

A photograph of a Black woman with short dark hair, wearing a black tank top, smiling down at a baby lying on a bright green blanket. The baby is wearing a light blue and white striped long-sleeved shirt. A colorful rattle with blue, yellow, and orange rings is on the blanket near the baby. In the background, a wooden toy basket is visible.

Healthy Start  
Virtual Grantees' Meeting

# Using Quality Improvement to Make a Difference

Jane Taylor, EdD  
Improvement Advisor

June 25, 2020



# Agenda



Housekeeping	Tess Pritchard, NICHQ
Introductions	Yvonne Beasley, Marion County Healthy Start
Using Quality Improvement to Make a Difference	Jane Taylor, EdD, Improvement Advisor
Q&A	All
Closing	Tess Pritchard, NICHQ



# Meeting Logistics

## Please note the following:



- This session is being recorded, and will be archived for future viewing.



- All participants are muted upon entry. We ask that you remain muted to limit background noise.



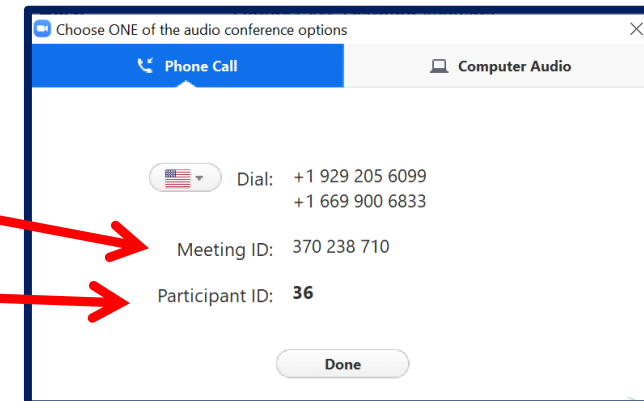
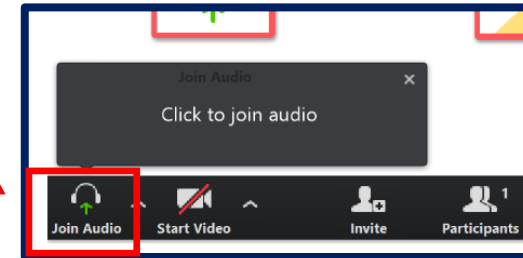
- Members are encouraged to participate in the discussion by typing your comment/asking questions using the chat box.

# Connecting to the Audio Conference

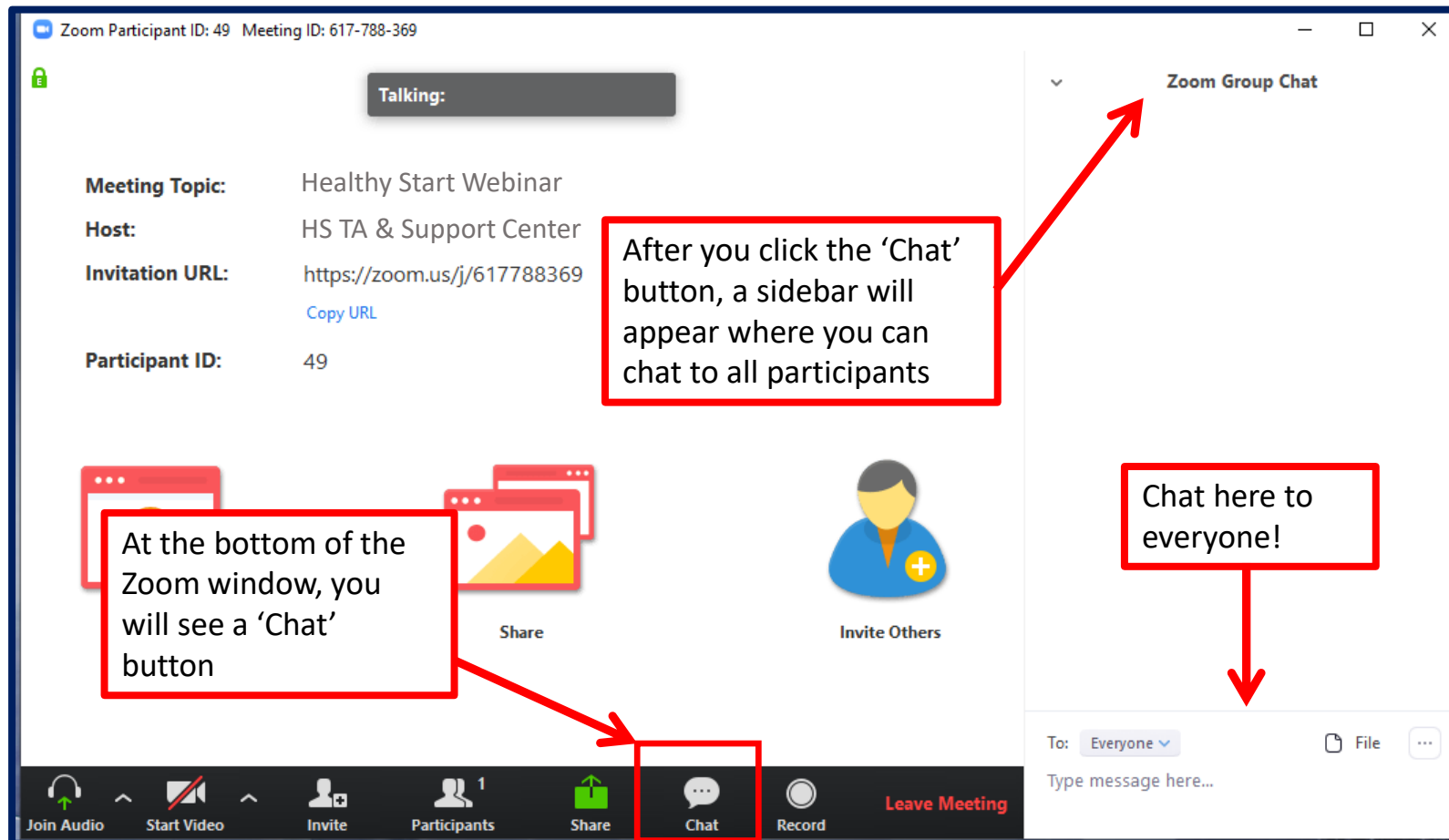


- Join Zoom Meeting by **clicking Zoom Meeting link** & launching the Zoom application
- An audio conference box will appear
  - If you do not see the box click the **'Join Audio' button**
- From the audio conference box: Select to **"Phone Call" or "Computer Audio"**
- If using the phone:
  - dial the number next to "Dial"
  - You will be prompted to enter the **"Meeting ID"**
  - Then you will be prompted to enter the **"Participant ID"**

**Join Zoom Meeting:**  
<https://zoom.us/j/237206404>



# Ways to Participate: Chat





# #HealthyStartStrong



- Spread the word about #HealthyStartStrong on social media
- Throughout the meeting, post about what you're learning/enjoying about the meeting
- Include the hashtag #HealthyStartStrong and be sure to tag @NICHQ

**We Are #HealthyStartStrong**



## Jane Taylor, EdD Improvement Advisor



# Quality Improvement, Now More Than Ever!



With the COVID19 pandemic, it has been like a fire drill every day for the last month changing our protocols for isolating well and sick patients with specific well/sick assigned providers and staff.

We have put up a tent for sick patients and taking the temperature of parents accompanying the patients to be sure we don't allow sick people into the office. We introduced telemedicine and have been training our practitioners on this new avenue for patient visits, as well as training patients to download our app and use the new functionality.

I have to say that if we ever wondered what it was like to put multiple PDSA's in place, and change based on experiencing the outcome and tweak the PDSA and do it again - we are all doing it now!

We are working hard to keep the children safe and parents reassured.

Susan Huffmann, Unifour Pediatrics, Hickory, NC from NICHQ's Pediatrics Supporting Parents Learning Collaborative



# Ice Breaker Part One

Chat your name and response to this question:



When you think back over the last 3 months, to all you have been through with the pandemic, what is something that has surprised you in a positive way about your Healthy Start Program?

# Ice Breaker Part 2



Now, thinking back over the last 3 months,  
what is a challenge you have yet to overcome at work?

# Key Elements of Improvement



- **Will** to do what it takes to change to a new system
- **Ideas** on which to base the design of the new system
- **Execution** of the ideas



Every system is perfectly designed to get the results it gets!

Paul Batalden, MD

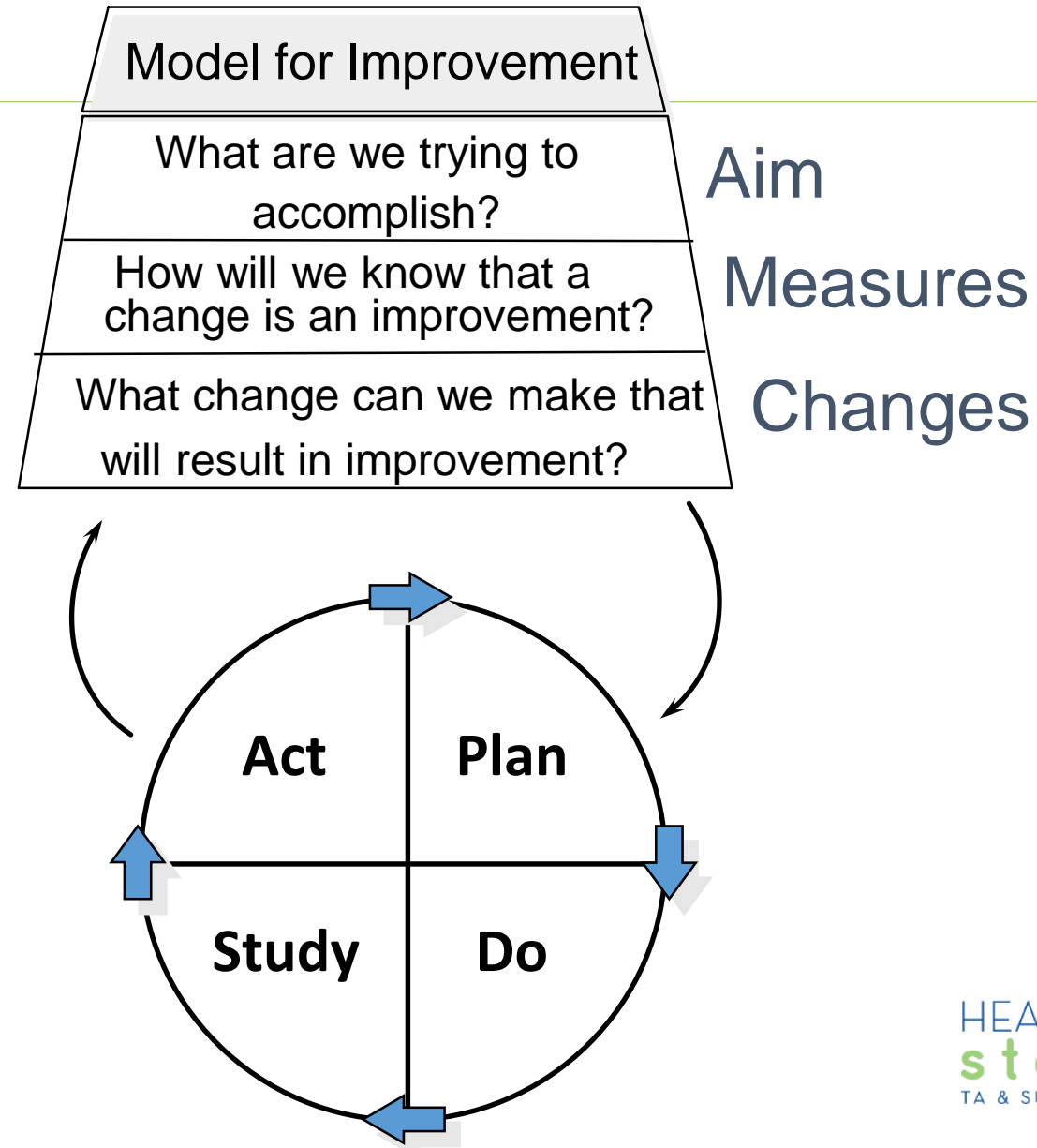
# Quality Improvement Provides a Model for Change



