



Quality Improvement Fundamentals

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Pediatric Partnership Initiative

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Objectives of this Session

- Participants will be able to:
 - Identify Model for Improvement
 - Create an Aim statement for the project with concrete goals
 - Constitute Plan-Do-Study-Act (PDSA) cycles to test improvements, using the project tools and resources



The First Law of Improvement

“Every system is perfectly designed to achieve exactly the results it gets.”



Research vs. Quality Improvement

Measurement for Research

Measurement for Learning and Process Improvement

Purpose

To discover new knowledge

To bring new knowledge into daily practice

Tests

One large "blind" test

Many sequential, observable tests

Biases

Control for as many biases as possible

Stabilize the biases from test to test

Data

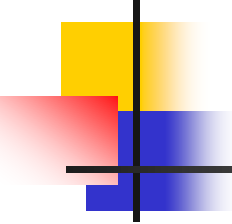
Gather as much data as possible, "just in case"

Gather "just enough" data to learn and complete another cycle

Duration

Can take long periods of time to obtain results

"Small tests of significant changes" accelerates the rate of improvement



It Takes an Effective Team to Do QI Work!

- Members representing different kinds of expertise in the practice
 - Clinical Leader
 - Technical Expertise
 - Day-to-Day Leadership
 - Administrative Staff
 - Parent Partner(s)
 - Project Sponsor



Fundamental Questions 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 an improvement?

Model for Improvement

What are we trying to accomplish?

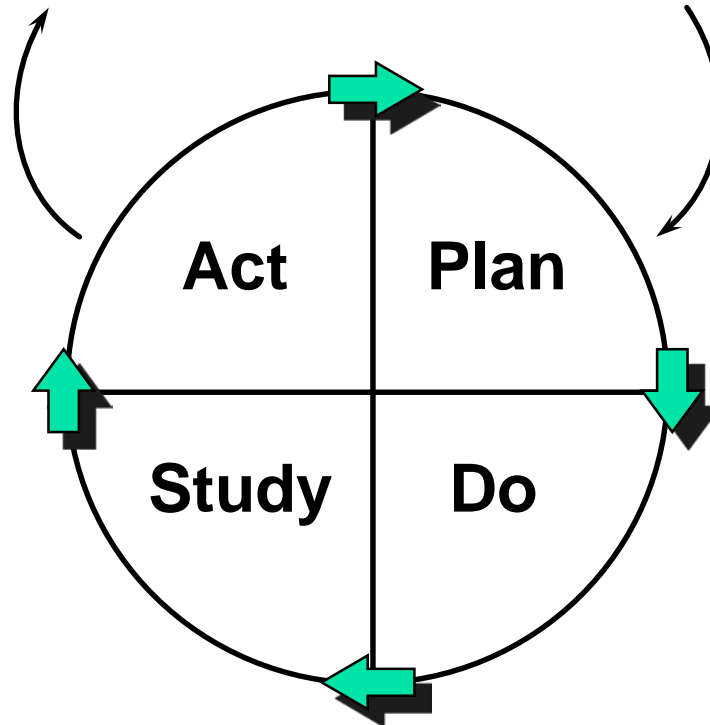
AIM

How will we know that a change is an improvement?

MEASURE

What change can we make that will result in improvement?

IDEAS





What Are We Trying to Accomplish?

Aim: A written statement of the accomplishments expected from this improvement effort

Key components:

- A general description of aim – should answer, “what are we trying to accomplish?”
- Some guidance for carrying out the work and rationale
- Specific target population and time period
- Measurable goals



Example (Poor)

- Our practice team will improve preventive care for all children by doing developmental screening.



Developmental Screening AIM Statement

By December 31, 2014, the XYZ Pediatrics team will aim to improve developmental screening processes in our practice for all children so that:

- 95% of infants receive a standardized evidence-based developmental screening at their 9-month well-visit
- 95% of young children receive a standardized evidence-based developmental screening at their 18-month well-visit
- 95% of young children receive a standardized evidence-based Autism Spectrum Disorder (ASD) screening at their 18-month well-visit
- 95% of young children receive a standardized evidence-based Autism Spectrum Disorder (ASD) screening at their 24-month well-visit.
- 100% of infants and young children with a positive screen are referred for appropriate follow-up



SMAART Aim

- Specific: Understandable, unambiguous
- Measurable: Numeric goals
- Actionable: Who, what, where, when
- Achievable (but a stretch)
- Relevant to stakeholders and organization
- Timely: with a specific timeframe



AIM Worksheet

The (name of your team) **intend to accomplish**

By (date)

For (population)

because

Our goals include:

Special guidance that will help us stay on track:

Model for Improvement

What are we trying to accomplish?

