QTIP

Quality through Technology and Innovation in Pediatrics

Model for Improvement Framework

Common barriers to improvement efforts

- Time
- Money
- Lack of Resources
- "We've always done it this way"
- Too much resistance to change
- Nobody wants to work on this
- Too many other priorities

Some change is good

Comparison of QA & QI

	QA	QI
Motivation	Measuring compliance with standards	Continuously improving processes to meet standards
Means	Inspection	Prevention, monitor over time
Attitude	Required, defensive	Chosen, proactive
Focus	Outliers or "bad apples", individuals	Processes, systems, majority
Players	Selected departments	Organization wide, benchmarking
Disciplines	Within profession	Multidisciplinary approach
Scope	Medical profession focused	Patient care focused
Responsibility	Few	All

Model for Improvement

What are we trying to accomplish?

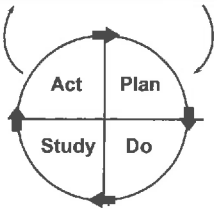
How will we know that a change is an improvement?

What change can we make that will result in improvement?

Aim

Measures

Ideas



From: Associates in Process Improvement

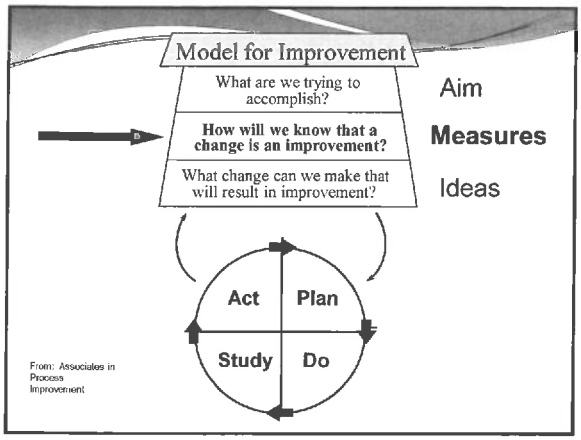
AIM Statements

Aim Statement: A written statement of the accomplishments expected from improvement effort. It should:

- Describe the SYSTEM to be improved (location)
- Must be TIME specific (by when?)
- Must be MEASURABLE (how much?)
- Must define a SPECIFIC POPULATION (who exactly?)

EXAMPLES:

- Reduce emergency room visits (system) for asthma patients (population) by 30% (measureable) within 15 months (time)
- Increase the %age of flu vaccinations (system) given to asthmatic patients (population) at University Pediatrics to 85% (measureable) by the end of flu season (time)



Measurement

- Measures are used to guide improvement and test changes
- Integrate measurement into daily routine; use patient population database
- Plot data for the measures over time and annotate graph with changes

"You Can't Manage What You Don't Measure."

Measures- 3 Types

Outcome Measures- Voice of the Customer. How is the system performing? What is the result?

Process Measures- Voice of the workings of the system. Are the parts/steps in the system performing as planned?

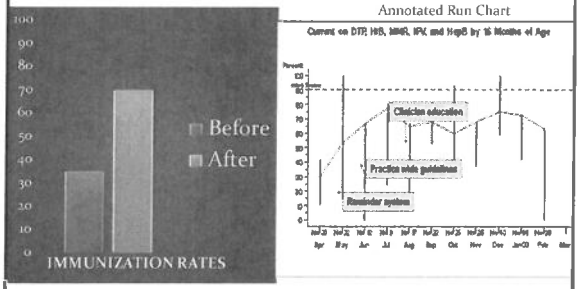
Balancing Measures- Looking at a system from different directions. What happened to the system as we improved the outcomes/process (e.g. unanticipated consequences, other factors influencing outcome)?

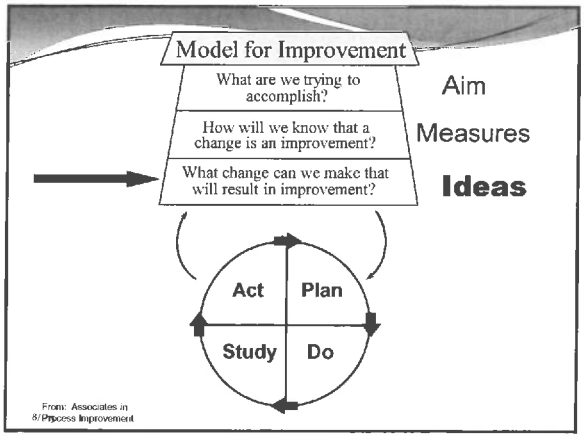
Project Measure

A balanced set of measures helps to assure the **system** is improved

- Related to the aim's measureable goals
- Easy to collect
- Show improvement quickly and include outcome
- Can display them graphically over time

Usual Display of Measures





Change Concepts:

- **Use change concepts,** models (Chronic Care Model), literature, shared experiences to develop specific changes
- Test: good ideas, ready for use or ready for adaptation to your environment

Change Concept Generic Examples

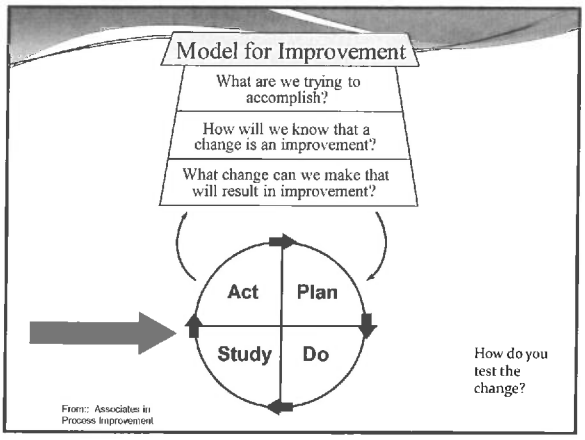
- Conduct trainings
- Focus on processes
- Work with suppliers/input
- Reduce setup and prep time
- Develop contingency/backup plans for special situations
- Use reminders
- Reduce # components/simplify

