

Gaining Experience in Practice-Based Learning and Improvement

Greg Ogrinc, MD, MS

Dartmouth Medical School
White River Junction VA

Objectives for this Session

- Identify core content and learning objectives in practice-based learning and improvement
- Plan a project to improve some aspect of your professional work
- Implement and test a project to improve some aspect of professional work (now until May 2005)

Today's Agenda

1:00 Introductions & overview

1:05 Buzz groups

1:15 Overview of PBLI

1:45 Small group/individual work for planning an improvement project

2:15 Break

2:25 Large group debrief

2:40 Example of success

2:55 Summary and evaluation of this session

3:00 Adjourn

First Perspective

I am unbelievably busy. Don't even talk to me about taking time to improve or change what I do. I can barely get through the day.

Second Perspective

I am busier than I have ever been, but I realize that no one is going to turn my lights on for me. If I am going to keep up with the state of the art in practice, I am going to have to make time to understand and engage in changing what I do.

Buzz Groups

- Turn to the person next to you
- Discuss the following:
 1. What do you need to figure out regarding PBLI?
 2. What are the barriers that you have encountered?



Practice-Based Learning and Improvement (PBLI)

- Investigation and evaluation of patient care
- Appraisal and assimilation of scientific evidence
- Improvements in patient care

Institute of Medicine

Chasm Report



“Americans can have a health care system of the quality they need, want, and deserve...This level of quality cannot be achieved by further stressing current systems of care.

The current care systems cannot do the job. Trying harder will not work. Changing systems of care will.”

IOM, *Crossing the Quality Chasm*, 2001

Improving Care

- Improved mortality after CABG (O'Connor et al 1996)
- Decreased cost and increased staff satisfaction on a GIM inpatient unit (Curley et al 1998)
- Improved care for patients in the DHMC spine center (Weinstein et al 2000)
- Reduced infant mortality in a high-risk Native American population (Pierce-Bulger et al 2001)

Physicians Need to Know How to Improve Care

- IOM Health Professions Education Summit: improvement = foundation
- AAMC Medical School Objectives Project Report V
- ACGME Core Competencies
- ABMS Continuing Certification

**Improving
health
care is a
contact
sport**

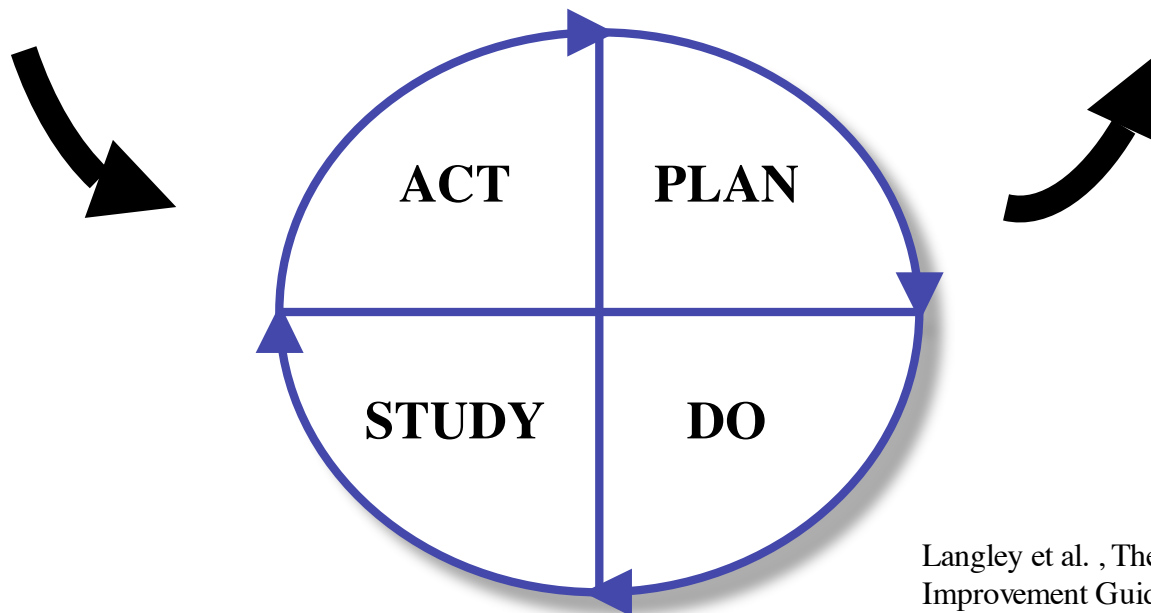


A Model for Improvement

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?