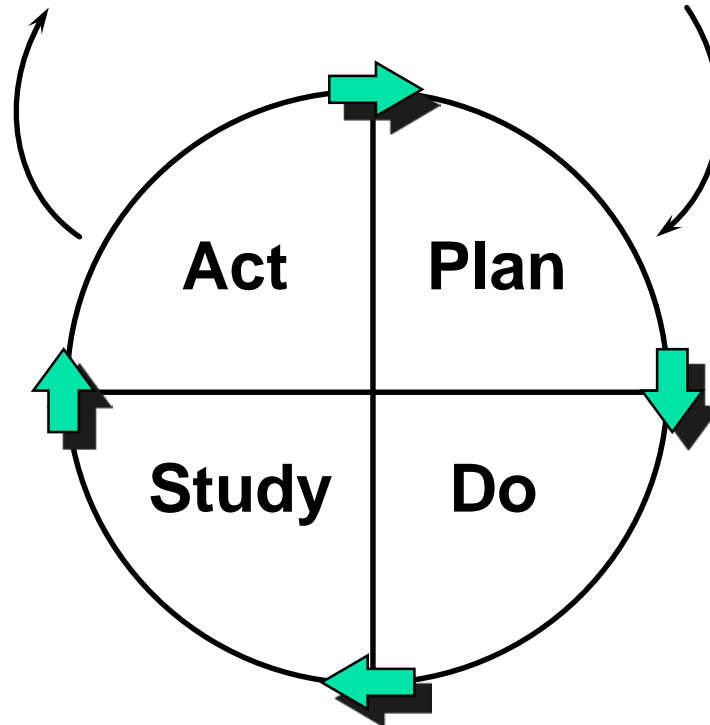
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How will we know a change is an improvement?

- Requires **measurement**
- Build measurement into daily work routine
 - Data should be easy to obtain and timely
 - Small samples over time
- Use qualitative & quantitative data
 - Quantitative data is highly informative
 - Qualitative data is easy to obtain



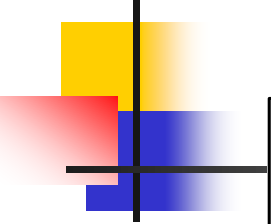
Measurement Guidelines

- Balanced set of 5 to 7 measures reported each month to assure that the system is improved
- Measures should reflect the aim and make it specific
- Measures are used to guide improvement and test changes
- Integrate measurement into daily routine
- Plot data measures over time and annotate graph with changes
- Outcome and process measures

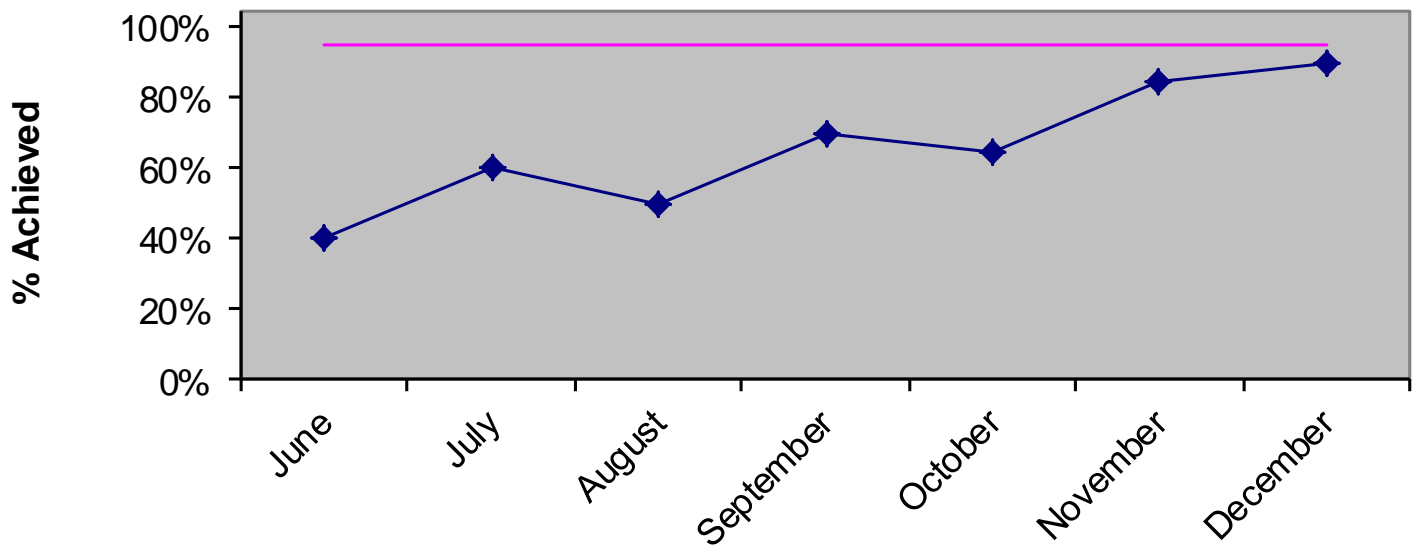


Example Measure for the Pediatric Partnership Initiative

- Target population
 - Infants/children seen by clinicians for preventive care in participating practice
- Numerator
 - # children seen for a 9-month well-child visit who were screened using a standardized developmental screening tool.
- Denominator
 - All children seen for a 9-month well child visit in participating practice whose charts are reviewed during the month of interest.



