Quality Improvement Basics

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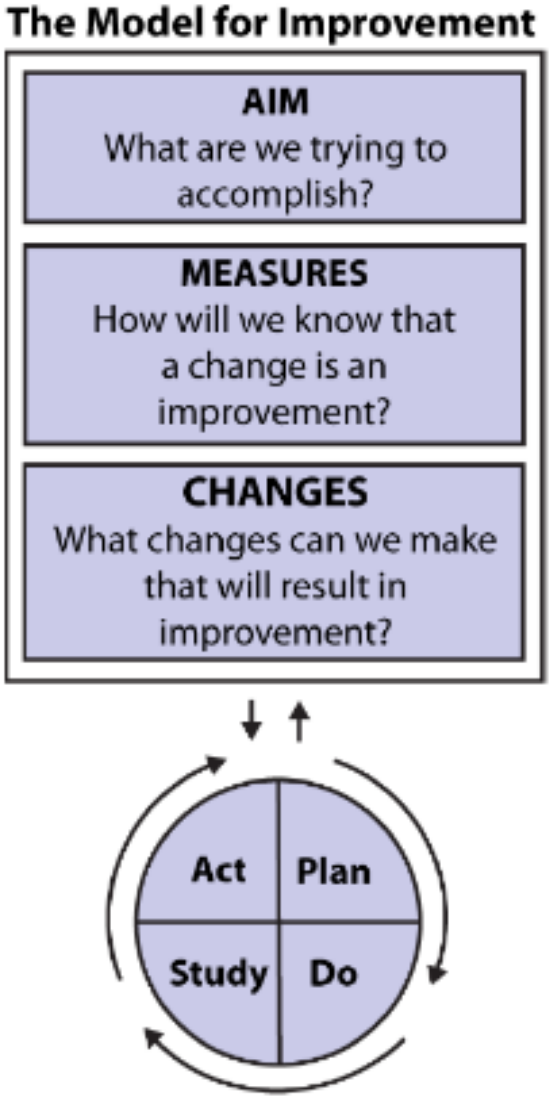
Why healthcare?

- “To help people”
- Provide health with care
  - Safe
  - Effective
  - Patient-centered
  - Timely
  - Efficient
  - Equitable
- Who is on my team?



First Step - AIM

IDENTIFY:

- What are we trying to accomplish?
- What do we need/want to improve, and why?
  - Numbers increasing/decreasing
  - Survey focus
  - New quality measure
- What to measure?
  - Relevant—really relates to the process
  - Meaningful—measure whole or part, timing
  - Available—use information that you can access with reasonable ease


ONE REALLY GOOD BOWEL MOVEMENT.
Glenn McCoy

Second Step: Measuring and Data

- Identify if a change in an improvement
- Maintain the efficient (providing good results without using more than necessary) use of resources. Is use of the resource helping?
- Ensure that residents get evidence-based care
- Provide support for negotiations/relationships with hospitals in ACO environment
- Reduce variations in treatment
- Understand the relationship between interventions and outcomes

More Benefits for Measurement

- Measure abstract concepts such as “good” care
- Communicate leadership goals to staff in clear terms that promote improved accountability from staff
- Identify problems and evaluate solutions
- Establish objective guidelines for delivery of care
- Improve ability to comply with quality measures for value-based reimbursement

Third Step: Make Change - Now What?

- What to do with what you measure:
  - What do your initial numbers tell you?
  - How can you change practice to move the numbers?
  - How will you know what made the numbers change?
- You know your baseline and have a theory….

Making Change Happen

- Critical thinking about the current system
- Benchmarking
- Take the patient's perspective
- Using technology
- Creative thinking
- Using change concepts

Category	Change Concept	Questions to Ask
1) Eliminate Waste	Eliminate things that are not used	Can you think of an activity or resource that doesn't add value?
2) Improve Work Flow	Find and remove bottlenecks	Is there some aspect of your processes where the work doesn't happen as smoothly as it should?
3) Optimize Inventory	Match inventory to predicted demand	Do you have too much or too little of the items you use or provide? Is your work held up because items are poorly organized or not available?
4) Change the Work Environment	Take care of basics	Changing the work environment itself can make all other process changes more effective. Does the culture resist or embrace new ideas?
5) Producer/Customer Interface	Focus on the outcome	What are the needs of the people you serve? Do they understand the value of your services? Do they have ideas for ways you can improve?
6) Manage Time	Do tasks in parallel	Can you cut down on the time it takes to do anything in the organization—whether it's waiting times or the time to develop a new idea or product?
7) Focus on Variation	Standardization (create a formal process)	What aspects of your systems vary and make your outcomes unpredictable?
8) Focus on Error Proofing	Use reminders	Can you make it harder for people in your system to make mistakes? For instance, can you make the information necessary to perform a task available in, say, a checklist—rather than in one's memory?
9) Focus on the Product or Service	Listen to customers	Is the service or product you provide a good one? Can it be better?

