

Agenda and Objectives

Agenda	Objectives
1. Introduction to CQI	1. Articulate what CQI is and the difference between CQI and QA
2. CQI Activity: Ms. Potato Head	2. Describe the Model for Improvement and the 4 stages of the PDSA Cycle
3. Using Data and Measurement for CQI	3. Practice rapid-cycle PDSA testing
4. Identifying Root Causes of a Problem	4. Practice developing a SMART aim statement
	5. Articulate the difference between outcome and process measures
	6. Practice creating a Fishbone Diagram to examine root causes of a problem

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?”

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**

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?



Cultivating a Culture of Quality

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



Necessary Ingredients for Improvement

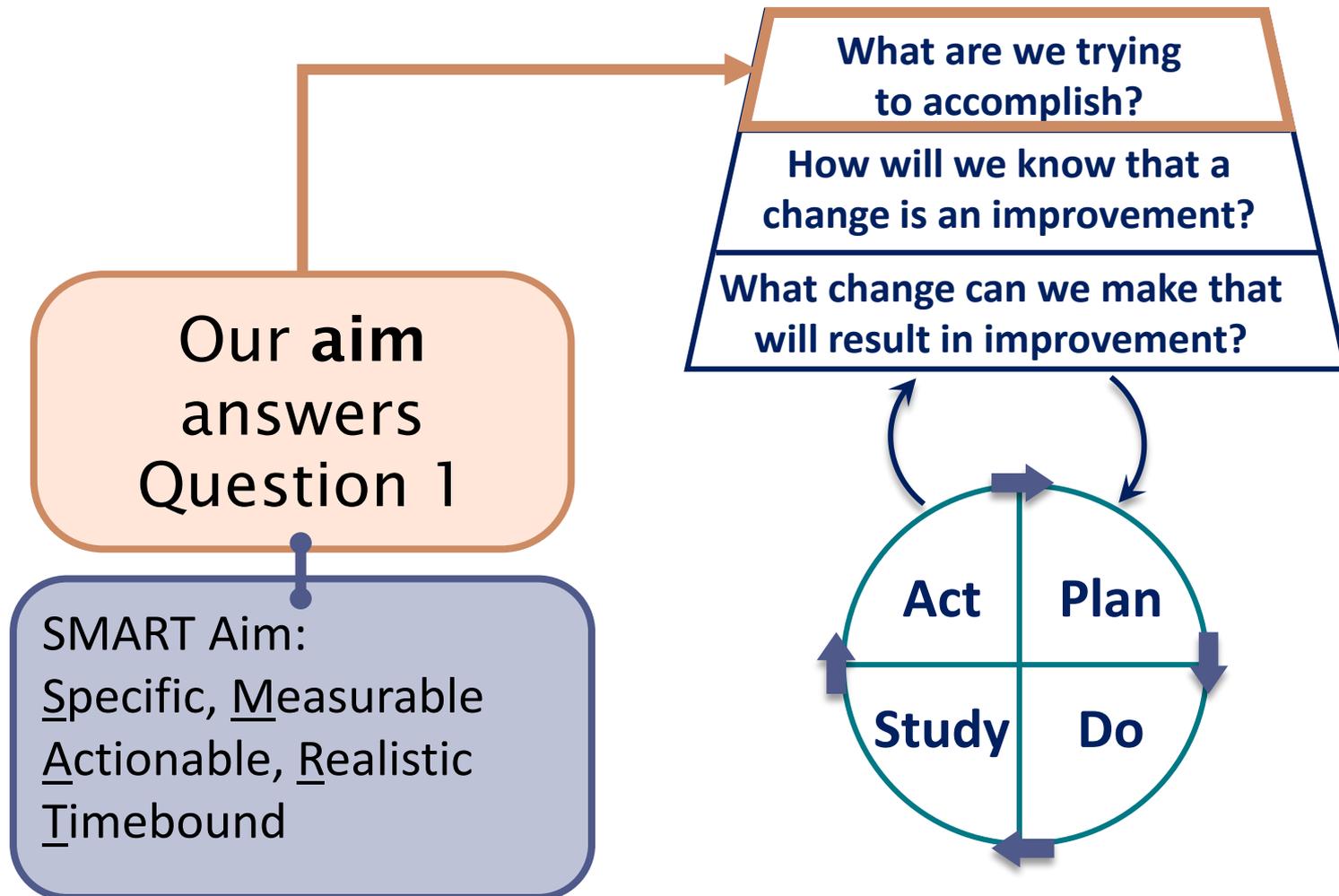
- **Will** to do what it takes to change to a new system
- **Ideas** on which to base the design of the new system
- **Execution** of the ideas