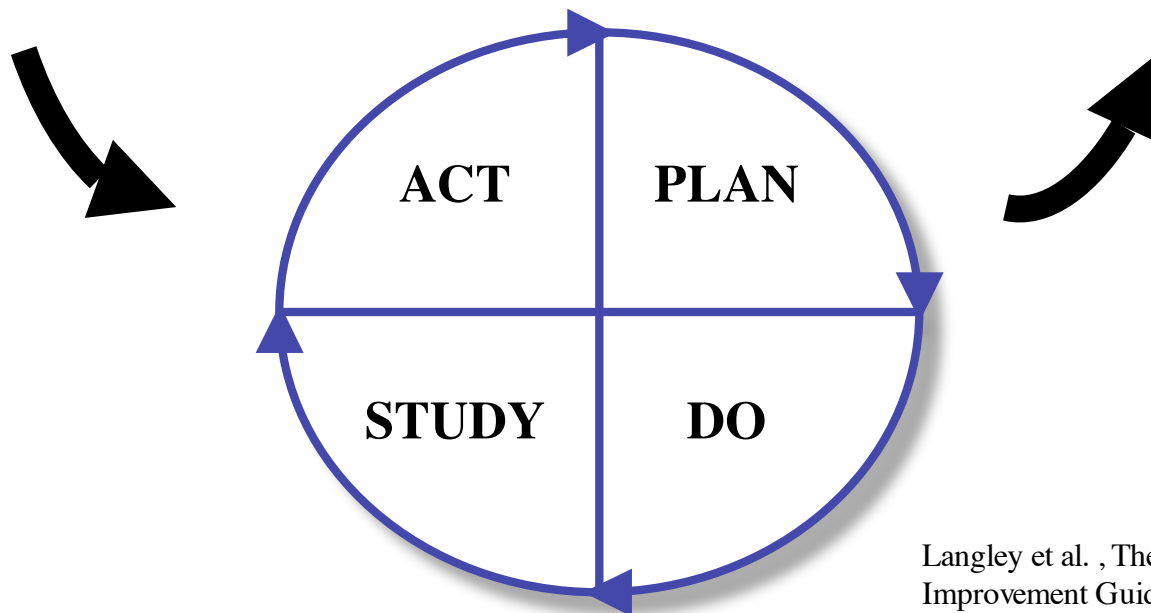
Langley et al. , The
Improvement Guide, 1996

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Criteria for Choosing a Focus for Improvement

1. Important to the people being served and who work in the process
2. Important to the organization in which the change must occur
3. Worth the investment of resources
4. Manageable size
5. Possible to measure effects of interventions quickly

Examples of Aim Statements

- Not so good...
 - “Our supervisor sent us a memo that we must keep patients from falling.”
- A bit better...
 - “Reduce the number of falls over the next six months.”
- Very clear...
 - “Working with the falls improvement team on 2-South, we will reduce the rate of falls by 25% before July 1, 2003.”

