

+ FROM IDEAS
TO IMPLEMENTATION





FROM IDEAS TO IMPLEMENTATION

This module discusses tools and methods that may be used to generate ideas for changes that meet specific aims. It also focuses on why it is important to test changes before moving directly to the implementation phase.

LEARNING OBJECTIVES

By the end of this module, participants will be able to...

- Recognize opportunities for improvement and generate creative ideas for change
- Develop and test an idea for change using PDSA cycles
- Consider ways to sustain and spread successful changes

THIS MODULE CONTAINS:



Twenty-two slides with speaking notes and questions for group discussion. (45-60 minutes)



Six optional learning activities:

- Ideas for Change from Change Concepts - worksheet (30 minutes)
- Mapping a Process (30 minutes)
- TRIZ – Theory of Inventive Problem-Solving (30 minutes)
- 25 Gets You 10 (15 minutes)
- Six Thinking Hats - worksheet (30 minutes)
- Paper Airplane Competition - worksheet (30 minutes)
- Planning for Sustainability - worksheet (30 minutes)



Remember to make this module your own! Add in examples and details that will bring the ideas to life for the learners.

+ FROM IDEAS TO IMPLEMENTATION



By the end of this module, you will be able to...

- Recognize opportunities for improvement and generate creative ideas for change
- Develop and test an idea for change using PDSA cycles
- Consider ways to sustain improvement over time

Speaking Notes:

- This module is focused on tools and methods to generate ideas for change and emphasizes the importance of testing in relatively short time frames. It also highlights some things to consider to help sustain improvement over time.

IDEAS FOR CHANGE

- Not all changes result in improvement
- Often we need a number of different ideas to achieve our aim
- Ideas for change come from various sources

Speaking Notes:

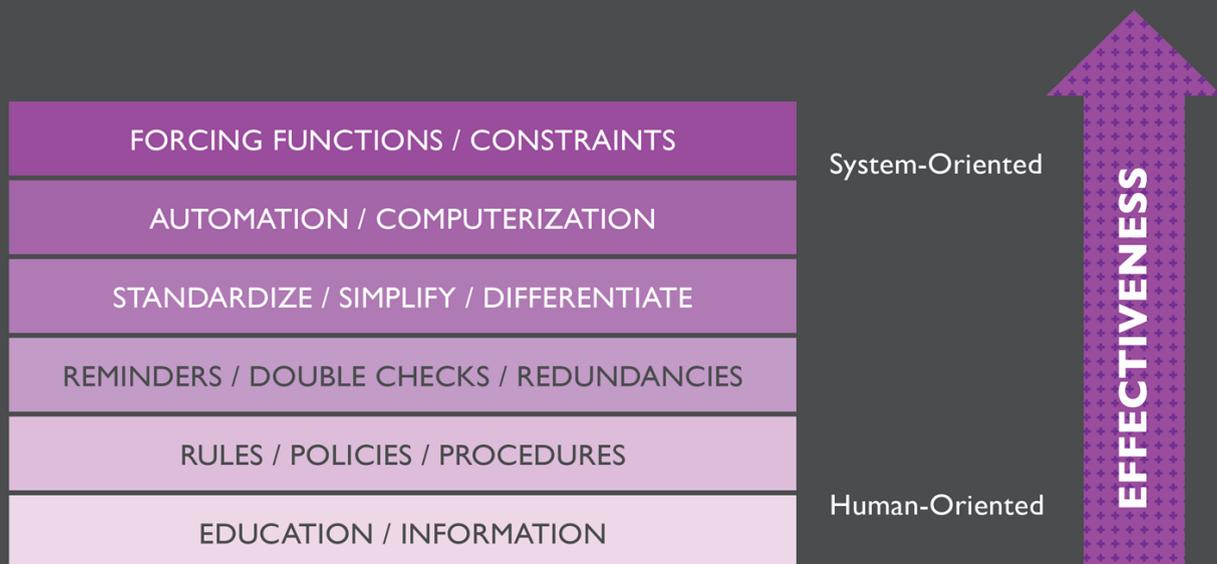
- Coming up with ideas that are different to how we usually work can be challenging.
- Even if the changes came from another organization or a best practice document, it doesn't necessarily mean they will work well in this instance.
- Typically, it takes more than one idea for change to make a difference.
- Ideas for change come from various sources, but always involve input from the organization and staff.

Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives. - William Adelbert Foster



EFFECTIVENESS OF CHANGES

Some kinds of changes are typically more effective than others



(Institute for Safe Medication Practices, 1999)

Speaking Notes:

- Some kinds of changes are usually more effective than others.
- The changes at the bottom are generally less effective because they depend on people changing their behaviours.
- Changes that are focused on the system, at the top, are more effective because they make it hard NOT to change.
- For example, at gas stations the pump for diesel is larger than the pump for gasoline and won't fit into the tank of gasoline-powered cars. This is a forced function that prevents people from using the wrong type of fuel in their cars.