% Infants Receiving Developmental Screening at 9 Month Visit



◆ % Achieved — Goal

Model for Improvement

What are we trying to accomplish?

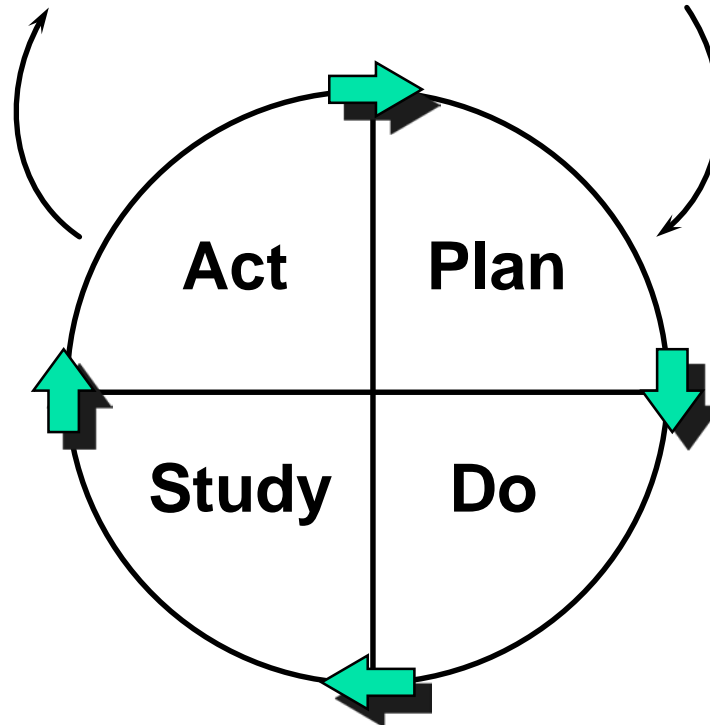
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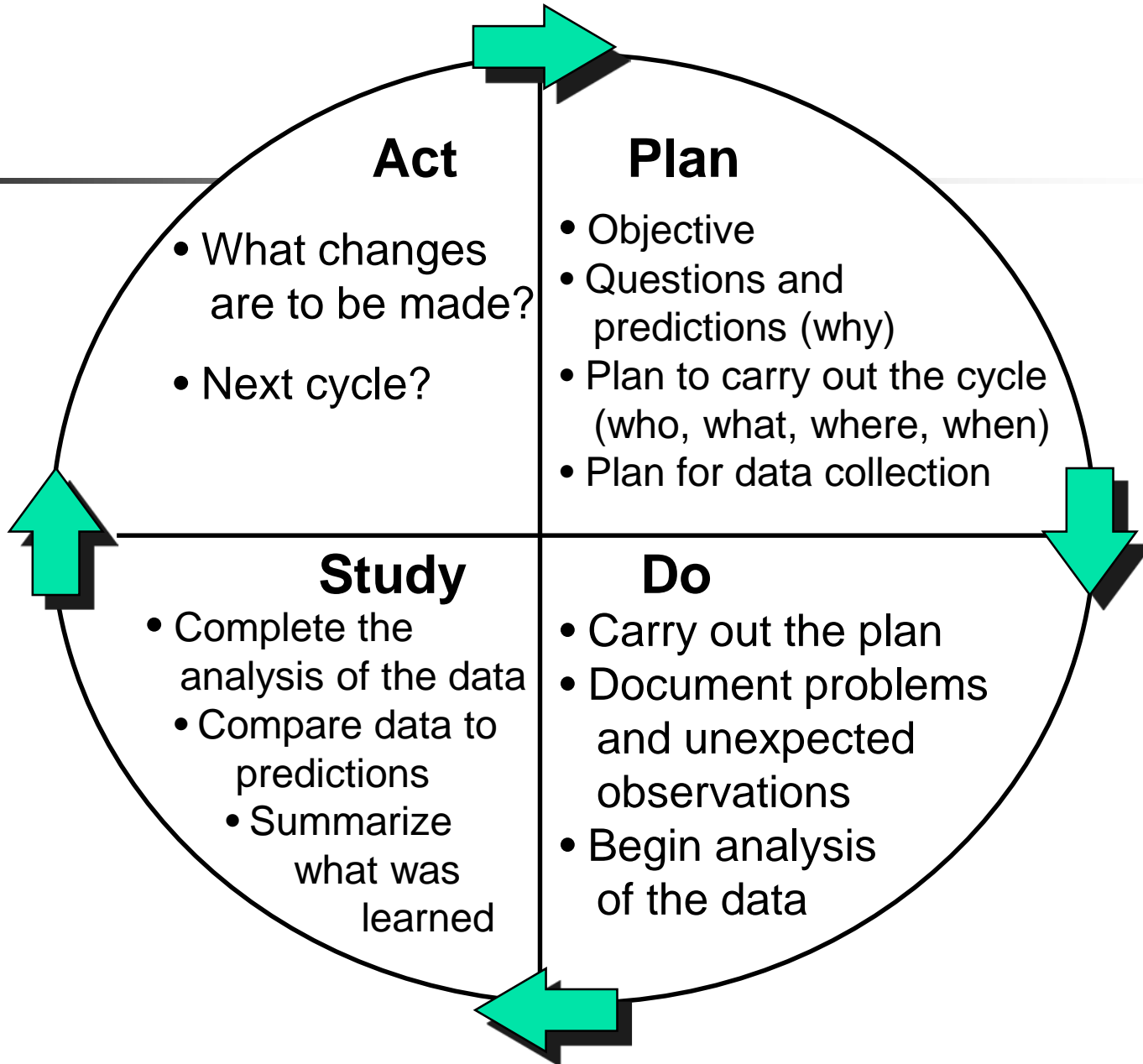
What Changes Can We Make That Will Result in Improvement?