VA Collaborative on Reducing Falls and Injuries

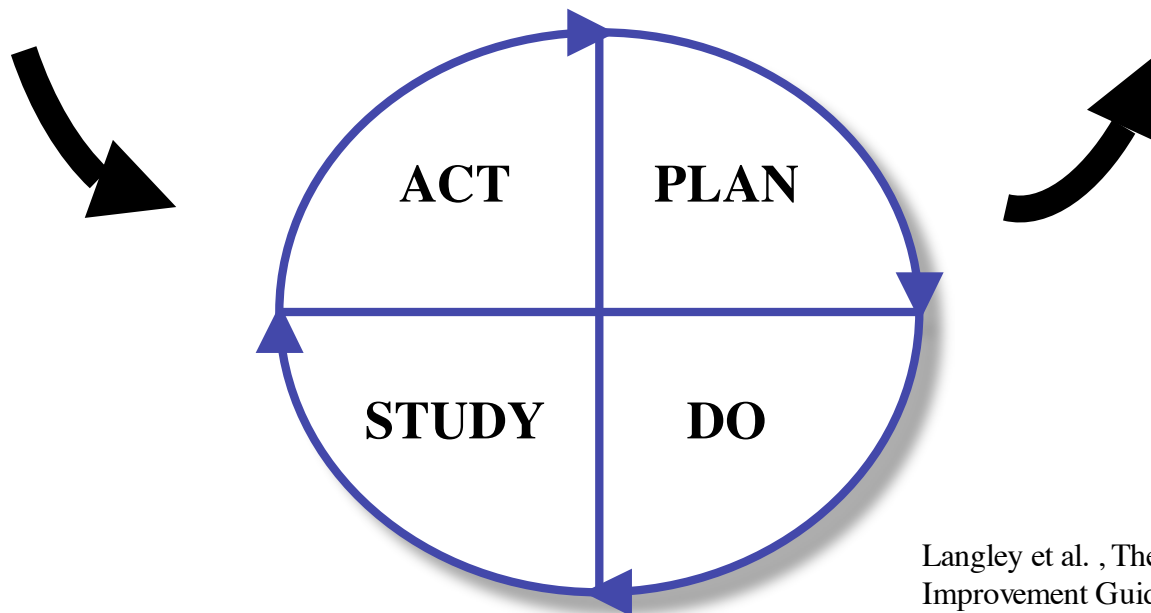
- **Aim:** Reduce the rate of falls and the injuries due to falls on ward 1 South by 50% over the next 8 months while maintaining maximum patient autonomy.
- **Aim:** Decrease the rate of major injuries due to falls on the rehabilitation unit by 50% in the next 8 months.

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My Mom...



My Mom as a baseball fan...



Standard Baseball Statistics

Team A

Batter	Pos	AB	R	H	RBI
Player 1	SS	1	0	1	0
Player 2	SS	1	1	1	0
Player 3	DH	1	0	1	0
Player 4	CF	1	0	1	0
Player 5	CF	1	1	1	3
Player 6	LF	1	0	1	0
Player 7	2B	1	0	1	0
Player 8	1B	1	0	1	0
Player 9	1B	1	0	1	0
Player 10	RF	1	1	1	0
Player 11	C	1	0	1	0
Player 12	C	1	0	1	0
Player 13	3B	1	0	1	0
Player 14	3B	1	0	1	0
Player 15	2B	1	0	1	1
Player 16	LF	1	1	1	0
Totals		36	4	10	4

Team B

Batter	Pos	AB	R	H	RBI
Player 1	CF	1	1	1	0
Player 2	CF	1	0	1	0
Player 3	SS	1	0	1	0
Player 4	SS	1	0	1	0
Player 5	LF	1	0	1	0
Player 6	LF	1	0	1	0
Player 7	DH	1	0	1	0
Player 8	DH	1	0	1	0
Player 9	RF	1	0	1	0
Player 10	RF	1	0	1	0
Player 11	1B	1	1	1	1
Player 12	1B	1	0	1	0
Player 13	3B	1	0	1	0
Player 14	3B	1	0	1	0
Player 15	C	1	0	1	0
Player 16	C	1	0	1	0
Player 17	2B	1	0	1	0
Totals		37	2	11	1

Team A

Pitcher	IP	H	R	ER	BB	SO	HR
Player 1	2	1	0	1	0	1	0
Player 2	3	1	1	1	0	1	0
Player 3	1	1	1	1	0	1	1
Player 4	1	1	0	1	0	1	0
Player 5	1	1	0	1	0	1	0
Player 6	1	1	0	1	0	1	0
Totals		9	4	6	0	6	1