## Quality Improvement Supports All Four Goals

- Improve women's health
- Promote quality service;
- Strengthen family resilience;
- Achieve collective impact; and
- Increase accountability through quality improvement, performance monitoring, and evaluation.





From: Associates in  
Process Improvement



# Q1: What are we trying to accomplish?

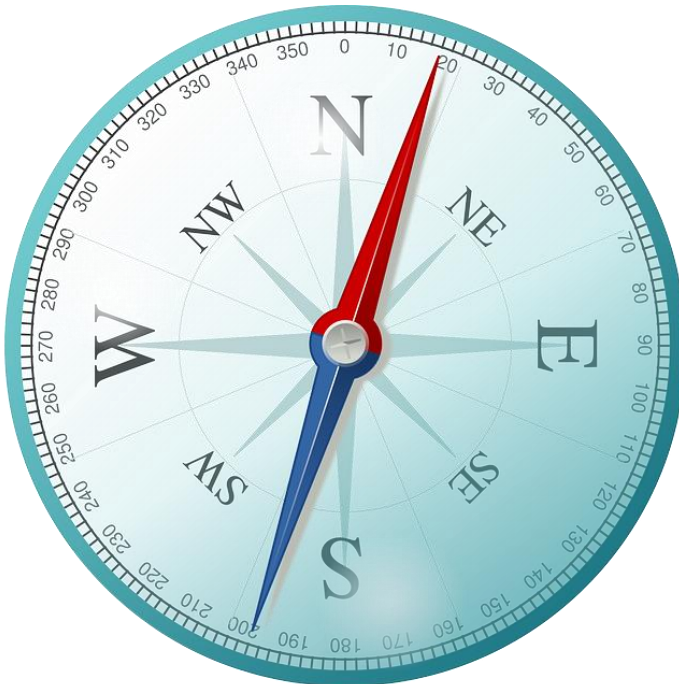
Aim Statements: by when, what, for whom, how much improvement?

- By 2022, we intend to improve the health of women and children before, during and beyond pregnancy so that we
  - Reduce infant mortality to less than 4 per 1000 live births
  - Increase access to prenatal care so that 95% of women have four prenatal visits or more before the 20th week of pregnancy and 1 per week between the 36<sup>th</sup> and 40<sup>th</sup> week
  - Decrease time to care for depression from a positive screen by 50%
  - Increase the well child visit rate for each year of life to 75% or higher



# Aim

- Direction
- Communicates magnitude of change
- Shared, easy to communicate



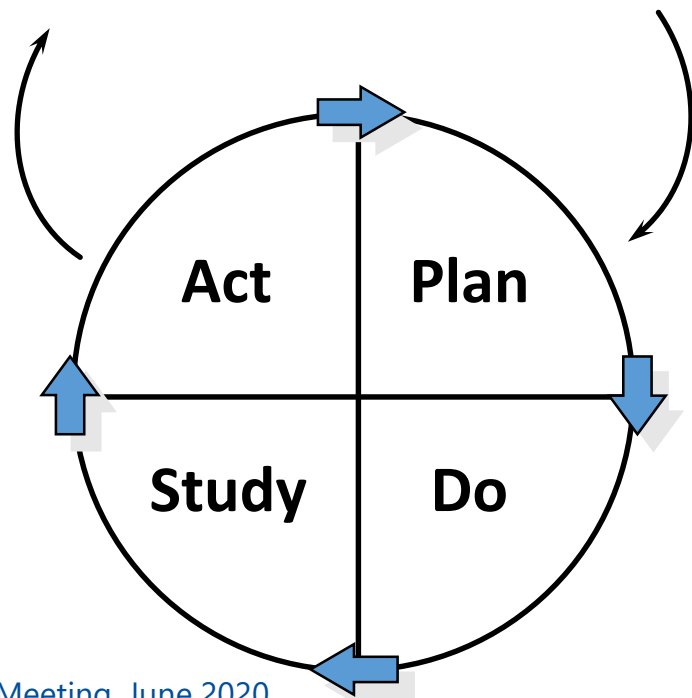
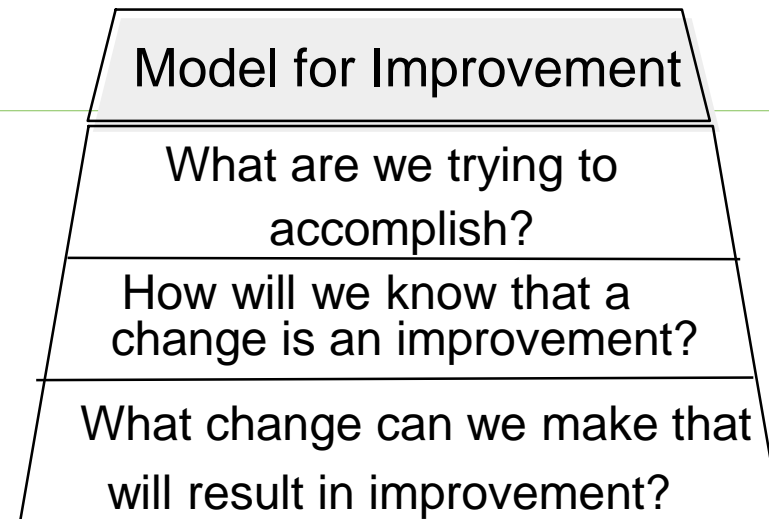
## Tips:

1. Ambitious – together we can do more
2. Concrete goals
3. Avoid aim drift
4. Poetic if you can!
5. Set an end date



# Question 1: What are we trying to accomplish?

- Useful at largest project level
- Useful when working on components or any area for improvement
- Useful even thinking about a meeting, a strategy
- Useful . . . . *For just about everything!*



From: Associates in  
Process Improvement



# We answer how would we know a change is an improvement with data



- Qualitative and Quantitative
- Just enough data
- No data is perfect; we strive for usefulness
- Use sampling and stratification (race, ethnicity, gender, zip code, age, etc.)
- Sequence data – usually over time
- Data informs better action to serve clients

## Question 2: How will we know a change is an improvement?



- Support clients on what they might expect; how you can support them; how to best use your services
- Focus on the quality and continual improvement of your service
- Seek client reactions
- Use them back into service improvement and redesign
- As women become better users of our improved approaches, they become wiser; we are required to keep up.

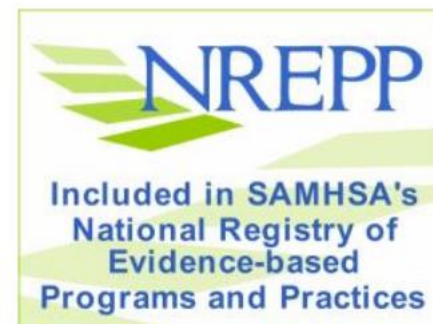
# Questions you might ask at the end of a session



On a scale of 0-10 and 10 is the best rating

- Did we talk about what you wanted to talk about? Work on what you want to work on today?
- How much did it seem that I heard you? Showed respect? Listened to what you said?
- How well did today work for you?
- Did I miss anything important?