Tests of Change need 2 components:

1. **Change concepts (ideas): ready for use or ready to adapt to your unique environment (**Use results from pre-work assessment to inform what you need to change)**
2. **PDSA test method**

The PDSA Cycle for Learning and Improvement



PDSA: Break it Down/Simplify...



Plan - Figure out the questions you want to answer, plan a way to answer the questions and predict results

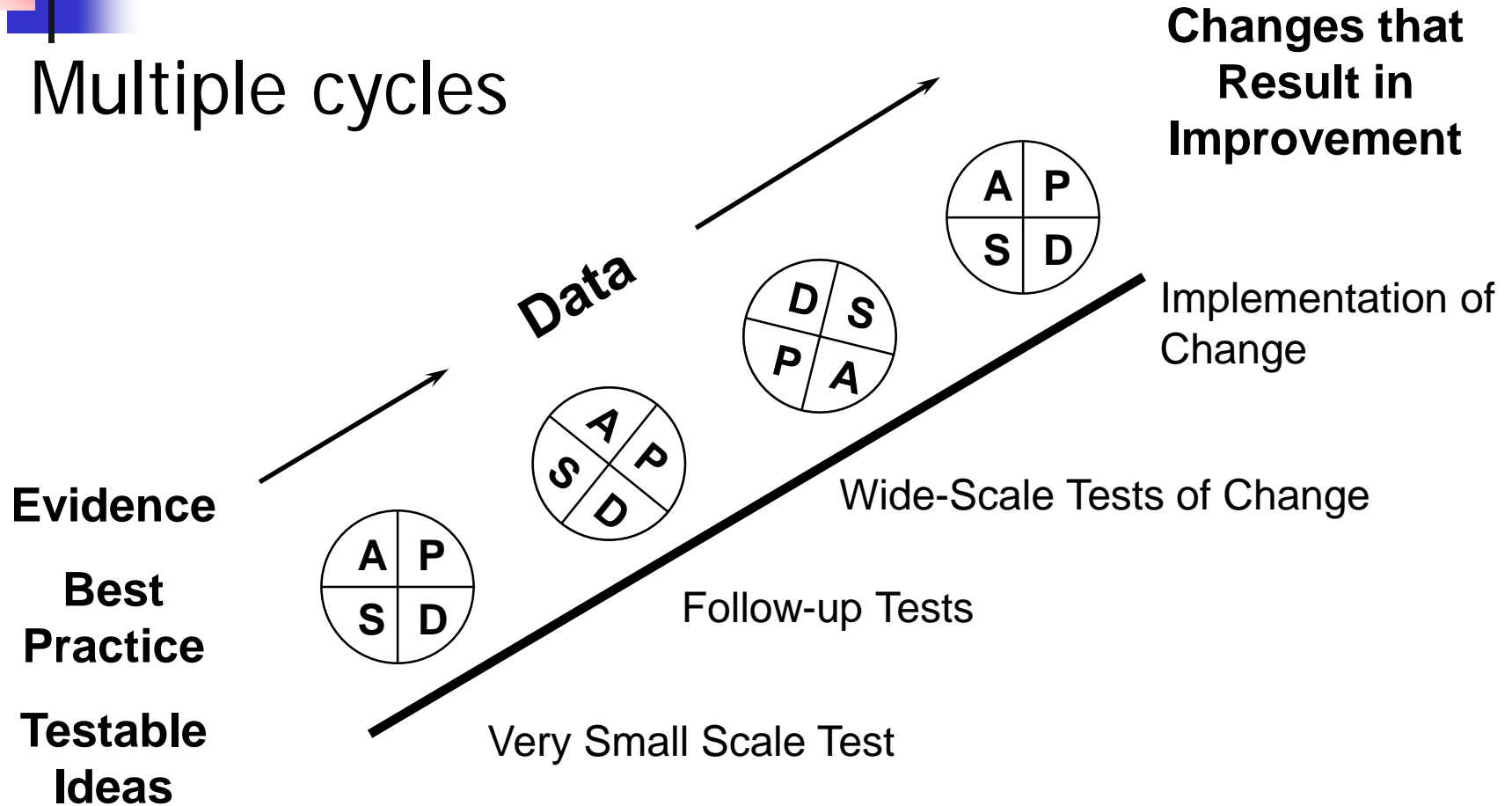
Do - "Just do it" (i.e. do the plan)

