The Model for Improvement

SEED Learning Session 1

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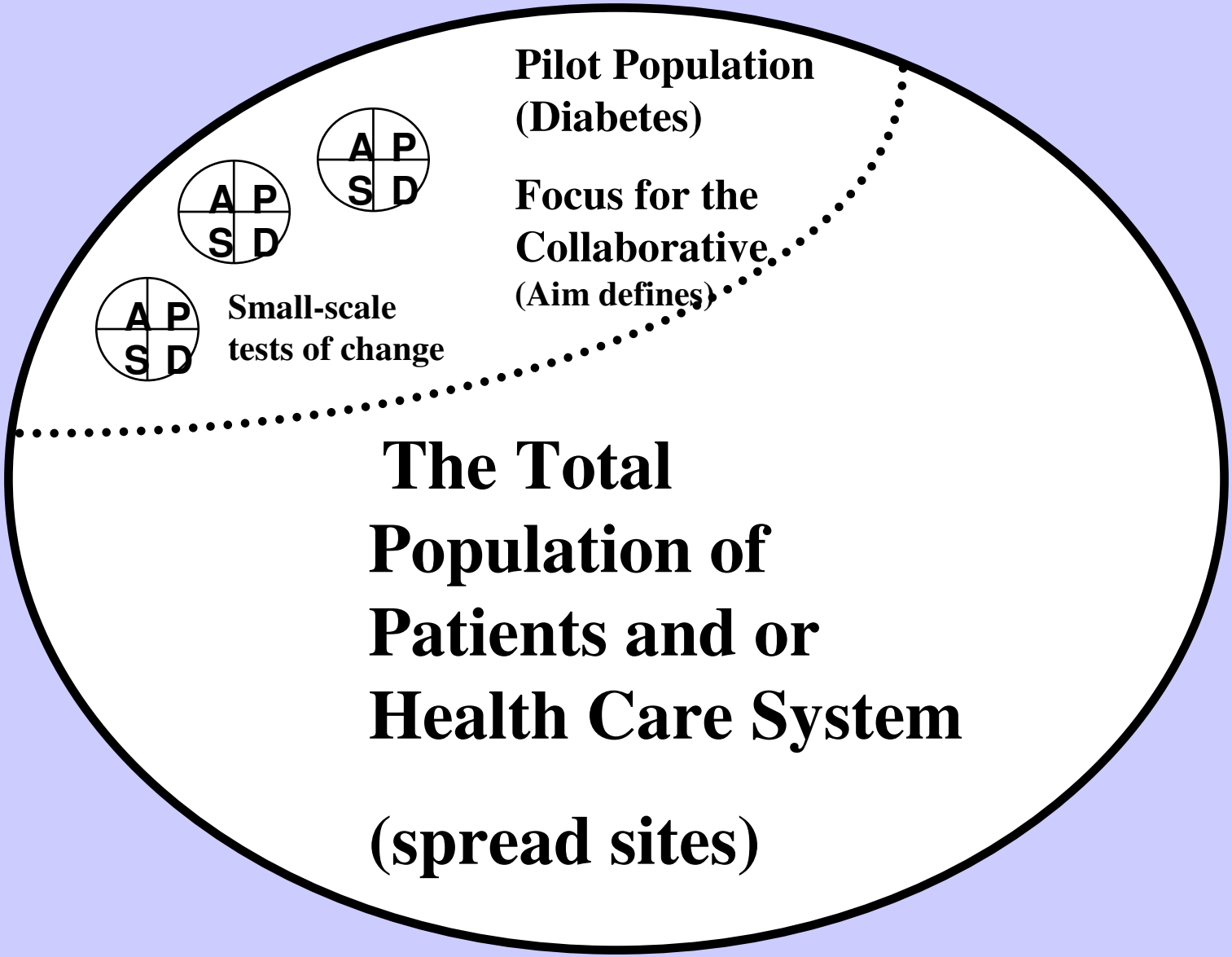
Characteristics of the Performance Improvement Model

- Action-oriented – “What are you going to test next Tuesday”
- Rapid-cycle testing of changes
- Evaluation and revision of all changes before implementation
- Testing and implementing the changes in small populations, then spreading then spreading to the larger population
- Impact evaluated using annotated run charts
- Monthly reporting of tests and outcomes

Different Populations



The Fundamental Questions for Improvement

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 an improvement?

What are we trying to accomplish?
Office Aim Statement Characteristics

- **States that we are going to change (redesign) the clinic practice.**
- **Describes the target population for improvement in terms of site, provider, and disease.**
- **Describes in general terms how we are going to improve care for the population (Chronic Care Model).**
- **Describes the most important outcomes that we want to improve for the population that define our success (Diabetes Measures).**

What are we trying to accomplish?
Practice Aim Statement

Aim: ***The ABC Clinic will be redesigned to improve care for patients with Diabetes by implementing the six components of the Chronic Care Model so that the average HbA1c for patients with diabetes will be <7.0%; 80% will be on Ace Inhibitors; and 70% of patients will have self-management goals.***

