


Overview of Quality Improvement Science

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Objectives of this Session

- Develop a strategy for improving delivery of adolescent immunizations in a primary care setting
- Apply the Model for Improvement to test changes, using the EQIPP Toolkit and/or other examples of adolescent immunization-focused tools and resources



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

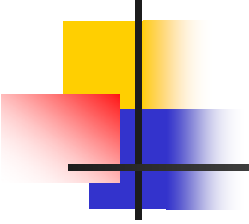
Gather as much data as possible, "just in case"

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

Duration

Can take long periods of time to obtain results

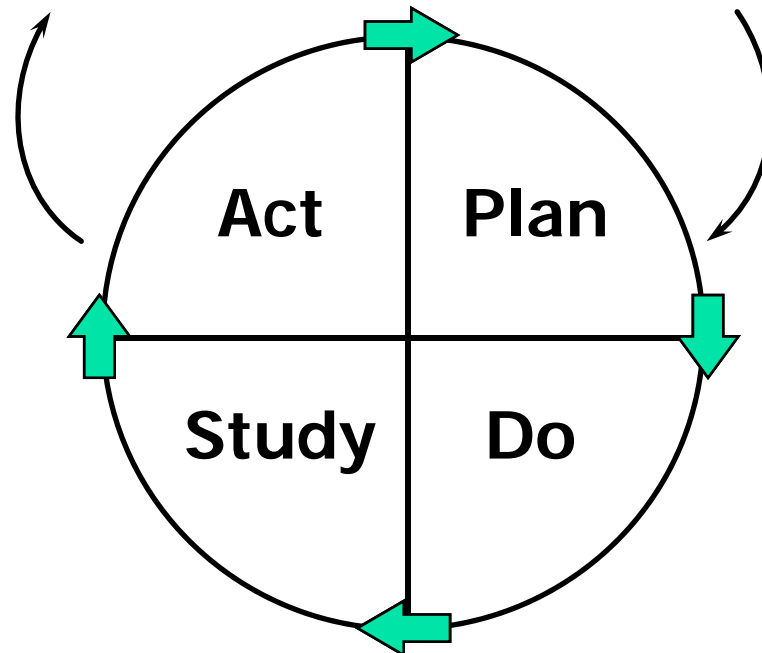
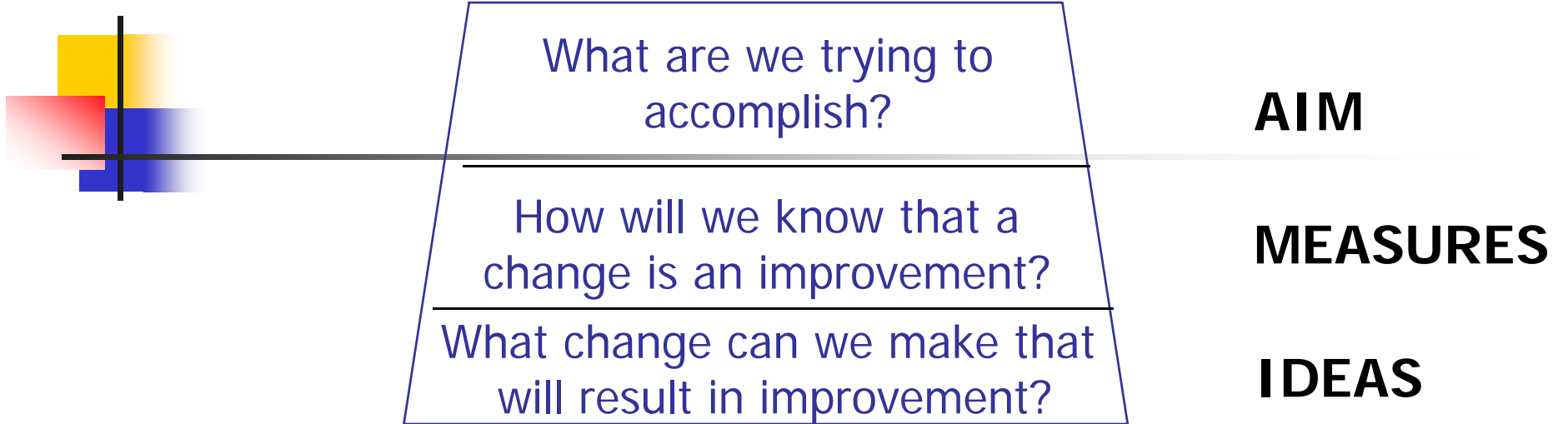
"Small tests of significant changes" accelerates the rate of improvement



It Takes an Effective Team to Do This Work!

