



# ***The Model for Improvement***

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*This presenter has nothing to disclose.*

# Session Objectives

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Participants will be able to:

- Finalize the team's aim.
- Plan and execute tests of change.
- Collect data for improvement.

# Key Elements of Breakthrough Improvement

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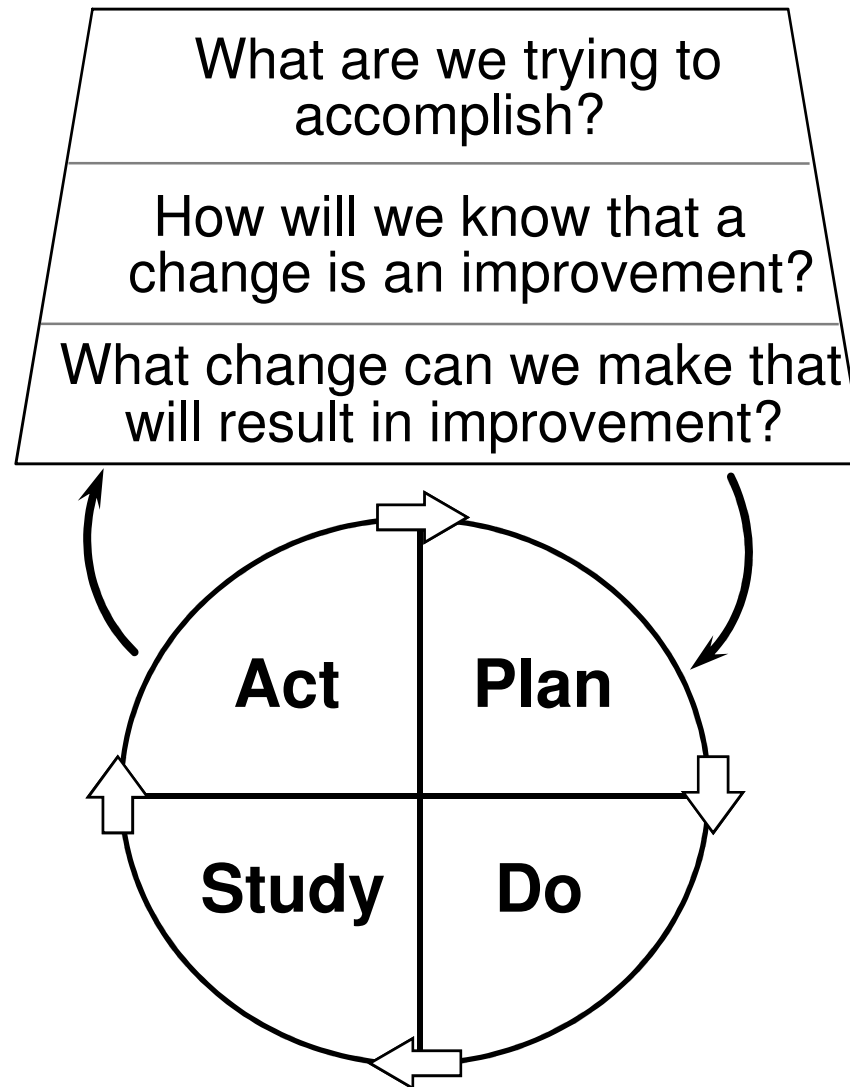
- ***Will*** to do what it takes to change to a new system
- ***Ideas*** on which to base the design of the new system
- ***Execution*** of the ideas

# Three Fundamental Questions for Improvement

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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?

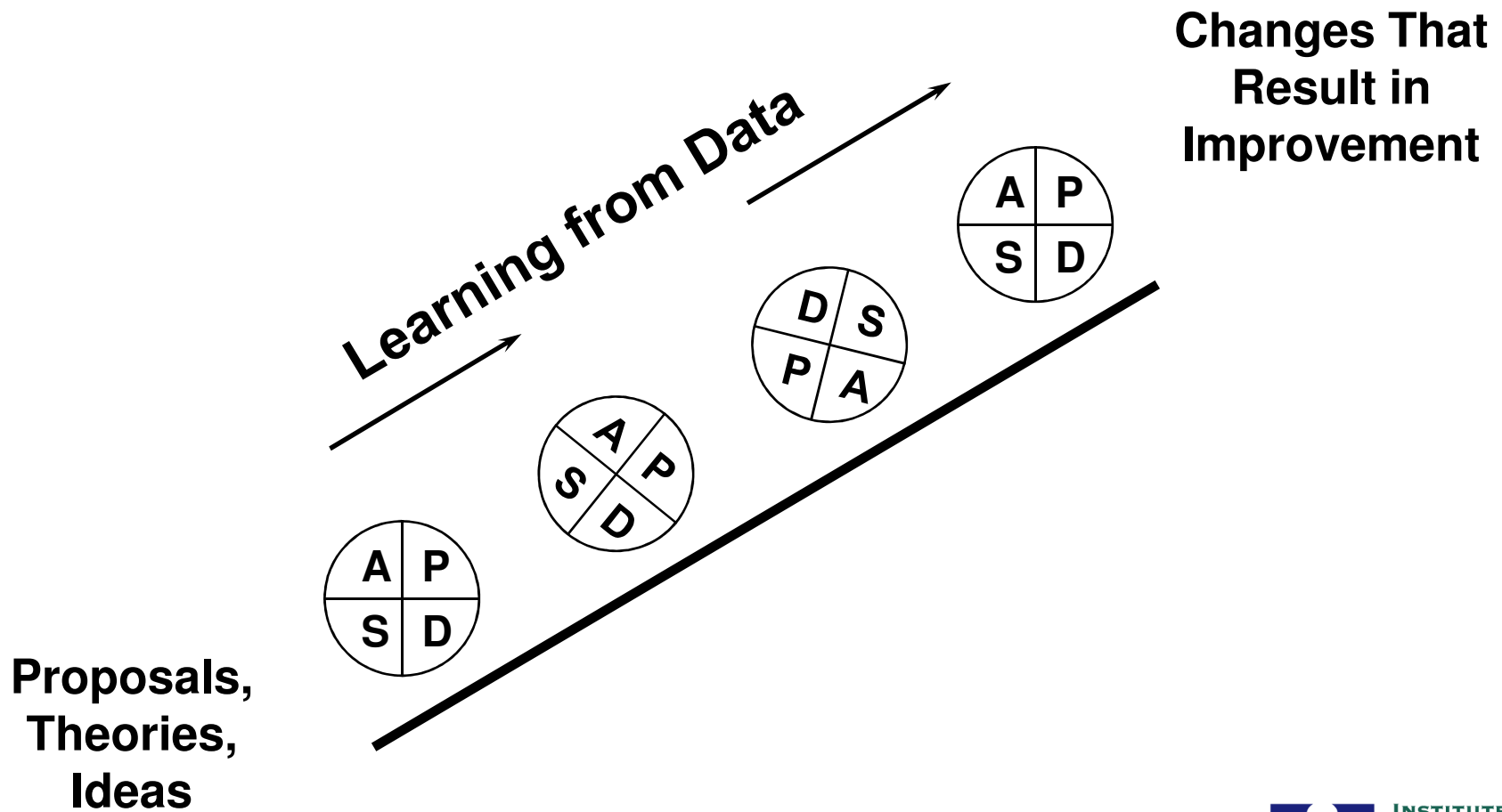
# Model for Improvement



From: Associates in  
Process Improvement

# Repeated Use of the PDSA Cycle

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# *What Are We Trying to Accomplish?*

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## **Establishing the Team's Aim**

- Write a clear statement of aim with numerical goals
  - Make the target for improvement unambiguous
- Guidance
  - Include anything to keep the team focused (location, strategies, patient populations, office systems, spread plans, etc.)