Team B

Pitcher	IP	H	R	ER	BB	SO	HR
Player 1	1	1	0	1	1	1	0
Player 2	1	1	2	1	0	1	1
Player 3	3	1	0	1	0	1	0
Player 4	3	1	1	1	1	1	0
Player 5	1	1	1	1	0	1	0
Totals		7	4	5	2	5	1

Mom's Baseball Statistics

MAY 4TH 2009

K.C. (Residence 3-2)

	AVG	HR	RBI	RS
BELTRAN ^{CF}	286	2	9	18
SANCHEZ ^{SS}	261	0	8	10
SWANNEY ^{1st}	268	7	20	25
DYE ^{2B}	265	5	18	21
RANDA ^{3rd}	200	3	16	11
BLINN ^{OH}	296	9	26	18
ORTIZ BROWN ^{LF}	322	2	14	10
ORDAZ ^{RF} ORTIZ ^C	278	0	7	6
ORDAZ ^{2nd}	286	0	2	3
		29	120	122

SABATHIA (3-1)

LOFTON	303	0	11	15
VIZQUEL	237	1	11	22
ALOMAR	342	1	15	21
GONZALEZ	373	10	37	30
THOME	221	4	15	14
BUCKS	290	4	19	18
CORDOVA	411	6	26	18
BRANNAN	222	7	22	10
DIAZ	311	1	11	11
		34	167	159

Tips for Useful Measurement

1. Link the measurements to improvements and changes
2. Seek usefulness, not perfection
3. Report percentages and rates rather than absolute numbers

Criteria for Choosing Measures

1. Clearly related to the project aim
2. Convincing to those asked to change what they do based on the results
3. Already collected routinely
4. Results available in a timely fashion
5. Can be collected easily as part of the routine daily flow of work
6. Previously validated instrument is available

VA Collaborative on Reducing Falls and Injuries

- Fall rate
- Minor injury rate
- Major injury rate
- Staff satisfaction
- Patient satisfaction

Examples of Measures

- Fall Rate

- $(\# \text{ of falls} / \# \text{ of Bed Days}) * 1000$

- Injury Rate

- $(\# \text{ of patients injured} / \# \text{ of patients who fell}) * 100$ (per month)