Study - What did you learn?
Did your prediction hold?
What assumptions need revision?

Act - What will you do with the knowledge you learned?
Adapt? Adopt? Abandon?

What do you want to do next?

Use of the PDSA Cycles





What are Tests?

Putting a change into effect on a temporary basis and on a small scale and learning about the potential impact



Task or Test?

■ Task

- To do's
- Meetings
- Posters
- Policy
- Committees

■ Test

- Question
- Prediction
- Data
- Usually involves patient

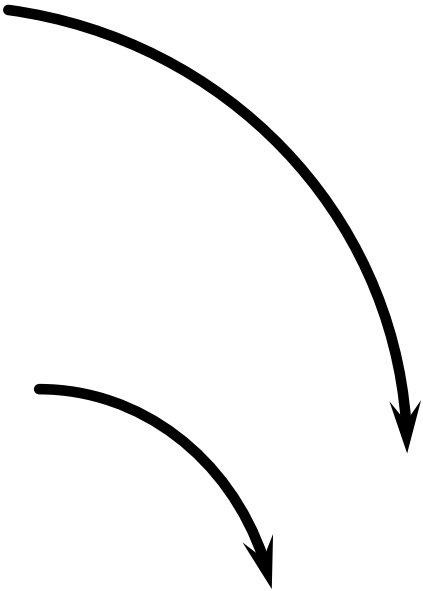


Why Test?

- **Increase** your belief that the change will result in improvement
- **Opportunity** for learning from “failures” without impacting performance
- **Document** how much improvement can be expected from the change
- **Learn** how to adapt the change to conditions in the local environment
- **Evaluate** costs and side-effects of the change
- **Minimize** resistance upon implementation

Decrease the Time Frame for a PDSA Test Cycle

- Years
- Quarters
- Months
- Weeks
- Days
- Hours
- Minutes



*Drop down next
“two levels” to
plan Test Cycle!*



What Can We Do Now!

