



PDSA Fundamentals, Selecting a Topic for Improvement and Running Short, Rapid PDSA Cycles

Missouri Virtual Learning Opportunity #2

August 19, 2020



As a reminder, we are using both video and audio for this virtual gathering. Please note that our audience may be able to see/hear you unless you specifically turn your video off and/or mute yourself. Please use your video/audio options accordingly and ask if you have any questions of how to use these options.

Agreements for Our Time Together

- ✓ Remain **available-to-be-on-mic**. You can mute while others are speaking/presenting, but be ready to participate.
- ✓ Remain **on-camera** as you are able.
- ✓ Avoid **distractions** as you are able.
- ✓ Feel free to **raise your hand** in Zoom using feature in participant list or on camera.
- ✓ Have the **chat** open and use it as needed.
- ✓ Have **fun!**

Welcome and Introductions



Explore

The basics of the
PDSA cycle

Learn

Approaches for
selecting a topic for QI

Gain

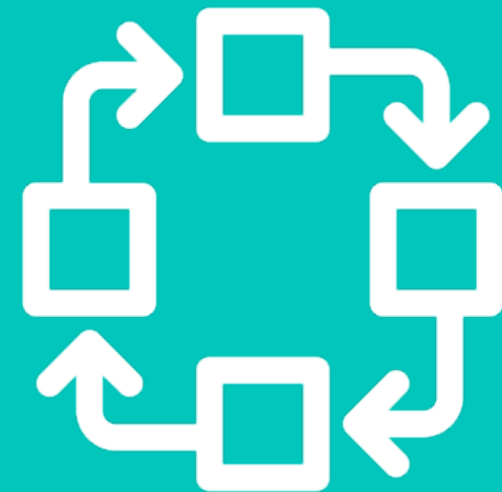
An understanding and learn
about what needs to be
considered when running
short, rapid PDSA cycles

Engage
and Learn

Together!



Our Time
Together



Basics of Plan-Do-Study-Act

The Plan-Do-Study-Act (PDSA) Cycle

- Made popular by Dr. W. Edwards Deming,
- Also known as Plan-Do-Check-Act (PDCA)
- Widely used by quality professionals, process improvement engineers, & health care professionals
- Science based, data driven, iterative process improvement methodology
- Turns ideas into action and connects that action to learning

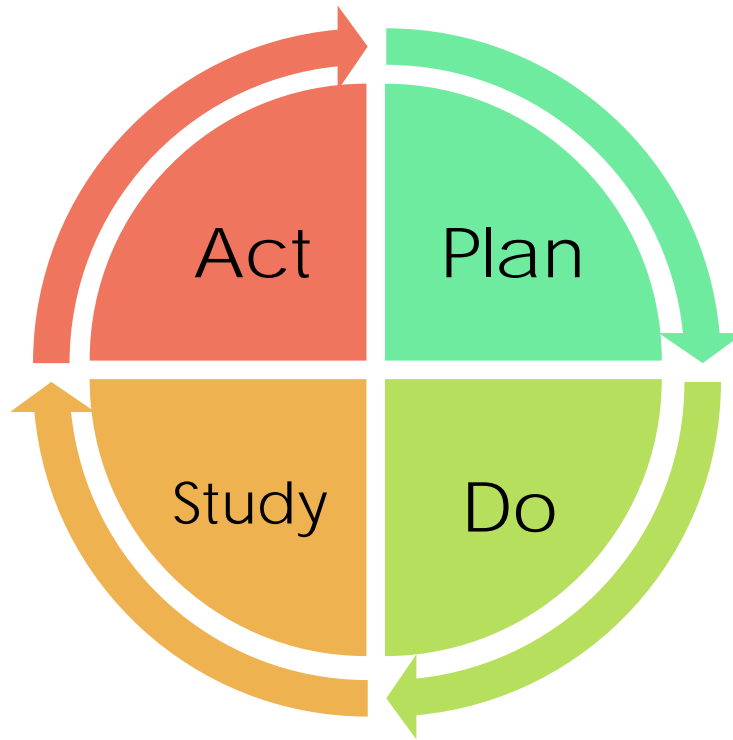
PDSA – An Overview



- Four Stages
- Team Approach
- Used to improve existing processes

Stages of the PDSA Cycle

- Standardize the improvement and make future plans
- Use data to study the results

