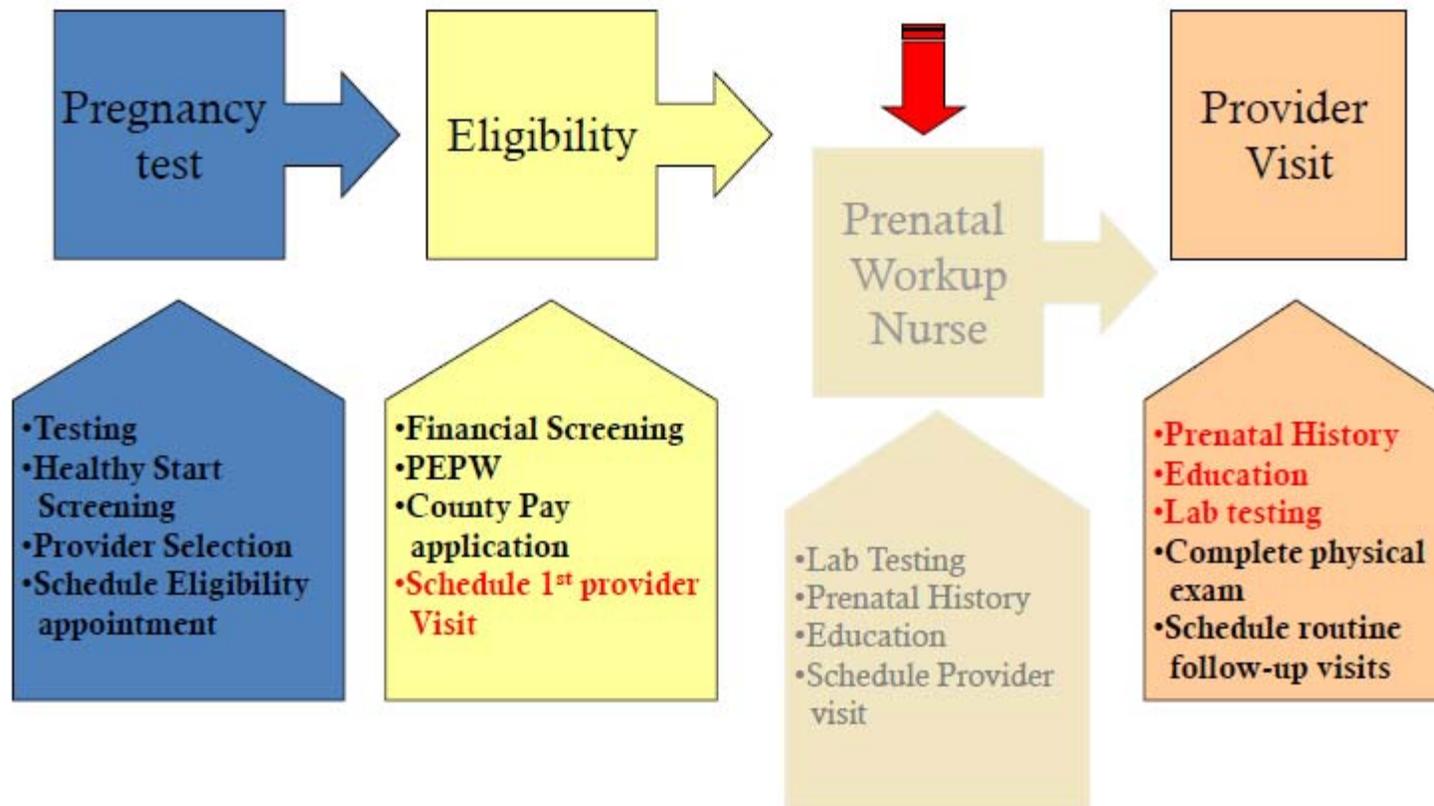


# Root Cause

- Artificially imposed barriers to make the system work for the agency and not necessarily for the participant.
- This cause was then further reduced: too many separate, specialized visits in the prenatal admission process.