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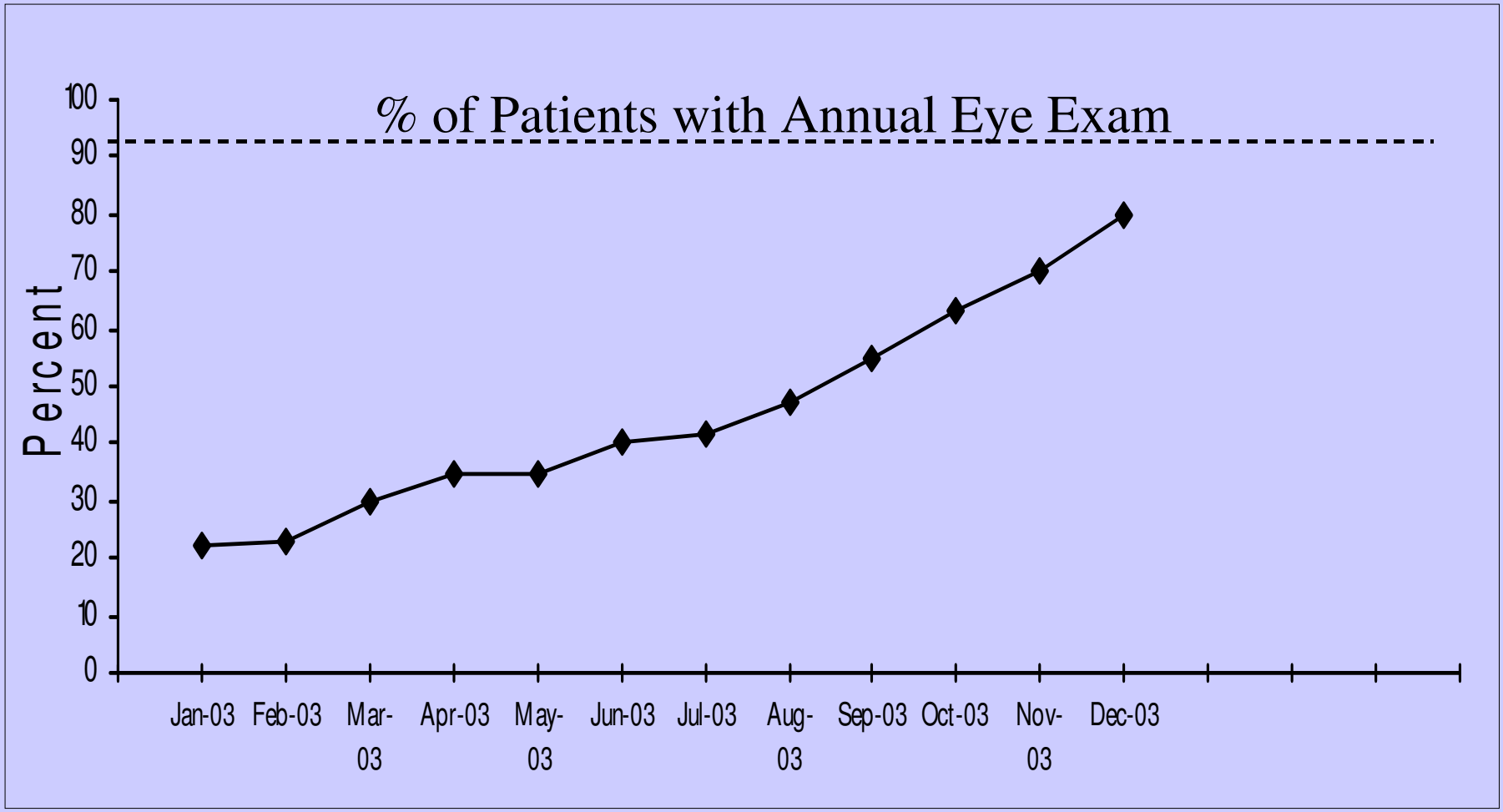
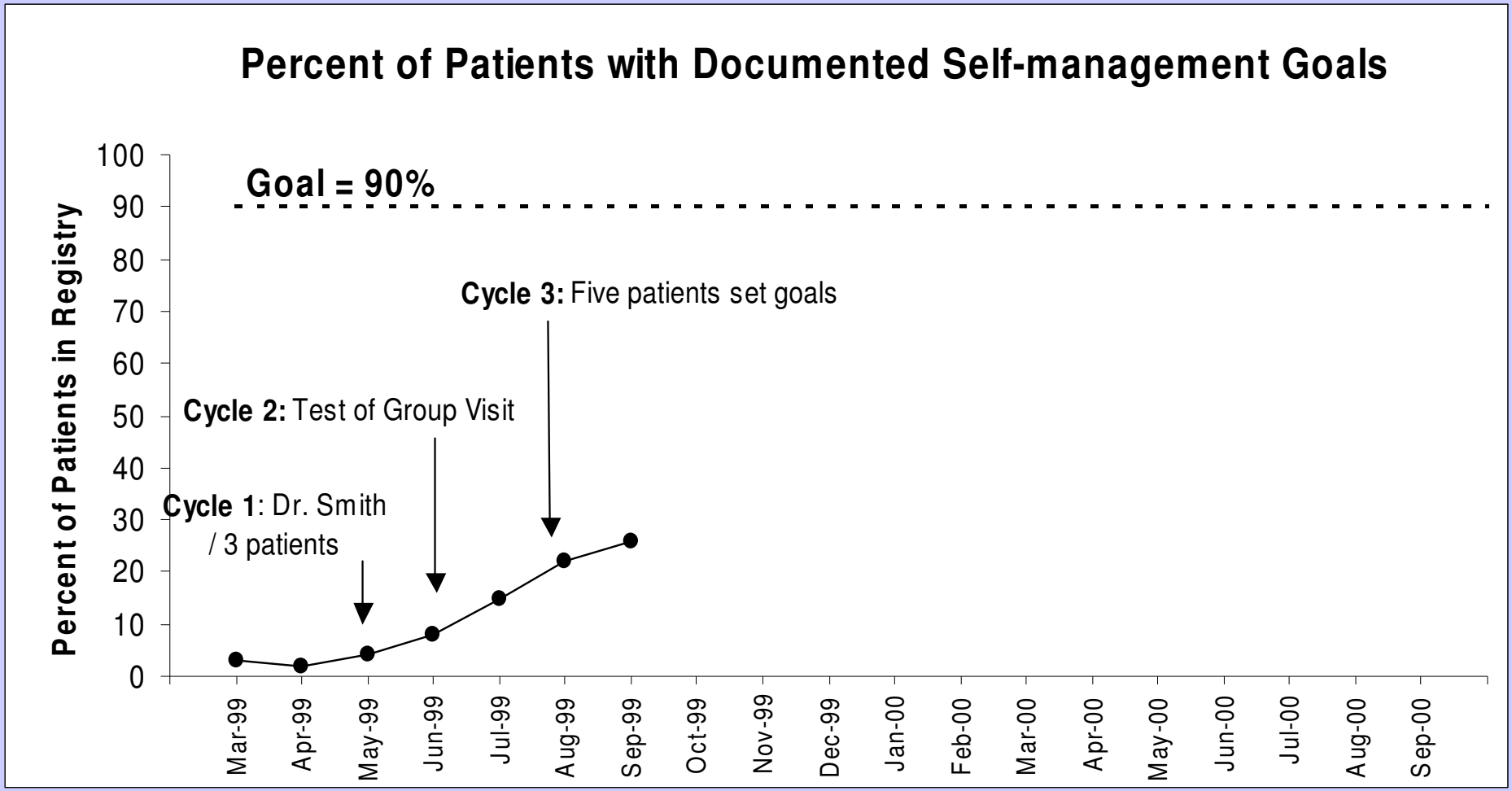
Diabetes Measures/Outcomes

- **% Patients with diabetes in the registry**
- **% Patients with average HbA1c < 7%**
- **% Patients with an LDL < 100**
- **% Patients with a BP <130/80**
- **% Patients with documented self-management goal**
- **% Patients taking ACE-Inhibitors**
- **% Patients with 2 HbA1c's annually at least 3 months apart**
- **% Patients with annual foot exam**