# Preparing an Aim Statement

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- Involve senior leaders
  - Obtain sponsorship (geared to the project's complexity)
  - Provide frequent and brief updates (practice the 2 minute elevator speech)
- Focus on issues that matter to your hospital
  - Connect team Aim Statement to Strategic Plan
  - Build on the work of others (steal shamelessly!)
- Use patient-centered language
  - If you showed your aim statement to a patient, would they see their needs being met, or just the hospitals?



# Example Aim Statement

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*By December 2011, St. Elsewhere hospital will improve transitions home for patients on 4W and 5S as measured by a decrease in 30-day all-cause readmission rate from 17% to 13% or less.*

*The pilot units will focus on improving planning for discharge, patient-centered handovers to community providers, post-acute follow-up and improving patients' understanding of self-care.*

# Developing an Aim Statement

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Team name: \_\_\_\_\_

Aim statement

(What's the problem? Why is it important? What are we going to do about it?)

How good? \_\_\_\_\_

By when? \_\_\_\_\_

Post your aim statement on your team's Extranet page



# *How Do We Know That a Change is an Improvement?*

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**This collaborative is about changing your organization's approach to improving the health of patients**

**It is not about measurement.**

**However .....**

# Measurement Guidelines

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- Need a balanced set of measures reported each month to assure that the system is improved.
- These measures should reflect your aim statement & make it specific.
- Measures are used to guide improvement and test changes.
- Integrate measurement into daily routine.
- Plot data for the measures over time and annotate graph with changes.

# Some Measurement Assumptions

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- The purpose of measurement in the collaborative is for learning not judgment
- All measures have limitations, but the limitations do not negate their value
- Measures are one voice of the system. Hearing the voice of the system gives us information on how to act within the system
- Measures tell a story; goals give a reference point

# Types of Measures

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- Outcome Measures
  - Results - system level performance
- Process Measures
  - Inform changes to the system
- Balancing Measures
  - Signal “robbing Peter to pay Paul”

# Outcome Measures: Readmissions

## Hospital-level AND Pilot-level

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<u>Measure</u>	<u>Description</u>
<b>30-Day All-Cause Readmissions</b> <b>Hospital-overall</b> <b>Pilot-unit(s)</b>	Percent of discharges with readmission for any cause within 30 days
<b>Readmissions Count</b> <b>Hospital-overall</b> <b>Pilot Unit</b>	Number of readmissions (numerator for 30-day all cause readmissions measure) for hospital and pilot unit(s)
<u><b>Optional Measure</b></u> <b>30-Day All-Cause Readmissions for a specific clinical condition or subpopulation (e.g., CHF, COPD, frail elders)</b>	Percent of discharges in the desired subpopulation who were readmitted for any cause within 30 days of discharge

# Outcome Measures: Patient Experience

<b>Measure</b>	<b>Description</b>
HCAHPS (Hospital-wide data) Communication Questions #3 and #7 Discharge Questions #19 and #20	“During this hospital stay, how often did nurses explain things in a way you could understand?” (Q3) “How often did doctors explain things in a way you could understand?” (Q7) “Did hospital staff talk with you about whether you would have the help you needed when you left the hospital?” (Q19) “Did you get information in writing about what symptoms or health problems to look out for after you left the hospital?” (Q20)



# Patient Experience: Care Transitions Measures PILOT UNIT

Description	Numerator	Denominator	Data Collection Strategy
<ul style="list-style-type: none"> <li>• The hospital staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left the hospital.</li> <li>• When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.</li> <li>• When I left the hospital, I clearly understood the purpose for taking each of my medications.</li> </ul>	<p>Calculate the sum of responses across the 3 items.</p> <p>Responses are scored Strongly Disagree =1; Disagree =2; Agree =3; Strongly Agree =4</p>	<p>Number of questions answered across all patients asked.</p>	<p>Collect data on routine follow up phone calls.</p> <p>Sample 21 patients. If you have less than 21 discharges per month, report 100%</p> <p>Response options: Strongly Disagree, Disagree, Agree, Strongly Agree, or Don't Know/Don't Remember/Not Applicable</p> <p>Do not count in your denominator questions where the patient responded don't know/remember or not applicable</p> <p>If disagree, ask (and document) what their concerns were.</p>

# Process and Balancing Measures

Enhanced Admission Assessment for Post-Hospital Needs	<ul style="list-style-type: none"> <li>• Percent of admissions where patients and family caregivers are included in assessing post discharge needs</li> <li>• Percent of admissions where community providers (e.g., home care providers, primary care providers and nurses and staff in skilled nursing facilities) are included in assessing post discharge needs</li> </ul>
Effective Teaching and Enhanced Learning	<ul style="list-style-type: none"> <li>• Percent of observations of nurses teaching patient or other identified learner where Teach Back is used to assess understanding</li> <li>• Percent of observations of doctors teaching patient or other identified learner where Teach Back is used to assess understanding</li> </ul>
Real-time Patient- and Family- Centered Handoff Communication	<ul style="list-style-type: none"> <li>• Percent of patients discharged who receive a customized care plan written in patient-friendly language at the time of discharge</li> <li>• Percent of time critical information is transmitted at the time of discharge to the next site of care (e.g., home health, long term care facility, rehab care, physician office)</li> </ul>
Post-Hospital Care Follow Up	<ul style="list-style-type: none"> <li>• Percent of patients discharged who had a follow-up visit scheduled before being discharged in accordance with their risk assessment</li> </ul>
Observation admits	<ul style="list-style-type: none"> <li>• Number of admissions to observation status in the month</li> </ul>