By Next Week,

By Tuesday,

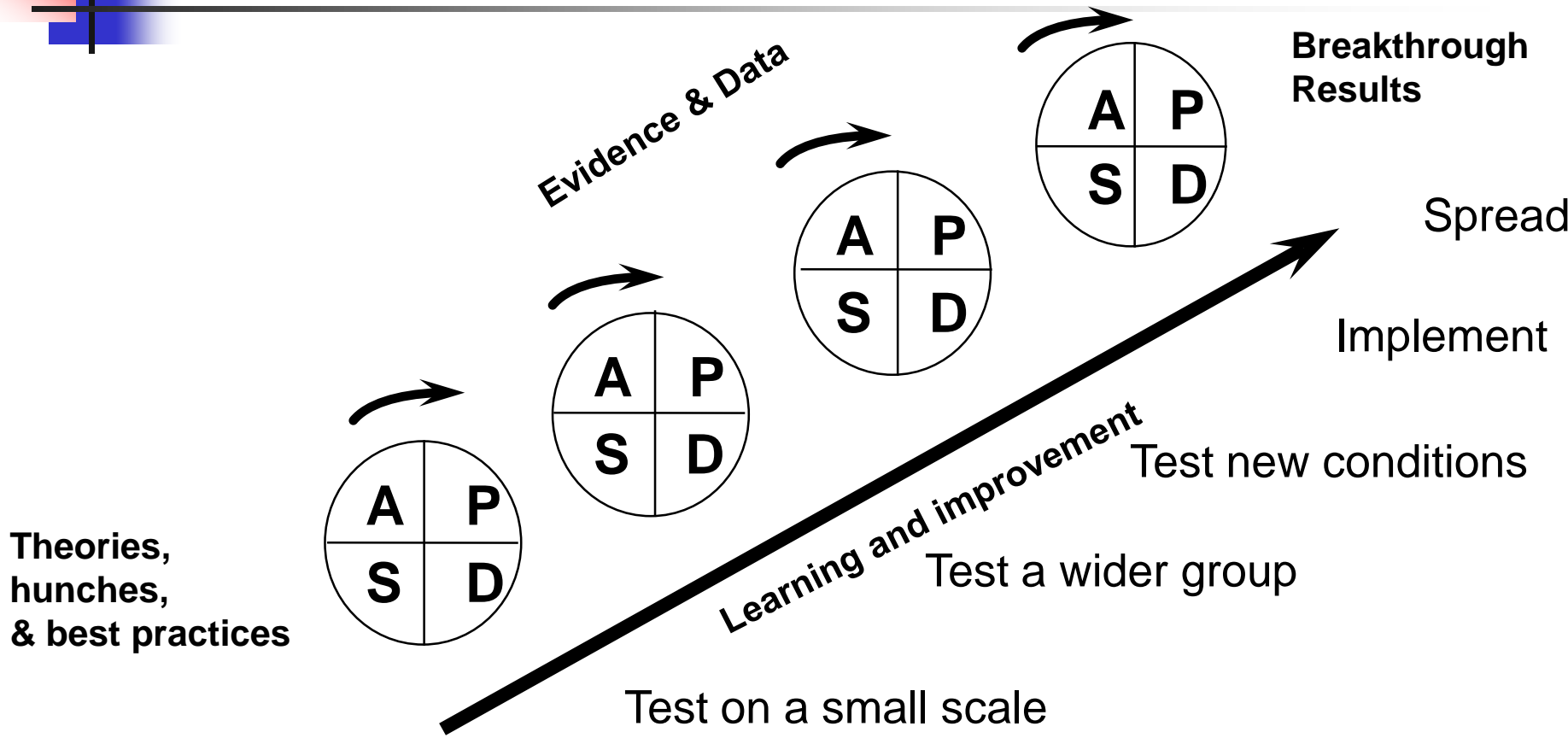
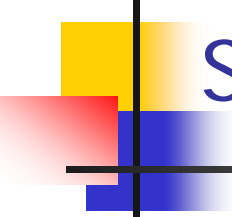
By Tomorrow



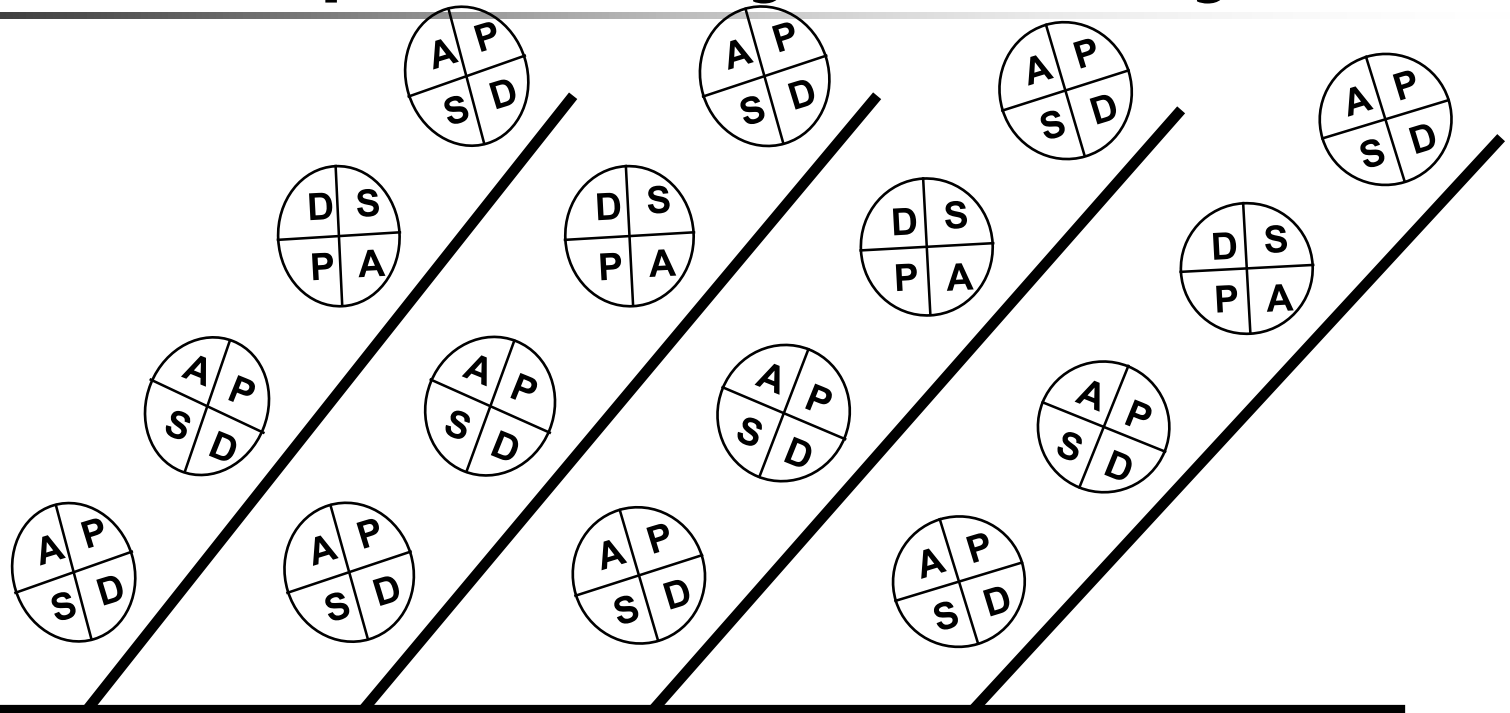
That won't harm a hair on the head of a patient?

