

STROKE NETWORK  
*of* Southeastern Ontario

# Quality Improvement PDSAs

## An Illustrated look at Quality Improvement – Dr. Mike Evans

- ▶ <http://www.ihl.org/resources/pages/audioandvideo/mikeevansvideoqihealthcare.aspx>

## PDSA Exercise



STROKE NETWORK  
of Southeastern Ontario

## What Does Your Team Want to Change First?

Brain Storming & Selecting  
A Change Idea

*Regional and Provincial Rehabilitation Intensity Update*  
Southeastern Ontario Stroke Best Practice Symposium  
Implementing Rehabilitation Intensity Inpatient Rehabilitation

## Brain Storming

### Instructions

- Individually identify 3 “Change Ideas” related to your “Area of Focus” (3 min)
  - 1 idea/sticky note
- Each person shares, clarifies & posts 1 idea
- Keep going until all ideas are shared



### Think About

- Scope of Practice
- Collaboration
- Communication
- Processes
- Redundancy
- What would you do if you were the Stroke Survivor?
- Imagine you were another member of the team. What could you do?
- What helps drive you forward?
- What forces act against you?

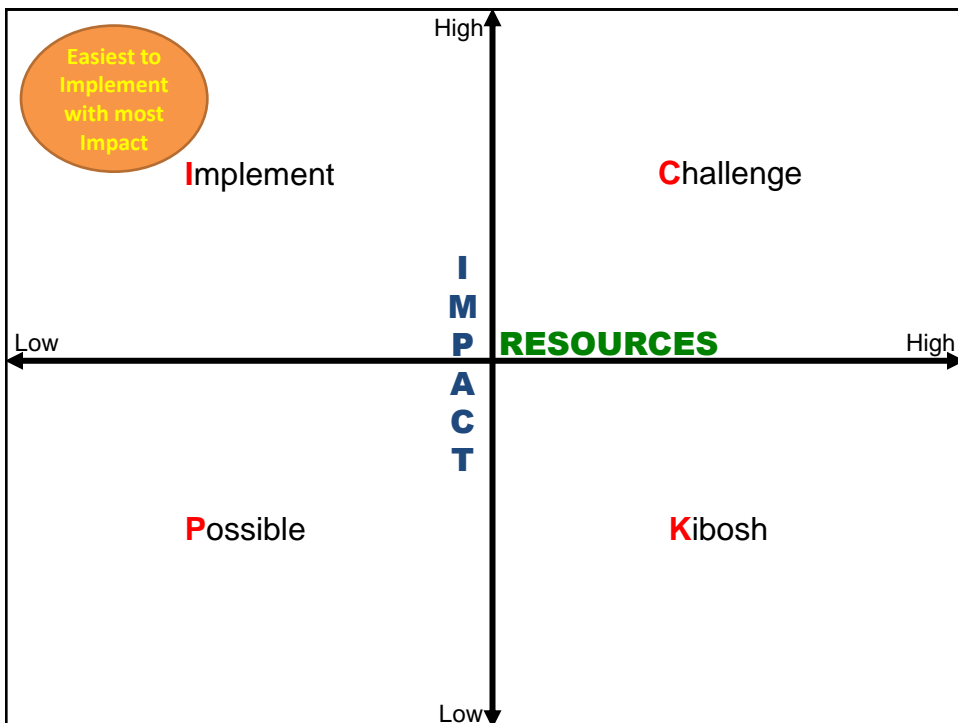
## Selecting One Change Idea

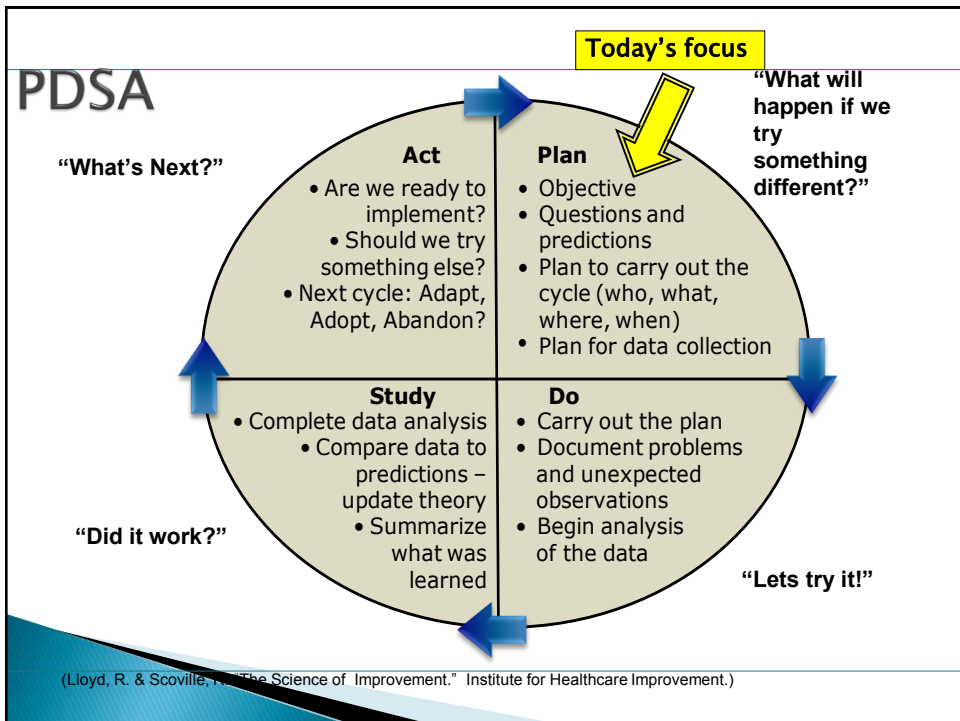
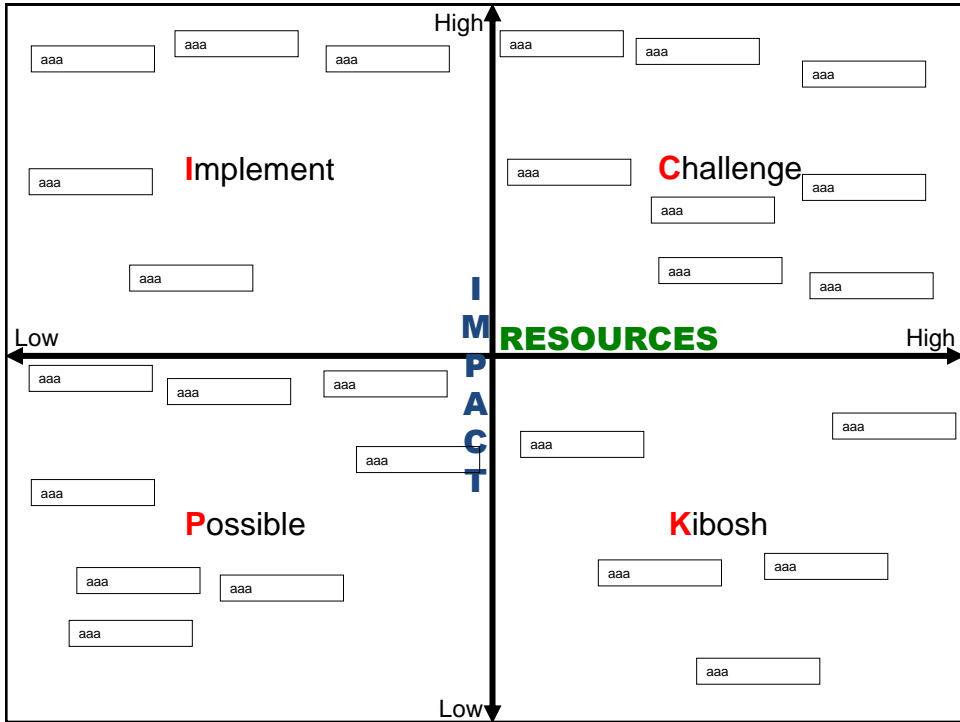
### Selection Criteria:

- Time Sensitive
  - Can begin within 48 hours
  - Avoid if you have to wait for other things to happen (e.g. policy, staffing changes etc.)
  - Short term – can begin to **S**tudy & **A**ct within 2 weeks
- Measureable
- Impact/Resource Chart