Optional Discussion Question:

What are some examples of things that fall into the different levels of effectiveness in your work?

METHODS TO GENERATE CHANGE IDEAS

- Adapting Best Practices
- Change Concepts
- Mapping
- Creativity of the Team



Speaking Notes:

- Improvement often involves doing things differently and thinking of creative solutions to old challenges.
- There are some specific methods that can help generate new ideas for changes to test.
- Don't be afraid to try an idea that was not effective previously. In different conditions, it just might work.

 *If participants are part of a specific project team, take some time for the group to generate change ideas for their project after reviewing all the methods.*

ADAPTING BEST PRACTICES

- Research/Literature Review
- Guidelines
- Benchmark

Speaking Notes:

- Often in health care, ideas are provided to us in the form of best practices.
- Best practices come from research literature, or top performing organizations, or established models or guidelines.
- The team still needs to identify and test how to adapt those best practices in their own setting.
- Benchmarking is learning from top performers. By connecting with areas that are having success in what you want to achieve, you can compare how things work and get ideas for things to test to improve in your area.

CHANGE CONCEPTS

A general approach found to be useful in developing specific ideas for change that results in improvement.

Speaking Notes:

- There are 72 general changes that successful organizations (health care and other businesses) have used to make successful and sustainable changes.
- These are general concepts, many having to do with reducing waste and improving work flow.
- Specific ideas can come from reviewing this list and then formulating ideas with more details.



Optional Activity

IDEAS FOR CHANGE FROM CHANGE CONCEPTS

Purpose

To consider how change concepts can generate ideas for change to test in an improvement project.

Time

30 minutes

Materials

Change Concepts worksheet 

Preparation

Print a copy of the worksheet for each participant.

Instructions

This activity can be done in a small or large group. Ask participants to think about the problem they are working on. Review the worksheet and find five change concepts that could be turned into a specific idea to test. From those five, brainstorm ideas and develop a plan to test your new ideas.

Alternatively, you could use the example of clinic wait times from the previous modules and consider change ideas for that.

Debrief

Ask participants to share the ideas they came up with from their change concepts.

Resources

A Resource Guide to Change Concepts. Pages 357-408 of Langley, Gerald J., et al. The improvement guide: a practical approach to enhancing organizational performance. John Wiley & Sons, 2009.

MAPPING

A visual depiction of a process.

Maps highlight:

- Unnecessary delays
- Unnecessary steps or transitions
- Duplication of effort (waste)
- Things that don't make sense
- Hotspots, bottlenecks, or constraints

Speaking Notes:

- Mapping can help identify opportunities for improvement.
- Maps highlight certain things such as:
 - Delays, overlap, and steps that don't make sense.
 - Bottlenecks and steps that might be in the wrong order.
 - Examples of steps that could be done by a different person.
- Mapping also allows people to see different perspectives of how things work and can help you anticipate how changes may affect other parts of the system.



Optional Activity

MAPPING A PROCESS

Purpose

For participants to map a process.

Time

30 minutes

Materials

- Flip chart paper
- Post-it notes
- Markers

Preparation

Set up flip chart paper for each group, and have post-it notes and markers at each station.

Instructions

Work in pairs or small groups and map out a familiar process, such as making a sandwich or mailing a letter. Then analyze the map to identify opportunities to improve the process.

Debrief

Have participants share an opportunity for improvement they identified from their maps, and any highlights or key learnings from the process of mapping.

Note differences among maps despite using the same example process. Highlight how people may have different perspectives of a process.

Notes

Process mapping can also be a useful tool at the beginning of a project to identify areas of focus for your improvement work.

CREATIVITY OF THE TEAM

Use novel ways of thinking to generate ideas for change.

Speaking Notes:

- There may be other ideas for change that are not as obvious.
- Often the people involved in the work have ideas, including patients and families.
- There are some tools to help people think outside the box and generate creative ideas for change.
- Some of these activities can also help prioritize the ideas for change to determine which ideas might be the best ones to try out first.

A new ideal is delicate. It can be killed by a sneer or a yawn.
It can be stabbed to death by a joke or worried to death by
a frown on the wrong person's brow. - Charles Browder



Optional Activity

TRIZ - THEORY OF INVENTIVE PROBLEM-SOLVING

Purpose

To generate and prioritize change ideas.

Time

30 minutes

Materials

- Flip chart paper
- Felts

Preparation

Arrange participants in groups of 4-7. Alternatively, this can be done as a large group with all participants.

Instructions

Ask participants to first make a list of ideas to make sure that the worst result imaginable with respect to their area for improvement occurs (ie: How can we make sure our clients have to wait forever for an appointment?).

Then as a group, review this list and check off each item that resembles anything they are currently doing. Go through the items that are checked off and decide what can be done to stop these things from happening.

From this list, prioritize your ideas for change and make a plan for testing them to achieve improvement.

Debrief

Have participants share key learnings from this exercise. What were the results of flipping their perspective? What were the highlights of doing the TRIZ?