Model for Improvement



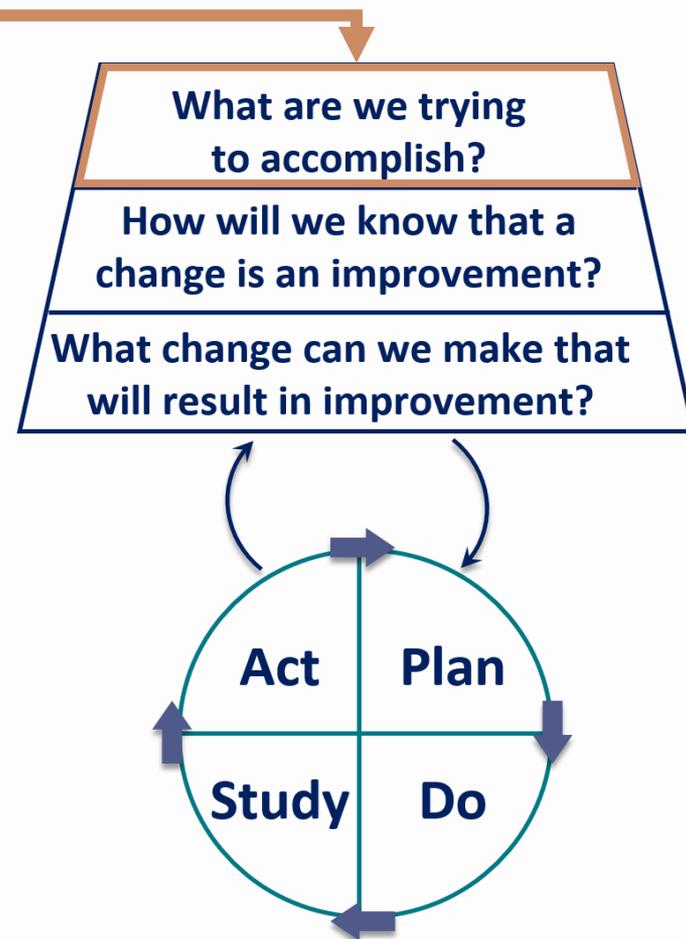
Public Health Division
Maternal & Child Health