# Qualitative Patient Experience Data

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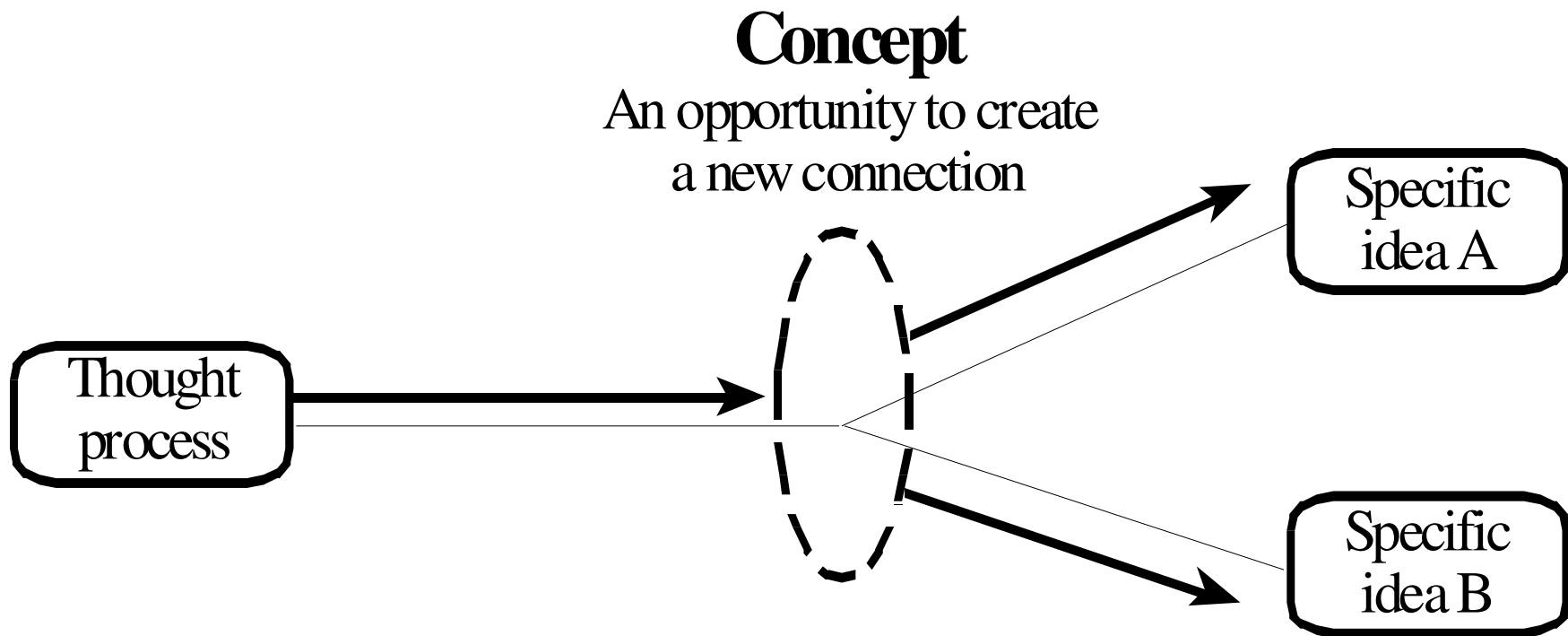
- Conduct the diagnostic tool with 4 patients readmitted each month (1 per week). Present findings to the cross continuum team to identify areas for redesign, better communication and improvement.
- Conduct a quarterly in-depth analysis of 1 patient who has experienced frequent readmissions within the year. Include a review of the diagnostic tool and a list of the patient's cross continuum care history with a timeline. For example, a diary or log of discharges, subsequent visits to the doctor, etc. Review at the cross continuum meeting.

# *What Changes Can We Make That Will Result in Improvement?*

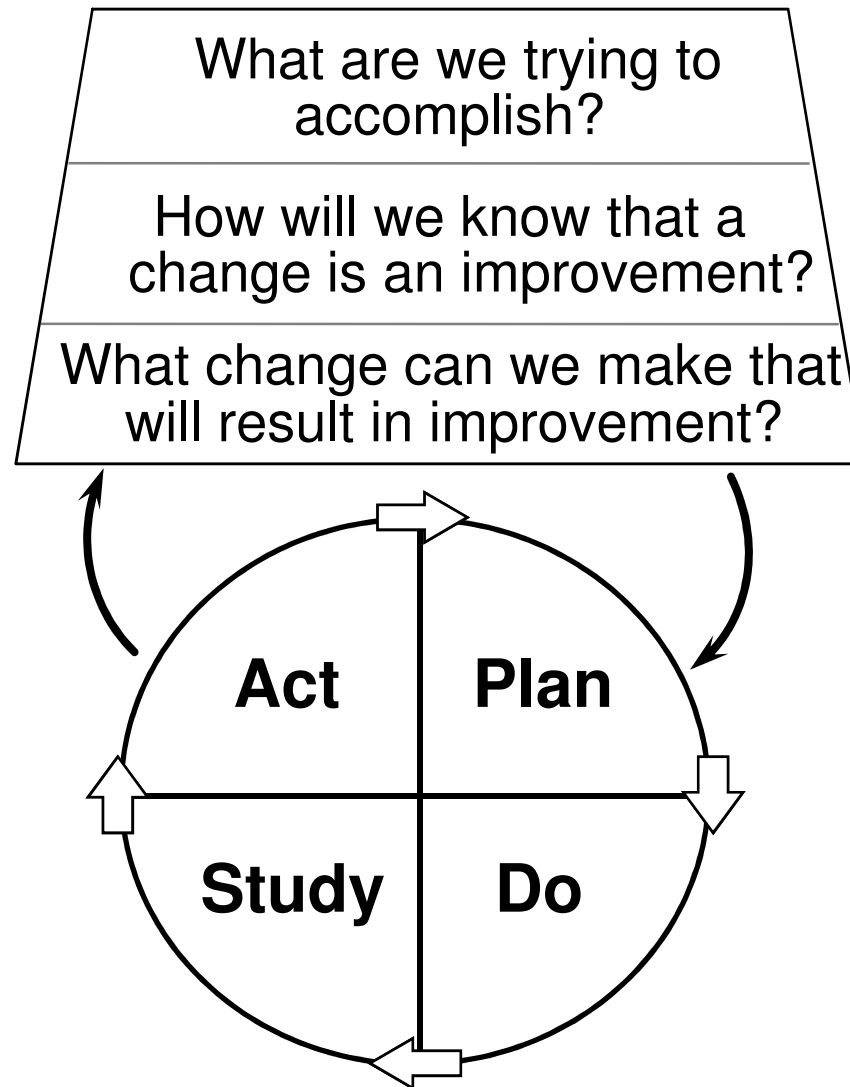
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- The collaborative “change package” contains the key elements of high performing system
- Use the change package to identify the changes you want to make to your system to achieve your aim

**Change Concept:** *A general notion or approach to change that has been found to be useful in developing specific ideas for changes that lead to improvement.*



# Model for Improvement



From: Associates in  
Process Improvement



INSTITUTE FOR  
HEALTHCARE  
IMPROVEMENT

*The PDSA Cycle Testing  
and Implementing  
Changes*

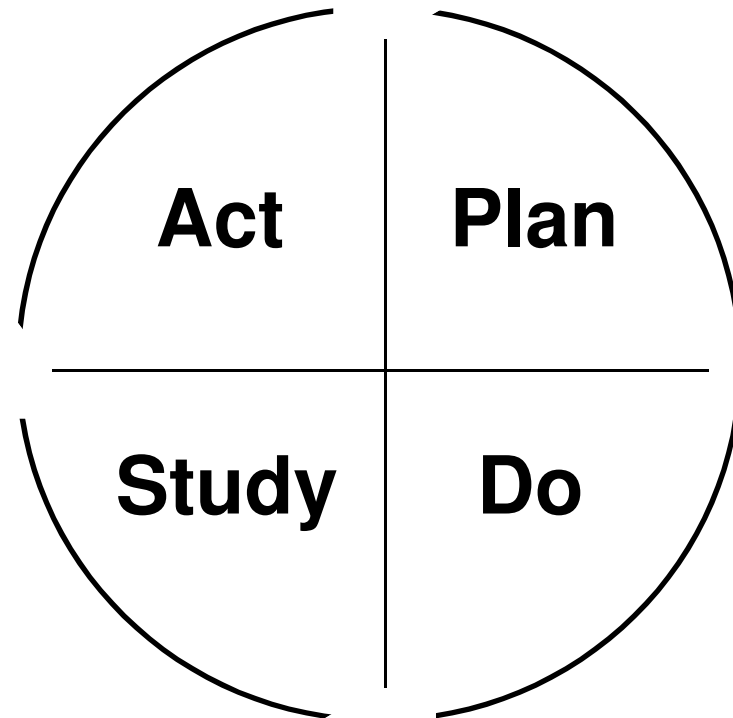
# The PDSA Cycle

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Four Steps: **P**lan, **D**o, **S**tudy, **A**ct