Resources

Liberating Structures www.liberatingstructures.com

Notes

This exercise can be a great way to engage people in the process of improvement, and can surface issues and problems in a comfortable and fun way.



Optional Activity

25 GETS YOU 10

Purpose

To generate and prioritize change ideas.

Time

30 minutes

Materials

- Index cards
- Pens
- Timer
- Bells or other sound-maker

Preparation

Arrange a space which participants can stand and mingle around in. Distribute an index card and a pen to each person. Have a timer and sound-maker.

Instructions

Ask participants to think about one big, bold idea for making change (ie: If you could do absolutely anything to try to make an improvement, what would you do?). Write a brief description on their index card.

Once everyone has written their idea down, ask them to quickly pass the cards from person to person until cued to stop (20-30 seconds), and then read the card they have at that moment. Rate that idea between 1-5, where 5 means you love the idea and 1 means you don't like it. Write your score on the back.

Repeat this until cards have been rated 5 times, then add the numbers on the back of the cards. Each card will have a total out of 25. Identify who has a card that has 25 points, 24, 23 etc. and share and discuss the ideas from the top-scoring cards.

Debrief

Have participants share any key learnings that came from rapidly sharing and evaluating ideas for change and highlights from the process of using 25 Gets You 10.

Resources

Liberating Structures www.liberatingstructures.com

Notes

This exercise helps to stimulate bold thinking and draws on the wisdom of the whole group.



Optional Activity

SIX THINKING HATS

Purpose

For participants to consider a change idea using multiple perspectives.

Time

30 minutes

Materials

- Six Thinking Hats worksheet 
- Pens

Preparation

Print a copy of the worksheet for each participant.

Instructions

Work in small groups and select an idea for change that the team has been considering. Alternatively, you could use a change idea from the earlier example of decreasing clinic wait times, such as implementing self-scheduling or modifying the staff schedule.

Using the Six Thinking Hats worksheet, analyze that idea from each of the coloured hat perspectives.

Debrief

Have participants share any key learnings that came from analyzing their ideas from the various perspectives and highlights from the process of using Six Thinking Hats.

Resources

de Bono Group www.debonogroup.com

Notes

Six Thinking Hats can also be used in team meetings or other types of conversations. It is a tool to facilitate people's thinking into separate functions and roles.

ONCE CHANGES ARE IDENTIFIED...

1. Test on a small scale
2. Collect data over time
3. Build knowledge sequentially and include a wide range of conditions

Speaking Notes:

- Ideas should be tested using PDSA cycles before they are implemented.
- Tests are simple and quick to start with and become more complex as they develop.
- Tests become bigger as we become more confident that the change is causing an improvement.
- Typically we need to test more than one change in order to meet the aim.

Optional Discussion:

Think about a change you've been involved with that hasn't worked or hasn't been sustained. Share a brief overview of the change and some potential reasons why it was not successful.

The fastest way to succeed is to double your failure rate.

- Thomas Watson

WHY DO WE NEED PDSA CYCLES?

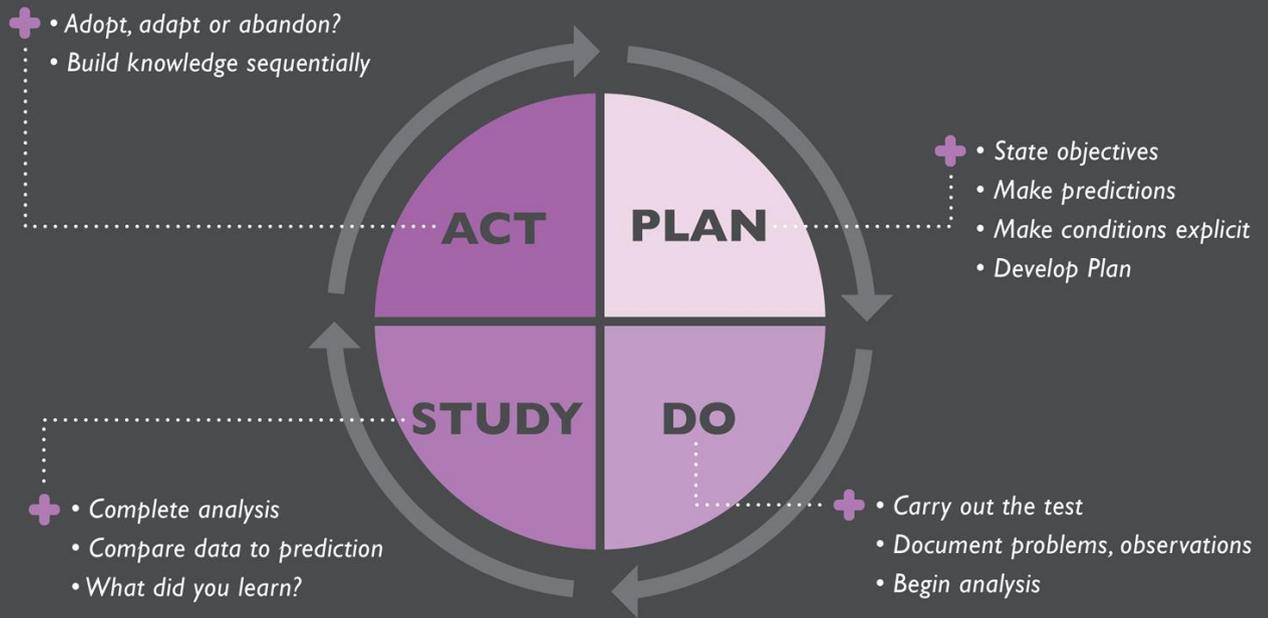
Because we don't know:

- How well an idea will work
- How the idea is best delivered
- If it will work in all conditions
- When it won't work
- How it will affect other parts of the system

Speaking Notes:

- Testing is an integral part of improvement.
- Using small tests of change to develop an idea before fully implementing it can maximize the chances of success in achieving improvement.
- Pay attention to failed PDSA cycles as well because we can also learn a lot from what didn't work.

PDSA CYCLE



(Adapted from Langley et al, 2009)

Speaking Notes:

- Going through each section before the test helps keep it small and ensures no key steps to testing are missed.
- This is what the PDSA cycle should entail:
 - **Plan:** deciding what you want to learn about your idea and how you can learn it. The team should predict what will happen. You may predict it won't work and focus on learning why not.
 - **Do:** doing the test and small measurement that will tell you whether your prediction was right.
 - **Study:** comparing the prediction to the actual result and documenting what you learned from this cycle.
 - **Act:** deciding what to do next. You may decide to do another test of the same idea with a different twist.
- After a few different cycles, you may have decided that a test worked and that you are ready to implement it. Or you might decide to completely abandon this idea and do some tests with a different idea.

AIM STATEMENT

“The wait time for the Get Better Clinic will decrease from an average of 135 days to 60 days by the end of this year.”

CHANGE IDEA

Modify clinic hours.

Speaking Notes:

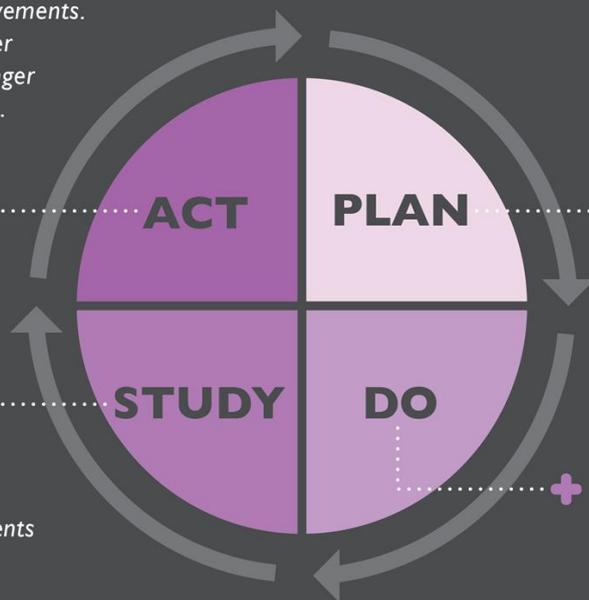
- For this example, one idea for change could be to modify the hours of the clinic.
- What would a PDSA cycle look like if you were to test this change?

Optional Discussion question:

What are some other ideas you can think of for changes to test in this situation?

PDSA CYCLE

+ Some promising improvements.
Consider adjusting other
schedules or having longer
hours on the weekends.



+ Adjust the schedule of
one clinician to offer
evening appointments
one extra day/week.

+ Monitor demand for
additional appointments

+ Make additional appointments
available for clients

Speaking Notes:

- Here is what a PDSA cycle might look like for one idea for change that could be tested.



Optional Activity

PAPER AIRPLANE COMPETITION

Purpose

For participants to try doing small tests of change using PDSA cycles.

Time

30 minutes

Materials

- PDSA Cycle worksheet 
- Scrap paper
- Box of paper clips
- Rolls of masking tape

Preparation

- Print a copy of the worksheet for each participant.
- Divide participants into groups of 2-5.
- Distribute scrap paper, paper clips, and masking tape so that each team has enough materials to make a few paper airplanes.

Instructions

The objective is to design a paper airplane that will fly the furthest. Use PDSA cycles to test changes to your plane. Track the changes you make and be prepared to review your process with the group. You will have 15 minutes to design your paper airplanes and then each team will fly their plane once to determine which team's plane flies the furthest.

Debrief

Ask each team to share some of the changes they tested and what they learned from their PDSA cycles and then fly their plane.

Notes

- Ensure participants track the changes they make using PDSA cycles.
- This activity could also be used in Module 3 to reinforce learning about PDSA cycles.

HOW BIG OF A CYCLE?