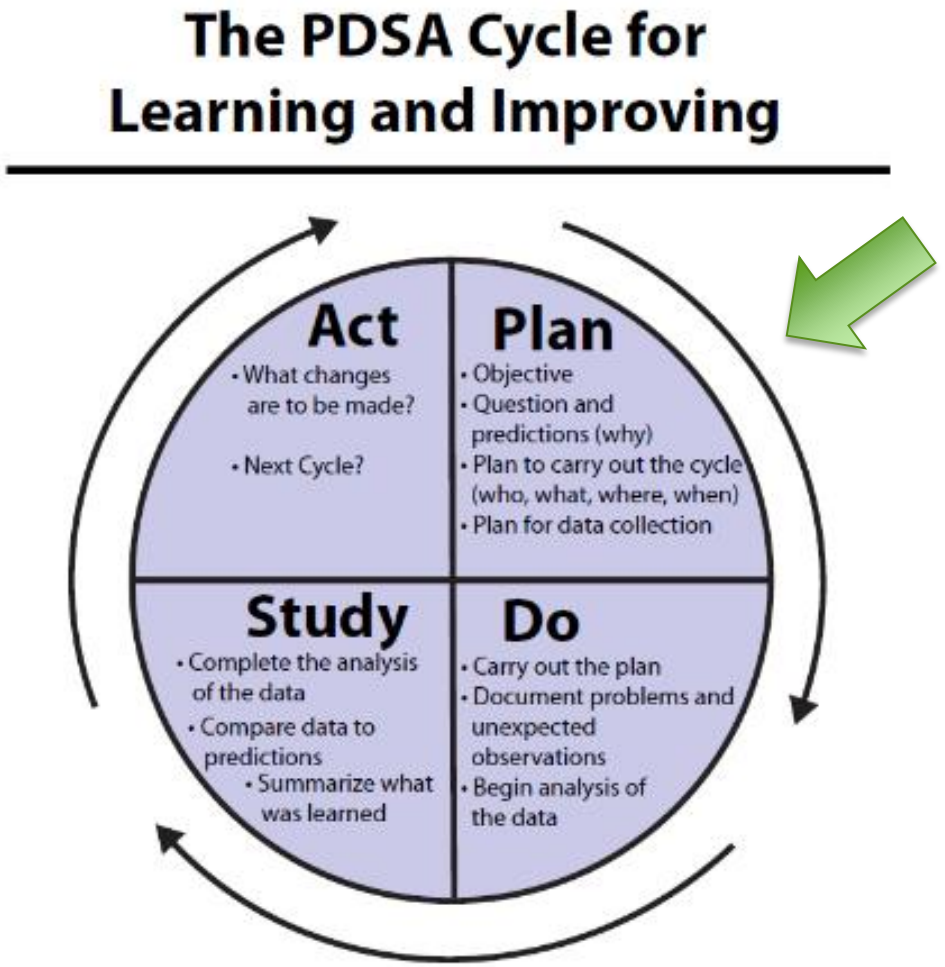

Hey, You Young Stud!!
Uh oh. Cougar Alert.

PDSA

- Step 1: Plan

  Plan the test or observation, including a plan for collecting data.

  - State the objective of the test.
  - State the questions you want to answer and make predictions about what will happen and why.
  - Develop a plan to test the change. (Who? What? When? Where? What data need to be collected?)