- Balancing Measures

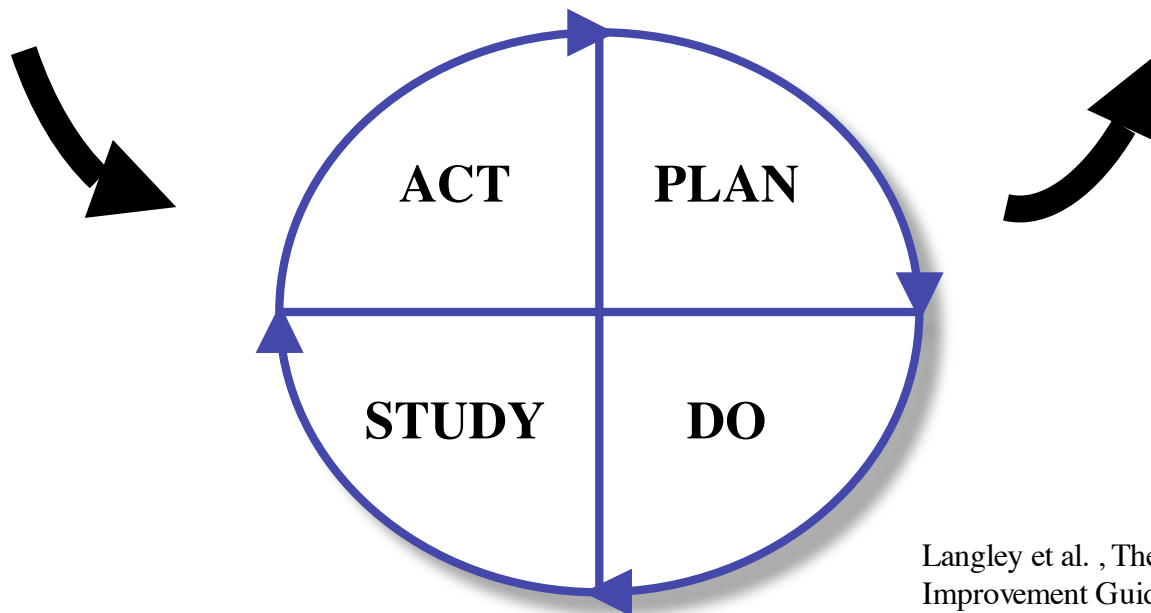
- Use of restraints, % staff trained

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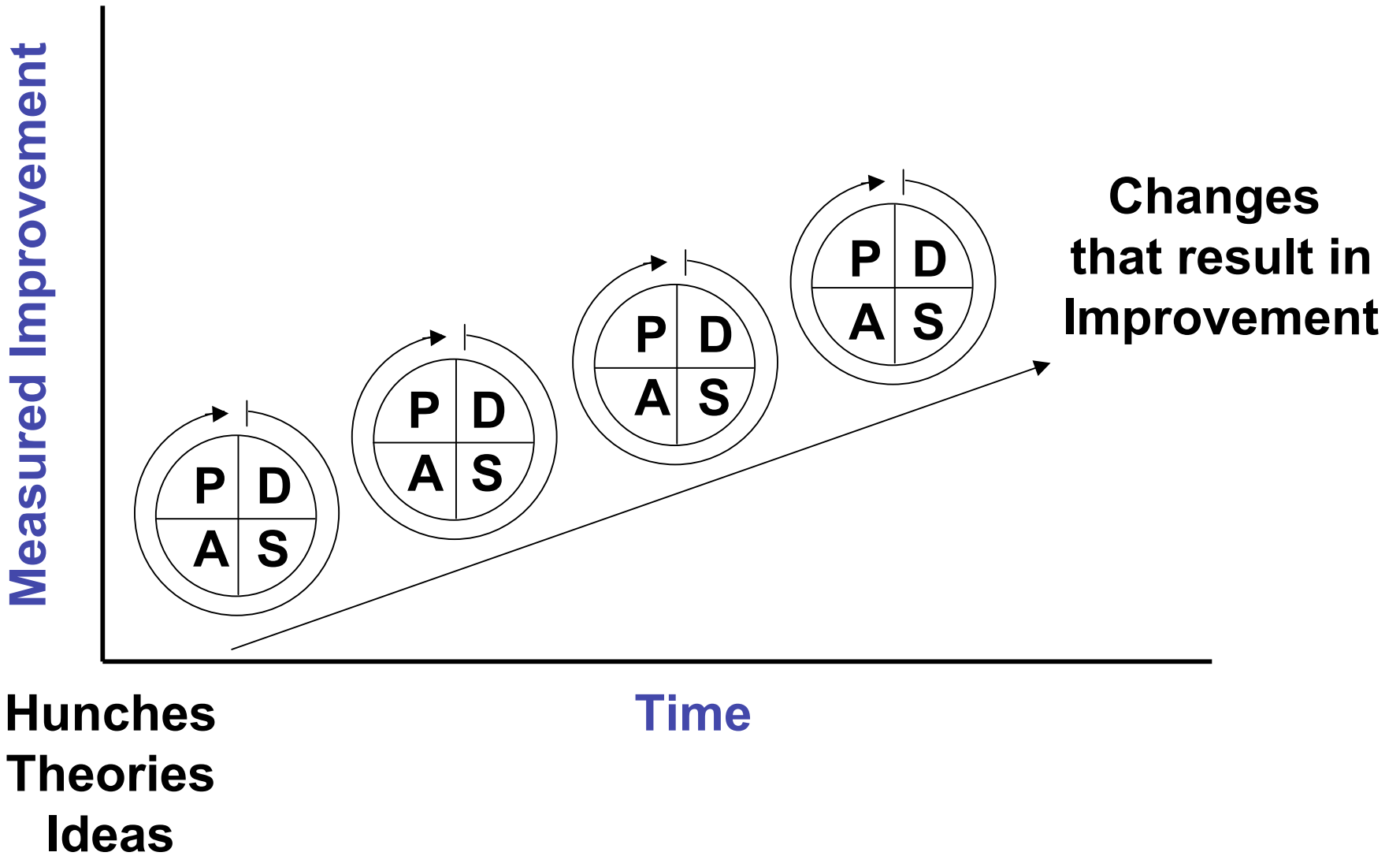
What change can we make that will result in improvement?