The Model for Improvement

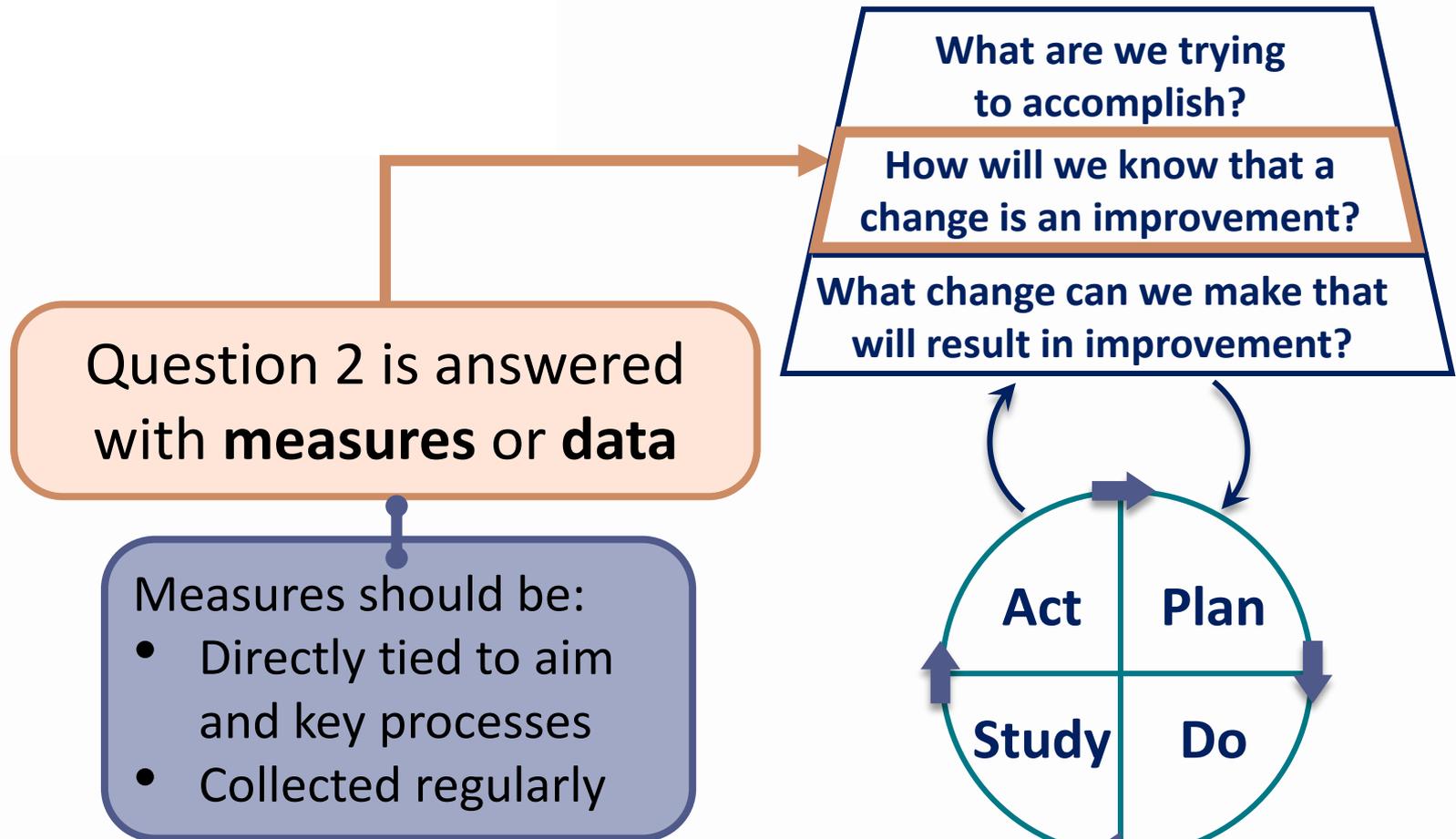


Example: Joy in Work

By August 30, 2020 we aim to increase the amount of joy Oregon home visiting professionals experience, as measured by a 12-item Joy in Work pulse survey. **Specifically, we will increase the average statewide pulse survey score from 3.96 to 4.25.**