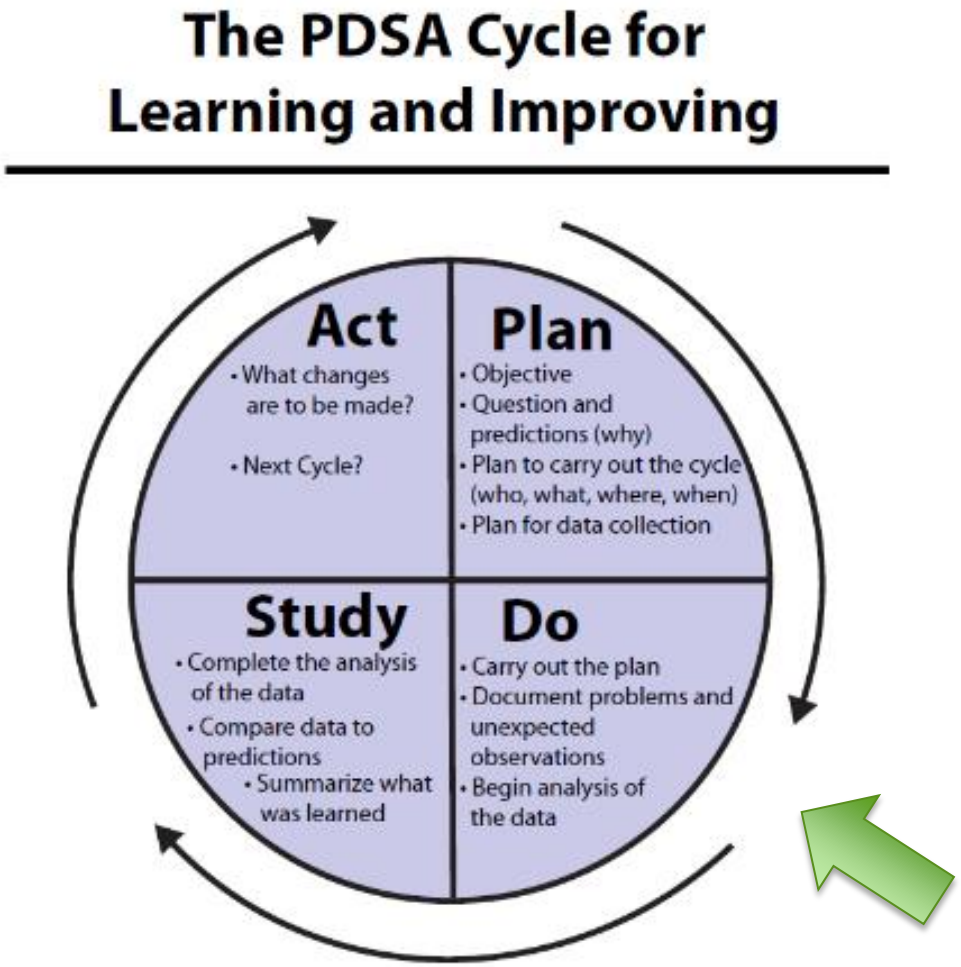


PDSA

- Step 2: Do

  Try out the test on a small scale.

  - Carry out the test.
  - Document problems and unexpected observations.
  - Begin analysis of the data.

