

## Quality Improvement In Your Practice

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## Learning Objectives

- Define the role of Quality Improvement in practice
- Understand the Model for improvement
- Define the use of PDSA cycles that can help guide quality improvement
- Demonstrate the use of PDSA cycles to guide improvement

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## What is Quality Improvement?

- Quality Assurance?
  - A term used in manufacturing and generally after-the-fact assurance of item quality
- Quality Improvement
  - Quality improvement (QI) consists of systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups. The Institute of Medicine's (IOM) which is a recognized leader and advisor on improving the Nation's health care, defines quality in health care as a direct correlation between the level of improved health services and the desired health outcomes of individuals and populations <sup>(1)</sup>.

1. The Institute of Medicine of the National Academies

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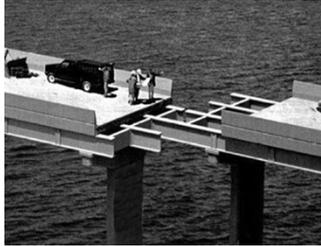
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### The value of continuously considering quality



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### Why conduct continuous quality improvement in your practice?

- It's Fun
- It can help improve reimbursement in a pay for performance environment
- It can help meet ABFM MOC part IV requirements
- It can contribute to decreasing the cost of care to the healthcare system
- It can reduce medical errors
- Most importantly, it can improve the quality of care that we deliver to our patients

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### The Model for Improvement

- The Model for Improvement,\* developed by Associates in Process Improvement, is a simple yet powerful tool for accelerating improvement
- The model is not meant to replace change models that organizations may already be using, but rather to accelerate improvement
- This model has been used very successfully by hundreds of health care organizations in many countries to improve many different health care processes and outcomes.

Sources:  
\*Langley GJ, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.

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### The Model Includes Two Parts

1. Three fundamental questions, which can be addressed in any order.
2. The Plan-Do-Study-Act (PDSA) cycle\*\* to test changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement.

\*\*The Plan-Do-Study-Act (PDSA) cycle was originally developed by Walter A. Shewhart as the Plan-Do-Check-Act (PDCA) cycle. W. Edwards Deming modified Shewhart's cycle to PDSA, replacing "Check" with "Study." [See Deming W.E. *The New Economics for Industry, Government, and Education*, Cambridge, MA: The MIT Press, 2000.]

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### The Three Fundamental Questions

<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p>What are we trying to accomplish?</p> </div>	<p><b>Setting Aims</b> Improvement requires setting aims. The aim should be time-specific and measurable; it should also define the specific population of patients or other system that will be affected</p>
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p>How will we know that a change is an improvement?</p> </div>	<p><b>Establishing Measures</b> Teams use quantitative measures to determine if a specific change actually leads to an improvement</p>
<div style="border: 1px solid black; padding: 5px;"> <p>What changes can we make that will result in improvement?</p> </div>	<p><b>Selecting Changes</b> Ideas for change may come from the insights of those who work in the system, from change concepts or other creative thinking techniques, or by borrowing from the experience of others who have successfully improved</p>

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### Setting Aims, Establishing Measures, Selecting Changes

SMART Aim

- ▀ Specific
- ▀ Measurable
- ▀ Achievable
- ▀ Relevant
- ▀ Timely

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### Constructing an Aim Statement

We will

\_[verb]\_\_\_[noun]\_\_\_\_\_ by  
\_[number]\_\_\_\_\_ [units] by \_\_[date]\_\_\_.

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### Thoughts for Improvement

- Before you try to solve a problem, define it.
- Before you try to control a process, understand it.
- Before trying to control everything, find out what is important.

Neuhauser, D., PhD, Myhre, S., MBA, & Alemi, F., PhD. (2004). *Personal Continuous Quality Improvement Work Book* (7th ed.).

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### Helpful Hints

- Clearly define your goal for each cycle – Put it in writing!
- Keep a log or diary of your progress.
- Data collection should be on a frequent basis – start immediately!
- Assemble data graphically

Neuhauser, D., PhD, Myhre, S., MBA, & Alemi, F., PhD. (2004). *Personal Continuous Quality Improvement Work Book* (7th ed.).

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## The PDSA Cycle



**Testing Changes**  
 The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change in the real work setting — by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method adapted for action-oriented learning.

coachingandleading.wordpress.com-

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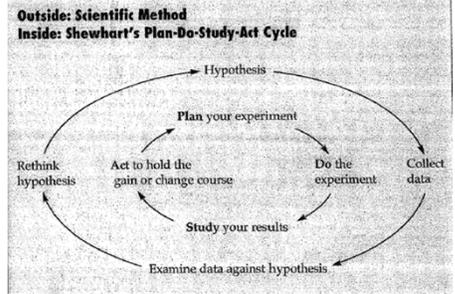
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## The Scientific Method of Improvement the PDSA Cycle



Neuhauser, D., PhD, Myhre, S., MBA, & Alemi, F., PhD. (2004). *Personal Continuous Quality Improvement Work Book* (7th ed.).