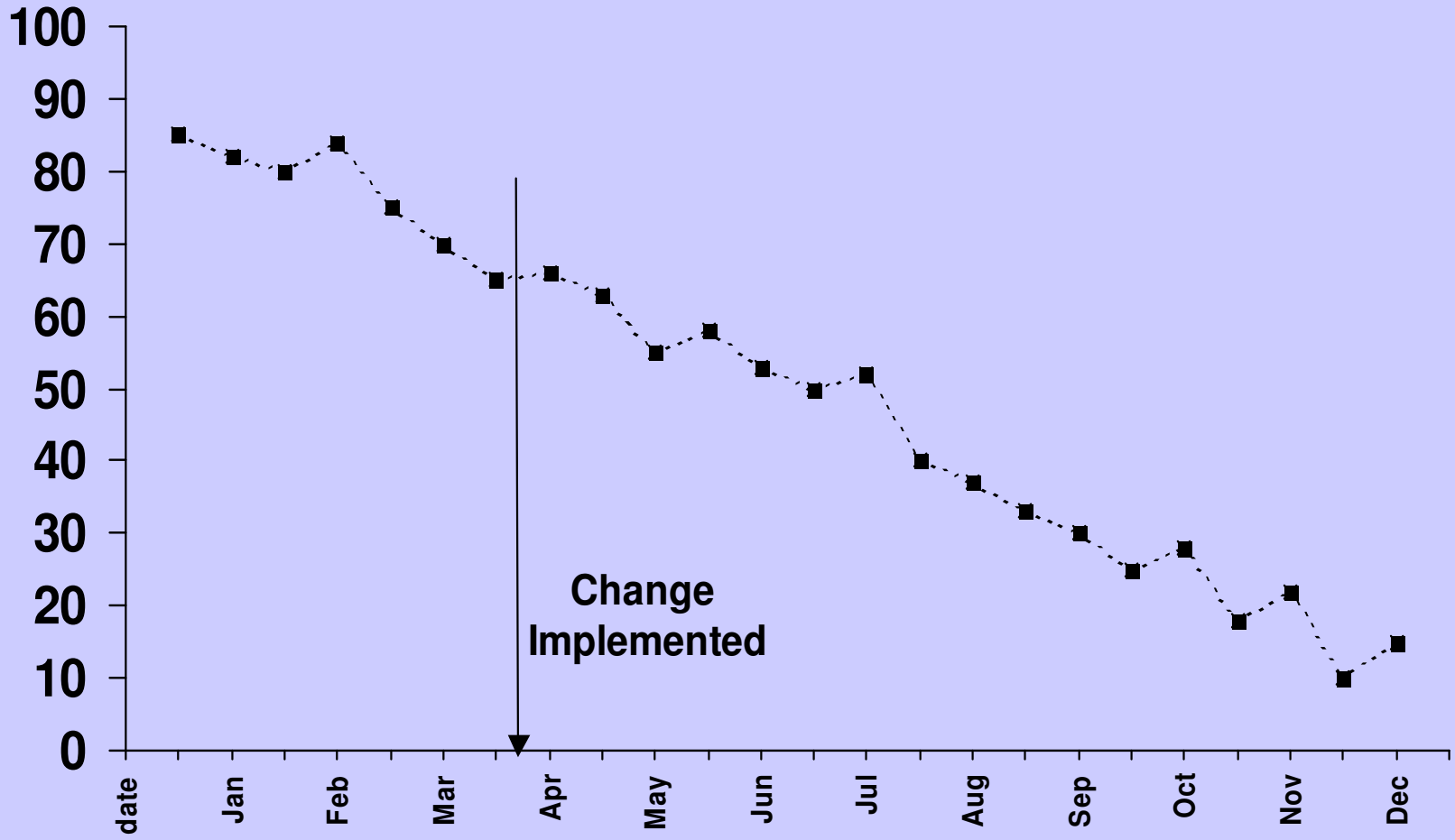
Minimum Standard for Monthly Reporting: Annotated Run Chart



Minimum Standard for Monthly Reporting: **Annotated Time Series**



Improvement in BP (>130/80) for Patients with Diabetes



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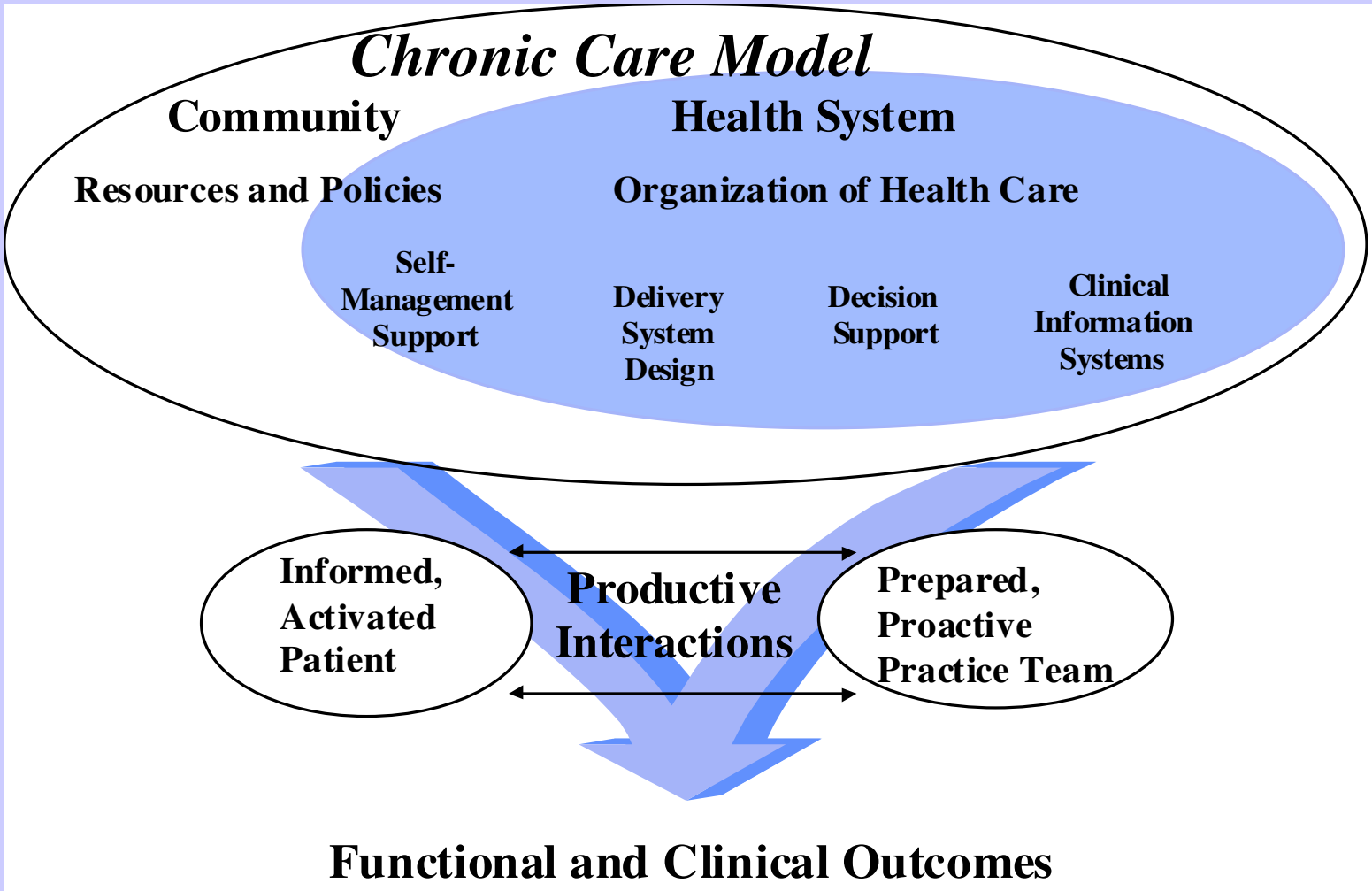