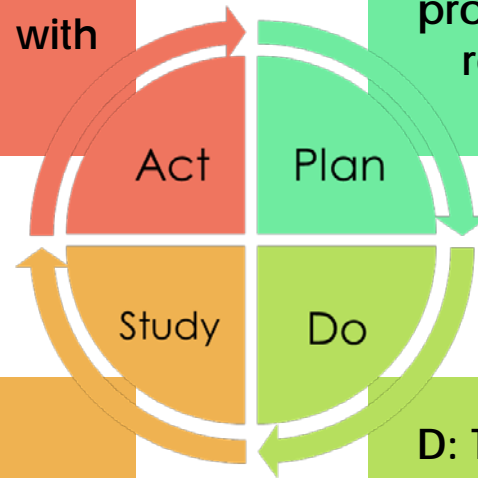


- Identify a problem or opportunity and propose how to fix it
- Test the theory for improvement

PDSA Example

A: Based on the results, the team decided to test the solution again with the same home visitor and two additional families during the month of June 2020. The team shared the results of this PDSA cycle at an all staff meeting and celebrated with coffee.

P: The QI team sought to improve the percent of families receiving the recommended number of home visits. The team mapped their current process for reminding families of visits, explored root causes, and selected a solution to test.



S: The QI team compared the baseline home visit completion rate for the family for the month of April and May 2020. Home visit completion increased from 25% in April to 75% in May 2020.

D: The QI team decided one home visitor would utilize the Apptoto reminder app to send 3 reminders to a family (one week before visit, three days before visit, and one day prior to visit) for each of the family's visits during the month of May 2020 (family receives weekly home visits).



Selecting Topics for Improvement and Approaches

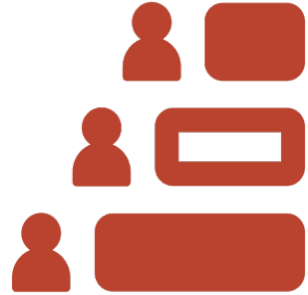
Selecting a Topic for QI: The Importance

- Key focus of the Plan stage of the PDSA cycle
- Critical in beginning to bring focus to a formal improvement effort
- Initial opportunity to foster excitement, curiosities, and buy-in for formal improvement efforts

Approaches for Selecting Topics



Look to/ review data



Survey Staff



Engage in a formal/ informal
brainstorming exercise



Use staff meetings/ supervision sessions

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What approaches have you used to determine how well your processes are performing?

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Discussion Questions to Generate Ideas



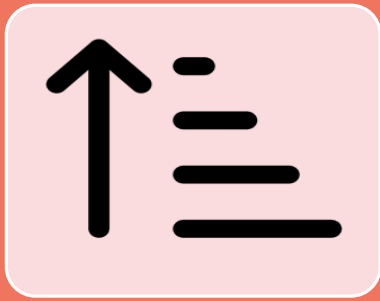
- Where is our performance different than we would expect or want?
- What processes are frustrating or inefficient?
- What are areas for improvement that you would like to see the team tackle next?
- Consider MIECHV performance measures and model standards



Breakout Discussion

- Take 5-7 minutes and think about the discussion questions we just talked about:
 - Where is our performance different than we would expect or want?
 - What processes are frustrating or inefficient?
 - What are areas for improvement that you would like to see the team tackle next?
- Write down your ideas and be ready to share with others!
- We are going to break you out into groups to share your ideas!

Once You Have Some Ideas



Prioritize where to start



**State the problem/
opportunity for improvement
to be tackled**

Remember...

- Formal Improvement efforts **have** to be:
 - Data driven
 - The product of an intentional method (Plan-Do-Study-Act cycle)
 - Utilize QI tools
 - Documented

- Formal Improvement efforts **do not have** to be:
 - Complicated
 - Long
 - Boring

Why is it important to select a topic for QI?

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Break



Short, Rapid PDSA Cycles

What Are Short, Rapid PDSA Cycles?