Langley et al. , The
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The Change Should Be...

1. Connected to the aim, with the potential to have a great influence on the desired outcome
2. Achievable in a short period of time, so that one can see the results
3. Measurable

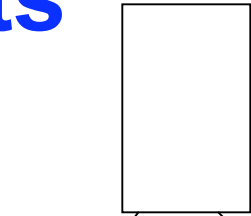


Change Concepts

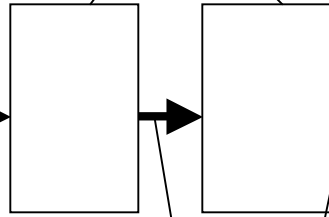


1. Modify Input

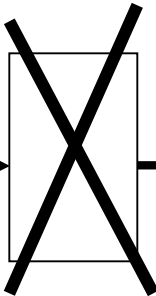
2. Combine Steps



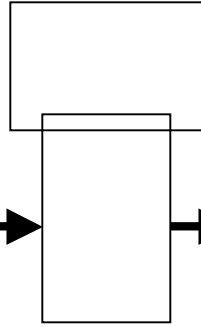
3. Eliminate hand-off failures



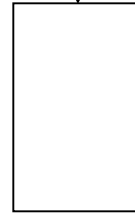
4. Eliminate Step



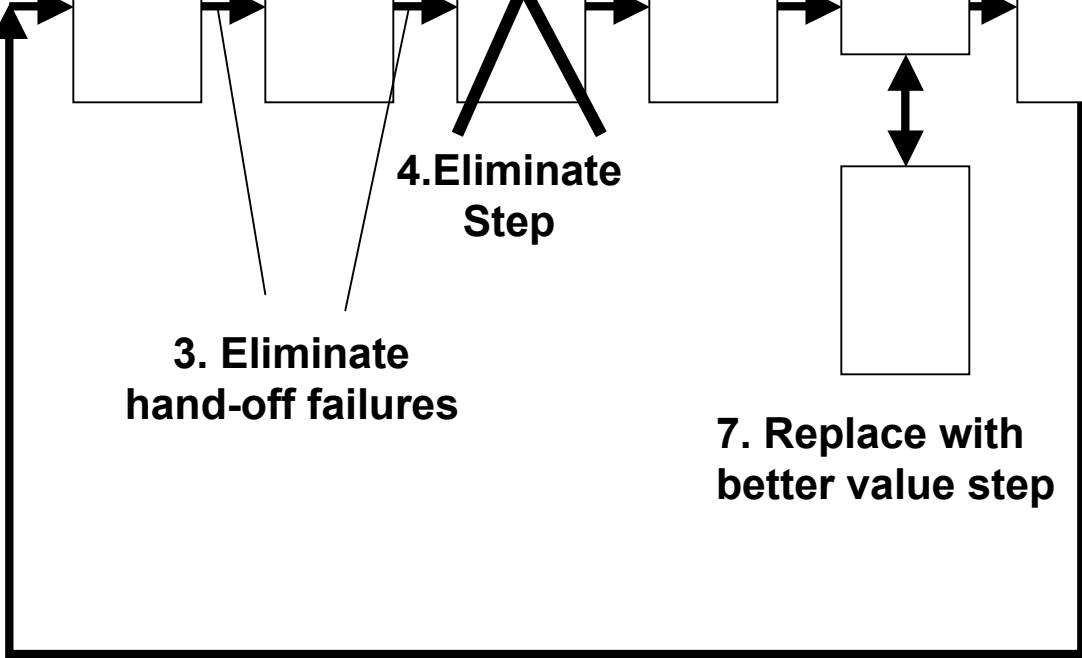
6. Arrange to change process concept



7. Replace with better value step



5. Reorder sequence



8. Based on output, redesign production

9. Based on use of output, redesign

10. Based on need, redesign

VA Collaborative on Reducing Falls and Injuries

- Standardize the falls risk assessment for patients on admission
- Paint the wall behind the toilet a dark color
- Try low beds for patients at high risk
- Bed alarms
- Chair alarms
- Move high risk patients close to nursing station