Change Concepts from the Chronic Care Model

Community

- Resources to support patient care are identified and made easily accessible.

Health System

- Organization goals for chronic illnesses are part of annual business plan.

- The system actively impacts the entire patient population with education and services.

Self-management Support

- Patients assisted in setting personal goals and given aids to assist in changing behavior.

- Mechanisms for patient peer support and behavior change programs.

Decision Support

- Evidenced-based guidelines and protocols are integrated into the practice systems.

- The system integrates the clinical expertise from generalists and specialists.

Delivery System Design

- The practice anticipates problems and provides services to maintain quality of life.

- Systems are designed for regular communication and follow-up.

Clinical Information System

- A registry of patients with a chronic condition is maintained and utilized.

Diabetes Change Package

Clinical Information System

- Establish an office-based registry of Diabetes patients
- Develop processes for use of the registry including designating personnel for data entry and registry maintenance
- Use the registry to generate reminders about patient follow-up

Decision Support

- Embed evidence-based guidelines in the care delivery system (office assessment form, flow sheet, progress notes.
- Provide a clinician's guide and protocol for BP management
- Train office staff about Diabetes measures and improvement plan

Change Package (con't)

Delivery System Design

- Design a chart identification system for the office that helps staff recognize patients with Diabetes.
- Assign roles and duties to office staff to accomplish planned visits.
- Use the registry to plan visits.

Self-management

- Use consistent Diabetes patient education tools that describe Diabetes, symptoms, medications, and patient responsibilities.
- Use Diabetes self-management tools.
- Train staff to set self-management goals with patients, assign roles.
- Establish goal follow-up process.

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Model for Improvement

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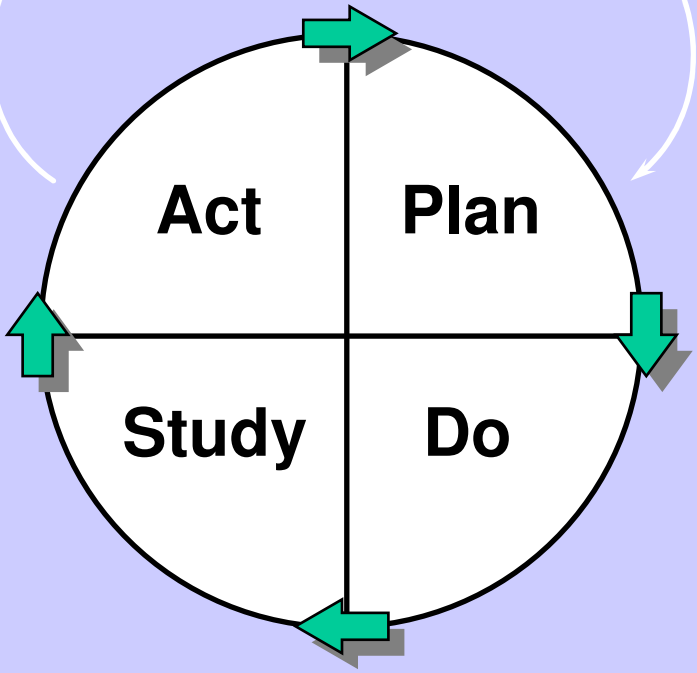
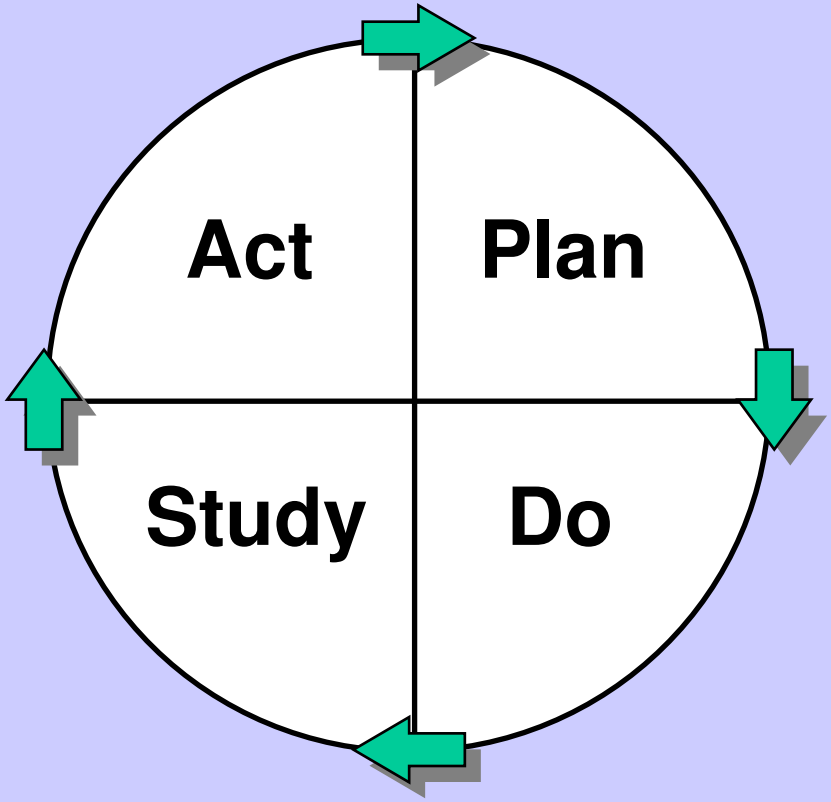