- PDSA cycles that are planned, tested, studied, and acted upon in a short amount of time
- Tests for improvement are small, short, and simple in nature and typically build on one another

Short, Rapid PDSA Cycles



Support Team



Gather & Build



Test



Maintain
Excitement



Improvement



Time for Change

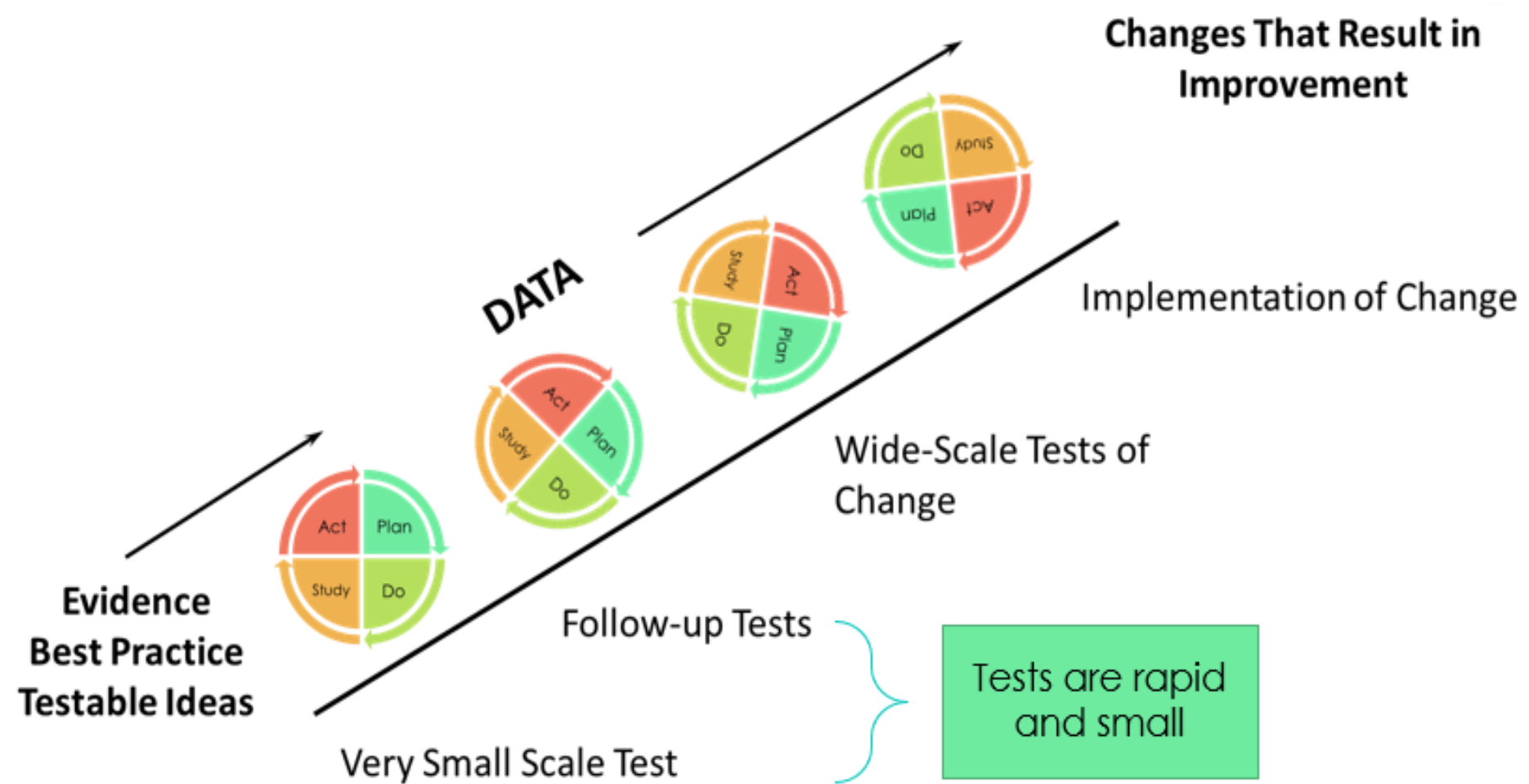
Rapid PDSA Cycles: What to Consider

Stage	
Plan	<p>Initial cycle: team should spend time planning improvement effort and use appropriate tools to charter the project, understand the current process, examine root cause, identify potential solutions, etc.</p> <p>Consecutive cycles: team should revisit components of Plan and tweak as needed (e.g. update aim, revisit root cause analysis, brainstorm of solutions, update/tweak improvement theory, etc.)</p> <p><u>Timing:</u> aim for no longer than a month for initial cycle; consecutive cycles should be accomplished within one team meeting</p>
Do	<p>Initial and consecutive cycles: tests should be short (e.g. within a day, a week, with one family, one home visitor, etc.) and data should be simple</p> <p><u>Timing:</u> aim for no longer than one to two weeks</p>