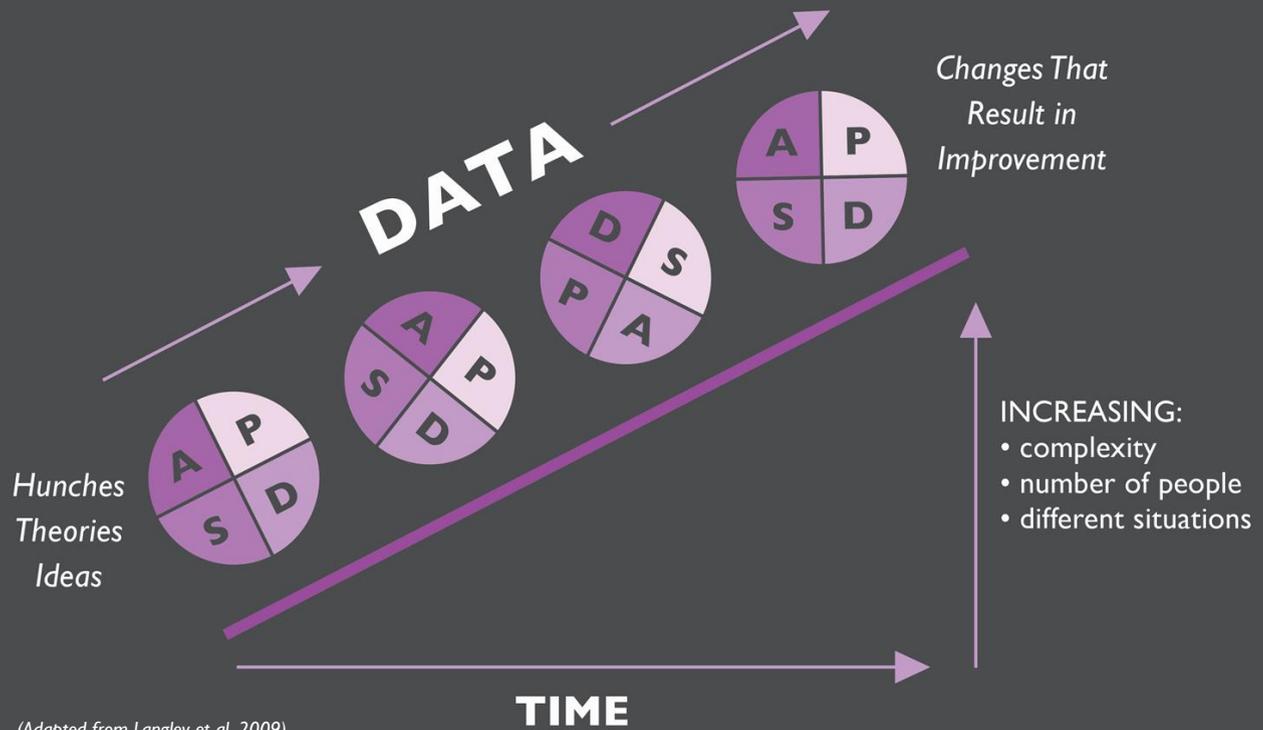
CURRENT SITUATION		RESISTANT	INDIFFERENT	READY
LOW confidence that current change idea will lead to improvement	Cost of failure large	Very small scale test	Very small scale test	Very small scale test
	Cost of failure small	Very small scale test	Very small scale test	Small scale test
HIGH confidence that current change idea will lead to improvement	Cost of failure large	Very small scale test	Small scale test	Large scale test
	Cost of failure small	Small scale test	Large scale test	Implement

(Adapted from Langley et al, 2009)

Speaking Notes:

- This chart can help you determine how small or large the scale of your tests should be.
- If you are confident that the change idea will work, then you can use a larger-scale test.
- If the cost of failure is high, then you would want to use a smaller-scale test.
- And if there is some resistance to the change, then it is better to start with small tests of change.
- Testing can be a way to engage people in the process and help you learn from this resistance.