The PDSA Cycle

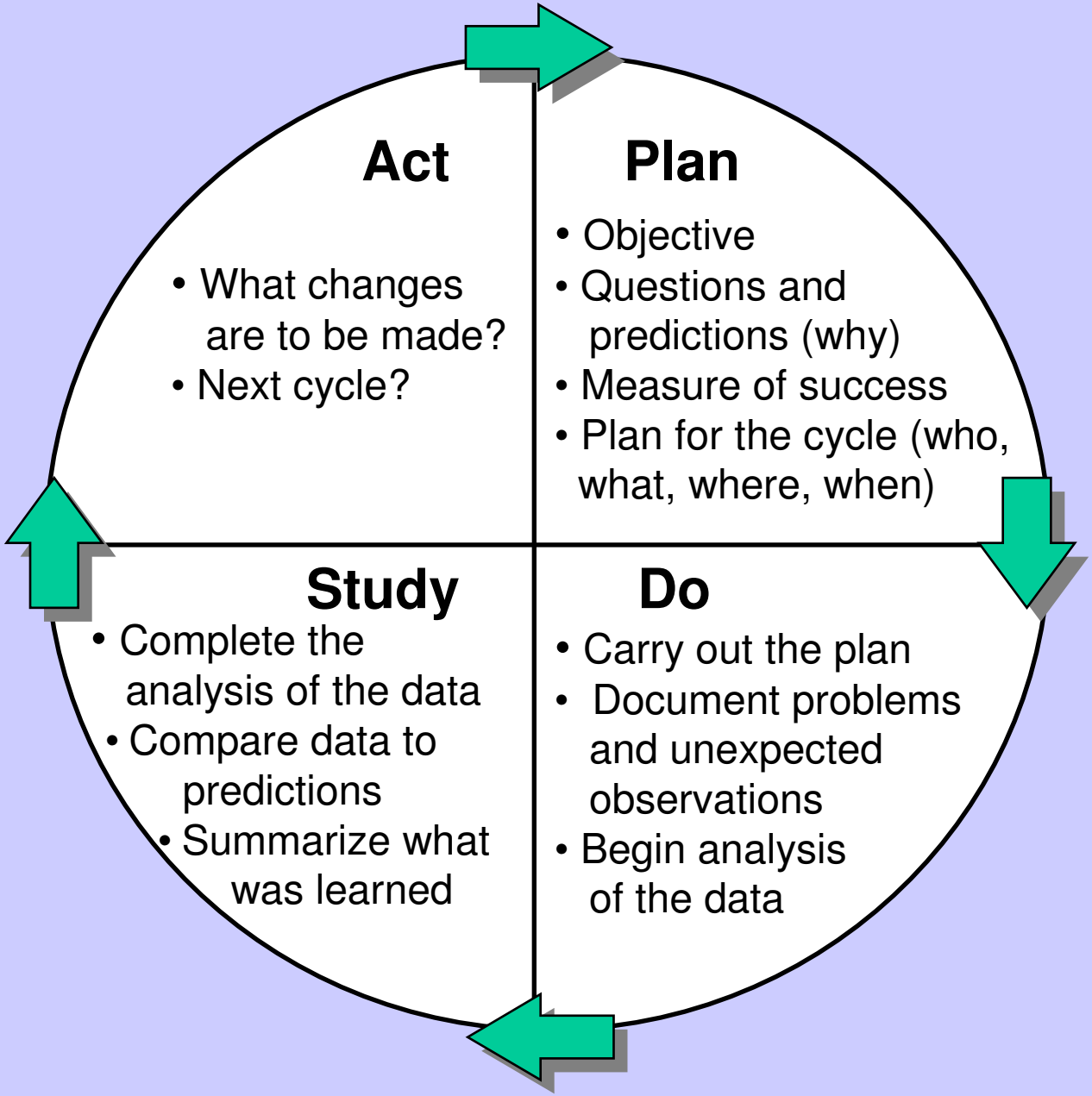
Why Test?



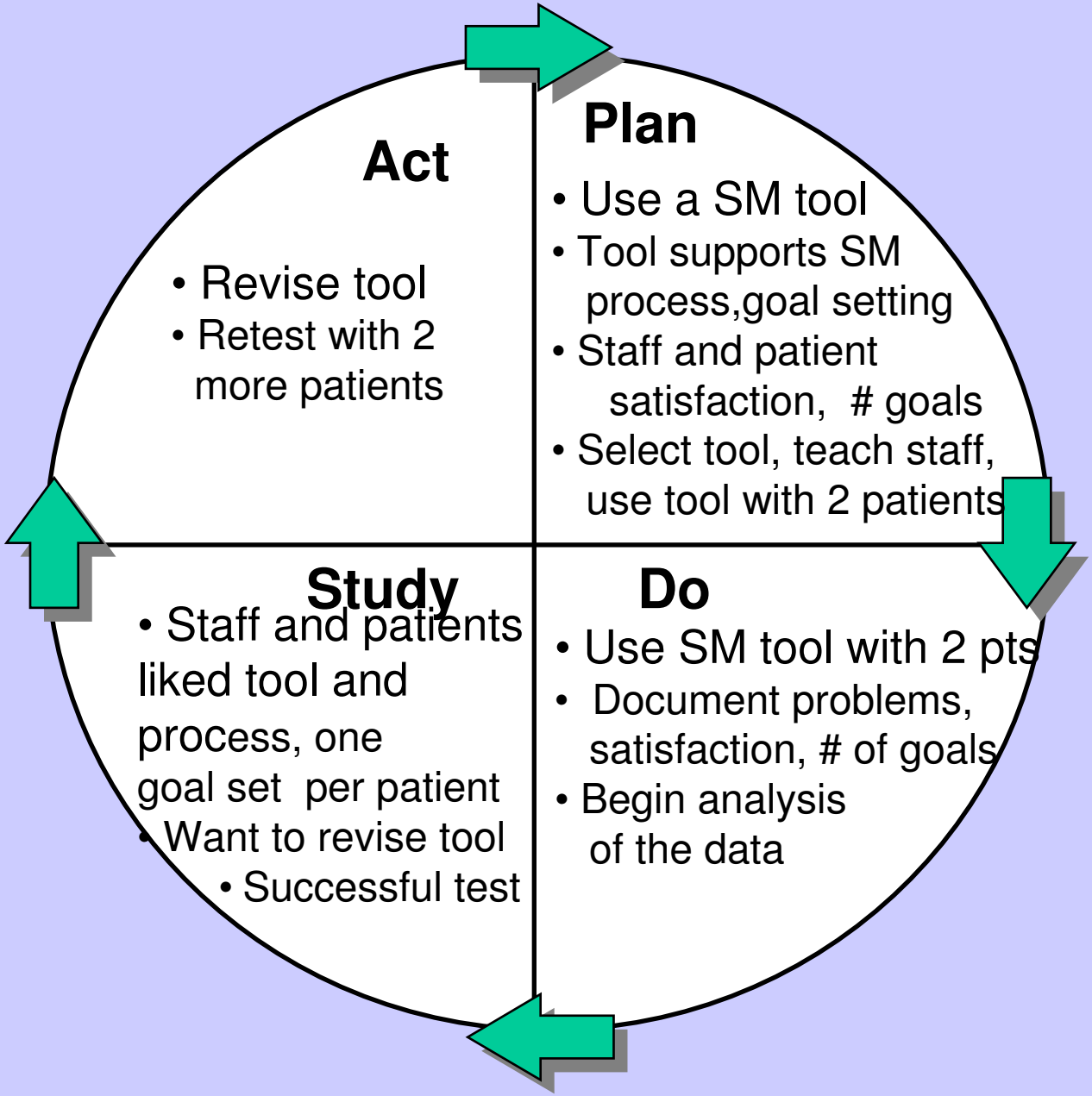
Why Test?