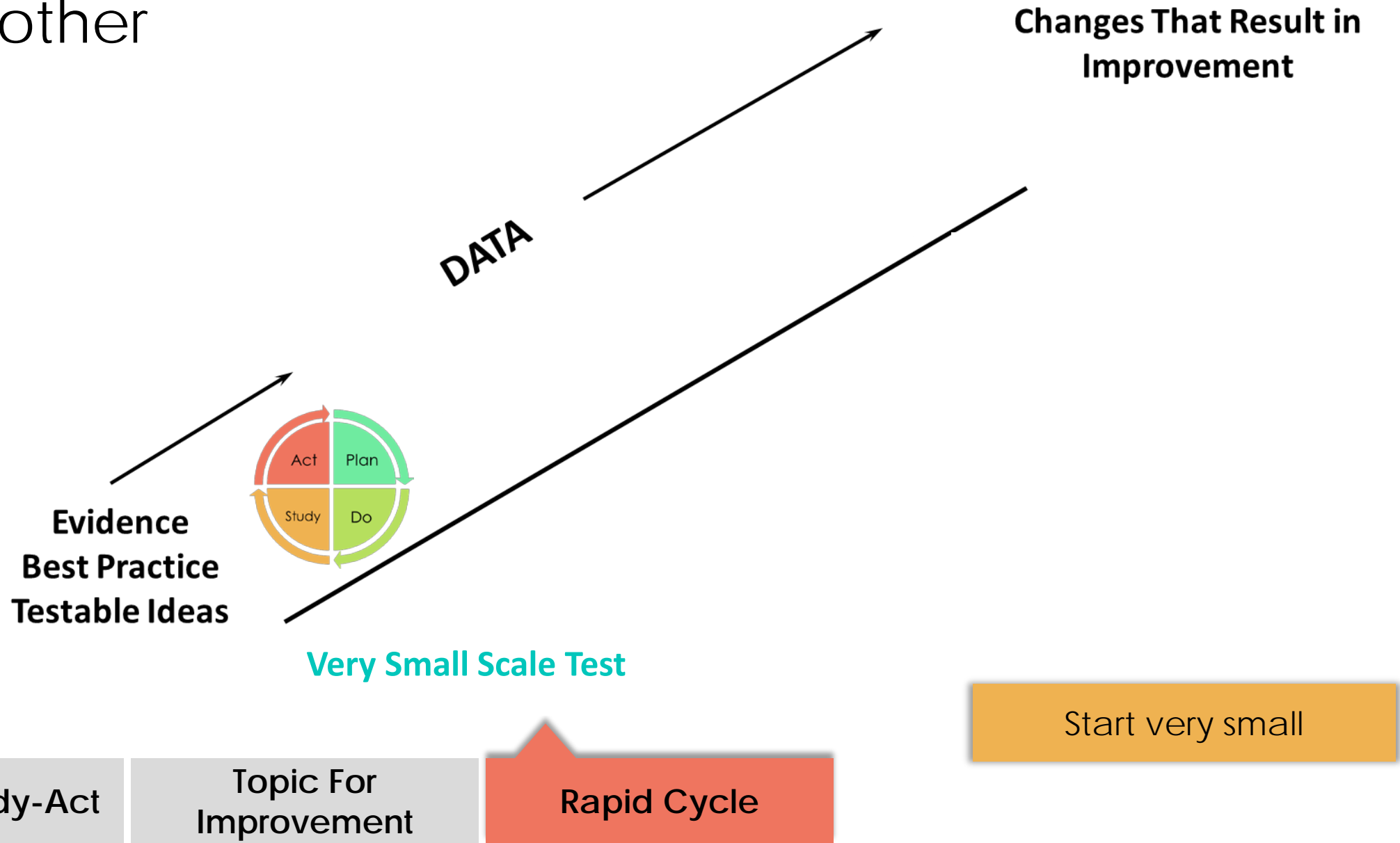
Rapid PDSA Cycles: What to Consider

Stage	
Study	<p>Initial and consecutive cycles: results should be able to be compared to baseline and aim immediately</p> <p><u>Timing:</u> accomplish in one team meeting that follows test</p>
Act	<p>Initial and consecutive cycles: team should be able to determine how to 'act' immediately and move to next cycle</p> <p><u>Timing:</u> accomplish in one team meeting that follows test (same meeting as 'study')</p>