Paraphrased from Quirk, Scott, Duncan, Owen,  
*Group Rating. Counseling and Psychotherapy* 2012,1-7  
iFirst article



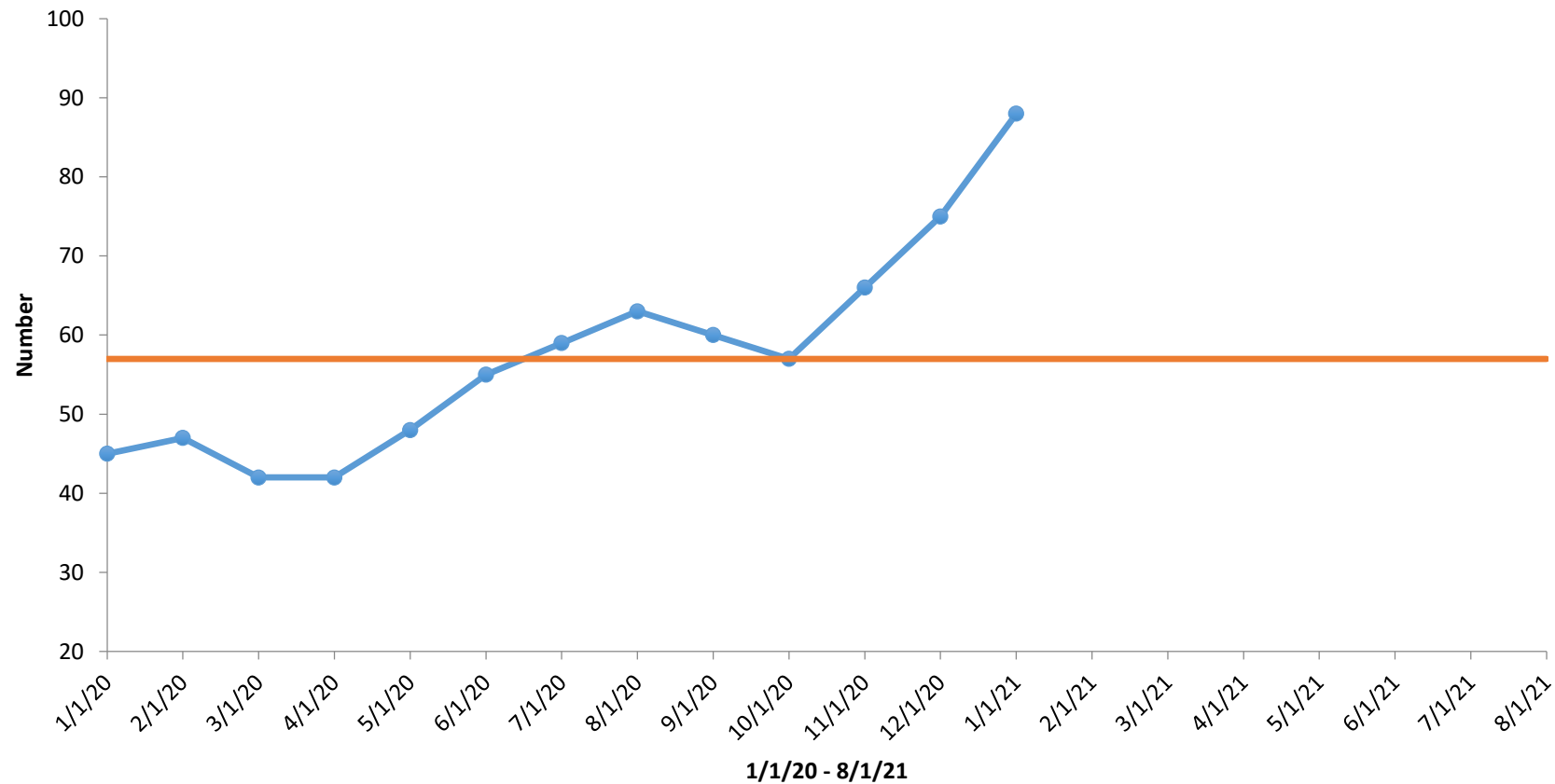
### 3 Faces of Measurement: Solberg, Moser, McDonald, 1996

Aspect	Improvement	Comparison or Accountability	Clinical Research
Aim:	Improvement of care	Comparison, choice, reassurance, spur for change	New knowledge
Test observability	Test observable	No test, evaluate current performance	Test blinded
Bias	Accept consistent bias	Measure & adjust to reduce bias	Design to eliminate bias
Sample size	"Just enough" data, small sequential samples	Obtain 100% of available, relevant data	"Just in case" data
Flexibility of hypothesis	Hypothesis flexible, changes as learning takes place	No hypothesis	Fixed hypothesis
Testing strategy	Sequential tests	No tests	One large test
Determining if change is improvement	Run charts or Shewhart charts	No change focus	Hypothesis tests (T-tests, F-tests, Chi-square), p-value
Confidentiality of data	Data used only by those involved in the improvement	Data available for public consumption	Research subjects' identities protected





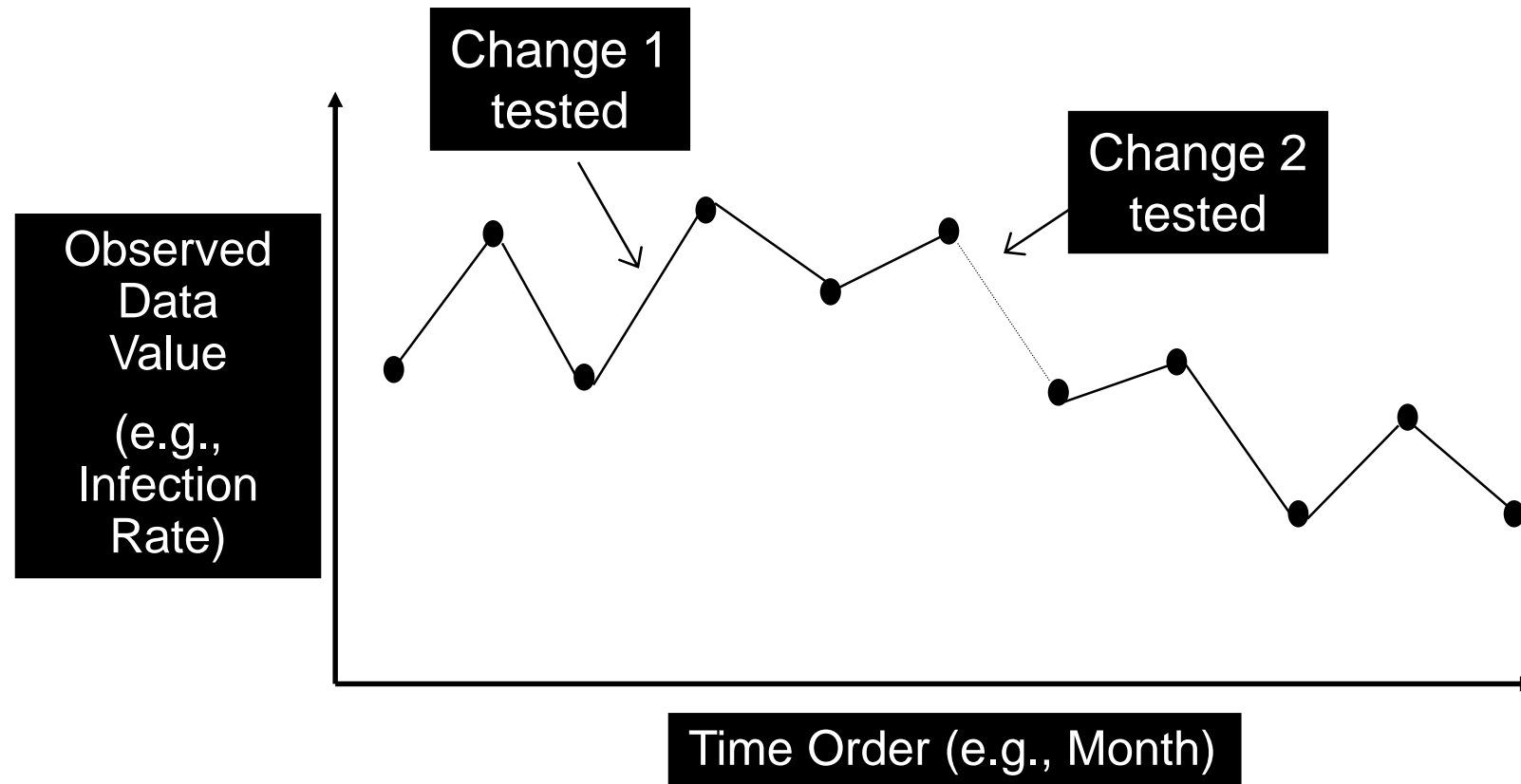
## Percentage of Infants Attending Recommended Well Child Visits Run Chart