Summary

- Many examples in the literature have demonstrated that PBLI is effective
- PBLI is a skill based activity and requires practice
- The methods and skills to improve care are not routinely taught in professional education
 - We can learn (and practice) these skills at any time in our career

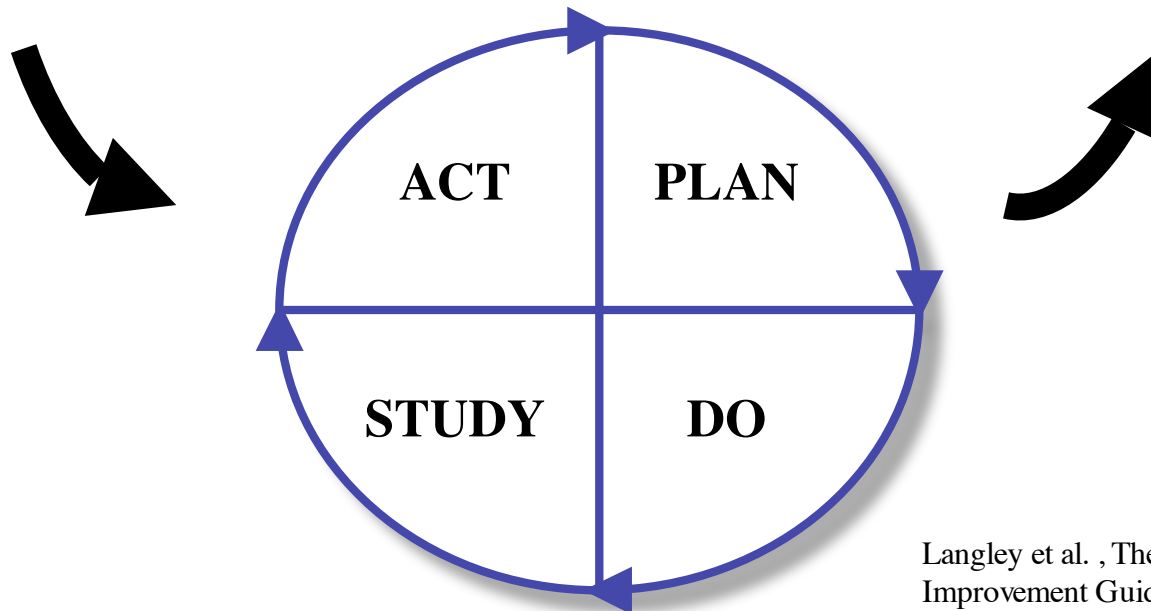
Now It's Your Turn!

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What change can **YOU** make that will result in improvement?



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Small Group Exercise

1. Gather with others from your practice or you may work alone
2. Use the worksheet
3. Take notes on the overhead transparency
4. You have 30 minutes for this exercise
 - Faculty will circulate to answer questions

Debriefing session...

Special guest presentation

Welcome to Martha Nelson, APN

Insert martha's slides

Summary

- Improving health care is a contact sport
- The model for improvement is a useful tool to frame our efforts
- We have developed some interesting projects
 - We'll work together in the coming months
 - Email (greg.ogrinc@dartmouth.edu)
 - Conference calls
 - May 2005 meeting

Next Steps

- Email your first PDSA cycle to our group by next Wednesday
 - We will read and comment through email
- Participate in first conference call
 - December 6, 2004, 12-1pm
 - Call information will be sent to you
- Contact me for any questions
 - greg.ogrinc@dartmouth.edu
 - 802-295-9363 x6946
- Make plans to join us at our spring 2005 faculty development conference