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

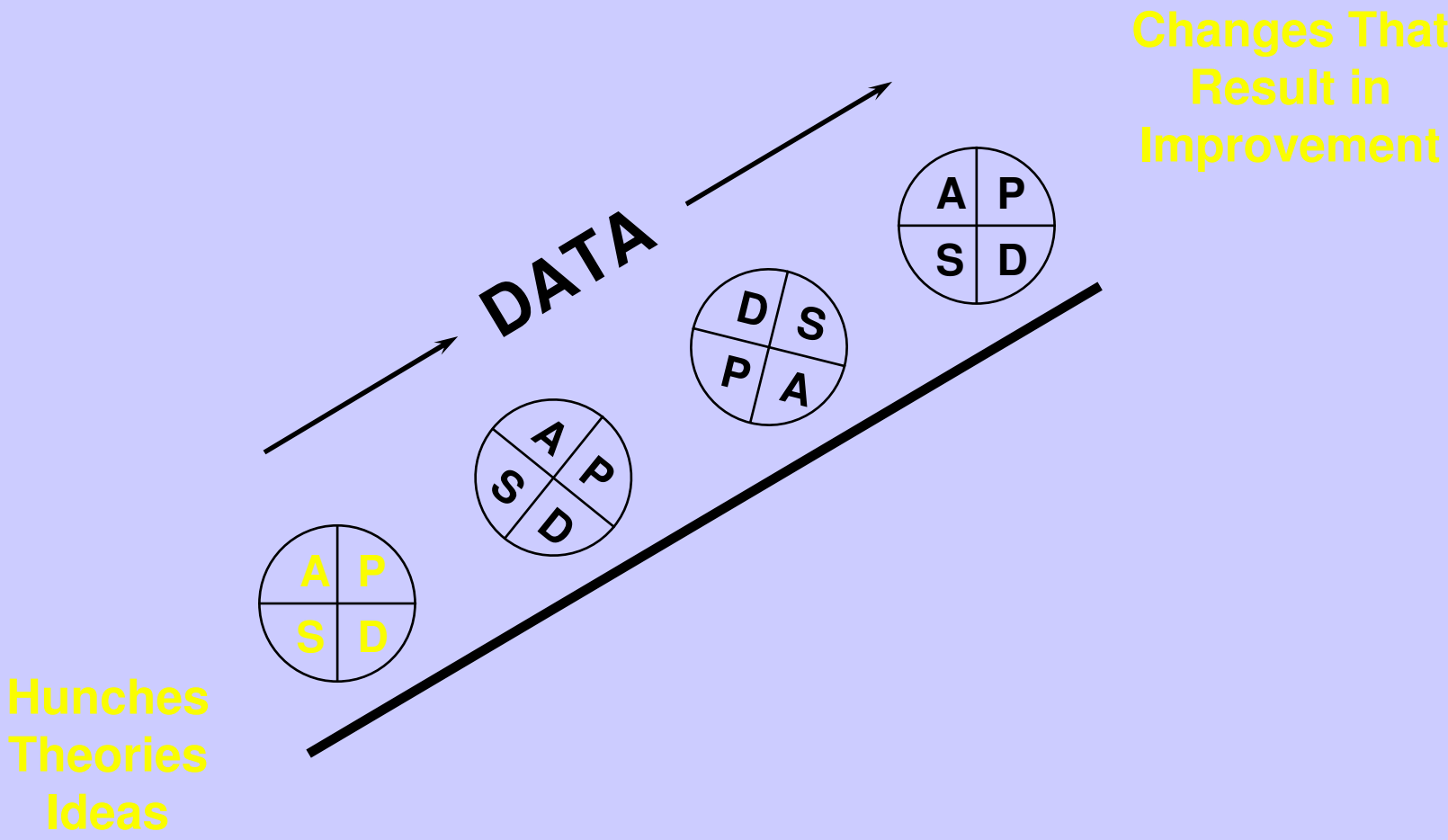
The PDSA Cycle



PDSA Cycle: Self-Management



Repeated Use of the Cycle



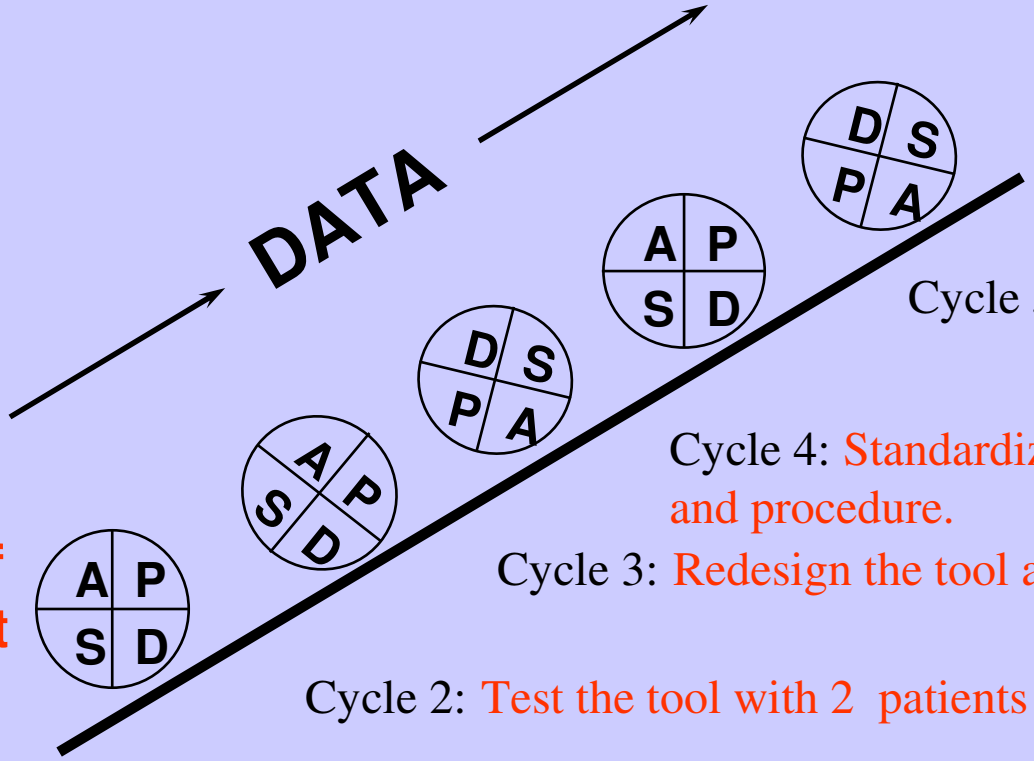
Testing on a Small Scale

- 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

- 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

Aim: To improve the care of patients with Diabetes by creating self-management goals with each patient.



