

Quality Improvement vs. Quality Assurance

Quality Assurance	Quality Improvement
Guarantees quality	Raises quality
Relies on inspection	Emphasizes prevention
Uses a reactive approach	Uses a proactive approach
Looks at compliance with standards	Improves the processes to meet standards
Requires a specific fix	Requires continuous efforts
Relies on individuals	Relies on teamwork
Examines criteria or requirements	Examines processes or outcomes
Asks, "Do we provide good services?"	Asks, "How can we provide better services?"

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Why Use a CQI approach?

- Tackle gaps between **what we know works** and **what we do**
- Ensure implemented change strategies are effective and ineffective change strategies are abandoned
- Engage a broader set of stakeholders and experts
- Connect **data to practice**
- Identify and disseminate **best practices** and **lessons learned**

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What Does Quality Mean?

- What does quality look like in the field of home visiting?
- What does it mean to improve?
- How do you define quality?
- How do you measure quality?
- What does quality mean to families?

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Cultivating a Culture of Quality

- Impact of current culture
- Attitude
- Transparency
- Commitment
- Data use/comfort
- Outcomes

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Necessary Ingredients for Improvement

- Will to do what it takes to change to a new system
- Ideas on which to base the design of the new system
- Execution of the ideas

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Model for Improvement

What are we trying to accomplish?

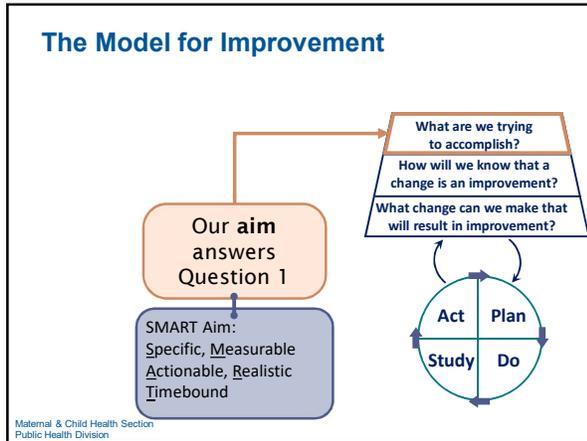
How will we know that a change is an improvement?

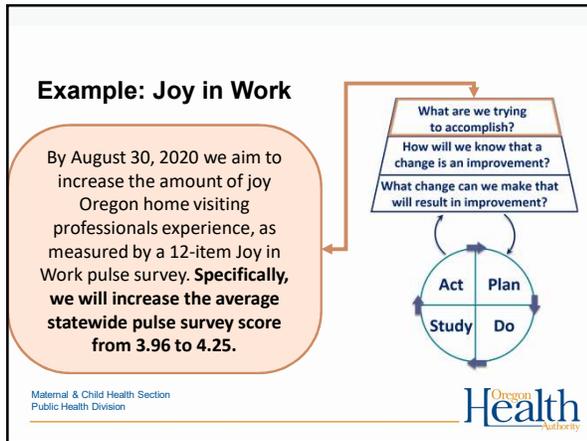
What change can we make that will result in improvement?

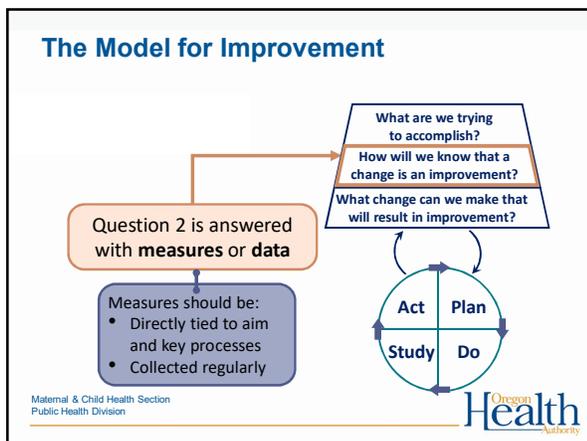


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The Model for Improvement

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?