Also known as:

- Shewhart Cycle
- Deming Cycle
- Learning and Improvement Cycle





# Use the PDSA Cycle for :

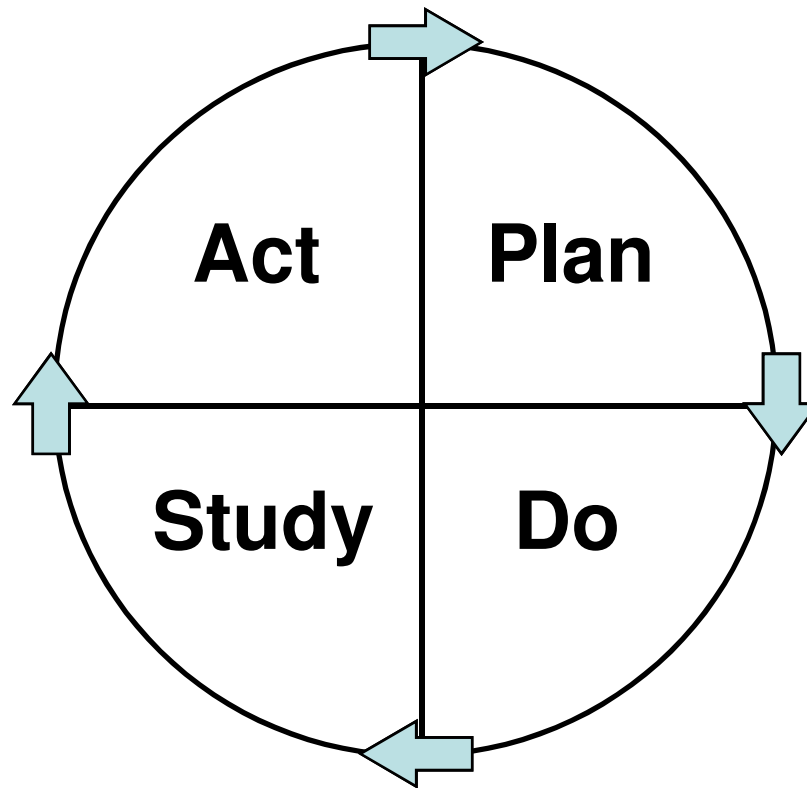
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- Testing or adapting a change idea
- Implementing a change
- Spreading the changes to the rest of your system

# The PDSA Cycle

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Why  
Test?