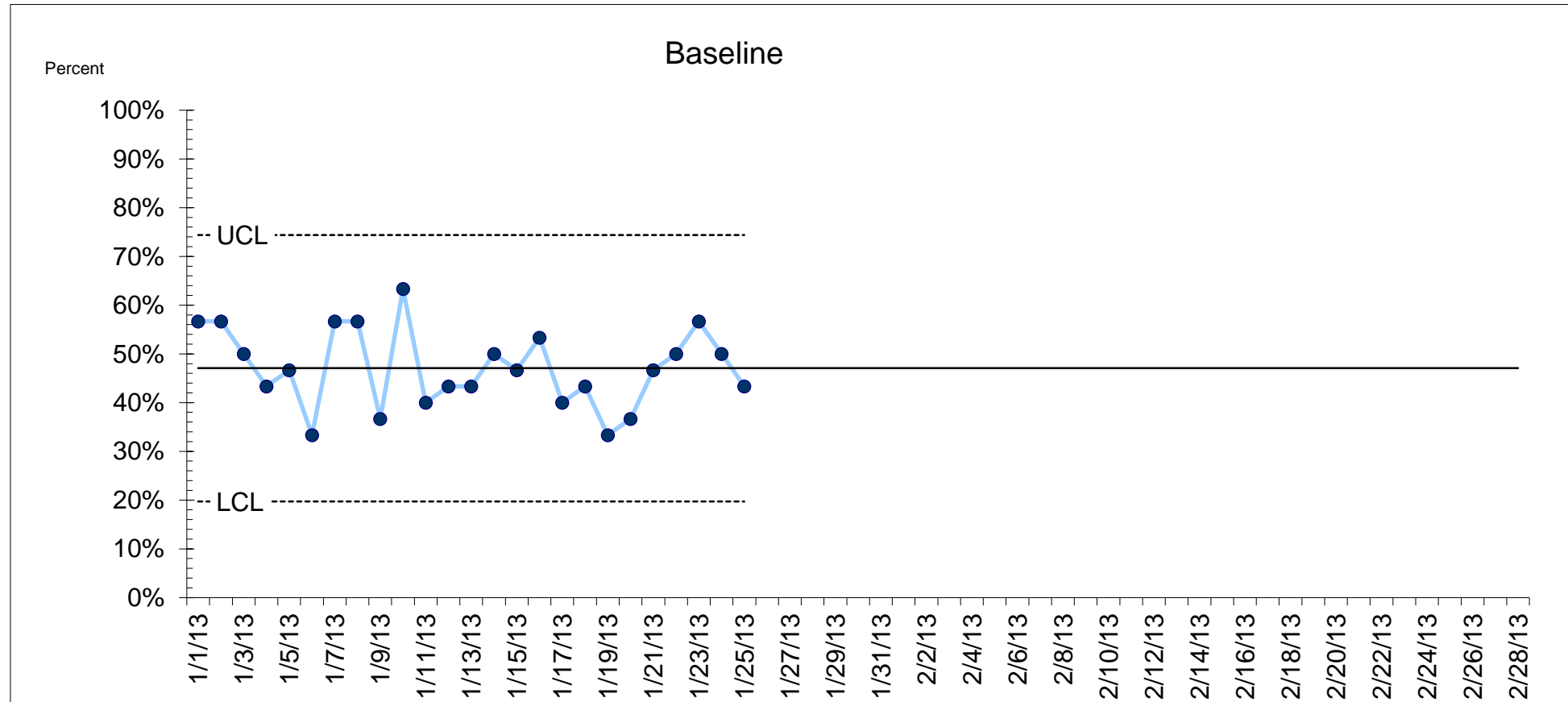


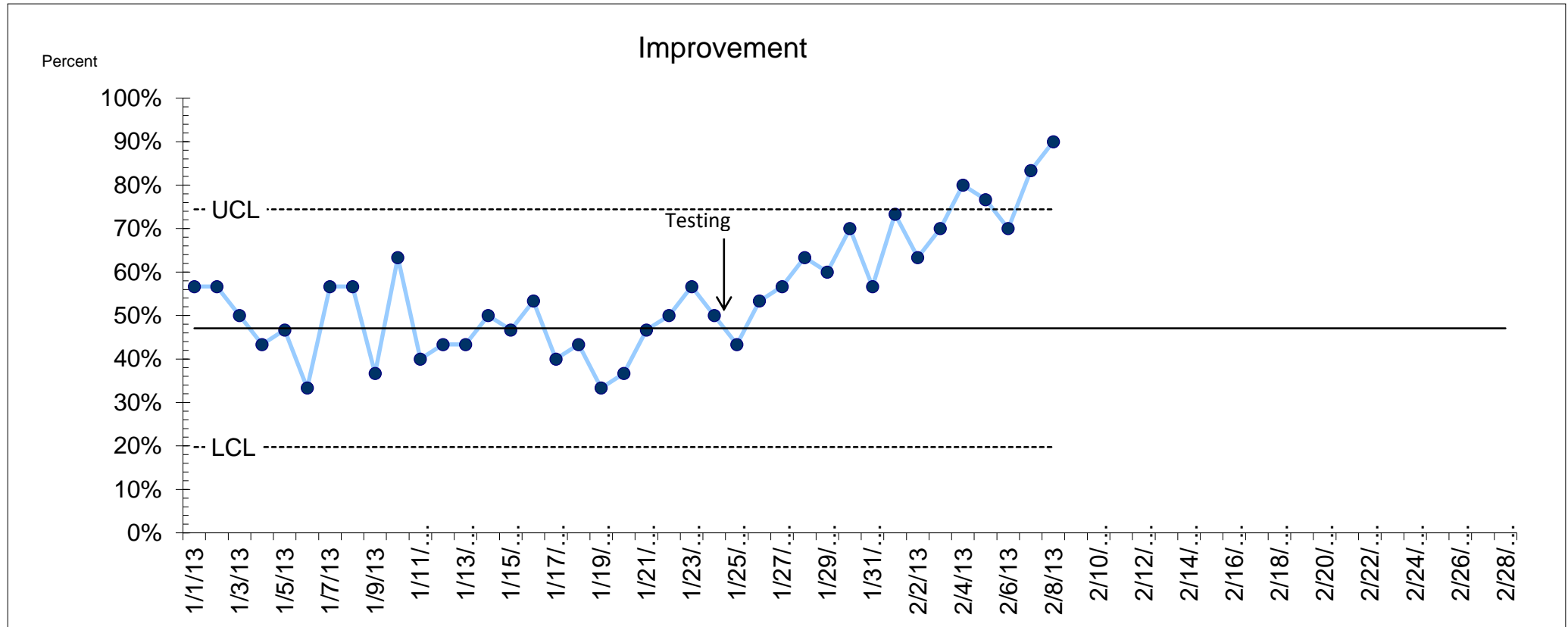
# Annotated Run Chart

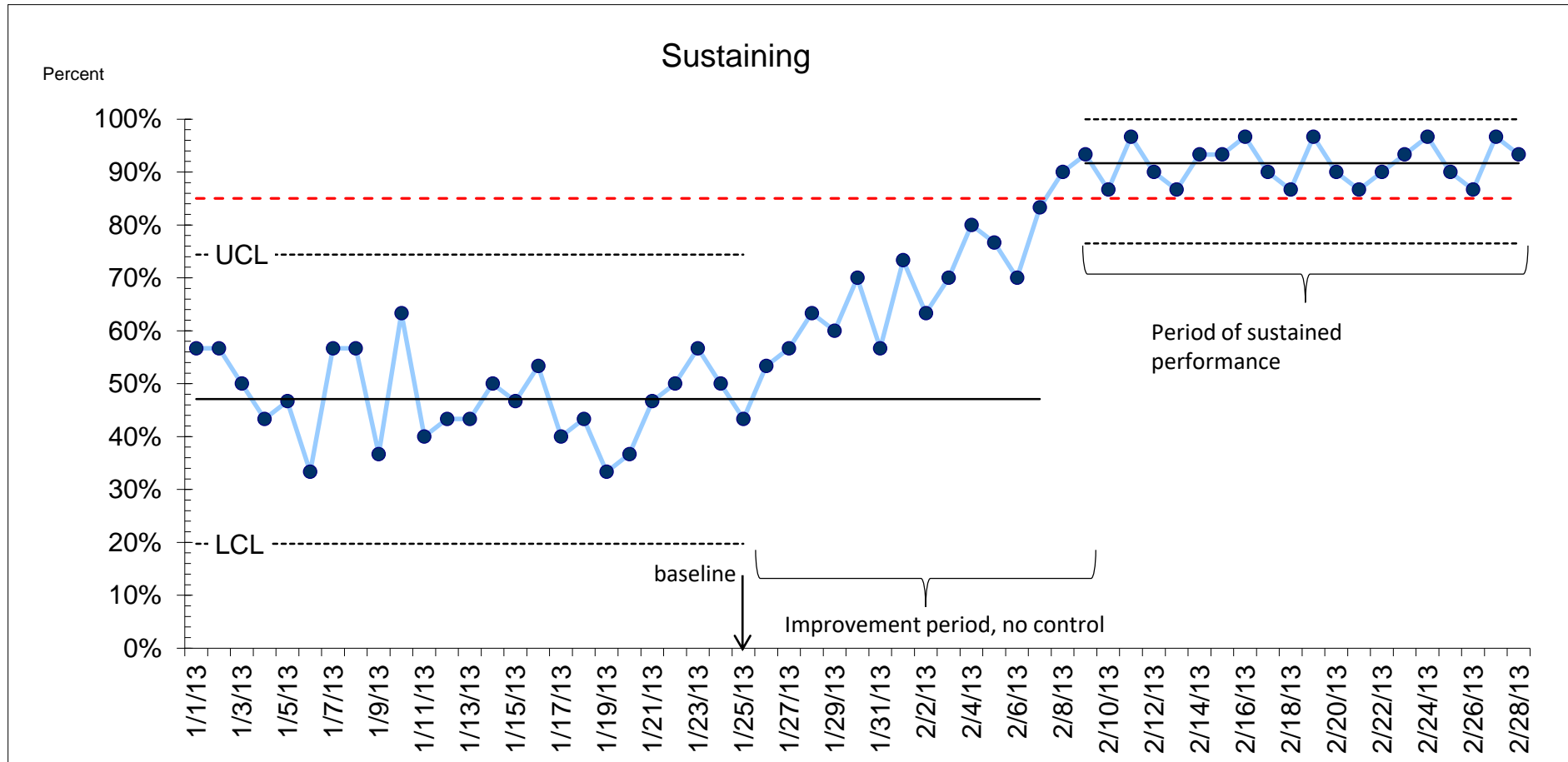


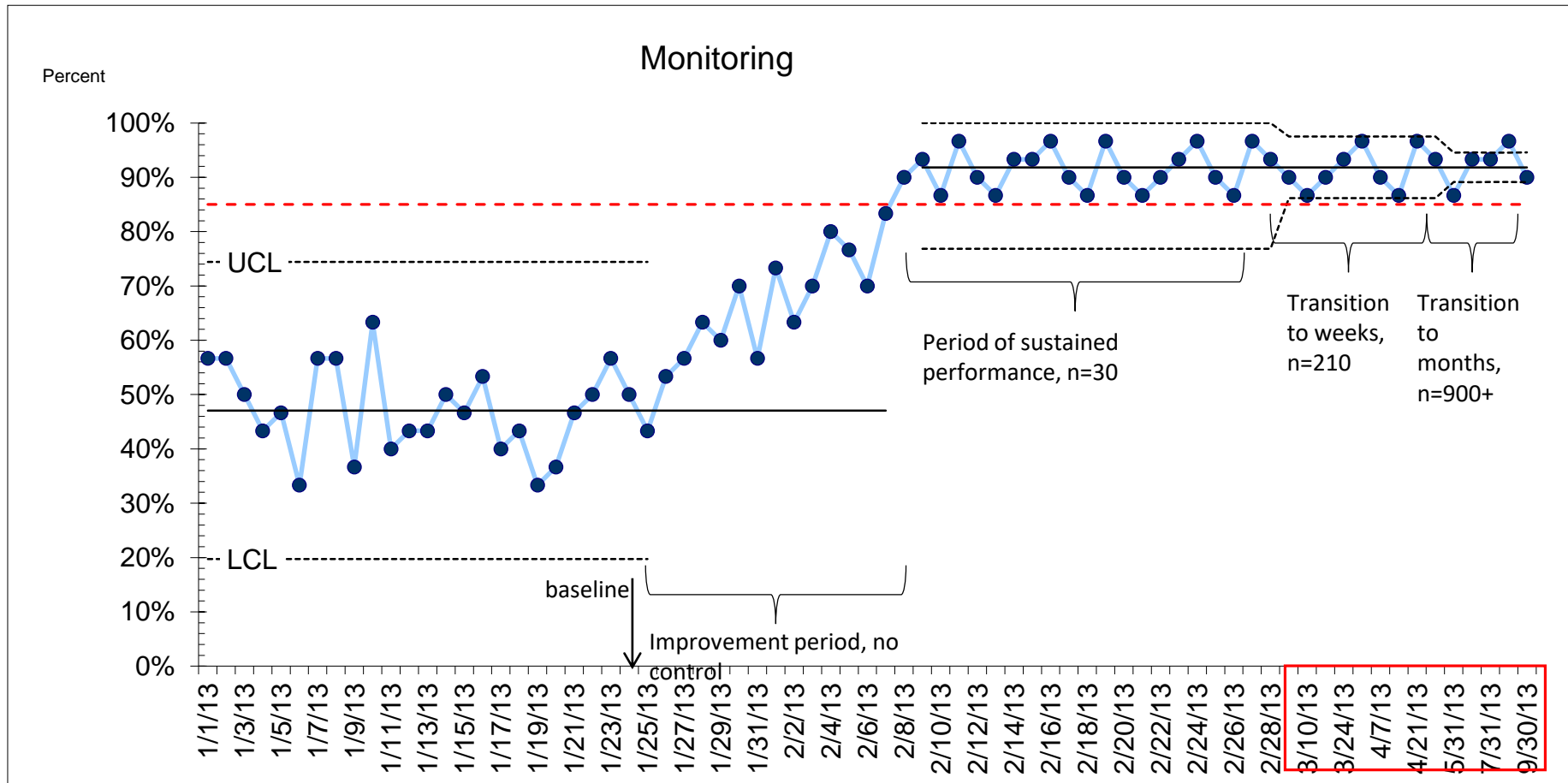
- Plot small samples frequently over time