REPEATED USE OF THE PDSA CYCLE

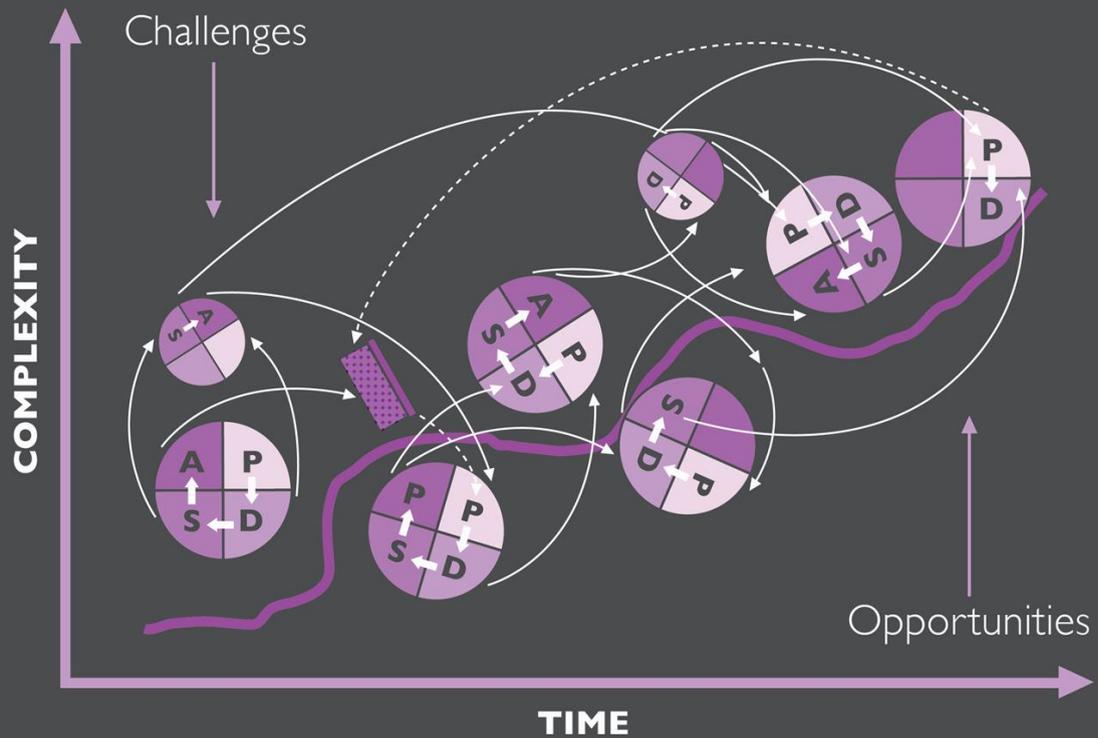


(Adapted from Langley et al, 2009)

Speaking Notes:

- PDSA cycles start small and then get more complex over time, until you have tested changes that you are confident will work.
- When the team's predictions start to be right all the time, it is time to move to more sophisticated tests – with more people and under different conditions.
- This is a PDSA ramp that shows how testing progresses from an idea to a change that results in improvement over time.

PDSA REALITY



Speaking Notes:

- While PDSA cycles seem straightforward, using them in a project is not necessarily a linear event. There can be multiple PDSAs going on at the same time, each at different stages. The important thing is to keep track of the learning that comes from each cycle.

Without continual growth and progress, such words as Achievement, Improvement, and Success have no meaning. - Benjamin Franklin

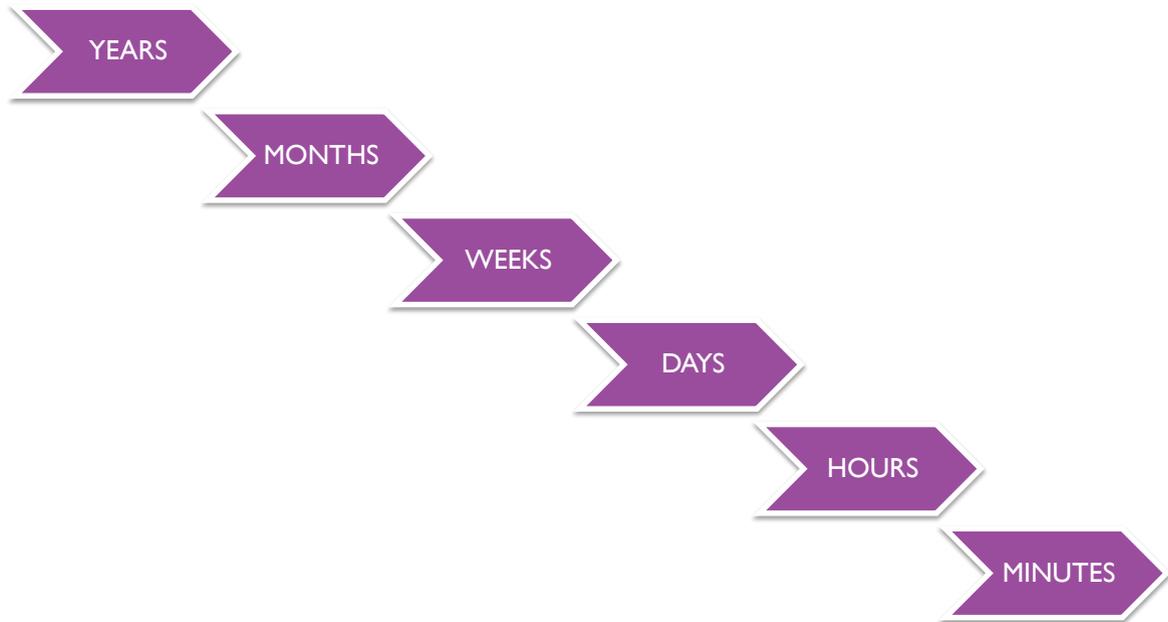
TEST UNDER DIFFERENT CONDITIONS

- Different employees
- New employees
- Different patient groups
- Complex patients
- Day shift vs. night shift
- Hours of the day
- Days of the week

Speaking Notes:

- An idea is ready to implement when it has been tested and the team knows it works under lots of different conditions.
- There might be some resistance to doing tests and concerns about the time it takes to do all of this. The time taken helps ensure the project will be successful and the improvement will be sustained.