Sequential Building of Knowledge

Include a Wide Range of Conditions in the Sequence of Tests



Overall Aim: Improving Preventive Care for all patients, with a focus on those impacted by SS Sandy



**Protective
Factors
Questionnaire**

**Mental
Health
Screening**

**Care
Coordination**

**Practice-based
Systems**



Examples of Practice-based Systems

- When scheduling office visits, our practice asks about special needs and accommodations of the patient and plans accordingly
- We start our day with a team “huddle”
- Our practice has a process to identify and contact patients who are behind schedule for preventive services (reminder-recall system)
- Our practice has a system to track and follow-up on all referrals
- Our practice has established a system to identify, follow, and provide care management for children with special health care needs (e.g., practice registry)

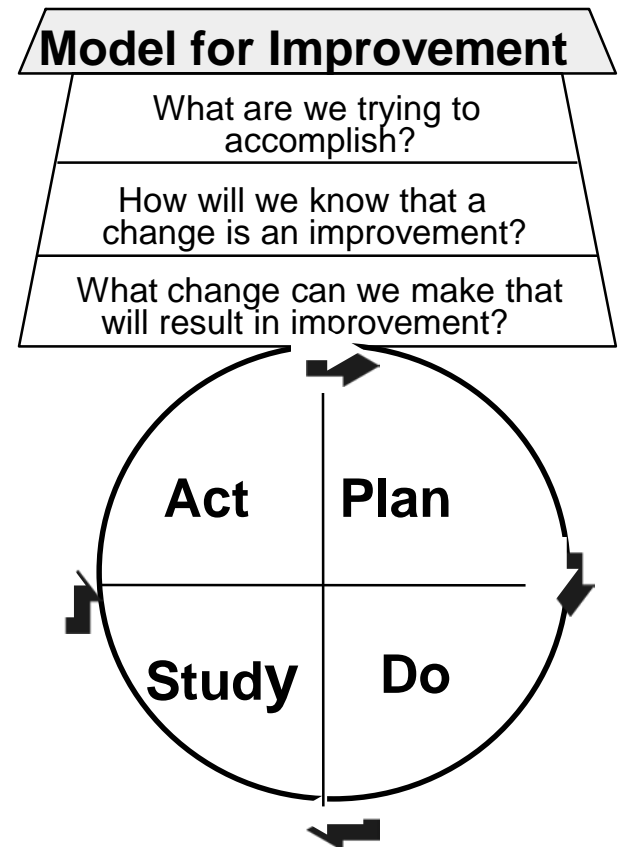


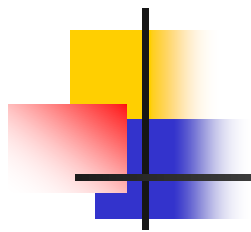
Examples of Practice-based Systems (con't.)

- ❑ Our practice participates in the Reach Out And Read (ROAR) Program
- ❑ Our practice has completed a staff training on psychological first aid and empathy skills (including a pre- and post-test and evaluation).
- ❑ Our practice includes one or more family members on our improvement team
- ❑ Our practice has completed a systematic assessment of our organization's cultural and linguistic, attitudes, practices, structures and policies, using the Cultural Competence Health Practitioner Assessment
- ❑ Our practice has invited at least one community organization to a quarterly practice team "lunch and learn" during which information was shared and introductions/personal connections with staff were made

Fundamental Questions for Improvement

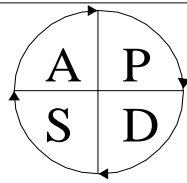
- What are we trying to accomplish?
 - *Team Aim Statement*
- How will we know that a change is an improvement?
 - *Measures*
- What changes can we make that will result in an improvement?
 - *Change Package (Tools, Resources and Best Practice Strategies)*





Form for
planning a
PDSA cycle
supports
prediction
and keeping
one step ahead

MODEL FOR IMPROVEMENT CYCLE:___ DATE:___



Objective for this PDSA Cycle

PLAN:

QUESTIONS:

PREDICTIONS:

PLAN FOR CHANGE OR TEST: WHO, WHAT, WHEN, WHERE

PLAN FOR COLLECTION OF DATA: WHO, WHAT, WHEN, WHERE

DO: CARRY OUT THE CHANGE OR TEST; COLLECT DATA AND BEGIN ANALYSIS.