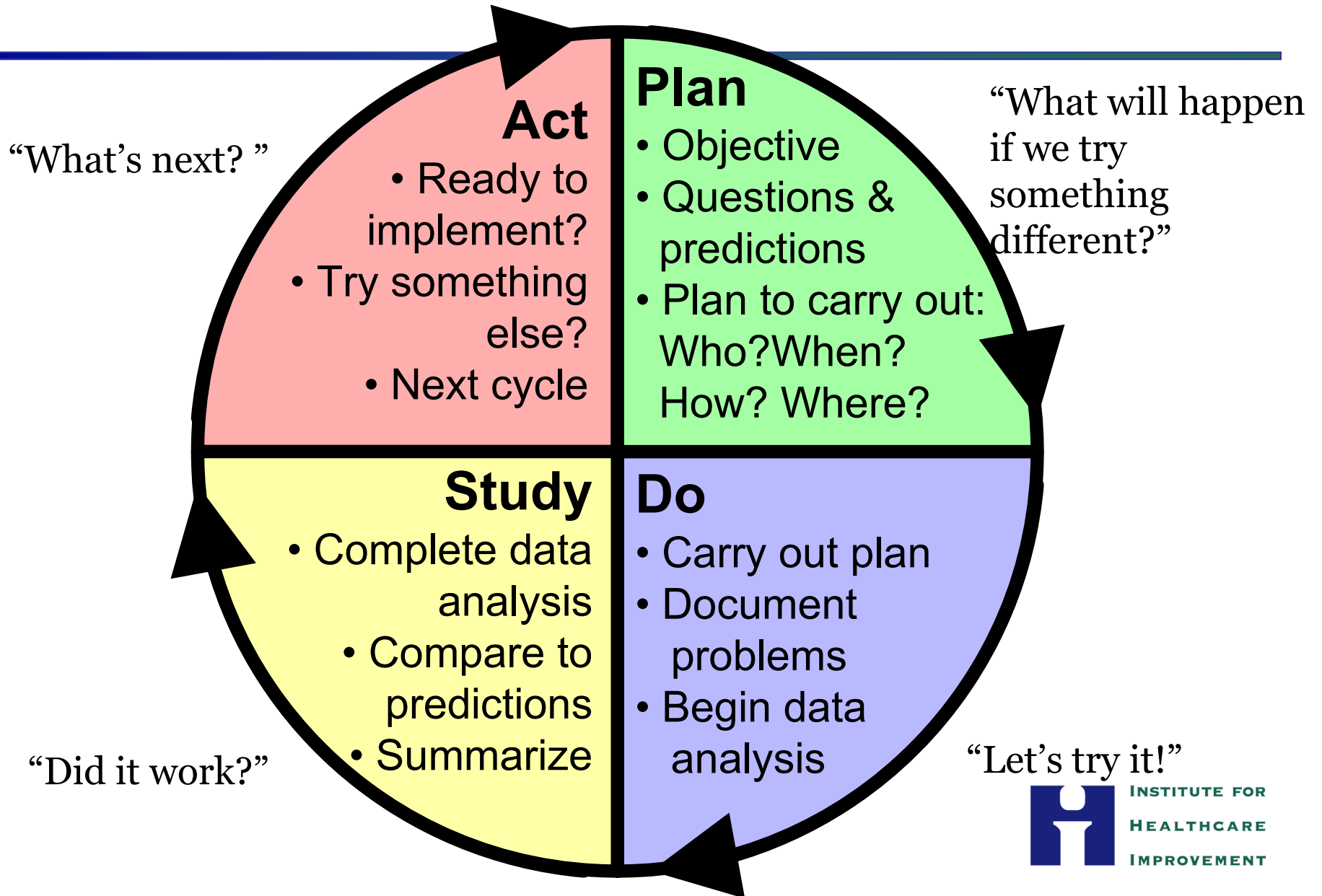


# Why Test?

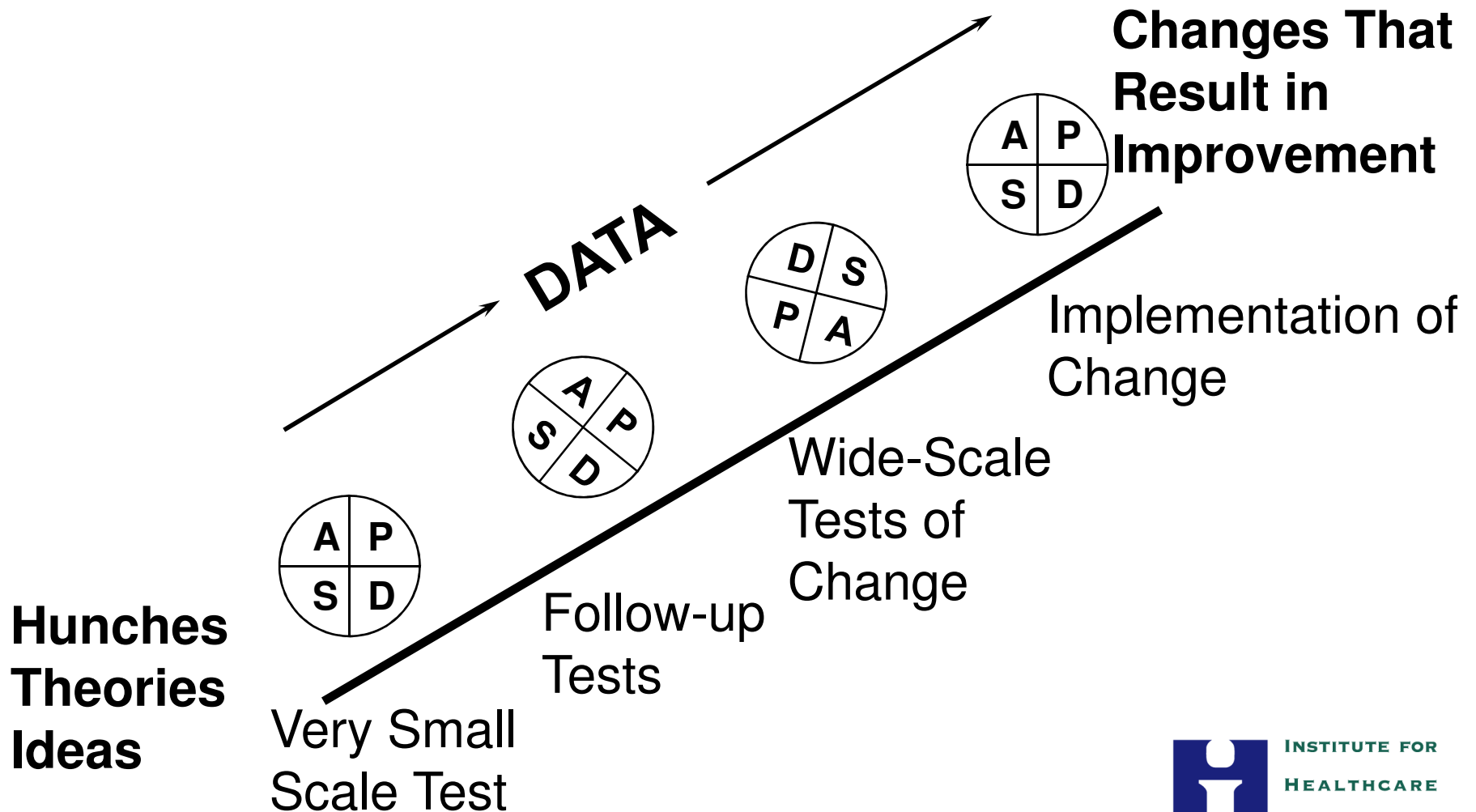
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- Increase the belief that the change will result in improvement
- Predict how much improvement can be expected from the change
- Learn how to adapt the change to conditions in the local environment
- Evaluate costs and side-effects of the change
-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

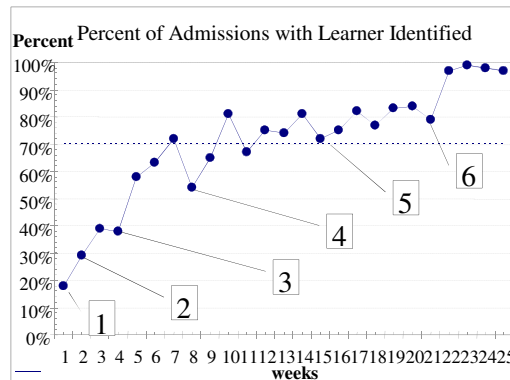
# The PDSA Cycle



# Repeated Use of the PDSA Cycle



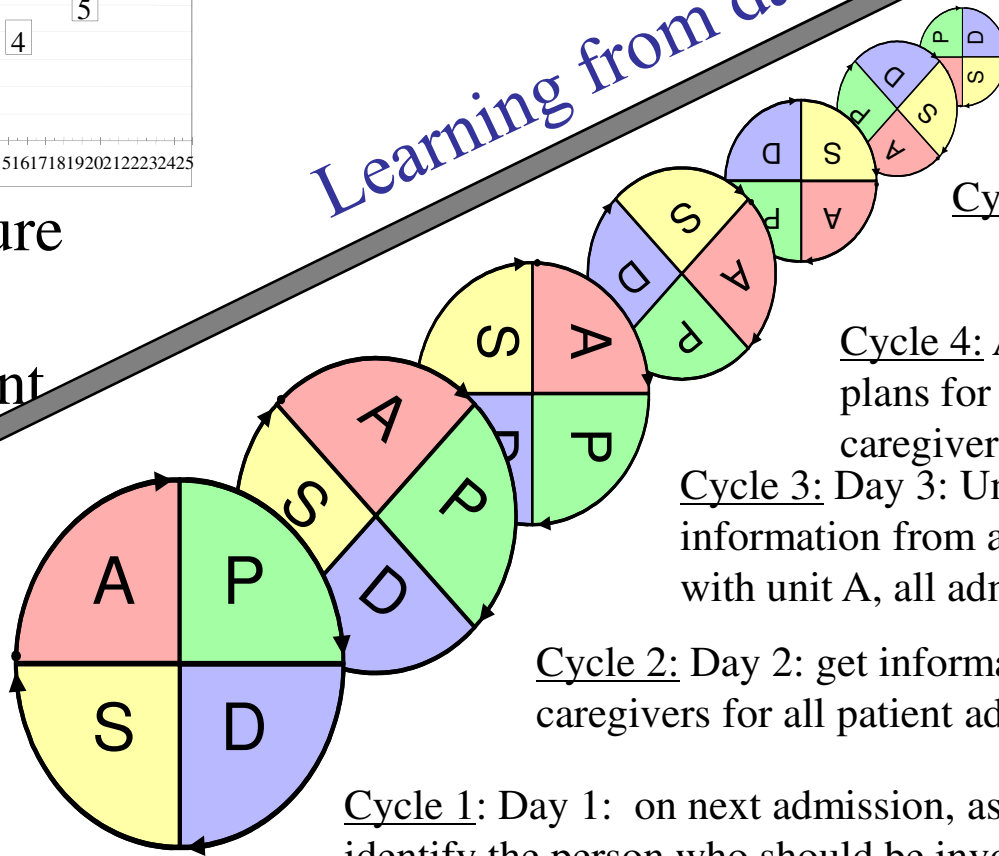
# Change Idea: actively include pt and family in assessing needs (specifically, identify the learner on admission, and include them in discharge planning)