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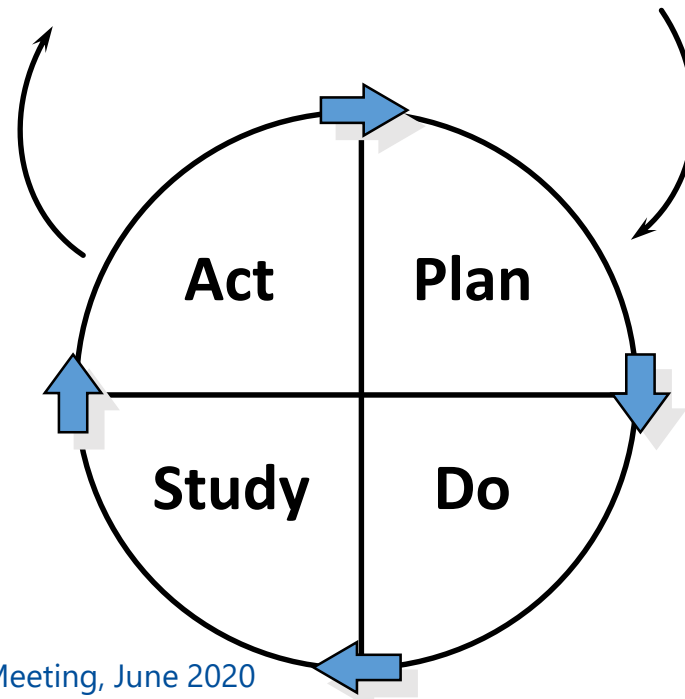
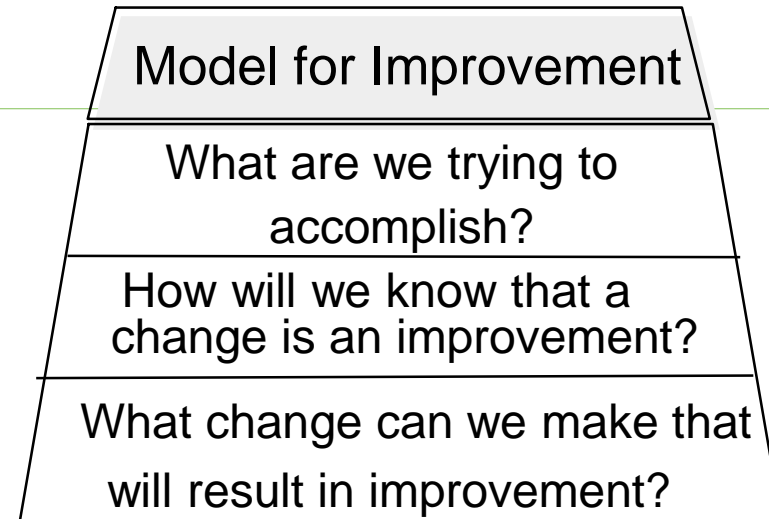












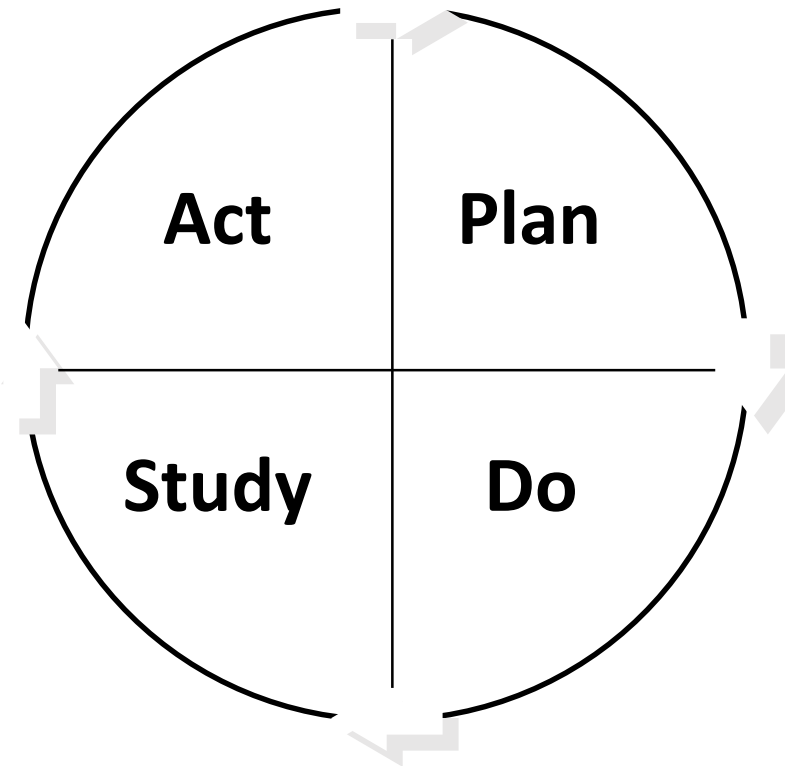
From: Associates in  
Process Improvement

# Question 3: What change can we make that will result in improvement?



Also known as:

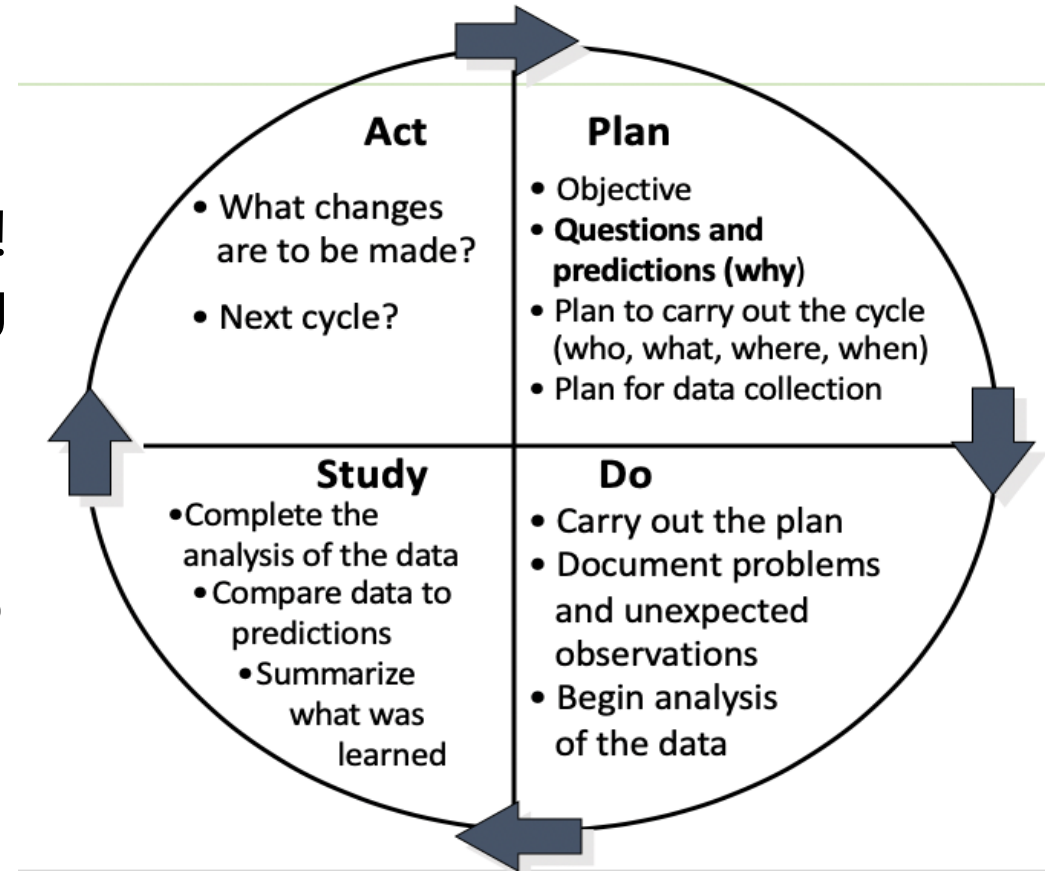
- Shewhart Cycle
- Deming Cycle
- Learning and Improvement Cycle



# PDSA on the fly, for rapid learning



- You may not be writing it down.
- You may not be explicitly stating a prediction - but I bet you have a theory! A hunch why you want to try something different?
- You may not be comparing what happened to what you thought would happen – but I bet you are using that to make up your mind about what to do next!



# PDSA WORKSHEET



## Healthy Start PDSA CYCLE DOCUMENTATION

A PDSA is the action component of the Model for Improvement. It allows the team to create new knowledge by conducting small tests of change.