STUDY: COMPLETE ANALYSIS OF DATA; SUMMARIZE WHAT WAS LEARNED.

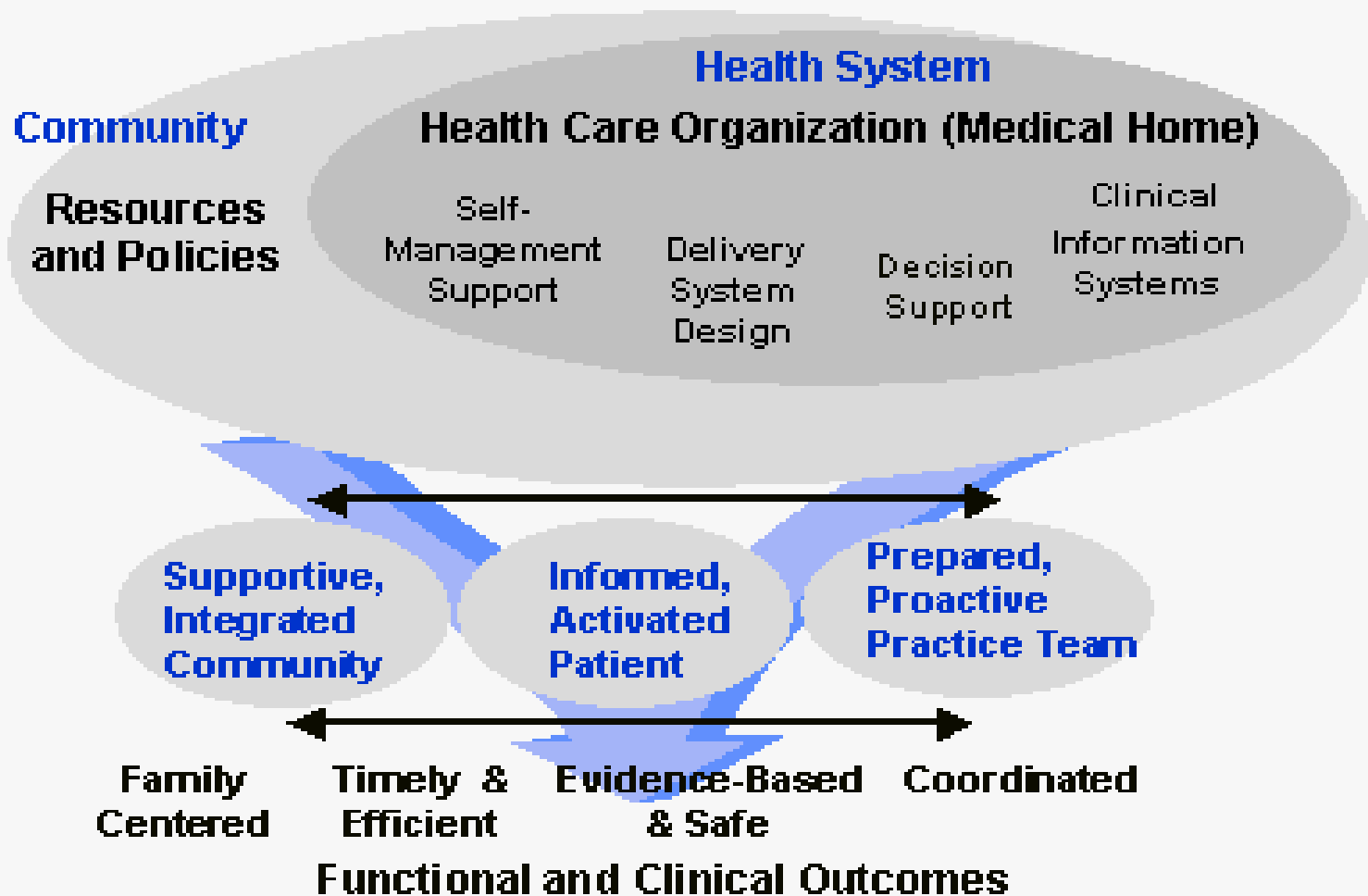
ACT: ARE WE READY TO MAKE A CHANGE? PLAN FOR THE NEXT CYCLE.

How teams get results



- Engage leaders
- Form team
- Assign responsibility for key tasks
- Meet
- Small tests of change
- Use of your technology, including decision-support in your EMR and registries to manage populations of patients.
- Use of best practices, tools and resources

The Care Model for Child Health in a Medical Home



From Charles Darwin:

“It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change.”



Questions/Comments?





Thank you!

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