Mini-measure tracks improvement cycles

If we identify the learner on admission, we can engage them in discharge planning and have a better chance of adherence to plan

Learning from data



99% Reliability

Cycle 6: Educate staff on new standards

Cycle 5: Standardize and document

Cycle 4: Analyze failures, determine plans for patients without family caregivers

Cycle 3: Day 3: Unit A is able to get useful information from all patients, continue with unit A, all admissions, try unit b

Cycle 2: Day 2: get information on family caregivers for all patient admitted to Unit A

Cycle 1: Day 1: on next admission, ask nurse to ask the patient to identify the person who should be involved in understanding their care plan after discharge

# Successful Cycles to Test Changes

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- Plan multiple cycles for a test of a change
- Think a couple of cycles ahead
- Scale down size of test (# of patients, location)
- Test with volunteers
- Do not try to get buy-in, consensus, etc.
- Be innovative to make test feasible
- Collect useful data during each test
- Test over a wide range of conditions

# Testing on a Small Scale

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- Have others that have some knowledge about the change review and comment on its feasibility
- Test the change on the members of the team that helped develop it before introducing the change to others
- Incorporate redundancy in the test by making the change side-by-side with the existing system

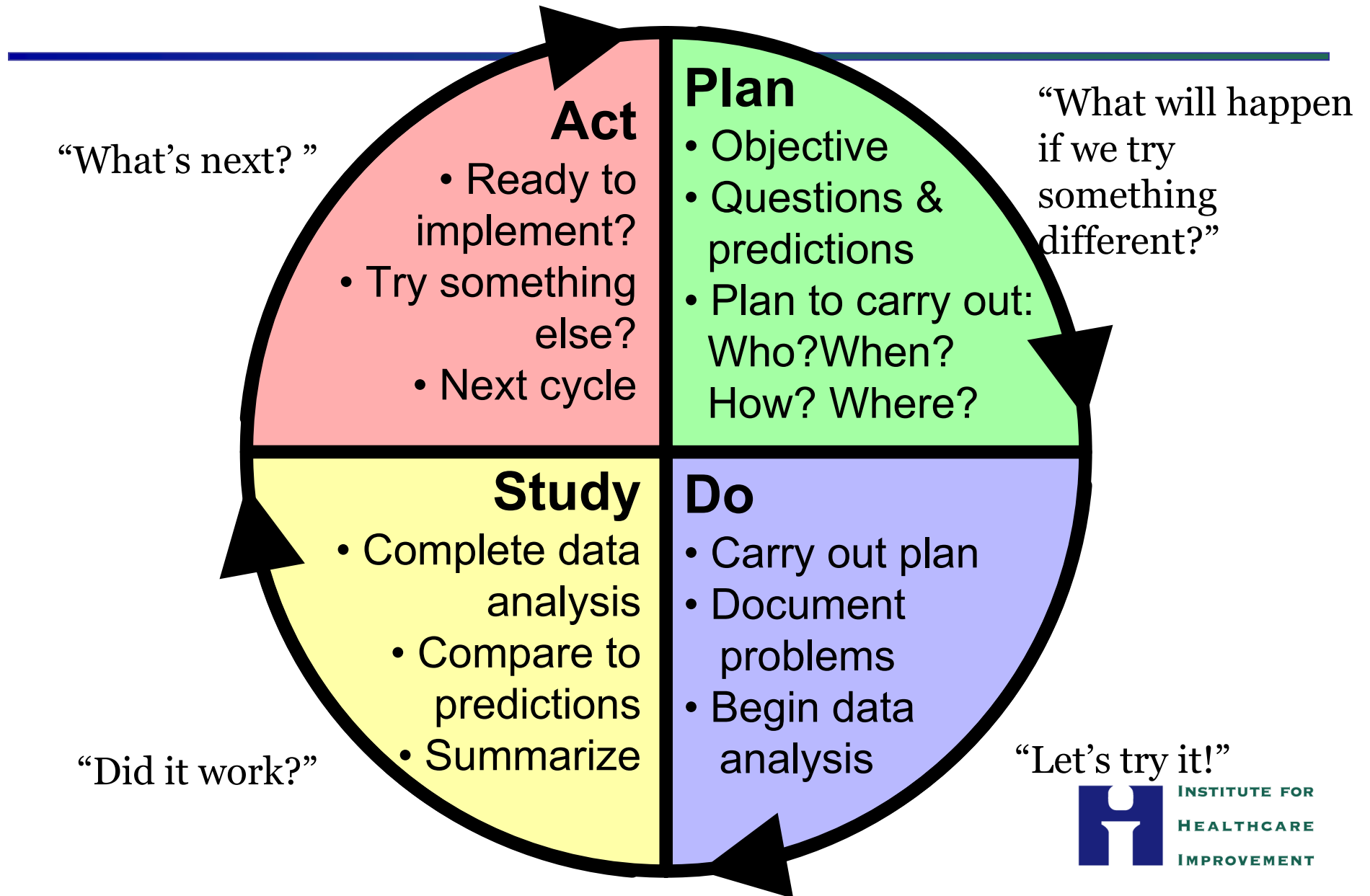


# Testing on a Small Scale

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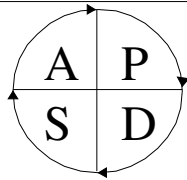
- Conduct the test in one facility or office in the organization, or with one patient
- Conduct the test over a short time period
- Test the change on a small group of volunteers
- Develop a plan to simulate the change in some way

# The PDSA Cycle



# Form for planning a PDSA cycle

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.