## Resource-Impact Grid

Place Ideas on Resource - Impact Grid  
According to level of Resources Needed  
and Impact





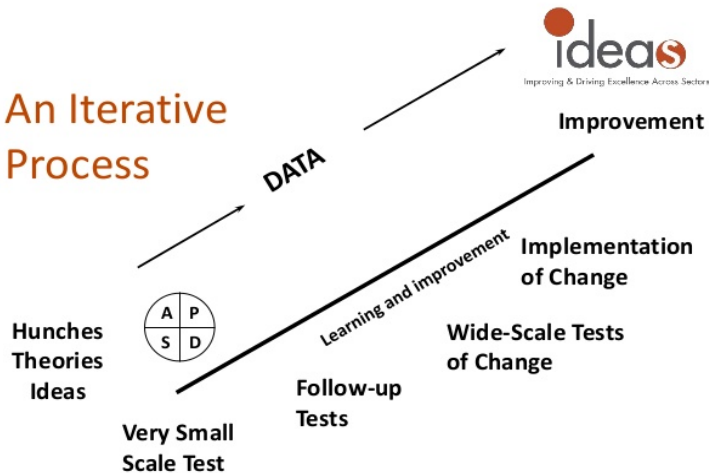
## Why test first?



- It involves less time, money and risk
- The PDSA is a powerful tool for learning; from both ideas that work and those that don't
- It is safer and less disruptive for patients and staff
- Because people have been involved in testing and developing the ideas, there is often less resistance

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## An Iterative Process



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## Hints for Planning Useful Cycles

### Scale down size

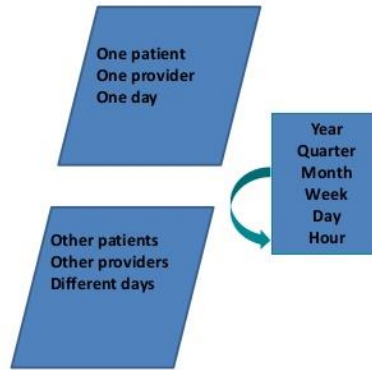
–think “oneness”

### Scale down the time

– think “drop two”

### Test under many conditions

### Think about next cycle



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## In your teams....

**PDSA: Plan-Do-Study-Act – Worksheet**      Date:

**AIM:** To increase rehabilitation intensity minutes by \_\_\_\_\_

(insert goal - %, minutes/hours, on certain days of the week etc) by

\_\_\_\_\_ (insert date) for stroke patients at \_\_\_\_\_.

**Current Baseline:**

**Change Test (describe the opportunity):**

PLAN	
What questions do you want to answer? What do you want to learn or demonstrate with your PDSA cycle?	What are your predictions? What do you expect will happen?

## “Big Dot Aim”

- ▶ Everyone is here today with the goal of “increasing rehabilitation intensity for their stroke patient” -- we just want to write it down!
- ▶ What are you hoping to accomplish with respect to rehabilitation intensity – fill in the blanks to create an overarching aim statement for your work
- ▶ An Aim Statement should answer “What” “By How Much” “By When”
- ▶ *AIM: To increase rehabilitation intensity minutes by 20 min (average per patient) by January 30, 2016 for stroke patients involved in the PDSA cycle on Service A at Southeast Rehab.*
- ▶ *Current Baseline: Mean of 63 rehabilitation intensity minutes (measured over 7 days/wk) for all stroke patients on Service A at Southeast Rehab.*

## In your teams

- ▶ Take 5 minutes to complete the top portion of your worksheet
- ▶ Write your AIM on the flip chart

**AIM:** To increase rehabilitation intensity minutes by \_\_\_\_\_  
 (insert goal - %, minutes/hours, on certain days of the week etc) by  
 \_\_\_\_\_ (insert date) for stroke patients at \_\_\_\_\_.