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## HMS PDSA Tracking Sheet



PDSA WORKSHEET

Team Name	Date of Start	Test Completion Date
Change description (or What is the objective of the test?)		

**PLAN** Study the baseline

How do you know that the change is an improvement?

What should the change impact?

What do you predict will happen?

**PLAN/DO** List the tasks necessary to complete the test (SMART)

	Responsible (SMT)	When	Where
1.			
2.			
3.			
4.			
5.			
6.			

Plan for collection of data

**DO** Test the change

Was the cycle carried out as planned? ☐ Yes ☐ No

Record data and observations

What did you observe that was not part of your plan?

**STUDY** Did the results match your prediction? ☐ Yes ☐ No

Compare the results of your test to your previous performance

What did you learn?

**ACT** Decide to Adopt, Adapt, or Abandon

**Adapt:** Consider the change and try a different one

**Adopt:** Select changes to implement on a larger scale and develop an implementation plan and/or for sustainability

**Abandon:** Return the change and continue testing plan improvements to the test

Adapted from: Tools: Plan-Do-Study-Act (PDSA) Worksheet (6.4). Institute for Healthcare Improvement (IHI). Retrieved August 11, 2014. from <http://www.ihi.org/resources/Pages/Tools/Plan-Do-Study-Act-Worksheet.aspx>

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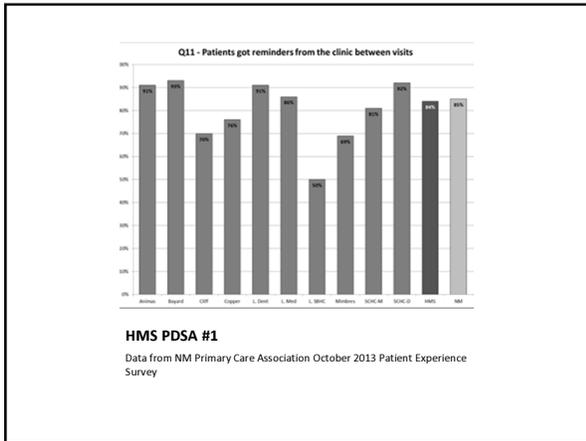
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**HMS PDSA #1**

Aim: Increase the percentage of patients getting pre visit reminders

Measure: Annual Patient satisfaction survey change

Selecting the Change: Enabling automatic voice, text and e-mail reminders through our EHR

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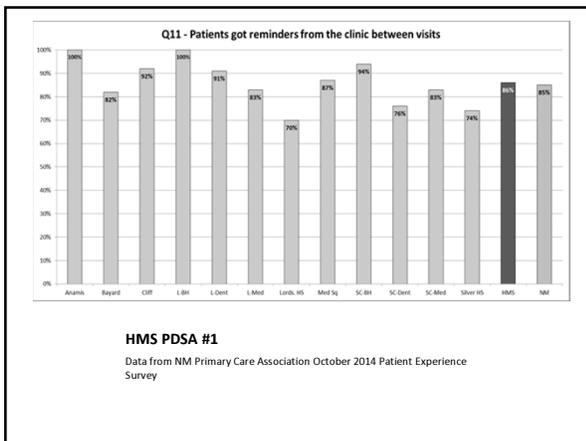
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**HMS PDSA #1**  
**Results from cycle #1**

- We saw a modest increase, 84% to 86% of patients indicating that they got pre-clinic reminders
- We realized that our system of collecting patient contact information needed improvement
- The disposition on PDSA#1 was "ADAPT"
  - The adaptation was to improve our mechanism for collecting patient contact information

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**HMS PDSA #2**

Aim: Increase the percentage of senior patients receiving pneumococcal and influenza vaccinations

Measure: Percent increase in senior patients who received pneumococcal and influenza immunizations

Selecting the Change: "Red Cards" and outreach

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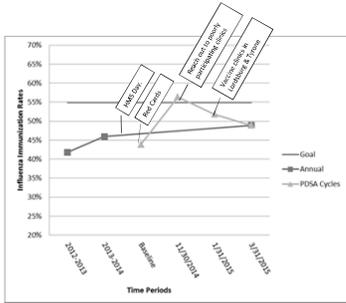
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### The power of PDSA (influenza)



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Questions?

Thank You

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