Testing using PDSA cycles. This is the action portion of the model

Act Plan
Study Do

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Plan-Do-Study-Act (PDSA)

- Cyclical, iterative process for testing changes
- Structured and reflective process
- Document predictions, actions, and learnings
- Intuitive process -
 - Identify a change
 - Put it into action
 - Reflect on the results
 - Use those reflections to decide on next steps

Act Plan
Study Do

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The PDSA Cycle

Act: What changes are to be made? Next cycle?

Plan: Objective, Questions and predictions (why), Plan to carry out the cycle (who, what, where, when), Plan for data collection

Do: Carry out the plan, Document problems and unexpected observations, Begin analysis of the data

Study: Complete the analysis of the data, Compare data to predictions, Summarize what was learned

“What’s next?”

“What will happen if we try something different?”

“Did it work?”

“Let’s try it!”

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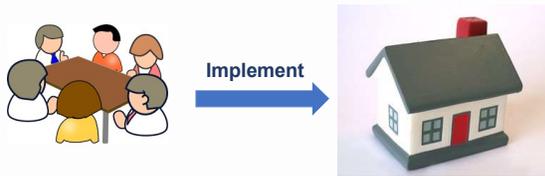
Goals of Testing With PDSA Cycles *Know Before You Implement*

- Increase your belief that the change will result in improvement
- Document how much improvement can be expected from the change
- Learn how to adapt the change to conditions in the local environment
- Evaluate costs and side-effects of the change
- Understand the social aspects of the change

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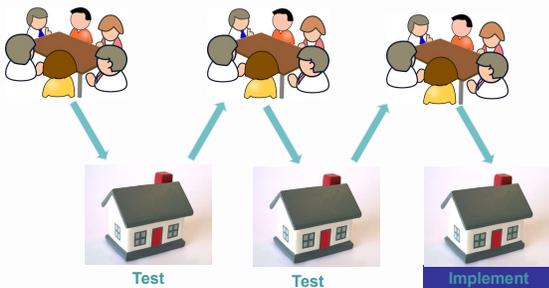
Common Practice



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Quality Improvement



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The Power of One

One child/family
One encounter
One day
One provider



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Why test small?

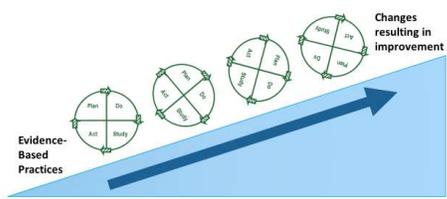
- Small tests allow for failure, with **minimal cost/risk**
- Increase (or decrease) your belief that the change will result in improvement
- Learn to adapt change to your environment or other conditions
- Gain buy-in for the change - “Proof of concept”
- Avoid analysis paralysis – just try something small!
- What can you test **next Tuesday**?

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Each PDSA cycle is just one test...



Evidence-Based Practices

Changes resulting in improvement

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Primary Driver: Wellness and Resilience
Change to test: incrementally increase the number of mindful self-regulation techniques

Pre/post: On a scale of 1-5, I am able to regulate my stress during client visits (never, rarely, sometimes, often, always)

Evidence Best Practice Testable Ideas

Cycle 1: Week 1: 2 home visitors will use at least one Mindful Self Regulation (MSR) technique in 50% of home visits.

Cycle 2: Week 2: 2 home visitors will use at least 1-2 MSR technique in 60% of home visits.

Cycle 3: Week 3: 2 home visitors will use at least 2 MSR technique in 60% of home visits.

Changes That Result in Improvement

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QUESTIONS?

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Activity: CQI in Action

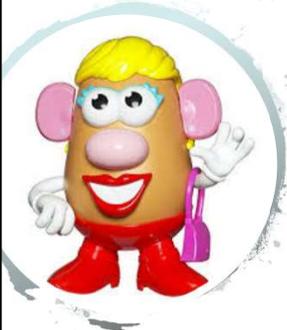
Objectives:

- Understand rapid-cycle PDSAs
- Understand how theory & prediction help to learn
- Collect real-time data for measurement
- Learn as a team

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Activity: Ms. Potato Head



Our Aim:

Assemble Ms. Potato Head in 10 seconds or less, with a precision score of at least 3 by the end of this activity.