**Current Baseline:**

**Change Test (describe the opportunity):**



## “Little Dot Aim”

- ▶ You will likely have sub-aims related to your change opportunities as well.
- ▶ Change Opportunity: *Improve patients ready on time for therapy*
- ▶ Little Dot Aim: *“X amount” of stroke patients are up/dressed and have had breakfast prior to first therapy appt*
  - Likely related to process measures that you are testing to contribute to your Big Dot Aim, based on your prediction that if more patient were ready earlier, they would get more minutes in therapy

## Getting Ready: Planning your PDSA

## Thinking a little more about your idea.....

### Purpose of your test



- What is the purpose of the test?
- What am I curious to learn?
- Be clear on what is the change you are testing.

*Example. We want to test if locating the green bin closer to the kitchen will result in more food waste being diverted from the garbage bag.*

## What questions do you want to answer....

PLAN	
Example... Change Test: Test bike riding as an activity to increase physical activity	
What questions do you want to answer?	What are your predictions?
1. How much time will I have to bike ride each day? 2. How will this change impact my families evening schedule? 3. How will my children feel about bike riding with me each day	1. I will have 30 minutes to ride each day right after school. 2. We will have to have dinner organized prior to the bike ride as this is when I usually prepare dinner or we will eat later. 3. They will lost interest after a few days.

## Your turn.....

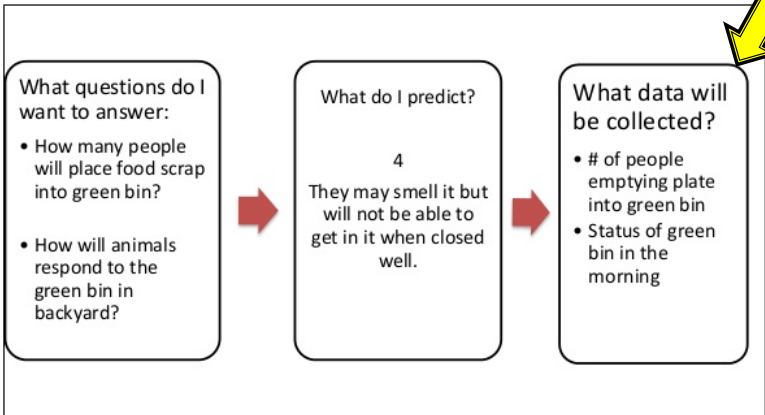
Write down 2 or 3 questions that you hope to answer by doing your change test -

PLAN	
What questions do you want to answer? What do you want to learn or demonstrate with your PDSA cycle?	What are your predictions? What do you expect will happen?

Share one question you  
are hoping to answer  
and your prediction.

How will you know.....

## What data do you plan to collect?



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What questions do I want to answer:

- How many people will place food scrap into green bin?
- How will animals respond to the green bin in backyard?

→

What do I predict?

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They may smell it but will not be able to get in it when closed well.

→

What data will be collected?

- # of people emptying plate into green bin
- Status of green bin in the morning

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## What is the plan to collect the data?



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- List data needed to answer each question
- List who is going to collect the data
- Include: How, When & Where they will collect the data

Example: *Joe will use a check sheet each night after dinner and record the number of people who empty their food scrap into the green bin for a week*

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# What data will be collected

Plan to collect data to answer your questions:				
What data will be collected?	How? (checklist, chart audit)	Who? (name or role)	When? (times, dates – be specific)	Where? (unit, area, charts)
1. Length of bike ride each day.	Mark on calendar	Mitchell	Daily: After the bike ride	in the kitchen
2. Number of days of bike riding per week.	Mark on calendar	Mitchell	Daily: After the bike ride	in the kitchen
3. What activities interfered with bike riding after school	Mark on Calendar	Mitchell	At the Sunday family meeting	in the kitchen

# Your Turn....

Plan to collect data to answer your questions:				
What data will be collected?	How? (checklist, chart audit...)	Who? (name or role)	When? (times, dates – be specific)	Where? (unit, area, charts)