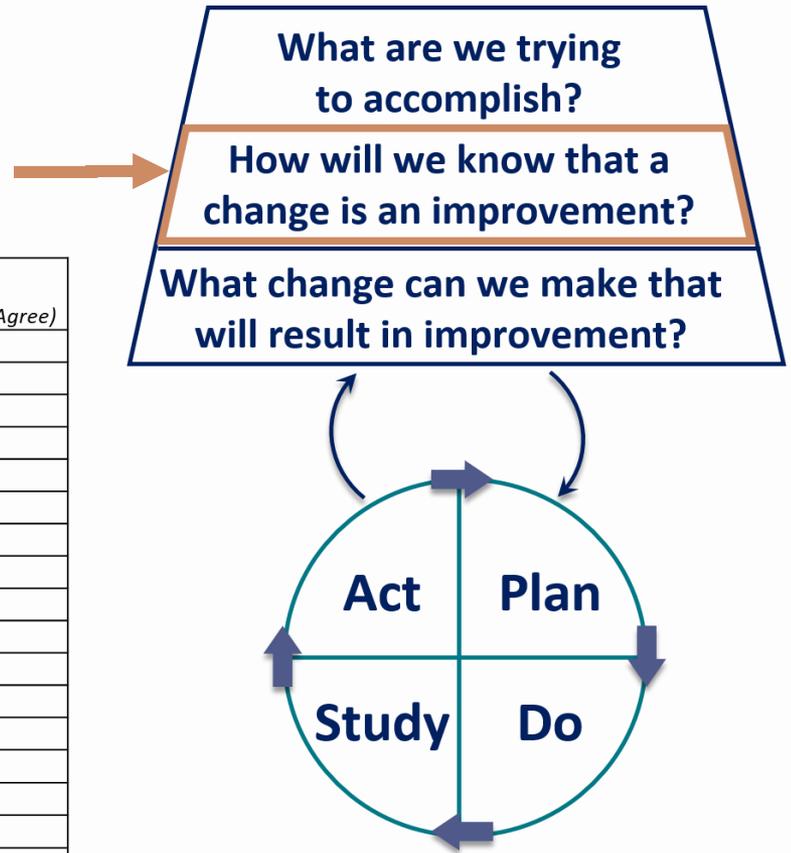
The Model for Improvement



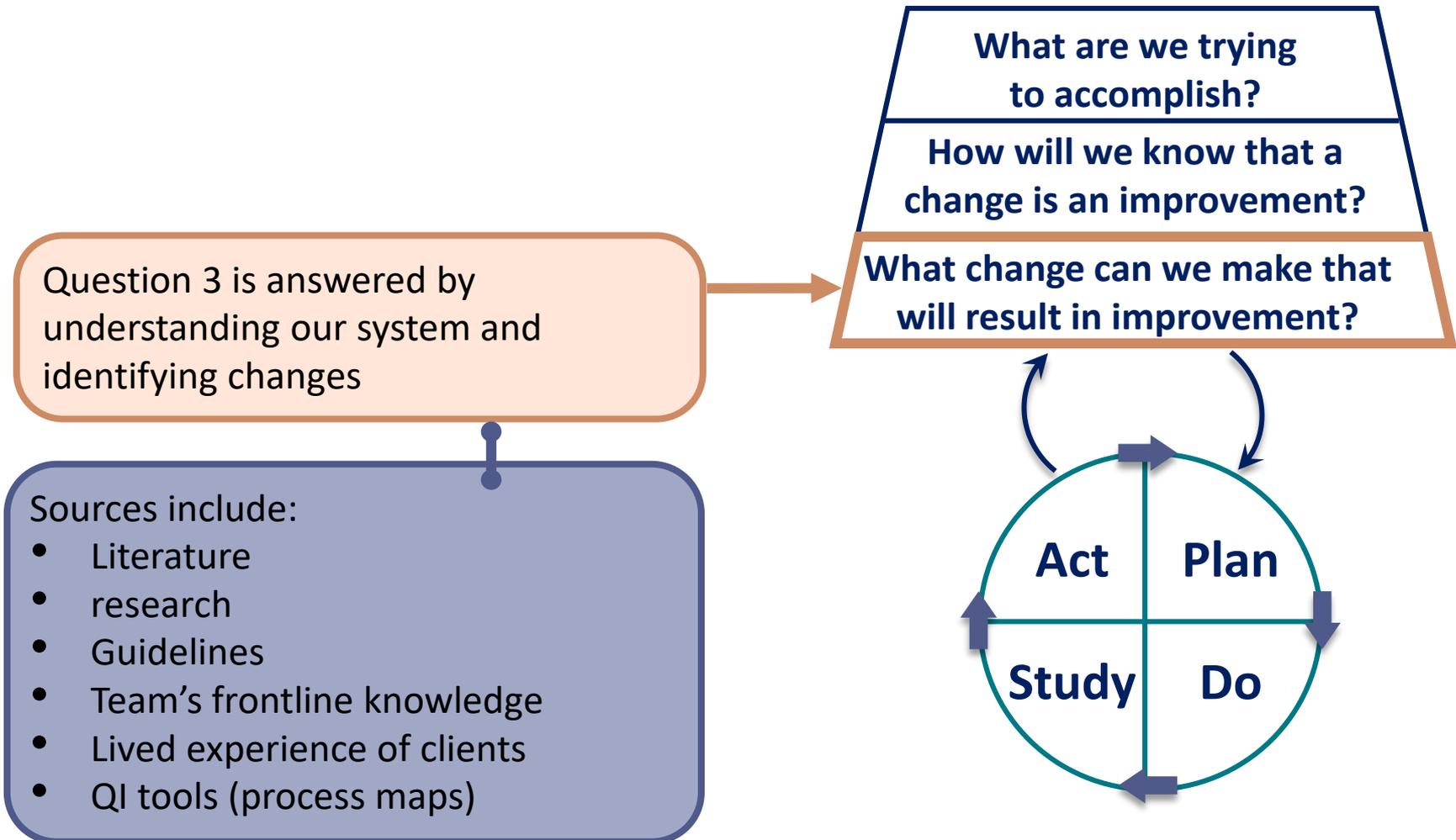
The Model for Improvement

Joy in Work (SMART aim): average monthly score of pulse surveys (12 questions, 5-item Likert scale)

Pulse Survey Questions	
<i>Response options: Likert Scale 1-5 (Strongly disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree)</i>	
PD1. Meaning, Purpose and Recognition	
1	My job makes me feel like I am part of something meaningful
2	I am recognized and thanked for what I do
3	I feel leadership cares about the work that I do
PD2. Physical and Psychological Safety	
4	People at my organization respect and take into consideration all views expressed
5	My organization recognizes the importance of my personal safety during home-visits
PD3. Camaraderie and Teamwork	
6	My work environment encourages camaraderie and conversation
7	I feel part of a team, working together toward something meaningful
PD4. Wellness and Resiliency	
8	I feel satisfied with my work/life balance
9	My workplace provides a supportive environment for self-care
10	My work brings me joy most days
PD5. Choice and Autonomy	
11	I have opportunities in my organization to voice what matters to me
12	My current roll enables me to build my professional skills