<b>Project Area</b>	
<b>Test Idea</b>	
<b>Date:</b>	
What question do we want to answer on this PDSA cycle?	<b>Is this cycle used to:</b> <input type="checkbox"/> Develop a change idea, or <input type="checkbox"/> Test a change idea, or <input type="checkbox"/> Implement a change idea
<b>Plan</b> Plan to answer the question: 'who will do what, when and where?'  Plan for data collection:  Prediction of PDSA cycle results:	
<b>Do</b> Carry out the PDSA cycle, collect data and begin analysis. Record what happened.	
<b>Study</b> Compare data to predictions:  Summarize what was learned:	
<b>Act</b> Do we want to <input type="checkbox"/> Adopt this change, or <input type="checkbox"/> Adapt this change, or <input type="checkbox"/> Abandon this change.	<b>Plan for the next cycle</b>



### Healthy Start PDSA CYCLE DOCUMENTATION

A PDSA is the action component of the Model for Improvement. It allows the team to create new knowledge by conducting small tests of change.



<b>Project Area Engaging Fathers</b>	
<b>Test Idea Creating comfort and welcoming in accompanying new Mom at prenatal visits</b>	
<b>Date: July 2 @ Maria's virtual prenatal visit</b>	
What question do we want to answer on this PDSA cycle? Will using introductions and sharing something about ourselves create engagement? Will Marcus and Maria feel comfortable, will the care team? Will Marcus want to <u>participate</u> in future visits? Will Marcus feel comfortable asking questions? Will he leave the visit with at least one idea how to be supportive of Maria over the next 4 weeks? Will Marcus and Maria feel heard, understood and respected? Will sharing extend the visit time?	<b>Is this cycle used to:</b> <input type="checkbox"/> Develop a change idea, or <input checked="" type="checkbox"/> Test a change idea, or <input type="checkbox"/> Implement a change idea
<b>Plan</b> Plan to answer the question: 'who will do what, when and where?' I will call Maria's nurse, Susan and explain what and why we want to do the test and ask her to collaborate, I know her outside of work and think she <u>will</u> . She will prep the care team for the <u>test</u> and I will talk with Maria. What: in zoom visit, after brief greeting, Susan will express how delighted she is to see M & M today. How important a supportive partner is. Maria will introduce Marcus to her care team. Maria will share one thing she is looking forward to during her pregnancy and when the baby comes. Marcus will also share one thing he is looking forward to when the baby comes. Maria will share one strength she has that she will rely on during this pregnancy and Marcus will share a strength he brings to the family. Maria will share one concern she has; Marcus will share one of his concerns. Care team will share 1 or 2 ideas on how Marcus can support Maria in the next 4 weeks. Nurse will ask Marcus, in his own words, if he were telling his friend <u>some thing</u> he can do to support Maria this month, what would he say? Susan will ask Marcus if he wants to come to the next visit: how important is it to him 0-10 ( <u>10 most</u> ) and how confident is he 0-10 he can make. They will troubleshoot and jointly problem solve if less than a 7. She will also ask Maria and Marcus to rate on a scale of 0-10 how much did they feel heard, understood and respected? 0 not at all and 10 perfectly. Was the approach a good fit, make sense to you? To what degree did we talk about things you wanted to today?  Plan for data collection: Did sharing happen? Y or N? How long did sharing take? Did visit run over? Response to respect questions from Maria and Marcus, re importance; confidence; heard; discussed what was wanted.  Susan will record length of visit, time to do "connecting" and responses to the 3 questions. She will ask M and M to share results with me.  Prediction of PDSA cycle results: Marcus and Maria will give 7 or higher on respect question; Maria will respond higher than Marcus on importance and confidence question. Marcus and care team will need to do some planning to work around his schedule for next visit, he may need a device so he can join next month. Marcus will mention 1 or more supportive actions he can take over the next 4 weeks.	

# What happened? What did we learn? What shall we do next?



One cycle is almost never enough to learn how to do something better

- What is the next test?
  - Go bigger
  - Refine the idea? What are the good ideas, other ideas?
  - Try in a face to face visit?
  - Try in a different month of a pregnancy?
  - Try in multi-lingual family?
  - . . .

# Approximately 8 minutes to write and 5 minutes to debrief



Use the Google doc link in chat

Scroll to the question you want to answer, and start typing! We will take 8 minutes for this exercise. Answer all or just one, your choice

Please answer the question(s) on the google doc

- If you were planning a test to learn how to engage fathers or partners in a visit, what would you test?
- How would you prepare the care team? The woman?
- How would you know if the partner or father was engaged?
- What might be your second test? Third?
- Is there something you would like to test? If so, what might that be?



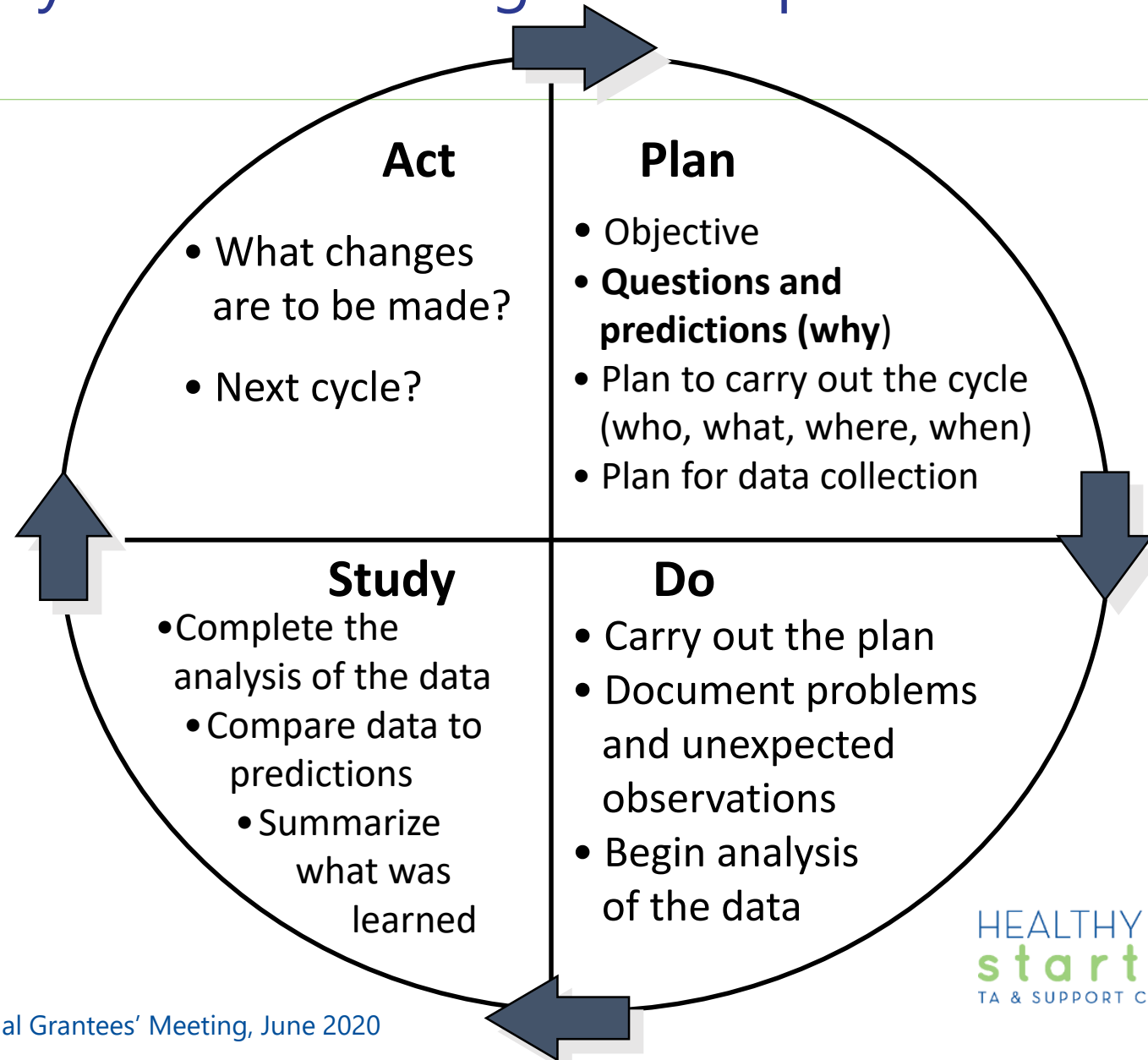


# Debrief

# The PDSA Cycle for Learning and Improvement



Small scale test  
Series of tests  
Wide-scale tests  
Implementation



# Why Test?



- Increase the belief that the change will result in improvement
- Predict how much improvement can be expected from the change
- Learn how to adapt a change to conditions in the local environment
- Evaluate costs and side-effects of the change
- Minimize resistance upon implementation
- Localize a good idea to your setting



# Test on a Small Scale

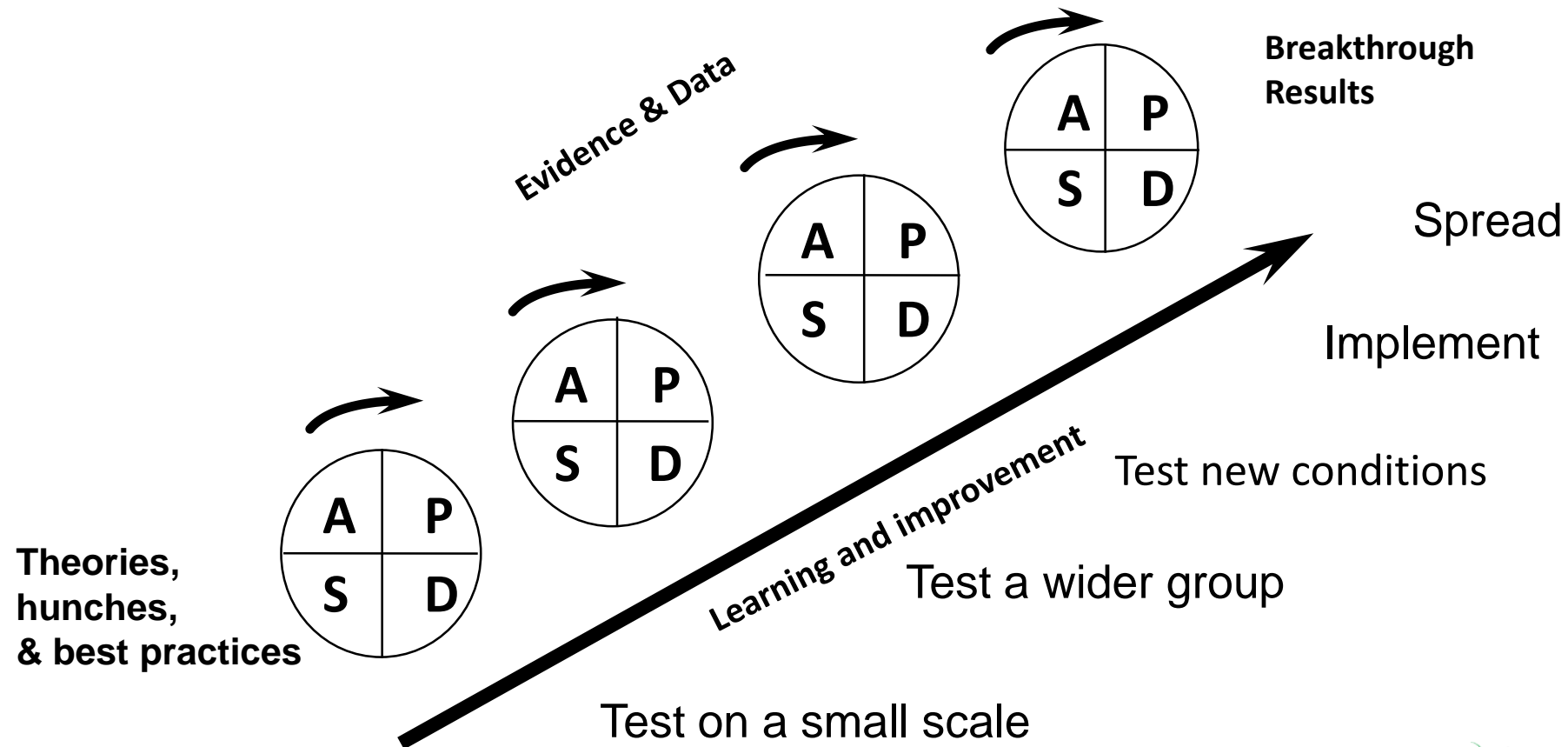
- Conduct the test with one community partner, one client, next 5 clients, with one staff member
- Test the change on a small group of volunteers
- Develop a plan to simulate the change in some way
- Use relationships you have for early tests