# List the tasks necessary to set up test

List tasks necessary to set up test:				
The purpose of this cycle is to: Develop Test Implement				
What? (specific task)	How? (checklist, chart audit)	Who? (name or role)	When? (times, dates - be specific)	Where? (unit, area, - be specific)
1. Fix my bike	Bring it to Joes Bike shop	Shawna	Tuesday night	Joe's bike shop
2. Look for a route that will take us 30 minutes	Do a practice loop on the trail and time the route.	Shawna and Erin Erin	Wednesday  Sunday	Leave from Oxford Park and take the east loop.  At the family meeting
3. Plan the meals ahead of time for the week.	Discuss menus' at the family meeting			

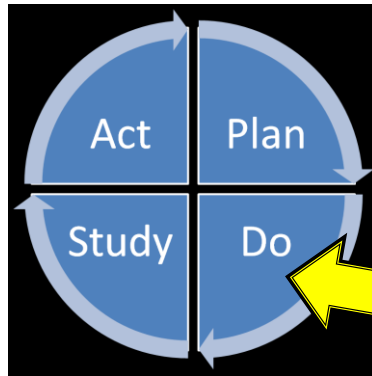
# Your Turn

Think about your change test -

- What are the first few things you need in order to start your test of change?
- Do you need to create a prototype of something to test? How and who will do that?
- Do you need your manager's help to get one new white board to test a new communication opportunity? How and who will purchase it? Who will ask maintenance to put it up? Can we use something else to test the concept with the first patient? What? When? Etc....

List tasks necessary to set up the test:				
What? (specific task)	How? (checklist, chart audit)	Who? (Name or role)	When? (times, dates - be specific)	Where? (unit, area - be specific)

Keep going when you get  
back to your sites.....



Keep the  
momentum – try  
something, start  
small!

DO

What did you observe during the test? Were there any unexpected observations?

DO

What did you observe during the test? Were there any unexpected observations?

The family enjoyed the bike ride on Monday and Tuesday.


Biking interfered with dinner plans. We had to eat grilled cheese sandwiches a few nights and dinners did not go as planned.

On Wednesday dance and hockey interfered and we did not bike ride.

On Thursday I went alone and Friday with a friend. Noone went on Saturday and Sunday.



## PDSA in ACTION

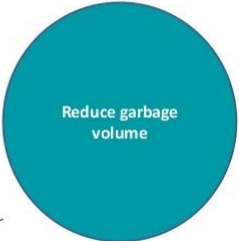



Use cloth bags for groceries

Place recycling bin in kitchen

Place green bin outside near kitchen

Place recycling bin in washrooms



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# Study

**STUDY**

**Analyze your data and describe the results. How do the results compare with your predictions?  
What did you learn from this cycle?**

2 night of 7 went as planned.

Hockey and dance interferred with biking on Wendesday.  
Guitar interfered with Erin's biking on Tuesday and Mitchell did not want to go.

It rained on Friday, Saturday and Sunday.

# Act

## ACT

### Are you ready to implement?

- Yes (I am confident that there is measured improvement, changes have been tested under different conditions and questions answered.)
- No (I have more questions, need to make adjustments and test again, OR risks outweigh benefits – new idea required.)

**What is your plan for the next cycle?** We will revise our plan and bike ride 3 times per week including weekends. We will also make three dinners and freeze ahead of time. We will fill out another PDSA and track data including meals.

Cunninghams

**Team:** \_\_\_\_\_

## Did my change make an improvement?



- Connecting the change back to the big dot – reduce garbage by half by June 1, 2015
- Little dot – % of nights that food scrap are placed in green bin each month
- Little Little dot – number of people who placed food scrap in green bin directly – **no longer relevant**
- **Lessons Learned** – centralization is better; keep it clean for users and keep green bin out of sight

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## Acknowledgements

- ▶ Tools, slides and concepts taken from IDEAS program/website. Check it out – <http://online.ideasontario.ca/>
- ▶ Thank you!
- ▶ Examples – thanks to Shawna Cunningham and Joe Mauri – HQO Advisors
- ▶ Thanks to Alice Strachan – HQO Advisor who has provided advice on QI work

## Next Steps

- ▶ You can go back and **DO**: start testing your change next week and **STUDY**: review and make changes within 2 weeks **ACT**: Make changes and test again
- ▶ Follow-up team visits by January (or sooner if helpful)
- ▶ Planning committee meeting in New year