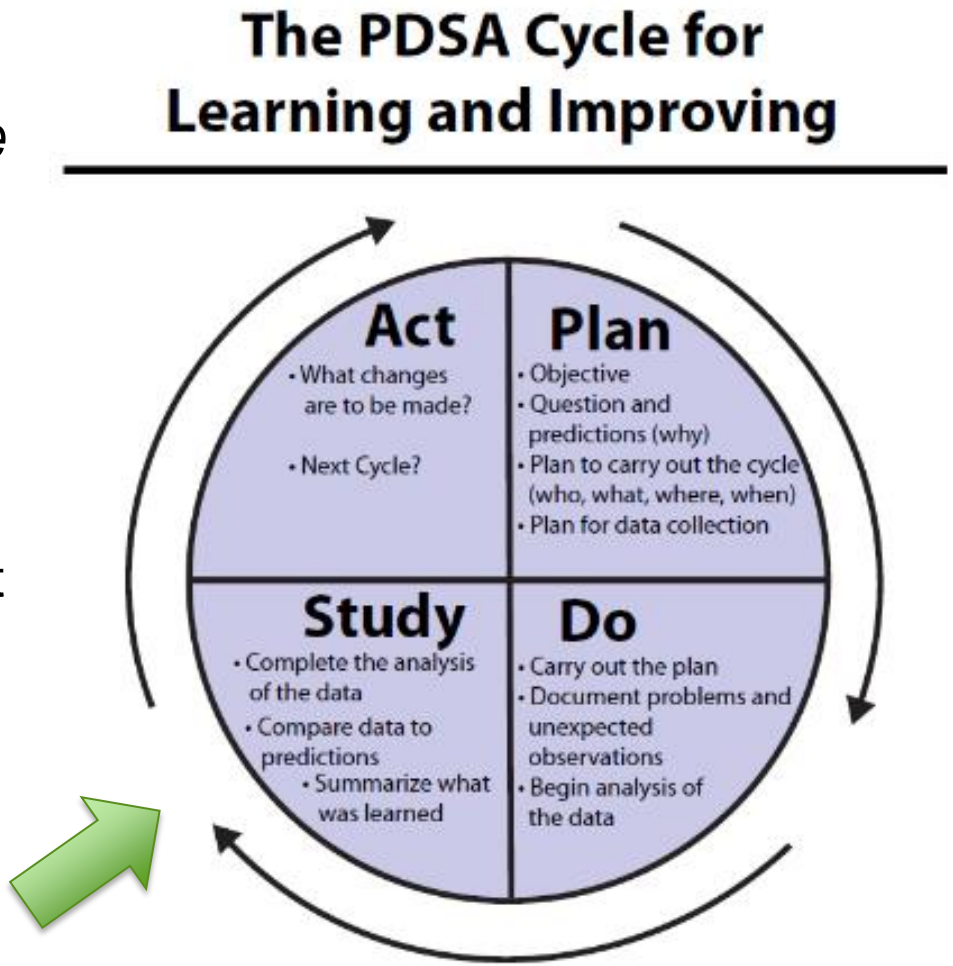


PDSA

- Step 3: Study

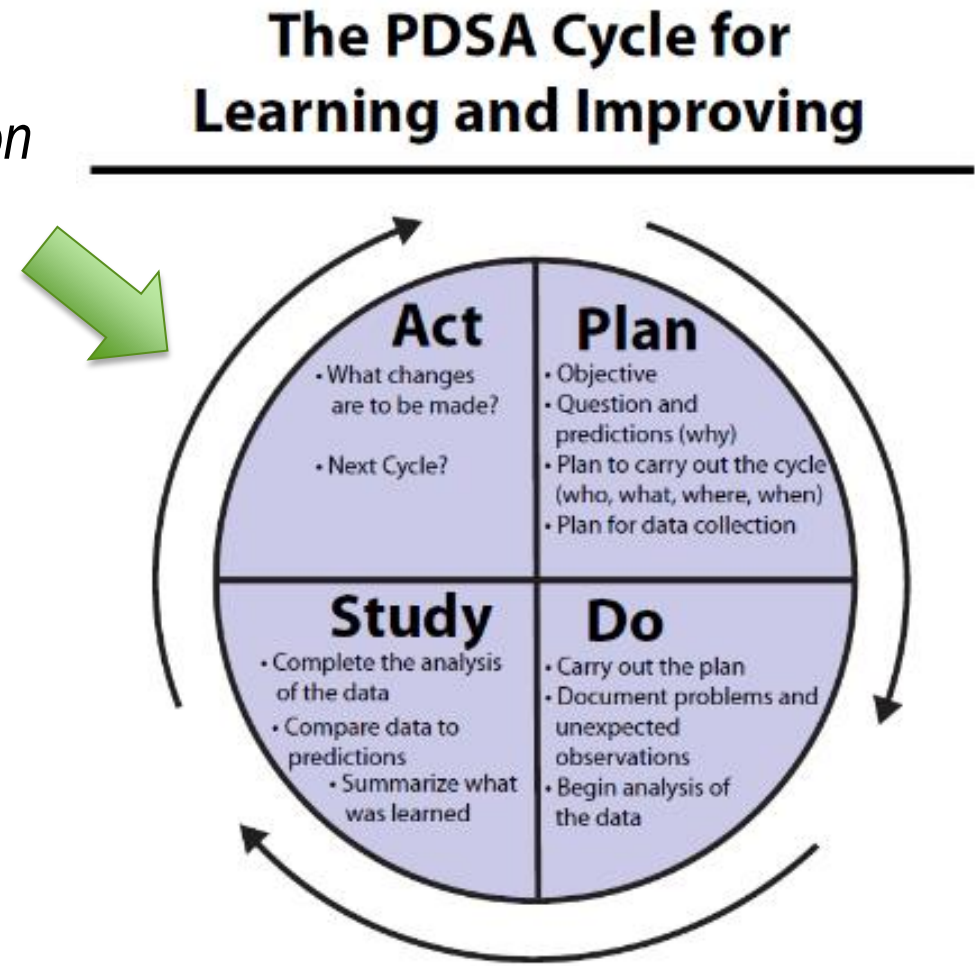
  Set aside time to analyze the data and study the results.

  - Complete the analysis of the data.
  - Compare the data to your predictions.
  - Summarize and reflect on what was learned.



PDSA

- <u>Step 4: Act</u>
  Refine the change, based on what was learned from the test.
  - Determine what modifications should be made.
  - Prepare a plan for the next PDSA.