- Members representing different kinds of expertise in the practice
 - Clinical Leader
 - Technical Expertise
 - Day-to-Day Leadership
 - Administrative Staff
 - Patient/Parent/Caregiver Partners
 - Project Sponsor

Model for Improvement





AIM Worksheet

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

By (date)

For (population)

because

Our goals include:

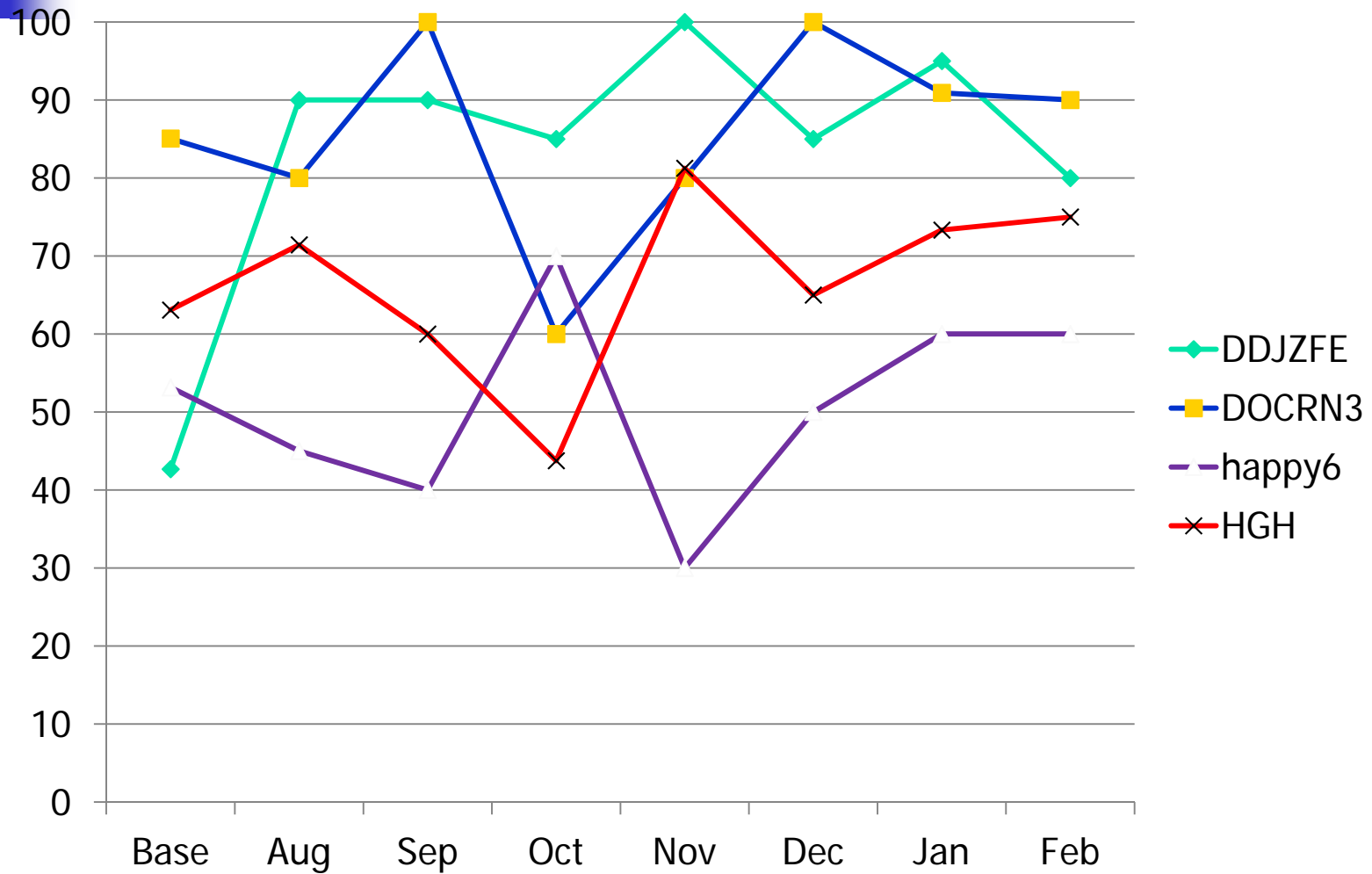
Special guidance that will help us stay on track:



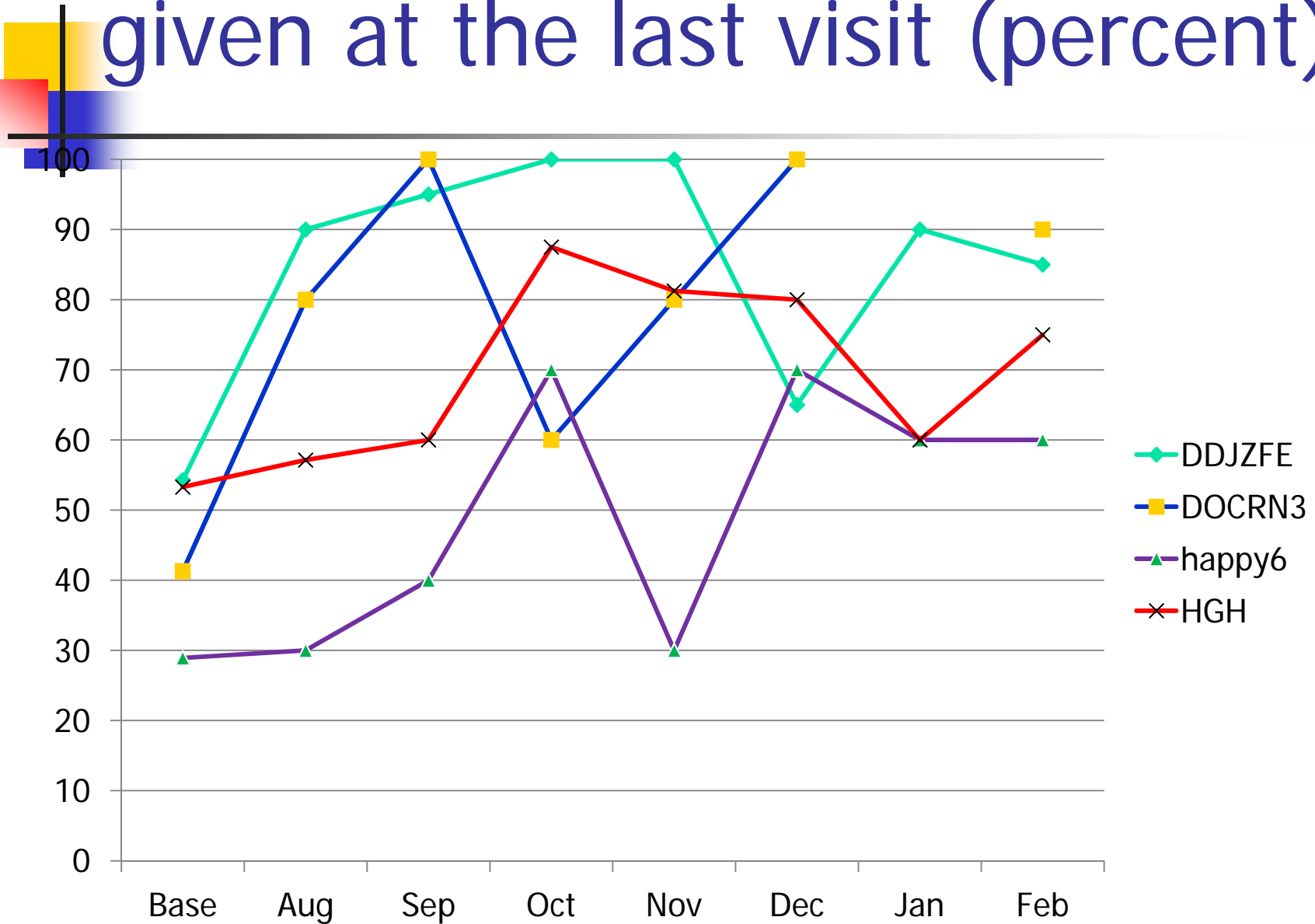
How will we know a change is an improvement?