This activity was developed by Williams, DM. Mr. Potato Head Plan, Do, Study, Act (PDSA) Exercise. Austin, TX: DMWAustin, LLC. 2014. (Available on www.DMWAustin.com)



Measures of Success

PRECISION

- 3 – All pieces are put exactly in the same position as the photo.
- 2 – All pieces of the Ms. Potato Head are in place, but one or more pieces are not exactly like the photo.
- 1 – One or more pieces are not in place on Ms. Potato Head

TIME MEASURED AS

- Start:** When the time taker calls start time.
- End:** When the last piece is positioned in place and you have taken your hands off of Ms. Potato Head.



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PDSA #	Theory being tested	Prediction		Time					
1			Seconds	80					
2				70					
3				60					
4				50					
5				40					
6				30					
			20						
			10						
				Baseline	1	2	3	4	5
				PDSA Cycle #					
			Precision	Precision					
				3					
				2					
				1					
				Baseline	1	2	3	4	5
				PDSA Cycle #					

Precision Scoring:

J3 – All pieces exactly in the same position as the photo.

J2 – All pieces of the Mr. Potato Head in place, but one or more pieces are not exactly in place like the photo.

J1 – One or more pieces not in place on Mr. Potato Head.



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PDSA #	Theory being tested	Prediction	Time
1	1 person alone is fastest; start with feet	Will complete in 12 seconds; precision 3	
2	2 people; start with hands	Will complete in 13 seconds; precision 3	
3			
4			
5			
6			

Seconds	Time
80	
70	
60	
50	
40	
30	
20	
10	
0	

Precision	PDSA Cycle #
3	
2	
1	
0	

Precision Scoring:
J3 - All pieces exactly in the same position as the photo.
J2 - All pieces of the Mr. Potato Head in place, but one or more pieces are not exactly in place like the photo.
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Assign Roles at Your Table

You will need:

- **Timekeeper** to report the time to complete assembly
- **Recorder** to write your team's theories, predictions, and graph time
- **Inspector** to determine the precision score
- The **entire team** to innovate and test changes to improve time and precision

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Reflections

What was your fastest time?

What did you try that got you there?

Did your results match your predictions?



What are we Trying to Accomplish?

Creating a SMART Aim Statement

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Measurable Relevant

Specific Attainable Time-bound

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Aiming SMART

Less SMART
Families will receive the services that ensure their children grow up better.

SMART
By September 1, 2020, the percent of families enrolled in 2020 in the Happy Homes home visiting program who received the recommended number of home visits prescribed by the model will increase from 60% to 75%.

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Your Turn!

Example AIM: More moms with breastfeed their babies

SMARTer AIM: At your table, take 5 minutes to develop a SMARTer aim using the worksheet

Set an Aim

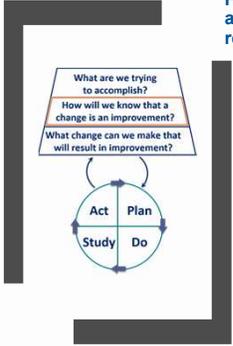
By _____, _____ of _____
 (when) (#, % or % change) (whom)

will _____
 (what result, change, benefit)

How will we Know a Change is an Improvement?

Understanding Data and Measurement for CQI

How will we know the key processes are in place and our change is resulting in improvement?



Data provide focused and objective measures of change in services and outcomes for families

- Track progress over time
- Guide improvement - feedback on whether changes are working and support data-driven decision-making in practice

Data is for **learning** not judgment



“All improvement will require change, but not all change will result in an improvement.”



The Improvement Guide: A Practical Approach to Enhancing Organizational Performance by G.I. Langley, K.M. Nolan, T.W.H. C.L. Norman, and L.P. Sain Francisco. Jossey-Bass Publishers, 2005. 41

Collecting Data for Quality Improvement

- Data is used to learn, not to judge or supervise
- All data is used transparently
- “All teach, all learn”
- Aim to collect ‘just enough’ data to be useful, not perfect data
- Data is collected and analyzed at regular intervals to inform decision-making



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Data for Improvement, Accountability and Research