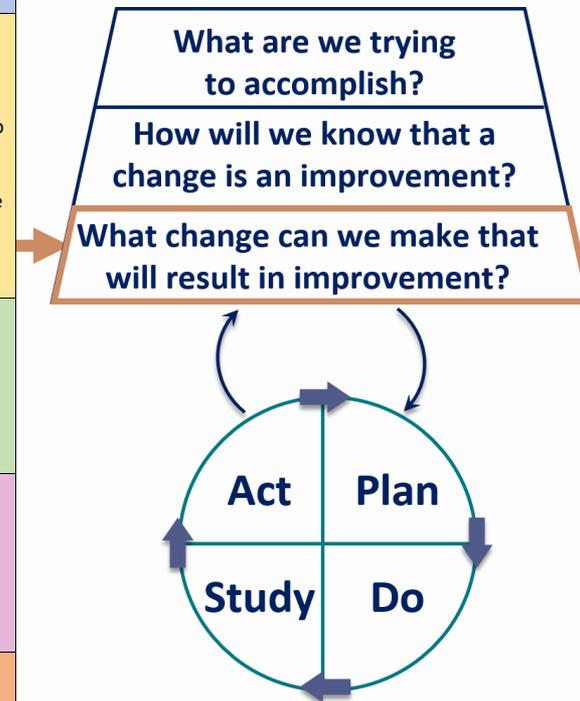


The Model for Improvement

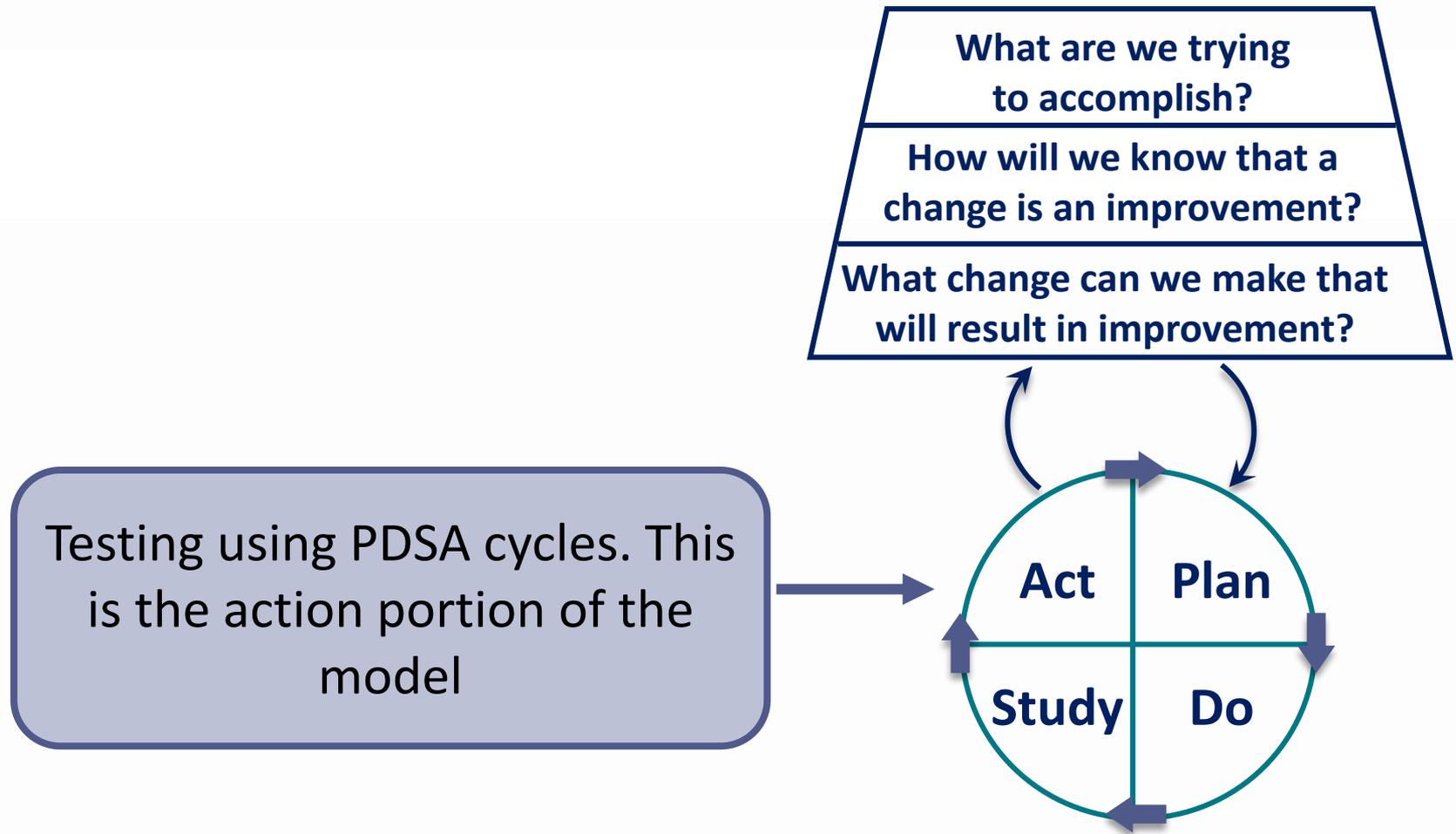


Joy in Work Key Driver Diagram

Drivers	Secondary Drivers	Example change ideas to test
PD1. Meaning, Purpose and Recognition	<ol style="list-style-type: none"> Home visiting teams have a shared understanding of their work Home visitors feel that the work they do makes a difference Home visiting staff are recognized for the impact of their work Organizational leaders understand home visitors' daily work and celebrate individual and collective outcomes 	<ol style="list-style-type: none"> Revise home visitor job description to match the responsibilities of the program Use CQI data in routine meetings to highlight bright spots and connect the work to positive outcomes Develop a formal peer recognition award system Spotlight home visitors at senior leadership staff meetings
PD2. Physical and Psychological Safety	<ol style="list-style-type: none"> All staff feel welcomed, supported and respected Trainings are provided on physical and psychological safety for staff and leadership Policies and procedures are established to create a safe and open work environment amongst staff Opportunities exist for home visitors to voice their perspectives and give feedback anonymously Leaders are available to staff when they need them Home Visiting staff feel free from physical harm during daily work The organization provides support for the staff involved in an adverse event 	<ol style="list-style-type: none"> 1-2. Provide staff training on culturally and linguistically responsiveness and implicit bias 4. Create an anonymous feedback loop for staff to voice concerns and leadership to respond 5. Develop open door policies for meeting with leadership and post times for availability 6-7. Use a check-in app on work issued phones to ensure the home visitor's whereabouts are known when they are out in the field