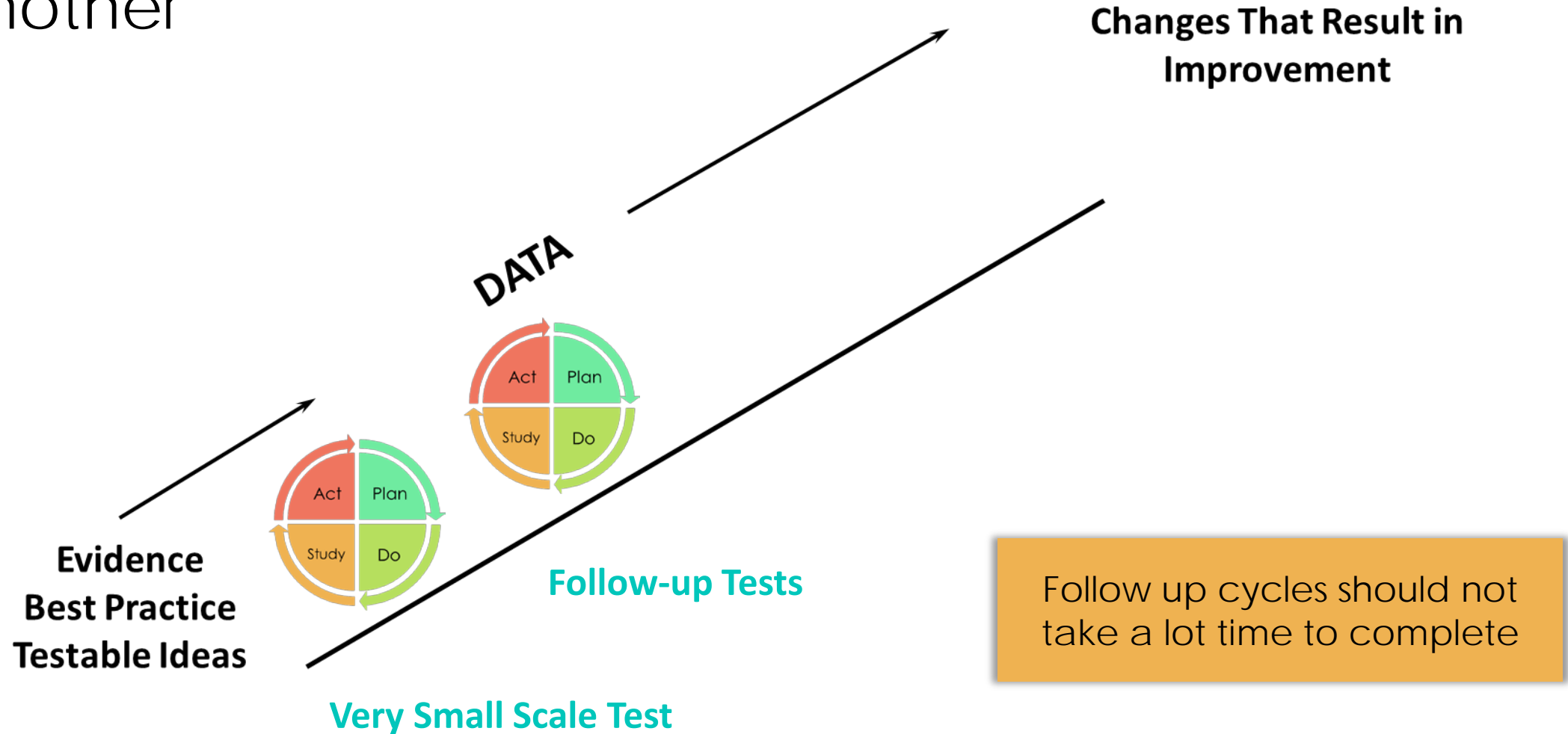
PDSA Ramps: Short, Rapid Cycles That Build on One Another