# Test under a wide range of conditions

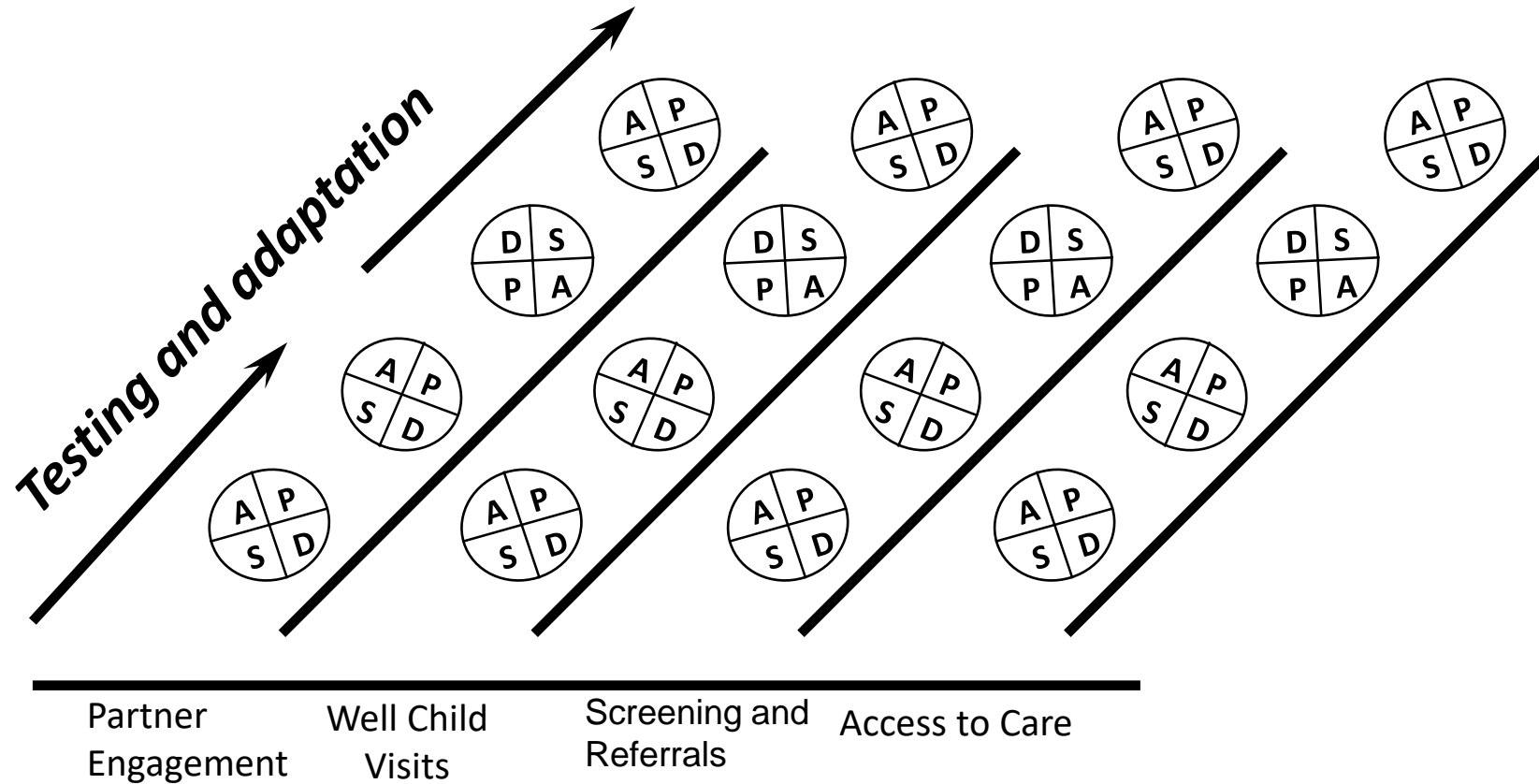
- Build belief in the change
- Robustness of change
- Try and test for the way thing will be in the future
- Contextual the change(s) for your setting; different types of clients, etc.

# Sequential Building of Knowledge Includes a Wide Range of Conditions in the Sequence of Tests



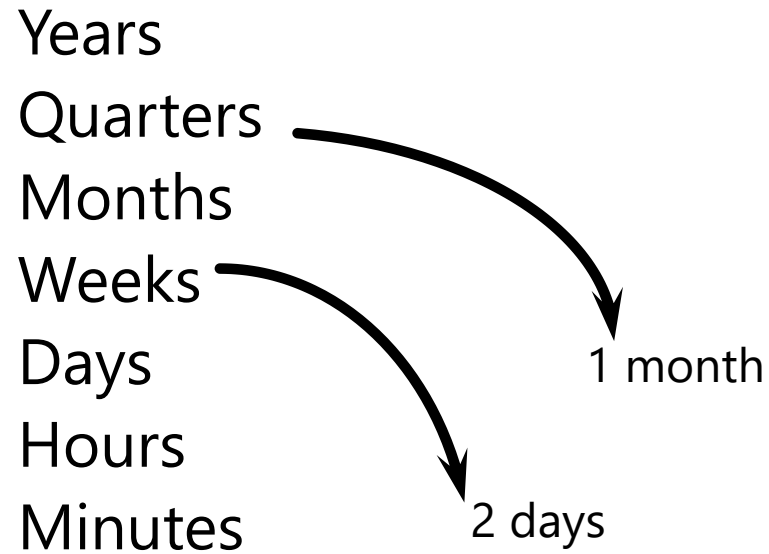


# Multiple PDSA Cycle Ramps





# Decrease the Time Frame for a PDSA Test Cycle



Drop down next  
“two levels” to  
plan early test  
cycles!

Don Berwick, MD

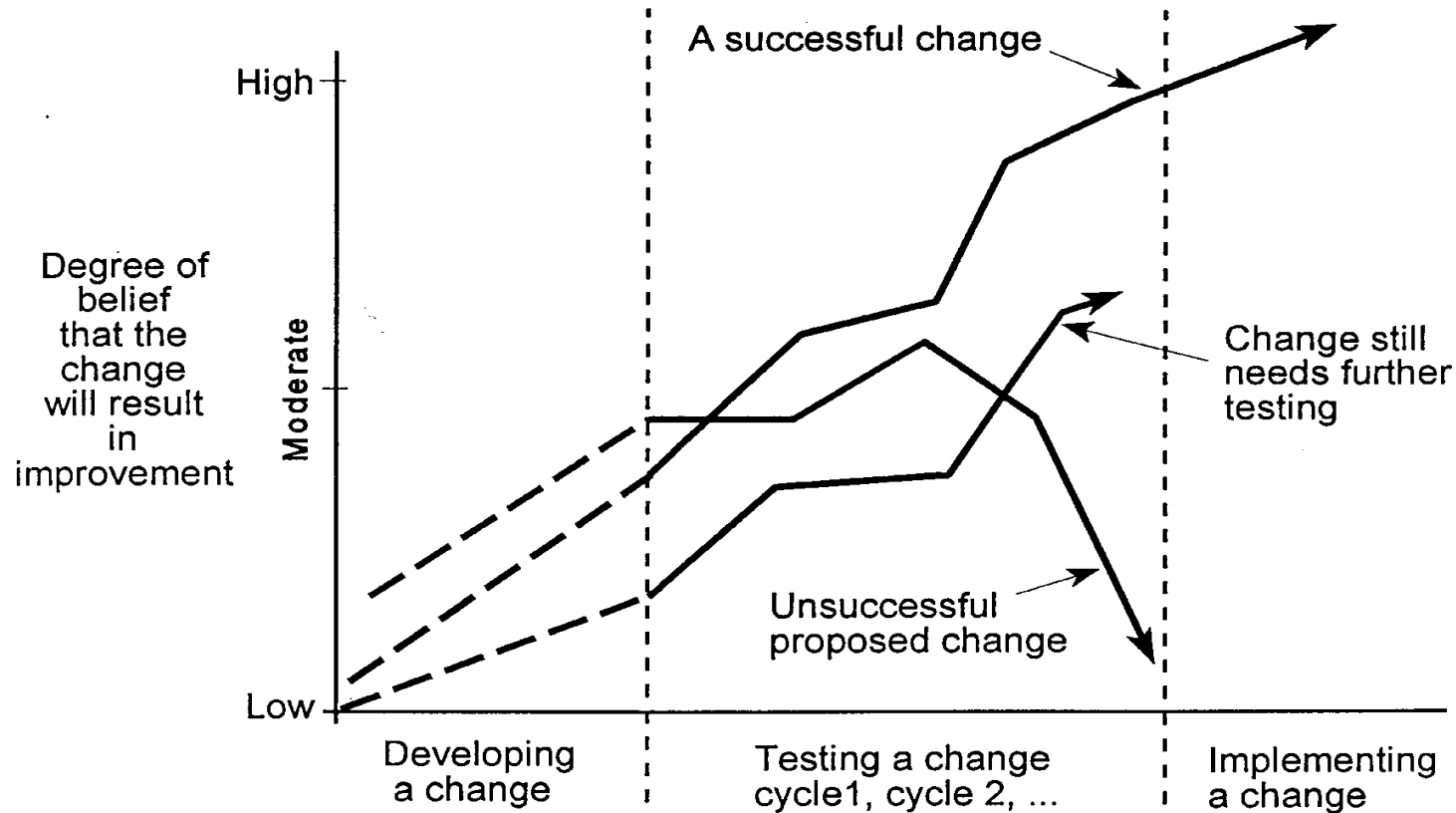


# Build confidence in change ideas, concepts

Testing: Trying and adapting existing knowledge from prototype on small scale. Learning what works in local system(s).