Aspect	Accountability	Research	Improvement
Purpose	Compare, reassure, evaluate	Discover new knowledge	Improve outcomes
Bias	Adjust data to reduce bias	Design to eliminate	Accept stable bias
Data/sample size	Report 100%	As much as possible, just in case	Just enough data; small sequential samples
Testing strategy	No tests	1 large blind test; can take long periods of time to obtain results	Small, sequential, observable tests that accelerate the rate of improvement
Flexibility of prediction	No prediction	Fixed prediction	Flexible. Changes as learning takes place

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Data for Improvement, Accountability and Research

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Take home message
The role of data for improvement and the spirit in which this data is used is different for CQI, compared to research

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Types of Measures

Outcome Measures: Measure system level performance or the “what” that we are trying to achieve.

- Tied to aim statement
- Did we achieve what we set out to?

Process measures: Relate to the “how” of improvement and what key processes are changing to bring about improvement.

- Tied to key drivers
- Are we going in the right direction?



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Examples of Measures

Joy in Work Smart Aim: increase our team's average pulse survey score on satisfaction with their work/life balance from 2.96 to 4.00 by August 31, 2020 (by implementing a policy to allow staff to adjust their schedules to ensure an eight-hour day)

- Outcome measure
 - Average team pulse survey score for question on work/life balance
- Process Measure
 - # of staff trained in the new policy
 - # of staff who adjusted their schedules each week

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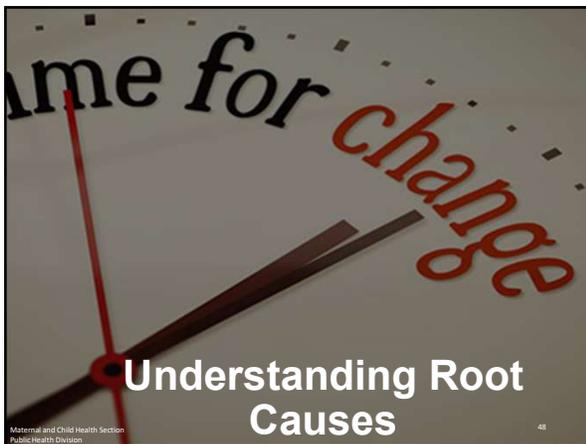


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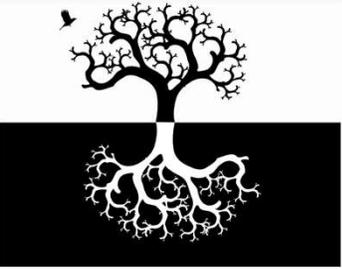
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- Systematic process
- Identifies causes associated with a problem of interest
- Detects why causes are present

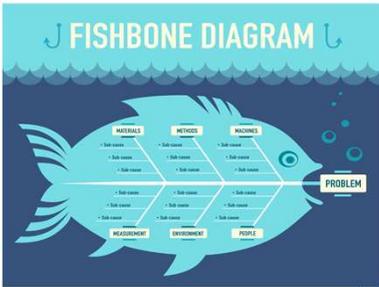
What Is Root Cause Analysis?



- Reduces inefficiencies
- Change strategies are targeted and more likely to be successful

Why Root Cause Analysis?