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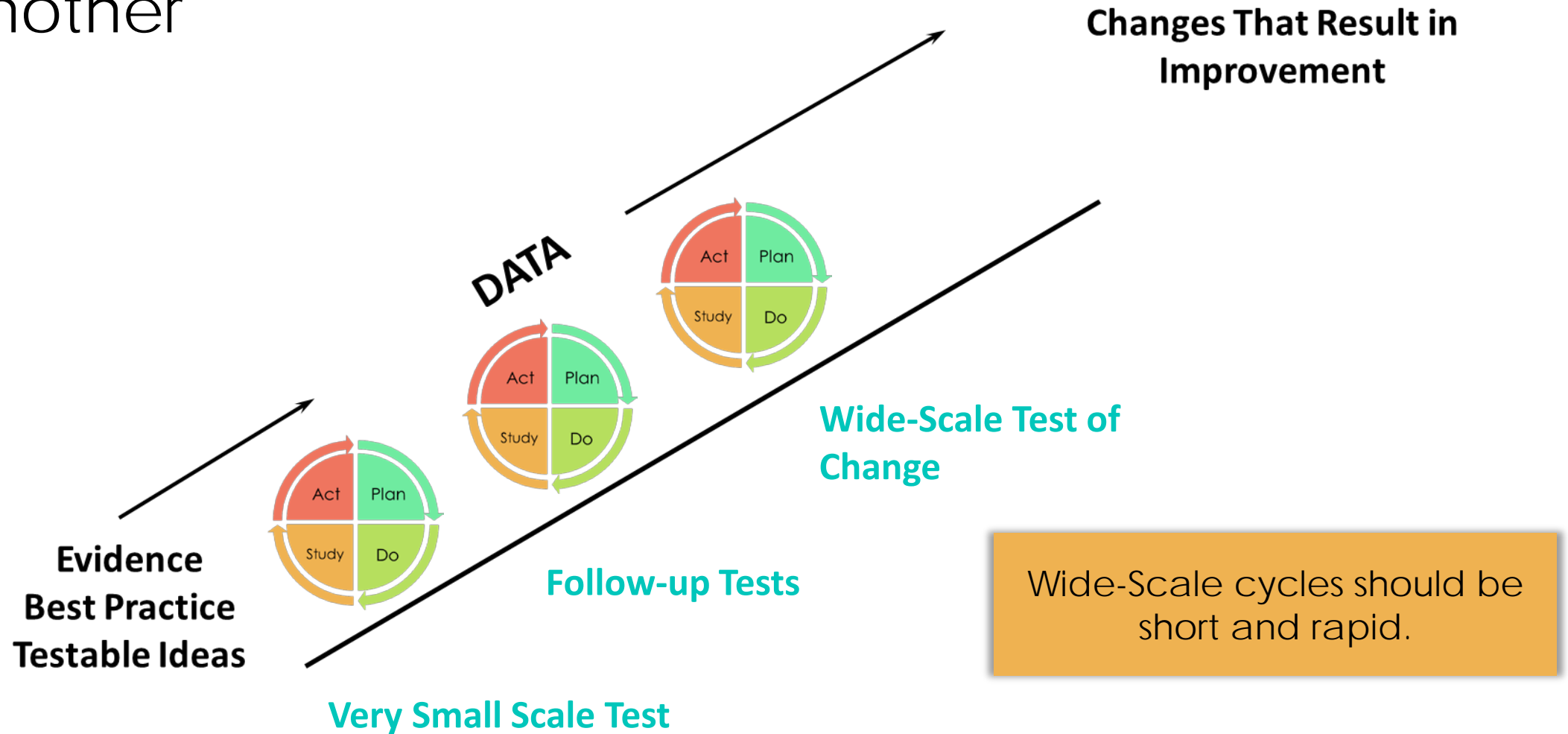