Improved outcomes

Cycle 5: Educate all use of the new tool.

Cycle 4: Standardize the tool in policy and procedure.

Cycle 3: Redesign the tool and retest.

Cycle 2: Test the tool with 2 patients tomorrow.

Cycle 1: Develop a self-management tool for patients with Diabetes.

Establishment of self-management goals with patients will improve outcomes.

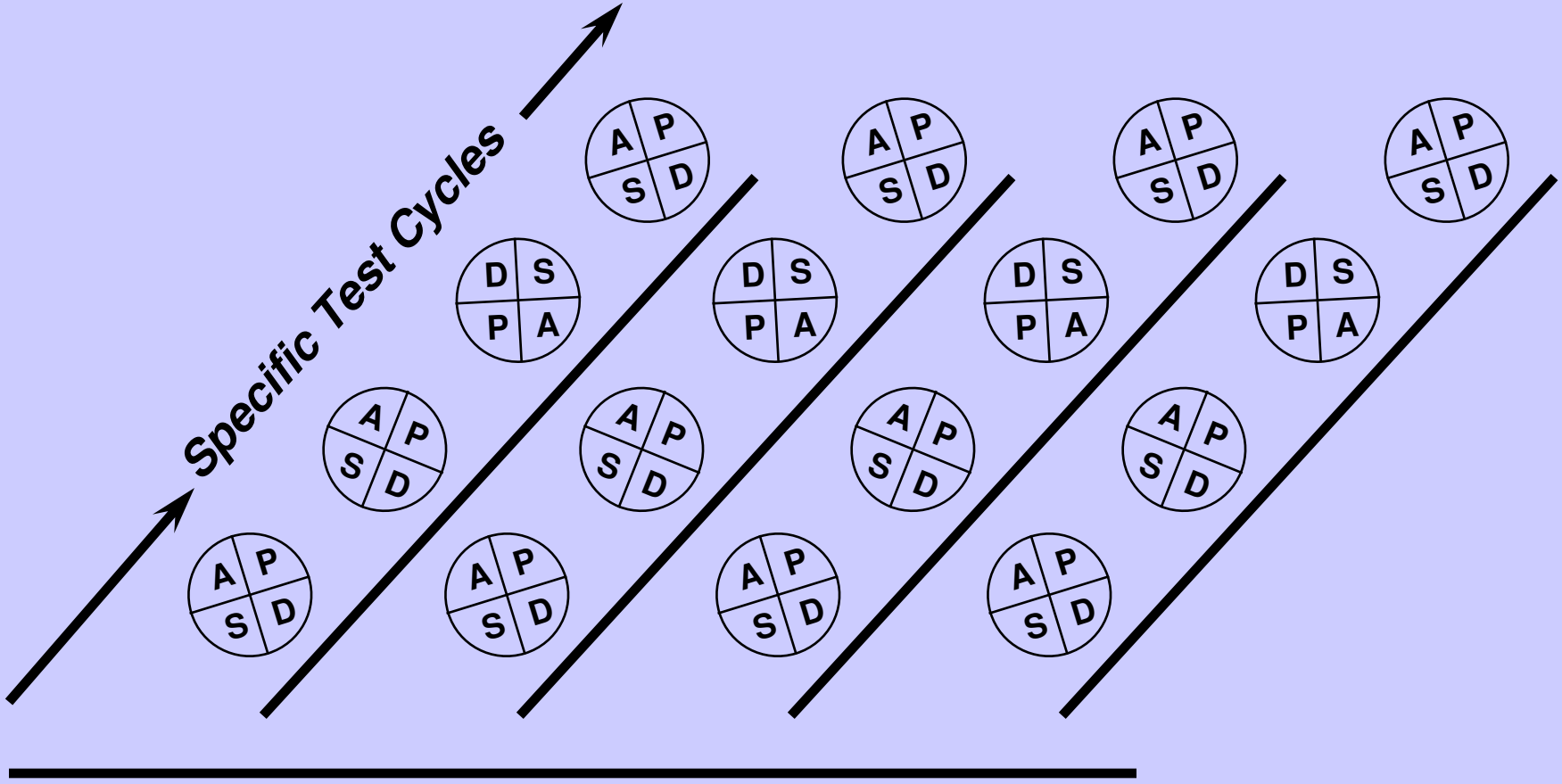
Do → Study

Reasons for failed tests

1. Change not executed well
2. Support processes inadequate
3. Hypothesis/hunch wrong:
   - Change executed but did not result in local improvement
   - Local improvement did not impact access or efficiency

Collect data during the Do Phase of the Cycle to help differentiate these situations.