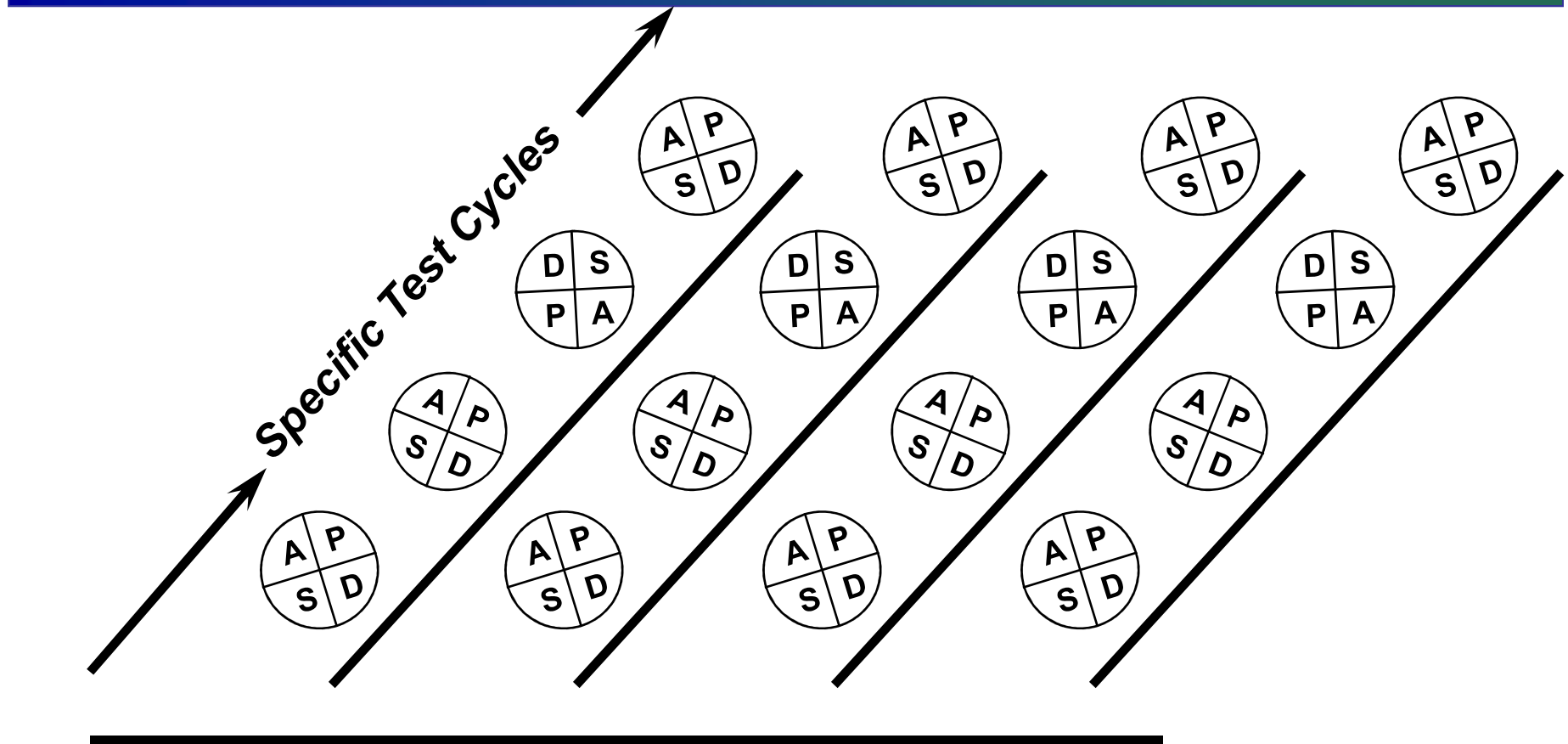
ACT: ARE WE READY TO MAKE A CHANGE? PLAN FOR THE NEXT CYCLE.

# Failed Test...Now What?

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- Be sure to distinguish the reason:
  - Change was not executed
  - Change was executed, but not effective
- If the prediction was wrong – not a failure!
  - Change was executed but did not result in improvement
  - Local improvement did not impact the secondary driver or outcome
  - In either case, we've improved our understanding of the system!