HOW LONG WILL IT TAKE?



Speaking Notes:

- Tests of change should occur rapidly. You can build momentum toward your overall aim by focusing your efforts on incremental changes in the short term.
- To determine the timeline for your initial PDSA cycles, consider how long it will take to achieve your aim, then move 2 steps down this continuum. For example, if your aim will take 6 months to achieve, what can you do in 6 days to get started?

SUSTAINABILITY

When new ways of working and improved outcomes become the norm...and stay the norm!

(NHS Institute for Innovation and Improvement, 2010)



Speaking Notes:

- It's never too early to start thinking about sustainability - this is an inherent component of a well designed change.
- As we decide on what changes to make and how to go about testing changes, it's also important to consider if and how these changes will last over time.
- The changes we make to a process should be things that we can maintain or continue to do even after the project has completed.
- A good change is a sustainable change, and a lack of sustainment is often due to challenges with the original idea.



Optional Activity

PLANNING FOR SUSTAINABILITY

Purpose

To identify strengths and potential challenges associated with a proposed change and promote sustainability of improvement.

Time

30 minutes

Materials

- Planning for Sustainability worksheet 
- Pens

Preparation

Print a copy of the worksheet for each participant.

Instructions

First on your own and then in small groups, consider each of the questions on the worksheet in relation to the change(s) you've proposed to achieve improvement. Note any concerns and discuss what steps you can take to address those concerns and ensure your changes are sustained over time.

Debrief

Did you learn anything new about the changes you proposed?

Did you identify any gaps or limitations based on the questions in the worksheet?

What steps can you take to ensure the changes you've proposed are sustained?

Resources

NHS Institute for Innovation and Improvement, Sustainability Guide, 2010. <http://bit.ly/1SekSAY>

Notes

There are a number of factors known to play a role when it comes to sustainability. Considering these factors can be a useful exercise at any time during your improvement initiative, from initial planning to implementation.

KEEP IN MIND...

- Testing helps you learn about whether a change was effective
- You may predict that the test will fail – this is good for learning too
- Documenting PDSA cycles ensures that cycles are actually tests of change, not simply activities or tasks
- It is important to plan for sustainability at the outset

Speaking Notes:

- Remember to make a prediction to help ensure the team is learning what it needs to when testing changes.
- Writing out the steps of PDSA cycles is good practice to help make sure the tests are not just tasks or activities.
- Thinking about how changes could be sustained in advance is important.
- Ensuring the necessary resources and supports are there to make sure the change can last over time will promote sustainability of your improvement.

Optional Discussion Questions:

What stood out for you today? What do you want to remember about this session?

TIME TO REFLECT

Can you...

- Recognize opportunities for improvement and generate creative ideas for change?
- Develop and test an idea for change using PDSA cycles?
- Consider ways to sustain improvement over time?

Speaking Notes:

- Overall, this module is meant to demonstrate how project teams can identify ideas for change and the methods for testing changes using lots of PDSA cycles, before the change is implemented.
- It takes a lot of effort to generate and test ideas, but putting in effort here will help ensure the project will be successful and will be sustained.

 Use any remaining time for questions and discussion.

Also, be sure to get feedback from your participants on the session. There is an evaluation form that you can use in the appendix. 

Eliminate Waste

1. Eliminate things that are not used
2. Eliminate multiple entries
3. Reduce or eliminate overkill
4. Reduce controls on the system
5. Recycle or reuse
6. Use substitution
7. Reduce classifications
8. Remove intermediaries
9. Match the amount to the need
10. Use Sampling
11. Change targets or set points

Improve Work Flow

12. Synchronize
13. Schedule into multiple processes
14. Minimize handoffs
15. Move steps in the process close together
16. Find and remove bottlenecks
17. Use automation
18. Smooth workflow
19. Do tasks in parallel
20. Consider people as in the same system
21. Use multiple processing units
22. Adjust to peak demand

Optimize Inventory

23. Match inventory to predicted demand
24. Use pull systems
25. Reduce choice of features
26. Reduce multiple brands of the same item

Change the Work Environment

27. Give people access to information
28. Use Proper Measurements
29. Take Care of basics
30. Reduce de-motivating aspects of pay system
31. Conduct training
32. Implement cross-training
33. Invest more resources in improvement
34. Focus on core process and purpose
35. Share risks
36. Emphasize natural and logical consequences
37. Develop alliances/cooperative relationships

Enhance the Producer/Customer Relationship

38. Listen to customers
39. Coach customer to use product/service
40. Focus on the outcome to a customer
41. Use a coordinator
42. Reach agreement on expectations
43. Outsource for “Free”
44. Optimize level of inspection
45. Work with suppliers