- 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

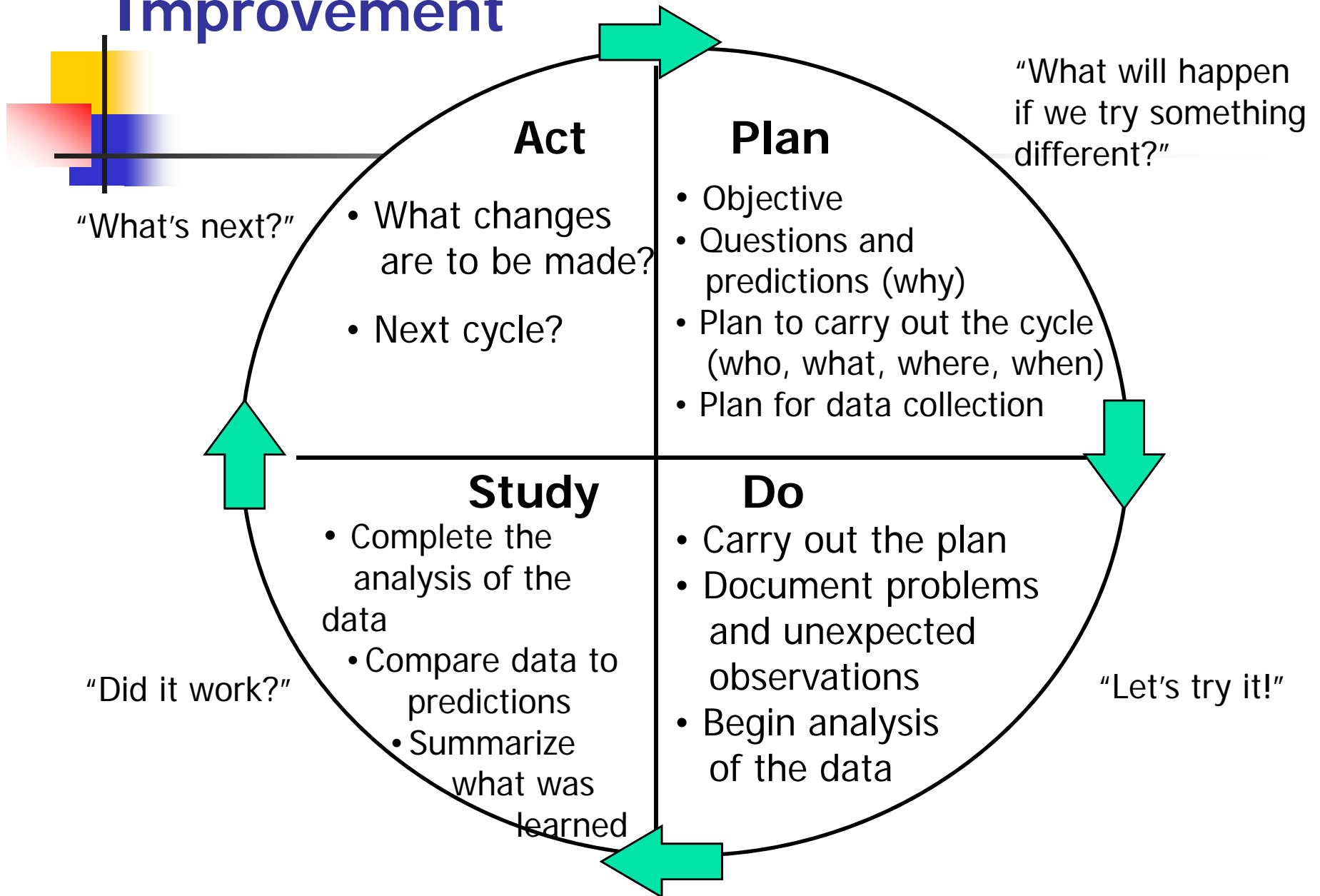
Record Review: Up-to-date (Percent)