- Change is not permanent
- Failure very useful here, even expected
- Fewer people impacted than during implementation – less resistance
- Focus is on learning with minimal risk

# Degree of Belief that Changes Will Result in Improvement



*The Improvement Guide, page 97*



# Implementing a change

- Change becomes part of routine day-to-day operations in your pilot population

Don't expect failure here

More people impacted than during testing

Increased resistance compared to testing

Generally requires more time than testing

# When to Implement a Change



## Staff Readiness to Make Change

Current Situation		Resistant	Indifferent	Ready
<b>Low Confidence</b> that change idea will lead to Improvement	Cost of failure large	Very Small Scale Test	Very Small Scale Test	Very Small Scale Test
	Cost of failure small	Very Small Scale Test	Very Small Scale Test	Small Scale Test
<b>High Confidence</b> that change idea will lead to Improvement	Cost of failure large	Very Small Scale Test	Small Scale Test	Large Scale Test
	Cost of failure small	Small Scale Test	Large Scale Test	Implement

Langley et. al., The Improvement Guide 2<sup>nd</sup> Ed

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# Implementation too: Gantt Chart



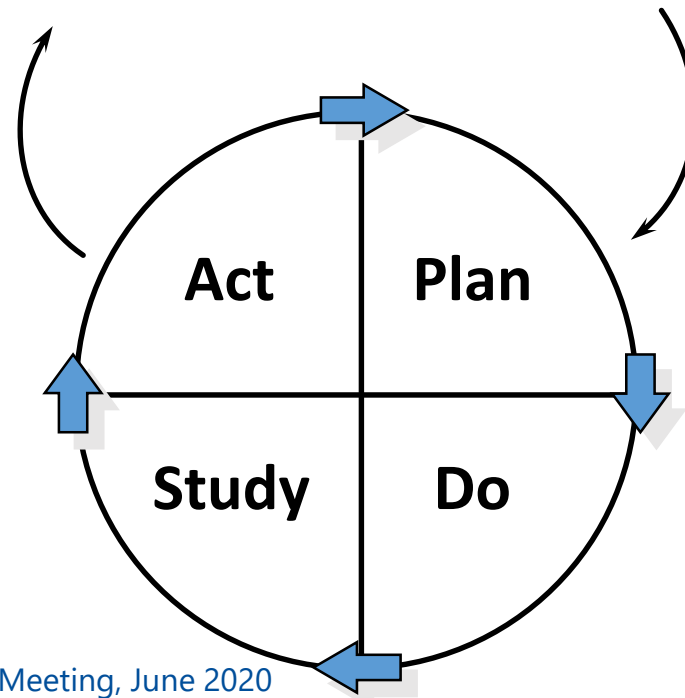
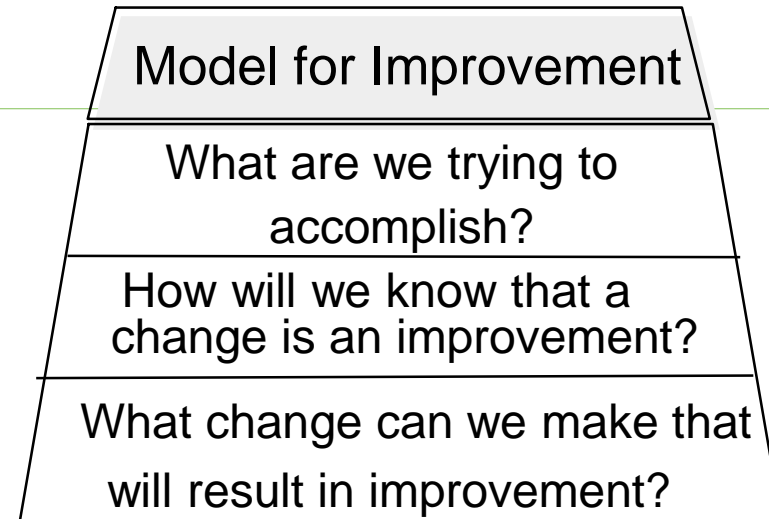
Cycle No.	Change Tested or Implemented	Lead	June 24	July 1 8 15 22 29	August 5 12 19 26	September 2 9 16 23 30	October 7 14 21	November 28 4 11 18 25
	<b>Policies</b>							
	<b>Process Documentation</b>							
	<b>Hiring Procedures</b>							
	<b>Staff education/training</b>							
	<b>Job descriptions</b>							
	<b>Information Flow</b>							
	<b>Equipment Purchases</b>							

# Attend to the psychology of change



- Reactions to change
  - Resistance
  - Apathy
  - Compliance
  - Conformance
  - Commitment
- People need to understand implications of change:
  - Physical
  - Logical
  - Emotional





From: Associates in  
Process Improvement

# Natural PDSA cycles



1. What was something you thought nearly impossible to do during this pandemic where your staff found a solution that worked?
2. What was it, how did they do it?
3. What did you learn?
4. Anything surprise you?
5. What else do you need to learn to make it work better?

And . . .



Please share something you tried that worked and you hope to carry on in “normal” times.

And, some of the things you tried that didn't work.

# Changes in how we work?



Let's explore whether and how your Healthy Start team functions changed in response to the pandemic?

What changes have you made in roles and responsibilities?



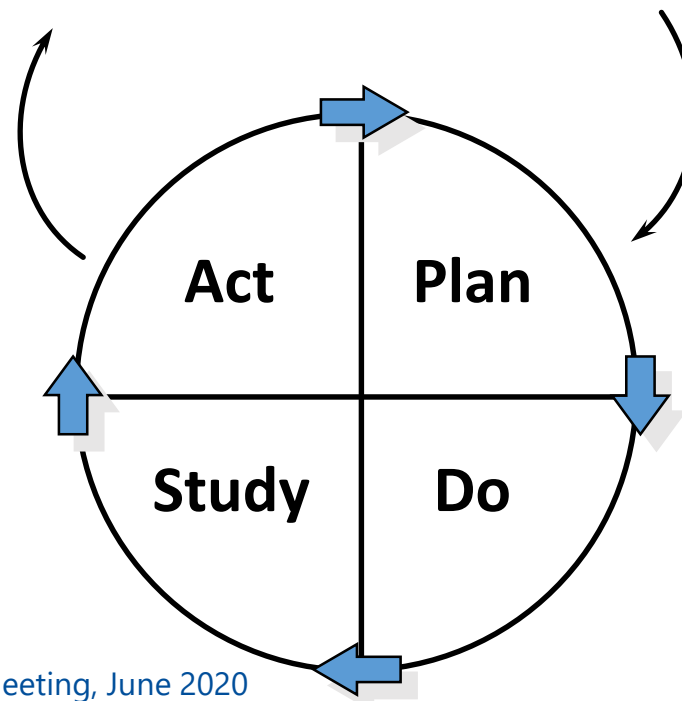
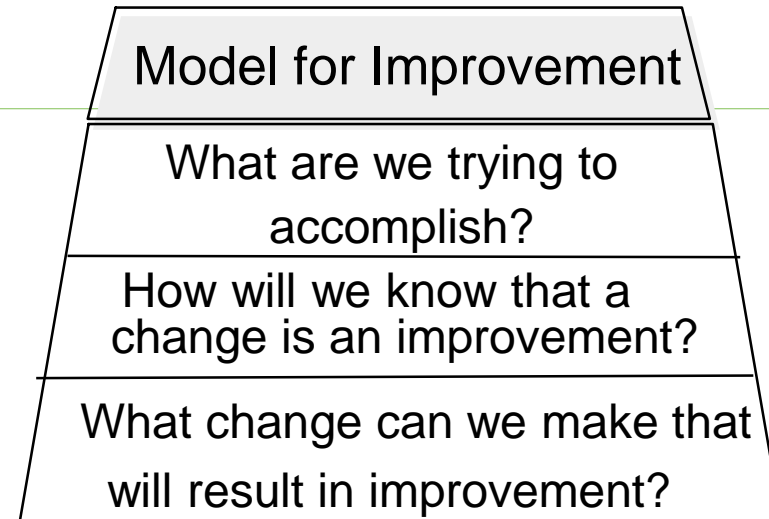
# Some reflections on virtual contacts

- How many of you are using virtual contacts?
- Were you able to support those without devices, if so how?
- What seems to work? What isn't working out so well?
- What is needed to document virtual contacts? Is it different, if so how?
- If we wanted to sustain virtual contacts, what data might we collect now to make a case for it?
- How are you tracking activities, e.g. setting up reminders for follow up?

# Finally let's talk about rebound for our services



- What will happen when we see the release in pent up demand for our services?
- What challenges can you predict?
- What will the new normal call us to do differently? How can we learn our way into providing more valuable service?



From: Associates in  
Process Improvement

TA for QI? Contact [Jane1taylor@mac.com](mailto:Jane1taylor@mac.com)



I am keen to support your unique learning as you strive to improve healthy starts for those you serve.

Thank you!

Jane



Questions?



## Closing

Tess Pritchard,  
TA & Support Center

Up Next



Updates from HRSA's Federal  
Office of Rural Health Policy  
Beginning at 4:30 p.m. EST