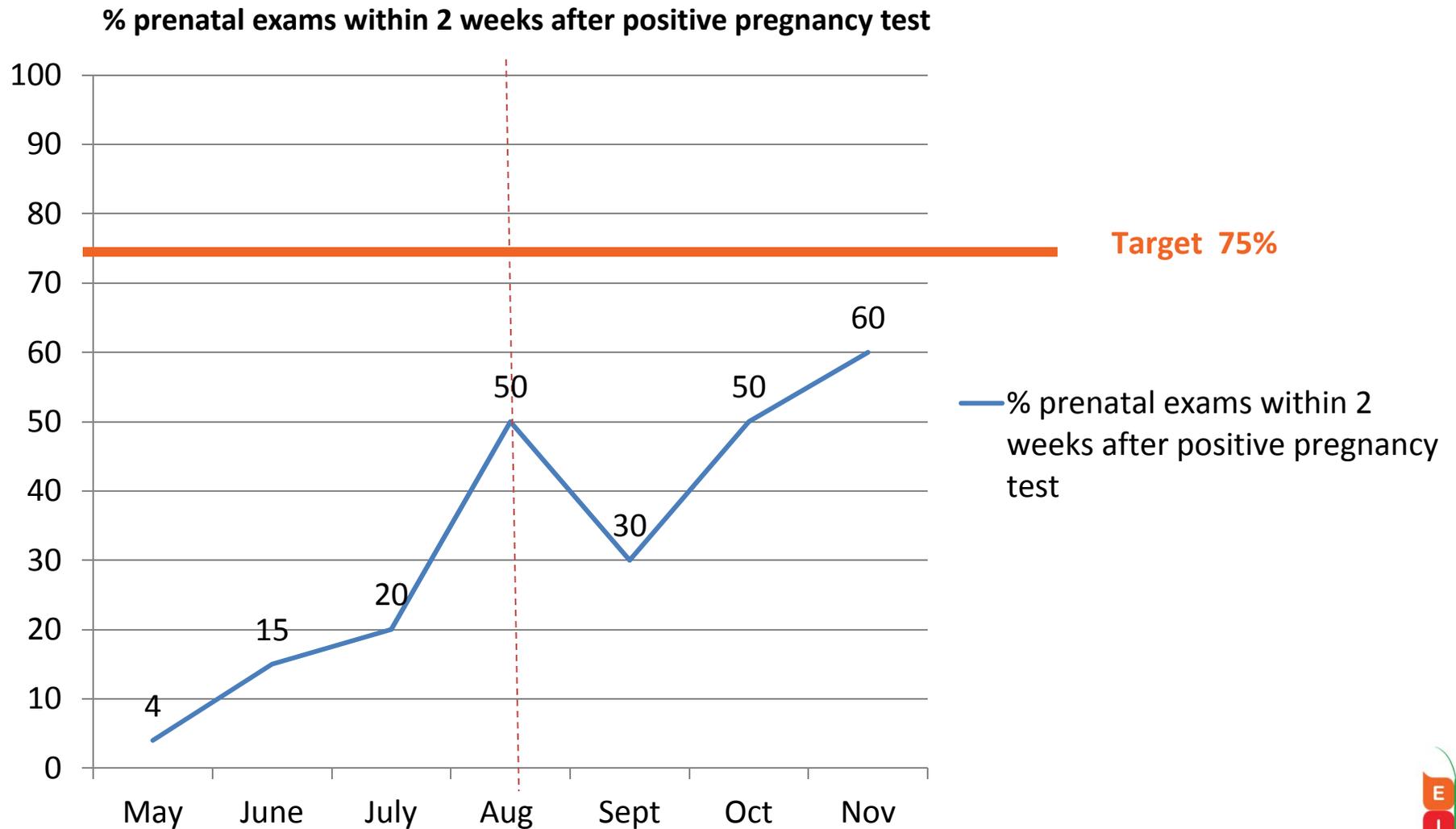


# Revised Flow Chart

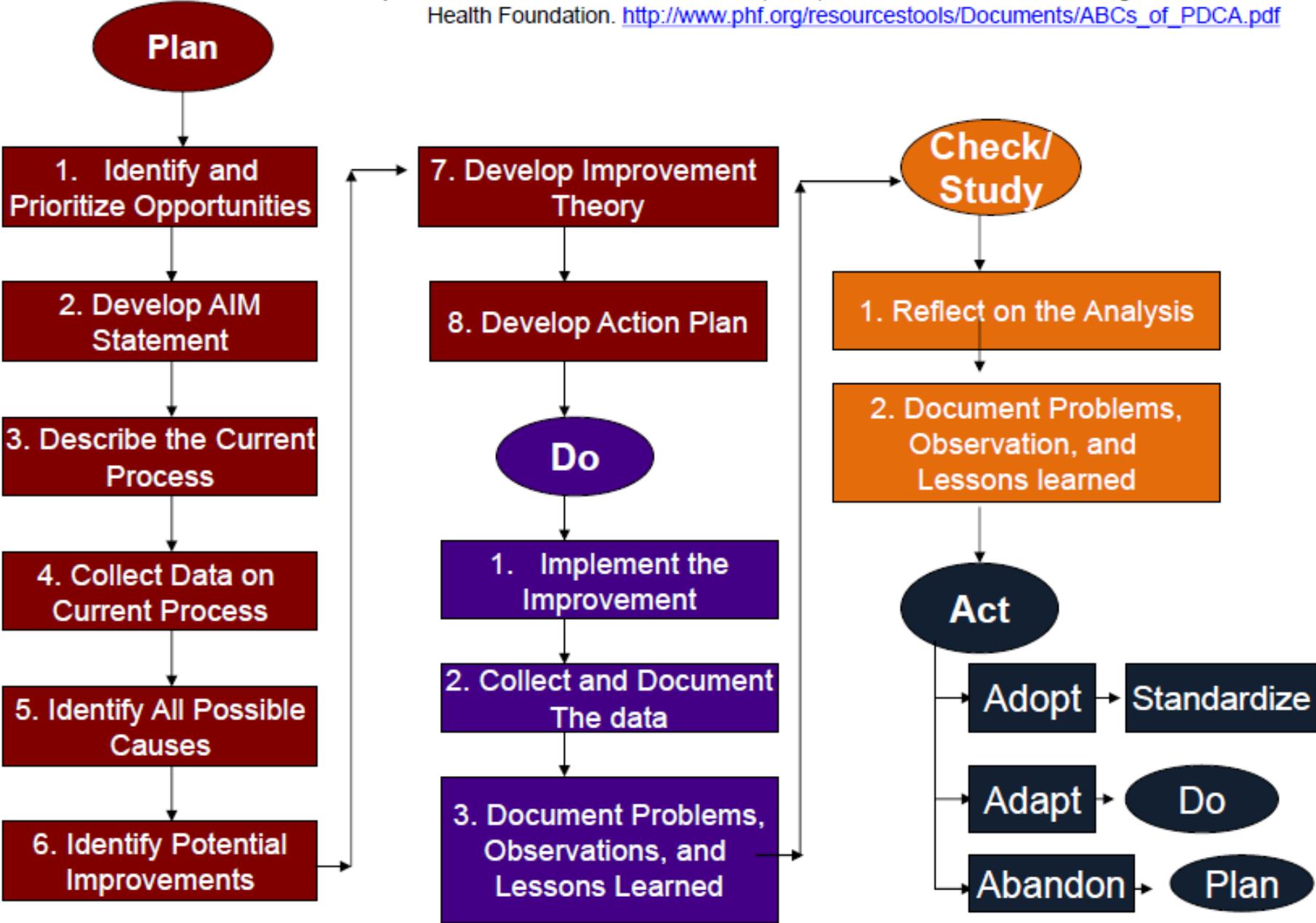


**NOTE:** This revised process flow chart drops the prenatal nurse work-up visit and adds the steps in that visit to the Eligibility and Provider visit steps.

# Results



Adapted from Gorenflo, G. & Moran, J.W. (2010). *The ABCs of PDCA*. Washington, DC: Public Health Foundation. [http://www.phf.org/resourcestools/Documents/ABCs\\_of\\_PDCA.pdf](http://www.phf.org/resourcestools/Documents/ABCs_of_PDCA.pdf)



# Resources

## Institute for Healthcare Improvement

- <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>

## Public Health Quality Improvement Exchange (PHQIX)

- <https://www.phqix.org/>

## NNPHI Public Health Performance Improvement Toolkit

- <http://nnphi.org/tools/public-health-performance-improvement-toolkit-2?view=file&topic=59>

## NACCHO QI in Public Health

- <http://www.naccho.org/topics/infrastructure/accreditation/quality.cfm>

## Michigan Public Health Institute QI Guidebook

- <https://www.mphiaccredandqi.org/qi-guidebook/>

## Public Health Foundation (PHF) Performance Improvement Learning Series Catalog

- [http://www.phf.org/consulting/Pages/Performance\\_Improvement\\_Learning\\_Series\\_Catalog.aspx](http://www.phf.org/consulting/Pages/Performance_Improvement_Learning_Series_Catalog.aspx)



# Poll Question

Are you interested in a regional training on QI that focuses on one of the Healthy Start benchmarks?

- Yes
- No
- Don't Know



# Questions?