# Overall Aim: Reduce Readmissions



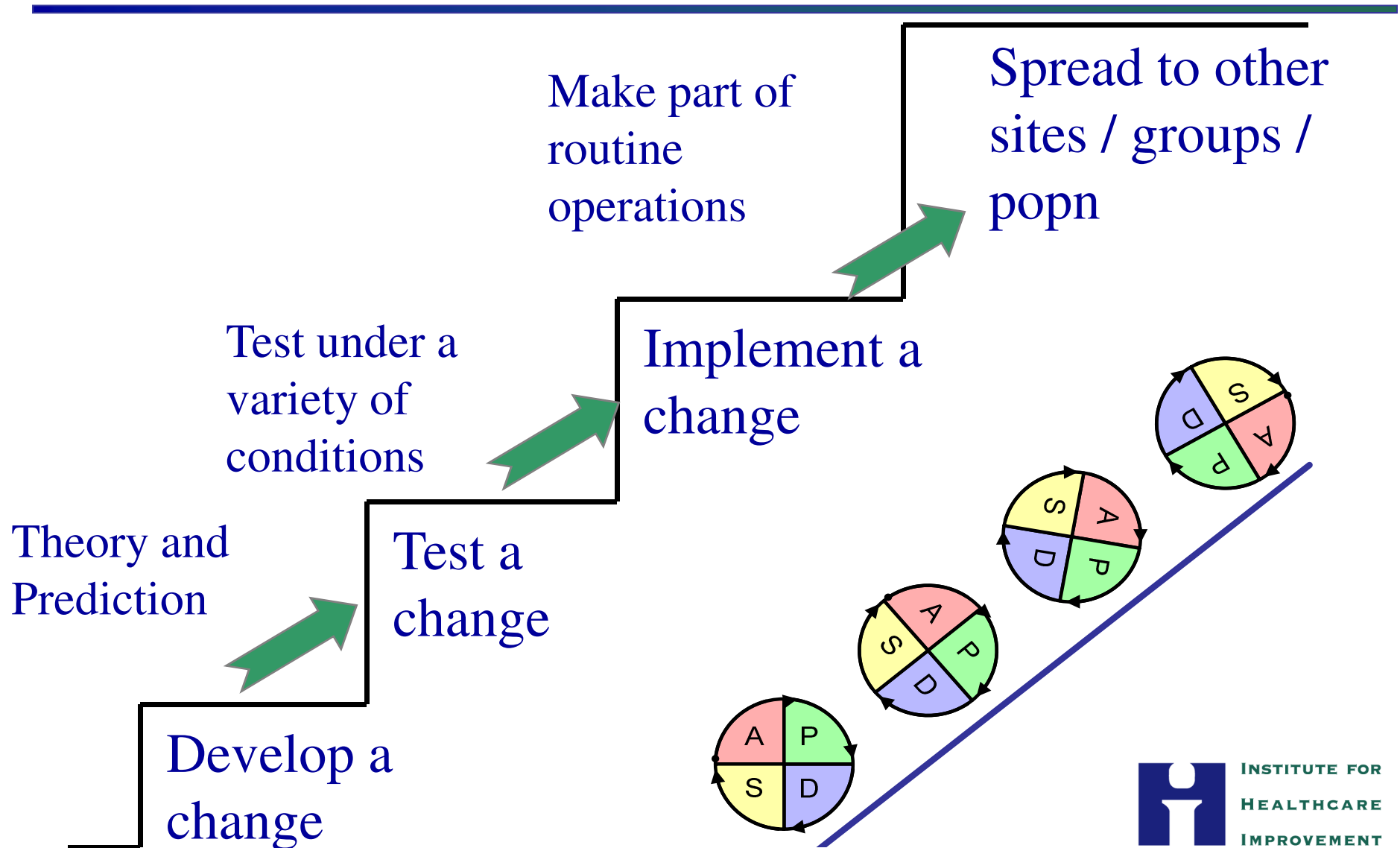
Enhanced  
Assessment

Teaching  
and  
Learning

Handoff  
Communication

Follow-up

# The Steps To Change



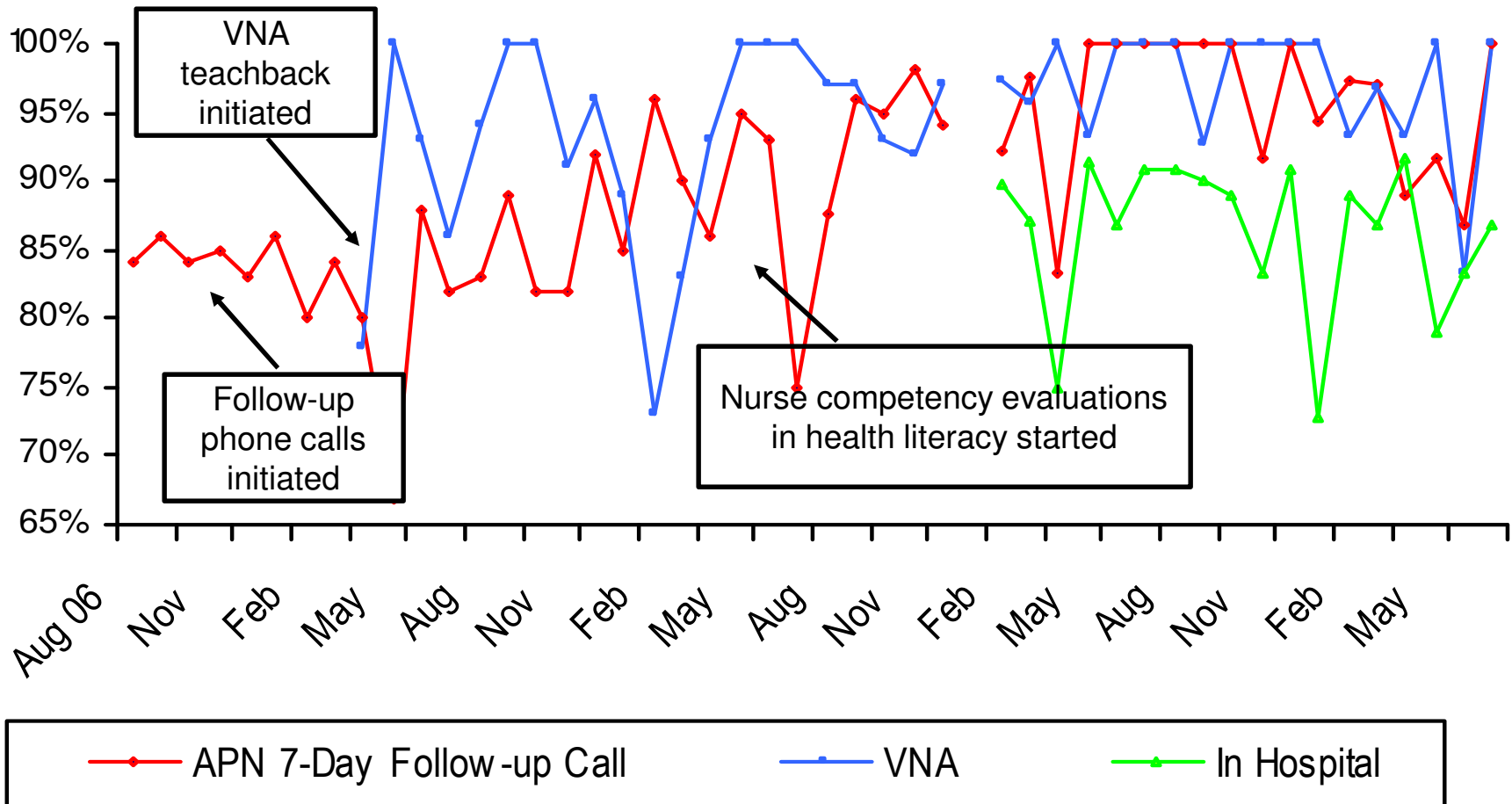
# PDSA Cycle Measures

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- In addition to the family of measures reported each month in the Collaborative, specific data will be required to determine and document the success of your PDSA tests and implementation cycles:
  - Collect useful data, not perfect data - the purpose of the data is learning, not evaluation
  - Use a pencil and paper until the information system is ready
  - Use sampling as part of the plan to collect the data
  - Use qualitative data rather than wait for quantitative
  - Record what went wrong during the data collection

# Successful Teach-back Rate

## Aug 06 – Jul 10 (4 questions)

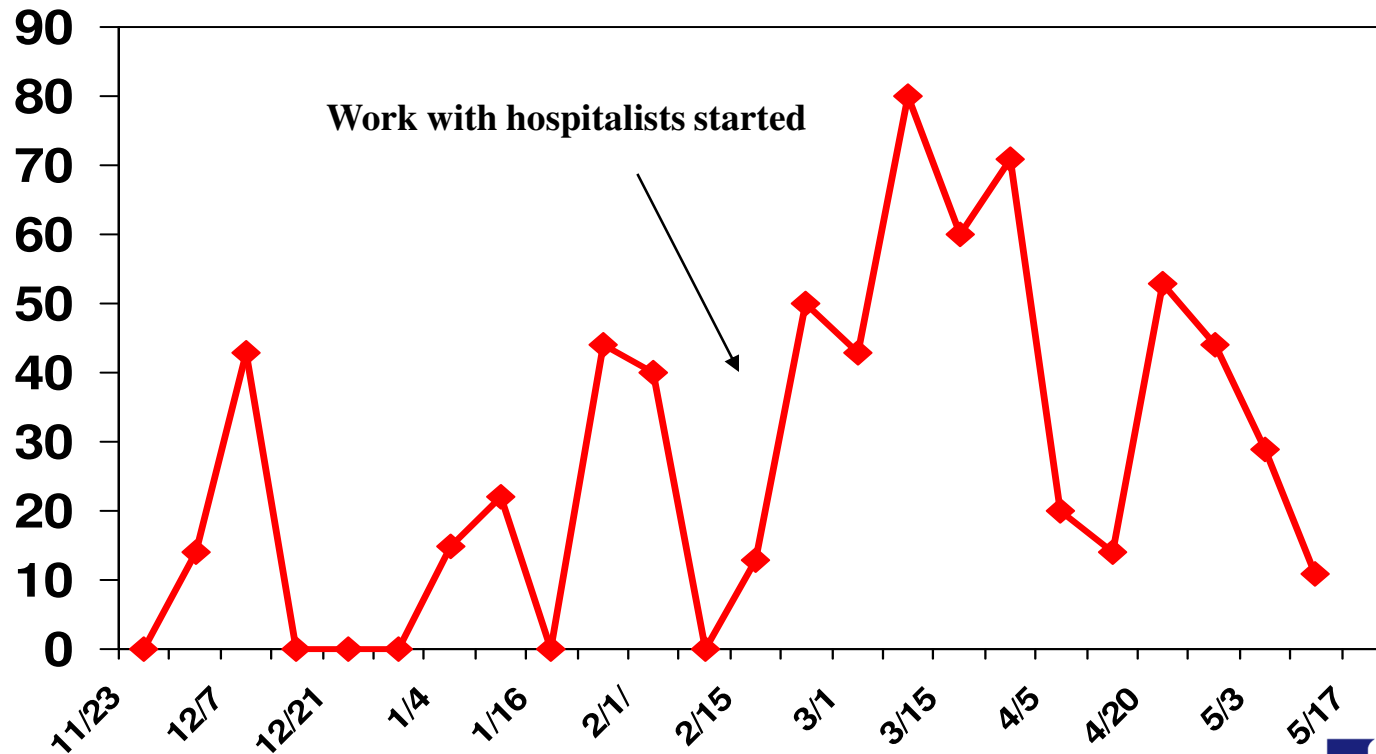


Updated 10/1/10



# PDSA Cycle Measure

% of time the patient medication list from the hospital matches the pts bottles at home.



# Accelerating Learning and Improvement

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- *What cycle can we complete by next Tuesday?*
- Willing to compromise on scope, size, rigor, and sophistication, but the cycle must be completed by Tuesday.