Root Causes Analysis Tool



FISHBONE DIAGRAM

MATERIALS

- Sub-cause
- Sub-cause
- Sub-cause

METHODS

- Sub-cause
- Sub-cause
- Sub-cause

MACHINES

- Sub-cause
- Sub-cause
- Sub-cause

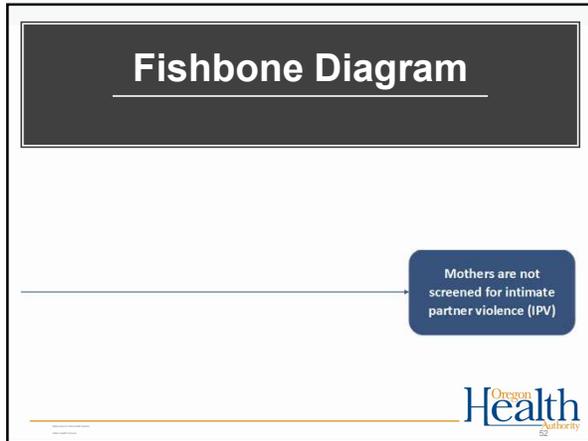
PROBLEM

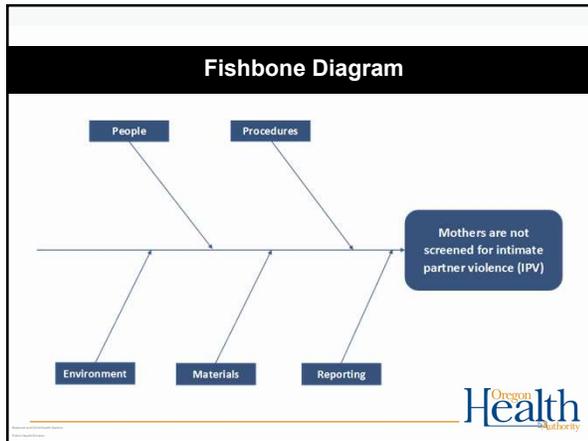
MEASUREMENT

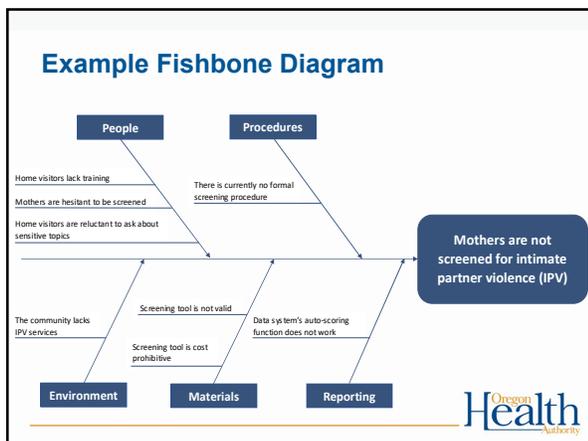
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PEOPLE

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Let's try this together!

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Example Root Cause Identification using Fishbone Diagram: Client Retention

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But where do we begin?

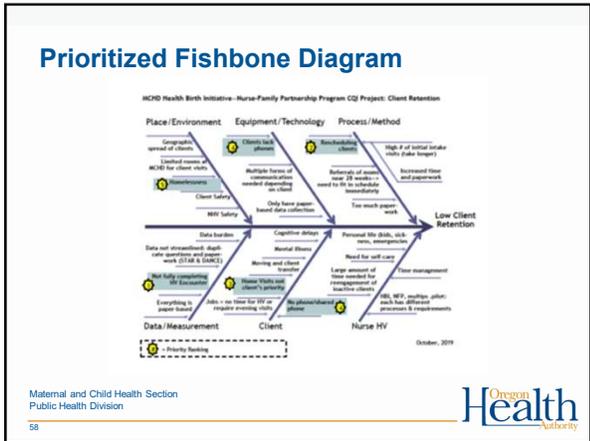
Problem Selection Grid

Problem	Importance (High, Medium, Low)	Impact (High, Medium, Low)	Control / Influence	Improvement Opportunity Ranking

Instructions:

- Ask the team to identify approximately 5 problems related to client retention outlined in the Fishbone Diagram (e.g. "Rescheduling Clients")
- Using the above matrix, write down each problem under the Problem column
- As a team, rate the importance and the impact of each problem as "high, medium or low"
- Identify whether the team has control or influence on each problem
- Review the problems on the matrix and assign an improvement opportunity ranking to each problem based on its importance, impact and control/influence level; a ranking of 1 indicates the highest priority problem to address

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CQI: Key Take-Aways

- CQI is meaningful and manageable – Remember the “Power of 1” and start small
- Data is used for learning, not judgement
- Conducting small, rapid PDSA cycles can increase your belief that a change will result in improvement and document predictions, actions, and learnings
- There are many CQI tools available to support CQI efforts

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Workshop Evaluation



- Please complete an index card with the evaluation questions:



1. What is one key thing that you learned from this session?
2. What is one key action that you can apply to your work?
3. Any other comments, observations or suggestions you would like us to know?

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Thank You!

For more information related to CQI please contact:

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