Example: Cluster of UTI's

You are the DON of the Heavenly Gardens Skilled Nursing Community. In the last six weeks, UTI's have increased by 150%. You have the following data available:

- Resident name/number
- Date UTI first identified
- ID of Physician/NP
- Catheter or not and date inserted/removed
- Unit at time infection identified
- Date of admission and from where
- Resident diagnoses
- Lab results
- Symptoms immediately prior to diagnosis

Plan→Do: Interventions

- Research proper use of antibiotics for UTI's and diagnostic criteria
- Meet with Medical Director and NP to discuss the increased numbers
- Develop criteria for antibiotic use based on ALL indications
- Observe residents for changes in:
  - Number of lab tests for UTI ordered on unit
  - Number of residents with identified symptoms
  - Number with positive labs and symptoms who are treated
  - Number with positive labs and no symptoms who are treated
  - Number with positive labs who are not treated (trend?)
  - Number of identified UTI's
- Implement for residents cared for by that team

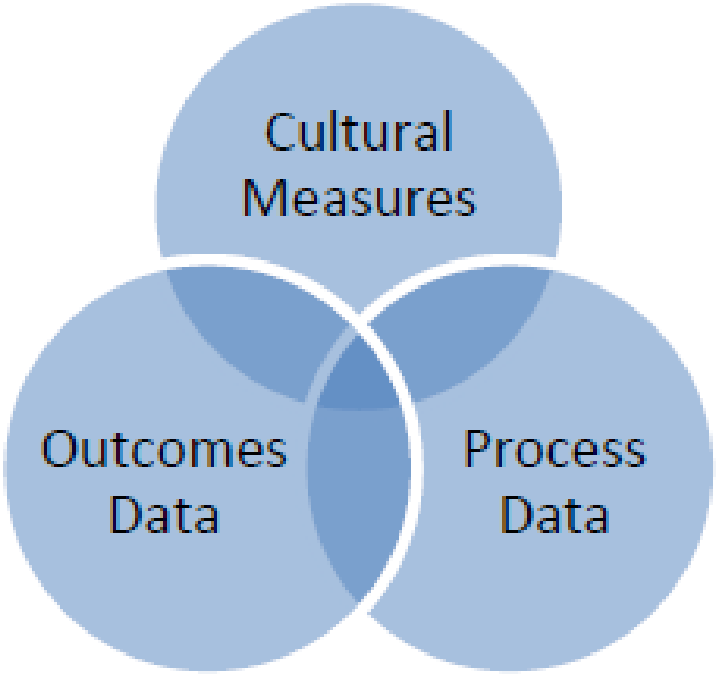
Results—what do they mean?

- Fewer lab tests were ordered
- The number of residents with positive lab results and symptoms stayed relatively constant, and they continued to be treated.
- The number of residents with positive lab results and no symptoms decreased, probably because tests were not ordered for as many of them.
- Total identified UTI's decreased 60%.
- Total courses of antibiotics for UTI's decreased more, due to some residents who would have received multiple courses.

Corollary benefit: While the home was not actively measuring c-diff infections, on retrospective review they had dropped by 30%.

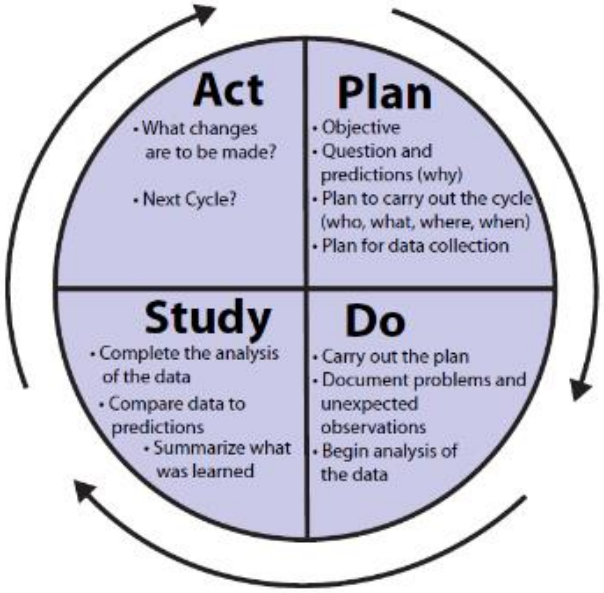
Types of Measures

- Outcome Measures = Where are we ultimately trying to go?
- Process Measures = Are we doing the right things to get there?
- Cultural Measures = Are the changes we are making to one part of the system causing problems in other parts of the system?



Quality Questions?

The PDSA Cycle for Learning and Improving



The Model for Improvement

AIM
What are we trying to accomplish?

MEASURES
How will we know that a change is an improvement?

CHANGES
What changes can we make that will result in improvement?