Plan-Do-Study-Act

Topic For
Improvement

Rapid Cycle

PDSA Ramps: Short, Rapid Cycles That Build on One Another



Plan-Do-Study-Act

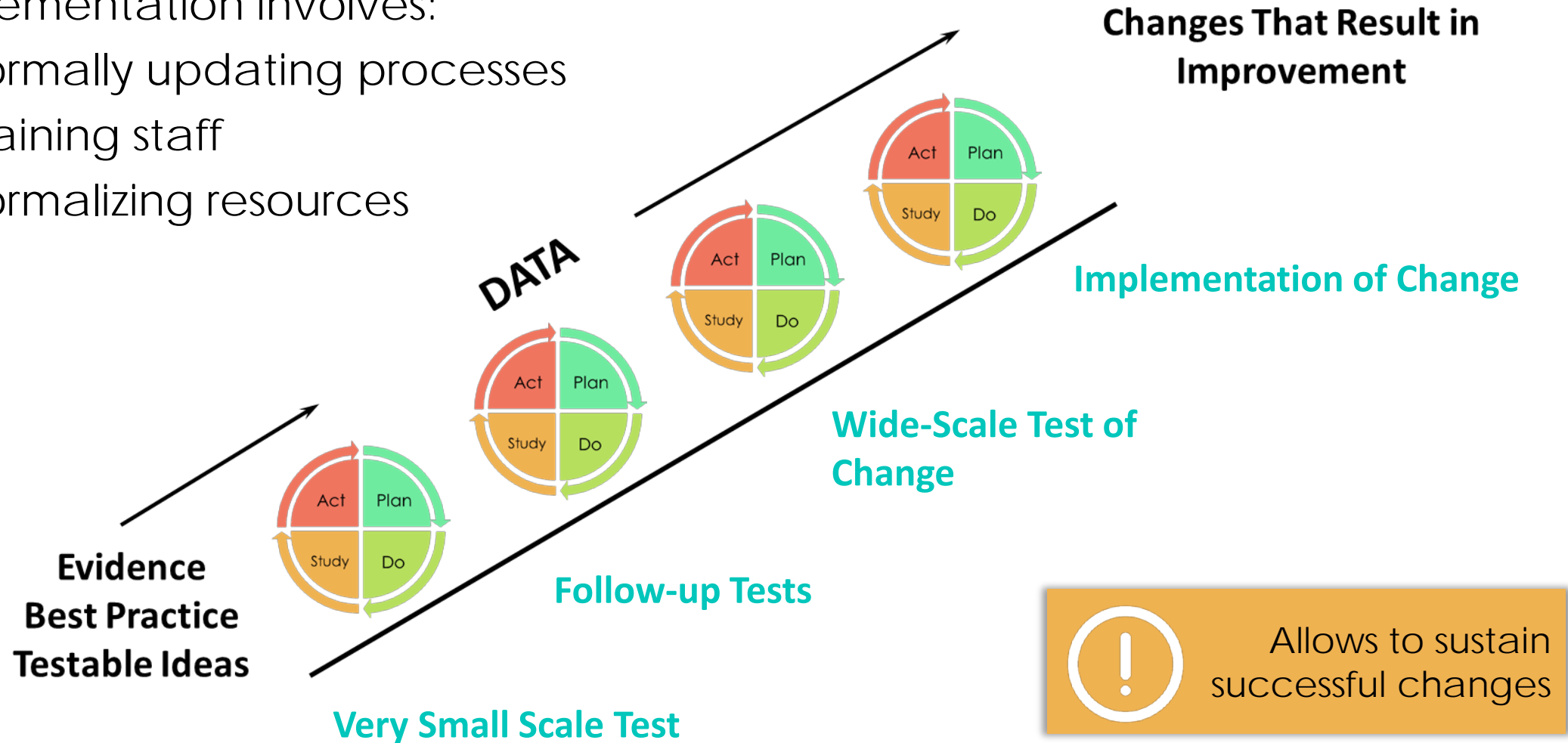
Topic For
Improvement

Rapid Cycle

PDSA Ramps: Short, Rapid Cycles That Build on One Another

Implementation involves:

- Formally updating processes
- Training staff
- Formalizing resources



Short, rapid PDCA cycles can (select all that apply):

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Q	Q	Q	Q
Support teams in keeping tests for improvement well-defined and short	Create space for teams to test under different conditions	Decrease excitement and energy for QI	Increase the chances improvements made to a process can be sustained



PDSA Ramp Example

Topic Area: Early Language and Literacy

Problem Statement: Families are not engaging in early language and literacy activities (reading, singing, and storytelling with their child on a daily basis.

PDSA Ramp Example, Continued

Aim Statement: By March 2020, the home visiting program will increase the percent of families who share that they engage in early language and literacy activities with their child on a daily basis from 20% to 40%.

Improvement Theory: If home visitors provide families with age-appropriate books to use between visits, then more families will share that they engage in early language and literacy activities with their child on a daily basis.

PDSA Ramp Example



Cycle 1: A home visitor provides 1 family with an age-appropriate book to use between visits.



PDSA Ramp Example



Cycle 1: A home visitor provides 1 family with an age-appropriate book to use between visits.



Cycle 2: Same home visitor provides 2nd family with an age-appropriate book to use between visits.



PDSA Ramp Example



Cycle 1: A home visitor provides 1 family with an age-appropriate book to use between visits.



Cycle 2: Same home visitor provides 2nd family with an age-appropriate book to use between visits.



Cycle 3: Second home visitor provides 1 family with an age-appropriate book to use between visits.