PD3. Camaraderie and Teamwork	<ol style="list-style-type: none"> Trusting relationships exist among home visiting staff Individual and team successes are recognized & celebrated collectively Staff acknowledge each other's strengths and teach each other new information and skills Opportunities exist for staff to spend time together 	<ol style="list-style-type: none"> Incorporate team building activities into meetings Organize opportunities for staff to celebrate accomplishments Implement a buddy system for new staff Share meals and breaks with each other; Organize team walking meetings
PD4. Wellness and Resiliency	<ol style="list-style-type: none"> Ongoing, quality reflective supervision and clinical consultation for home visitors and supervisors is occurring Organizational practices, policies, and systems are in place to support wellness and resilience, including work/life balance, and are informed by principles of trauma-informed care Trainings, resources and supports are provided to staff to cultivate resilience and stress management 	<ol style="list-style-type: none"> Provide reflective supervision to supervisors Develop a staff wellness plan; Allot time in work day/week for home visitors to complete data entry Use mindfulness techniques during home visits such as Mindful Self-Regulation from the Facilitating Attuned iNteractions trainings
PD5. Choice and Autonomy	<ol style="list-style-type: none"> Home visiting staff work in an environment that supports choice, flexibility and autonomy Home visitors are part of decisions on processes, changes, and improvements that affect them 	<ol style="list-style-type: none"> Implement flexible/alternative work schedules to balance caseload and workload Home visitors serve as representatives at board or leadership meetings