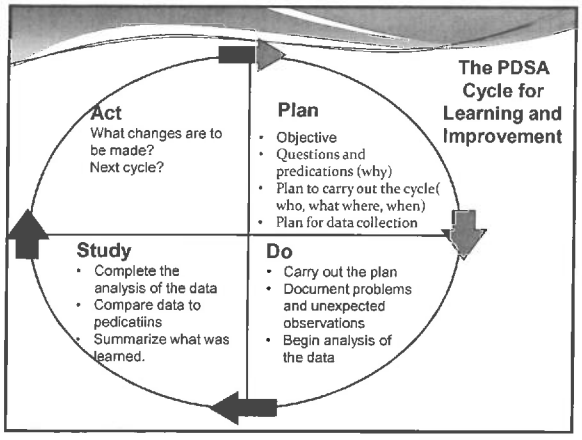
Vague, creative

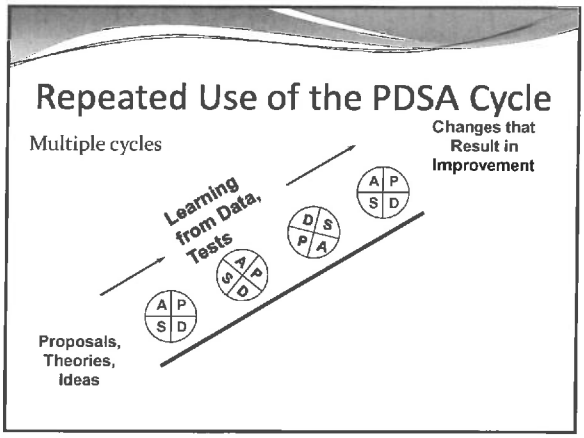
Specific, actionable

Example of A Change Concept:

- Reduce backlog
- Make continuity of care a system property
- Identify patients' PCP
- Develop phone script for schedulers
- Pilot phone script for one day



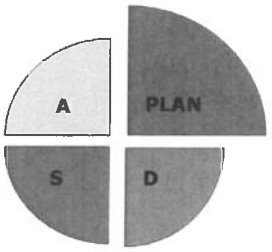




Why Test?

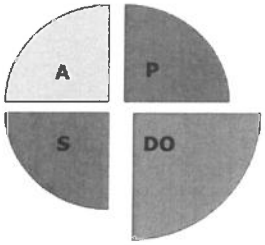
- **Increase** your belief that the change will result in improvement
- **Opportunity** for learning from "failures" without impacting performance
- **Document** how much improvement can be expected from the change
- **Learn** how to adapt the change to conditions in the local environment
- **Evaluate**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

PDSA- Plan



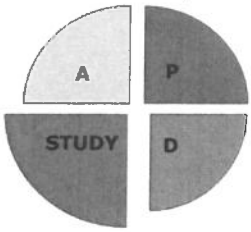
- Create an AIM statement
- Form your hypothesis
- Predict what will happen when the test is carried out
- Develop measures determine if hypothesis is correct

PDSA- Do



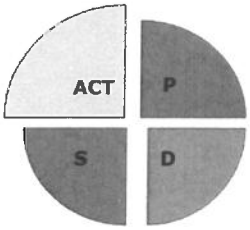
- Collect data
- Chart and display the data
- Document problems, unexpected observations
- Describe what happened when you ran the test
- "Just enough" data

PDSA- Study



- Determine
- Compare
- Describe

PDSA- Act



- Act on what you have learned
- Describe modifications to the plan from what you learned

Helpful Hints

To PDSA or Not to...

To PDSA:	***Not to PDSA:***
• When testing *new:* • processes • tools • measures	• Gathering data or information (patient lists---unless you want to learn about the data process) • General "planning", setting goals, objectives or completing tasks

Helpful Hints

K.I.S.S. --Keep It Short and Simple

- Scale down size of test (# of patients, location)
- Conduct the test over a short time period
- Test with volunteers
- Do not try to get buy-in or consensus for the test
- Collect *useful* data during each test

Helpful Hints

Key Points for PDSA Cycles

- Successful test
  - As you move to implementation, test under as many conditions as possible
  - Test under special situations (e.g.., busy days)
  - Factors that could lead to breakdowns (e.g.. Different staff or physicians involved)
  - Things naysayers worry about (e.g., it will not work when Dr. King is not here)

Helpful Hints

Initially Use Smaller Scale Tests: The power of "one"

Conduct the initial test with...

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

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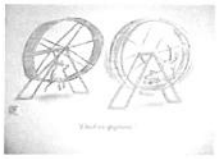
Helpful Hints

Some inefficiencies of PDSAs

- Doing too much in one PDSA, instead of several cycles
- Running PDSA that are not PDSAs;
  - Collecting baseline data
  - Meetings
  - Brainstorming
  - Planning to change



References

- *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance.* G. Langley, K. Nolan, T. Nolan, C. Norman, L. Provost. Jossey-Bass Publishers, San Francisco, 1996.
- "Eleven Worthy Aims for Clinical Leadership of Health Systems Reform," Don Berwick, *JAMA*, September 14, 1994, Vol. 272 #10, p. 797-802

Final Thought...

If you don't have time to do it right, when will you have time to do it over?