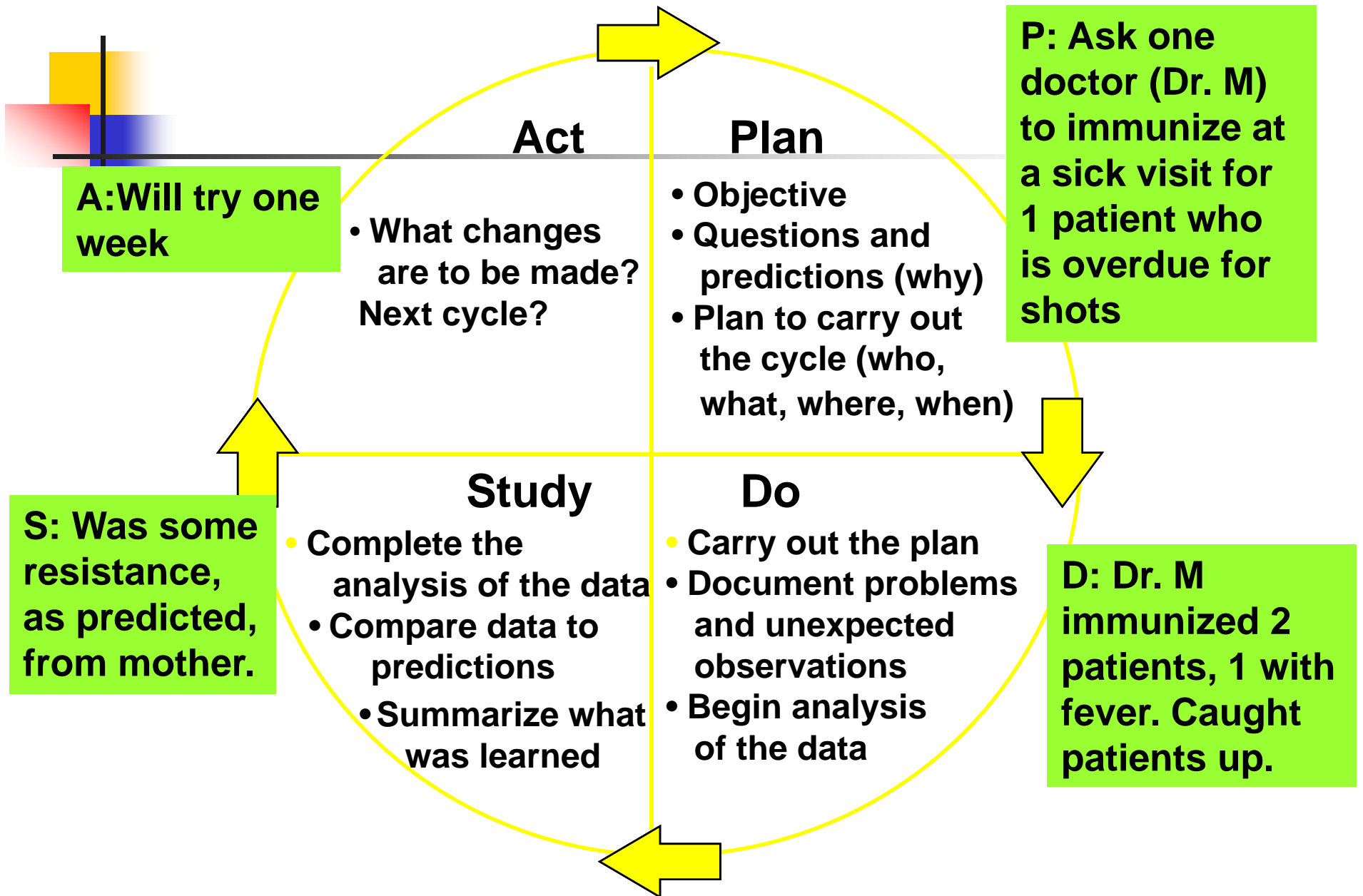
All needed vaccines were given at the last visit (percent)