PDSA Ramp Example



Cycle 1: A home visitor provides 1 family with an age-appropriate book to use between visits.



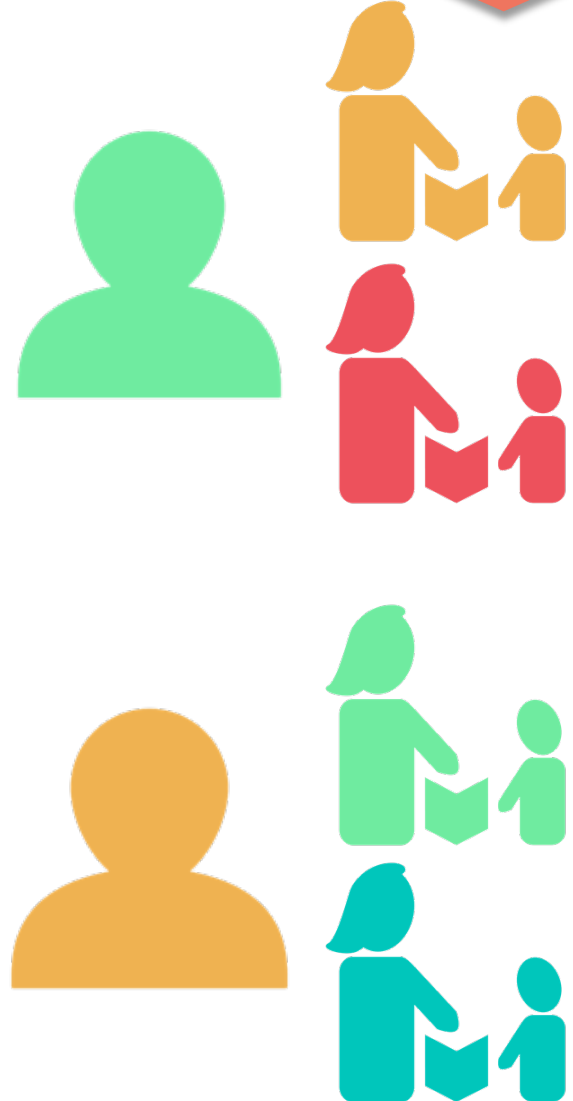
Cycle 2: Same home visitor provides 2nd family with an age-appropriate book to use between visits.



Cycle 3: Second home visitor provides 1 family with an age-appropriate book to use between visits.



Cycle 4: Both home visitors provides 2 additional families with an age-appropriate book to use between visits.



PDSA Ramp Example



Cycle 1: A home visitor provides 1 family with an age-appropriate book to use between visits.



Cycle 2: Same home visitor provides 2nd family with an age-appropriate book to use between visits.



Cycle 3: Second home visitor provides 1 family with an age-appropriate book to use between visits.



Cycle 4: Both home visitors provides 2 additional families with an age-appropriate book to use between visits.



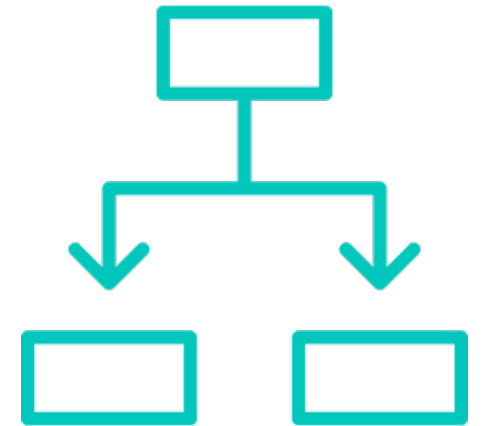
Cycle 5: All home visitors provide all families they are visiting during defined week with an age-appropriate book to use between visits.



PDSA Ramp Example



Update process to reflect the solution tested, asking all home visitors to follow process change moving forward, **and monitor data** to ensure gains are maintained.



When Using the Rapid Cycle Approach

- Test ONE SMALL, SIMPLE change per cycle
- Tests should build on one another
- Collect and compile simple data along the way to understand if the change tested was an improvement (use quantitative and qualitative)

Rapid Cycle Tips

- A strong team approach is ESSENTIAL
- Meeting regularly (weekly/bi-weekly) is ESSENTIAL
- Look to best practices – if another team has had success testing a small change in the same area you are focused on for improvement, try testing the change within your team

Next Learning Opportunity:
August 24th @10am



Thank You!

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