Manage Time

46. Reduce setup or startup time
47. Set up timing to use discounts
48. Optimize maintenance
49. Extend specialist’s time
50. Reduce wait time

Manage Variation

51. Standardization (Create a formal process)
52. Stop tampering
53. Develop operation definitions
54. Improve predictions
55. Develop contingency plans
56. Sort product into grades
57. Desensitize
58. Exploit variation

Design Systems to Avoid Mistakes

59. Use reminders
60. Use differentiation
61. Use constraints
62. Use affordances

Focus on the Product or Service

63. Mass customize
64. Offer product/service anytime
65. Offer product/service anyplace
66. Emphasize intangibles
67. Influence or take advantage of fashion trends
68. Reduce the number of components
69. Disguise defects or problems
70. Differentiate product using quality dimensions
71. Move steps in process closer together
72. Manage variation, not tasks

SIX THINKING HATS

Our Idea: _____

	THINK ABOUT....	COMMENTS....
<p>WHITE</p> 	<p>What further information is needed?</p>	
<p>YELLOW</p> 	<p>Positives/Benefits</p>	
<p>BLACK</p> 	<p>Drawbacks/Risks</p>	
<p>RED</p> 	<p>What does your gut say?</p>	
<p>GREEN</p> 	<p>What are other alternatives or possibilities?</p>	
<p>BLUE</p> 	<p>Are we staying on track? Next steps...</p>	

Adapted from: www.debonogroup.com

Project Name: _____

Cycle #: _____

Objective: _____

+ ACT

- Adopt, adapt, or abandon.
- What action are we going to take as a result of this cycle?
- Are we ready to implement?
- What other process might be affected by this change?

+ PLAN

- Details of the plan (who, what, where, when, and how) including data collection
- What change are we testing? What is our prediction and theory?

+ STUDY

- Complete analysis. Summarize new knowledge
- Do you agree with the prediction? What new questions or issues arose? What is our updated theory? Under what conditions could the results be different?

+ DO

- Carry out the plan.
- Record data, observations, and modifications to the plan.

Objective of Next Cycle: _____



		QUESTIONS TO CONSIDER	
PROCESS	Factors related to the change itself – what about the new process will prevent things from reverting to the old way?	Benefits beyond helping patients	In addition to helping patients, what are the other benefits? For example, does this change reduce waste, help things run more smoothly? Will staff notice a difference in their daily work?
		Credibility of benefits	Are benefits to patients, staff and the organization visible? Do staff believe in the benefits? Can staff clearly describe the full range of benefits? Is there evidence that this type of change has been beneficial elsewhere?
		Adaptability	Can the new process overcome internal issues, or will this disrupt the change? Does this change continue to meet ongoing needs effectively? Does the change rely on a specific individual or group of people, technology, or funding to keep it going? Can it keep going when these are removed?
		Monitoring progress	Does the change require special monitoring systems to identify and measure improvement? Is anything in place to continue to monitor progress? Is there a feedback system to reinforce benefits and guide further action? Are the results of the change communicated to patients, staff, and the wider community?
STAFF	Factors related to people involved – are they supportive of the change and willing to continue on with the new way of doing things?	Training and involvement	Do staff play a part in designing, testing, and implementing the change? Have they used their ideas to inform the change from the beginning? Is there training available to build staff members' knowledge and skills to take this change forward?
		Behaviours	Do staff express their ideas regularly throughout the change process and is their input taken into account? Do staff think that the change is a better way of doing things? Are staff able to run PDSA cycles based on their ideas to learn if additional improvements should be recommended?
		Senior leaders	Are senior leaders trusted and respected? Are they involved in the initiative? Do they understand and promote it? Are they respected by their peers and can they influence others to get on board? Are they helping to break down barriers and provide support to ensure the change is successful?
		Clinical leaders	Are clinical leaders trusted, respected, and influential? Are they involved in the initiative? Do they understand and promote it? Are they respected by their peers and able to influence others? Are they helping to break down barriers and giving their time to help ensure the change is successful?
ORGANIZATION	Factors related to the organization – are there resources and systems in place to maintain the change?	Alignment	Are the goals of the change clear and shared? Are they clearly contributing to organizational strategic aims? Is improvement important to the organization? Has the organization successfully sustained improvements in the past?
		Fit with culture	Are the staff fully trained and proficient in the new way of working? Are there enough facilities and equipment to support the new process? Are new requirements built in to job descriptions? Are their policies and procedures supporting the new way of working? Is there an effective communication system in place?

Module References

de Bono Group. *Six Thinking Hats*. www.debonogroup.com

Institute for Safe Medication Practices, *Medication Error Prevention Toolbox*, 1999. <http://bit.ly/IPwfozO>

Langley, Gerald J., et al. *The improvement guide: a practical approach to enhancing organizational performance*. John Wiley & Sons, 2009.

Liberating Structures www.liberatingstructures.com

NHS Institute for Innovation and Improvement, *Sustainability Guide*, 2010. <http://bit.ly/ISekSAY>