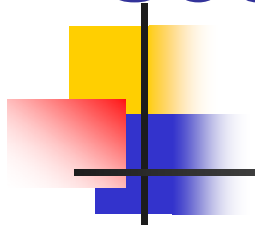
The PDSA Cycle for Learning and Improvement



A PDSA Cycle



Use of the PDSA Cycles



Multiple cycles

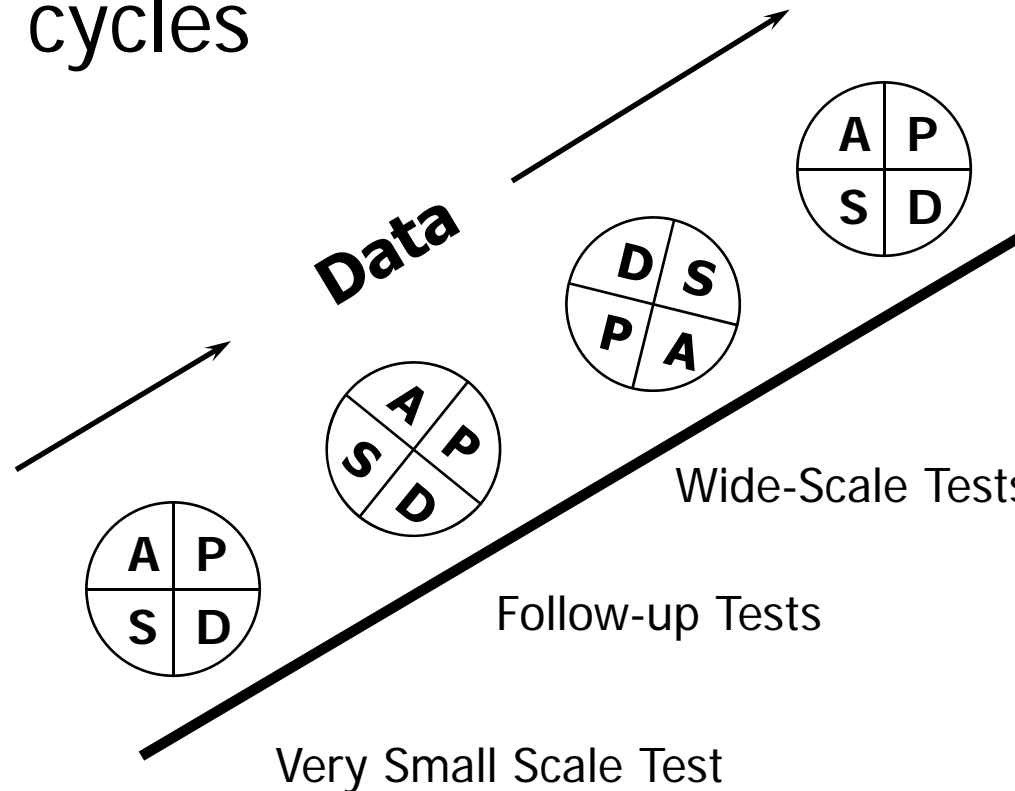
Changes that Result in Improvement

Implementation of Change

Evidence

Best Practice

Testable Ideas



Wide-Scale Tests of Change

Follow-up Tests

Very Small Scale Test



Task or Test?

- Task

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

- Test

- Question
- Prediction
- Data
- Usually involves patient

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 is Important to Understand About Testing?

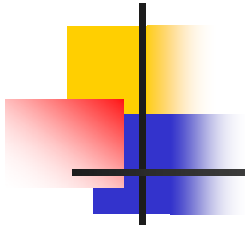


- Change isn't permanent
- No support for change beyond test period
- Learning from testing will be significant—up to 50% of tests not expected to yield improvement
- Fewer # of people affected by the test (lower risk)
- It will provide you with the data to prove that a new way works better



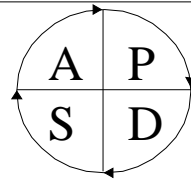
Tips for Testing Changes

- Stay a cycle ahead
- Scale down scope of tests – **START SMALL**
- Pick willing volunteers (work with those that want to work with you)
- Avoid the need for consensus, buy-in, or political solutions
- Replicate changes made elsewhere
- Pick easy/feasible changes to try
- Avoid technical slowdowns
- Reflect on the results of every test (successful AND failed tests)