Overall Aim: Improve Chronic Illness Care



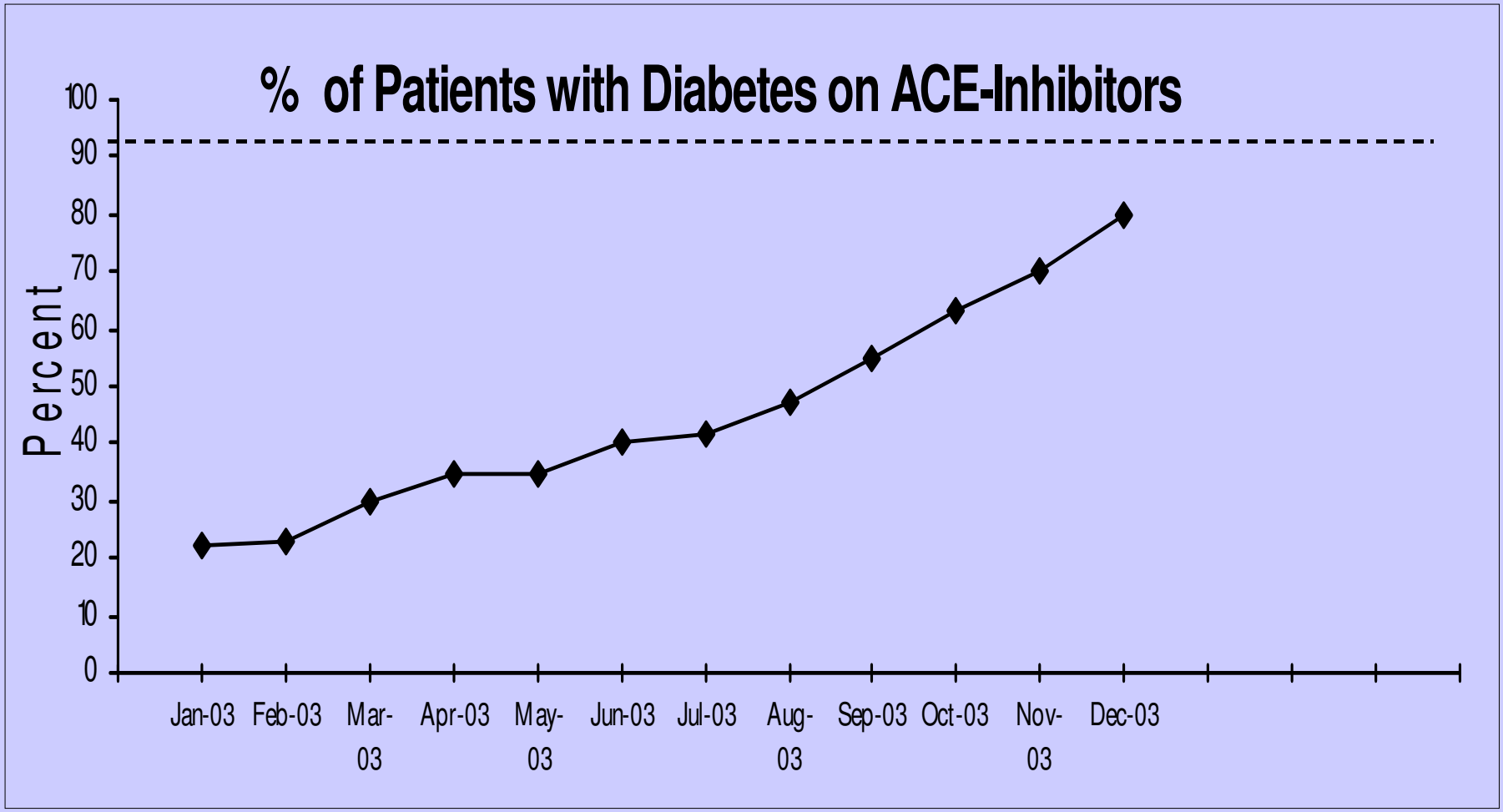
Clinical information system

Delivery system design

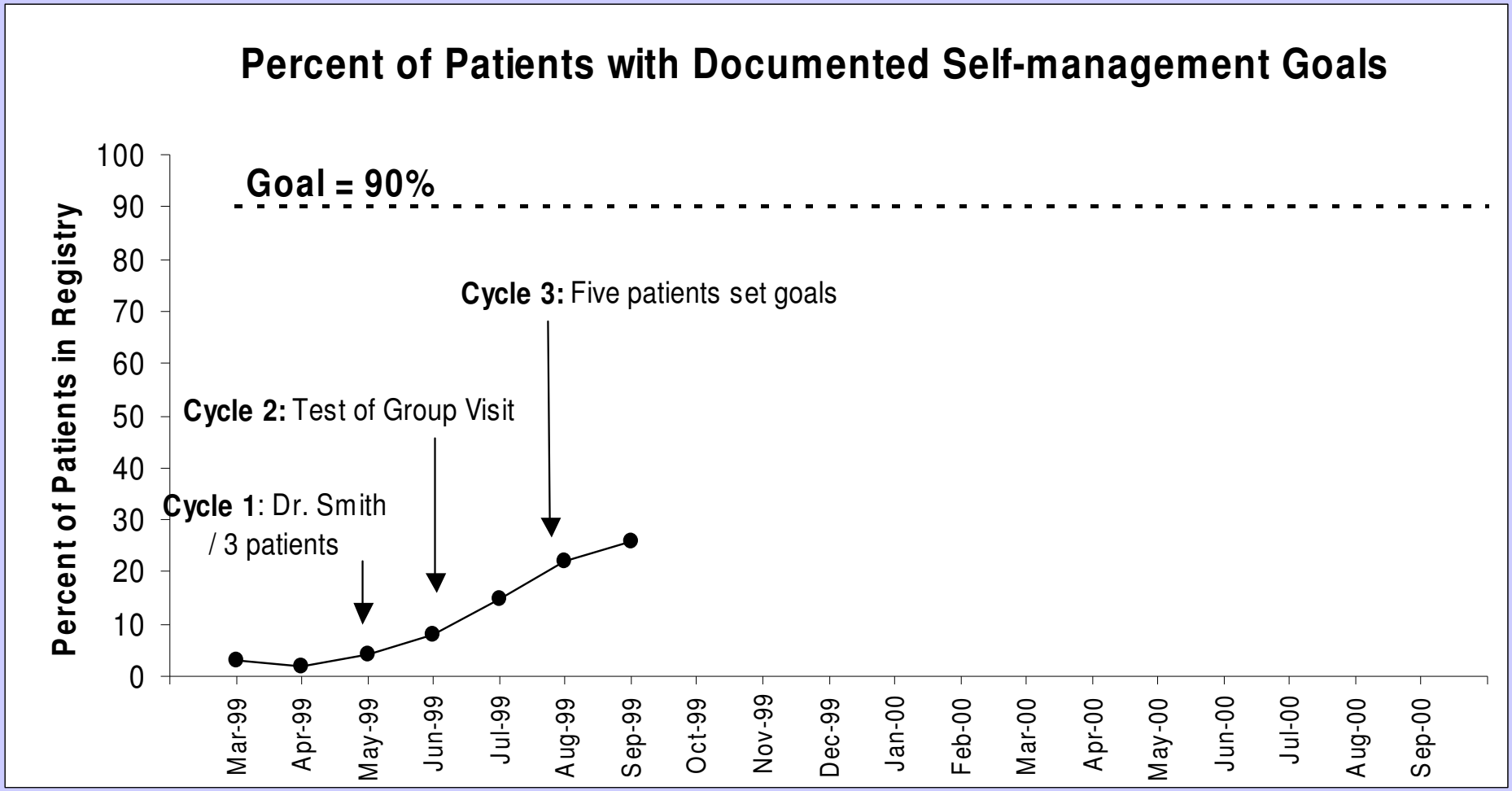
Decision support

Self-management goals

Data Reported Monthly:
Annotated Run Chart



Data Reported Monthly:
Annotated Time Series



Accelerating Learning and Improvement

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.