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

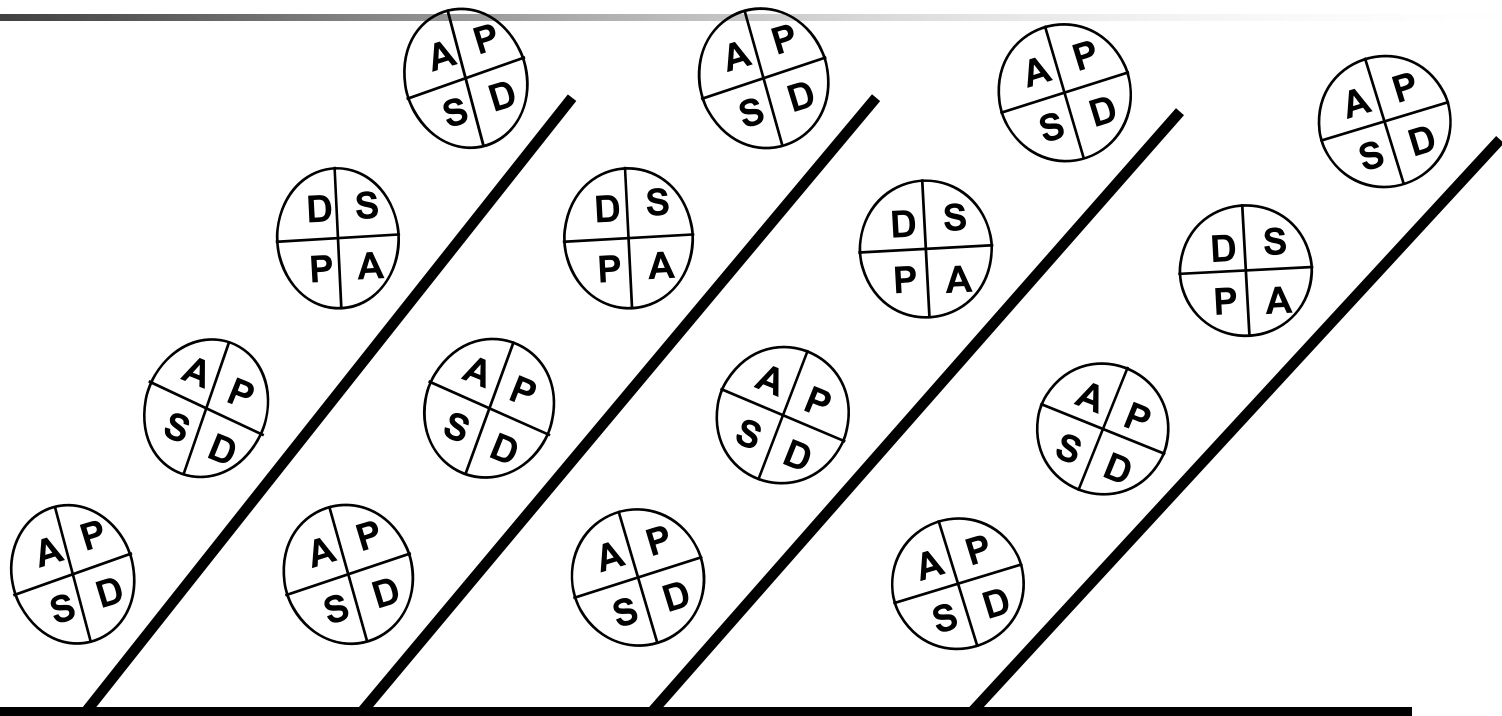
PLAN FOR COLLECTION OF DATA: WHO, WHAT, WHEN, WHERE

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.

Overall Aim: Improving Adolescent Immunization Coverage Rates (and Preventing Disease!)



**Assess
immunization
status at every
visit**

**Elicit
patient/family
concerns**

**Administer
all eligible
vaccines**

**Conduct
Reminders/
Recalls**



How teams get results

- Engage leaders
- Form team
- Assign responsibility for key tasks
- Meet
- Small tests of change
- Use of the IIS
- Use of best practices, tools and resources

Questions/Comments?