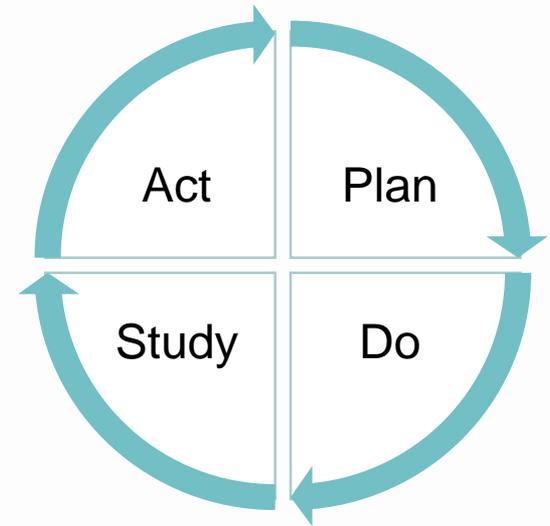


The Model for Improvement

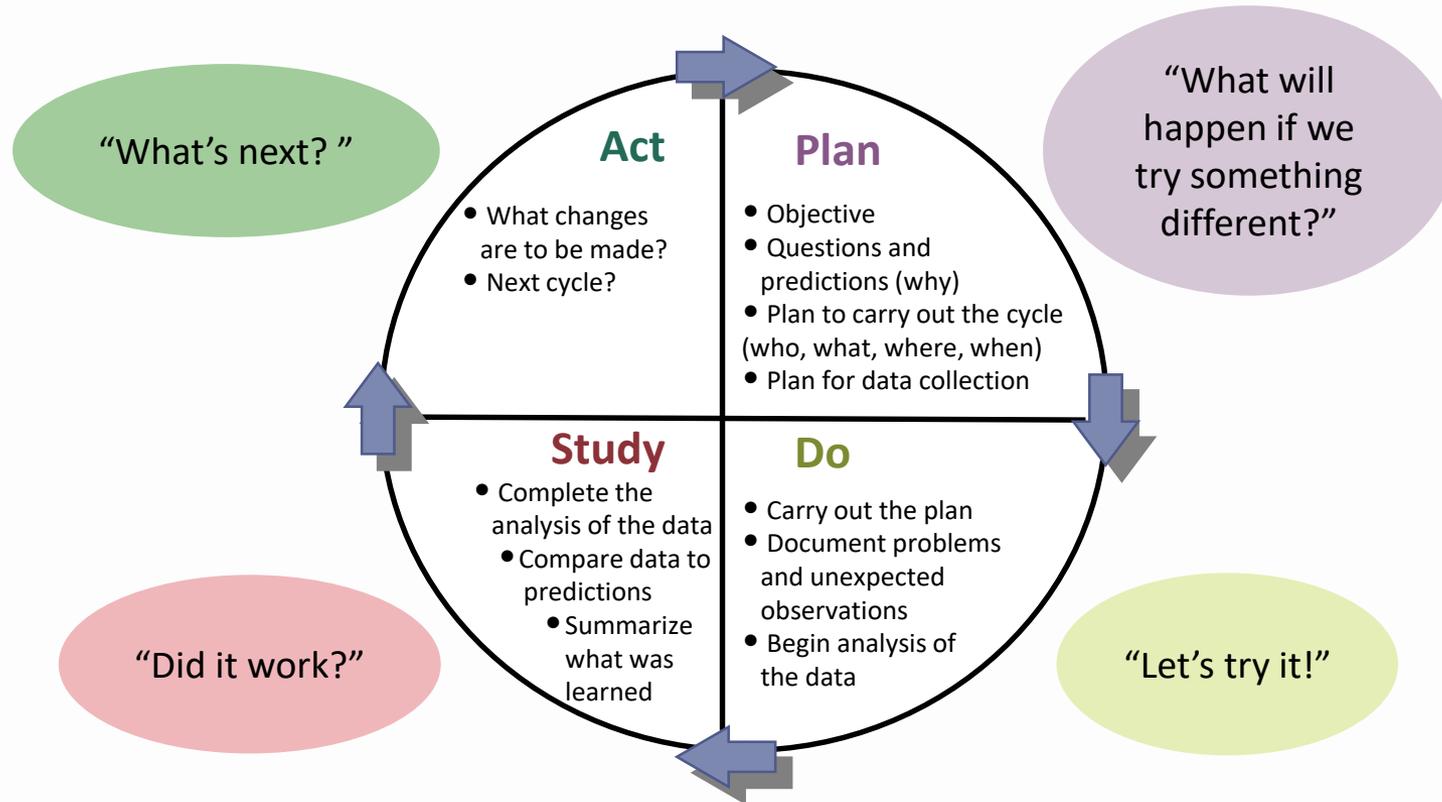


Plan-Do-Study-Act (PDSA)

- 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



The PDSA Cycle

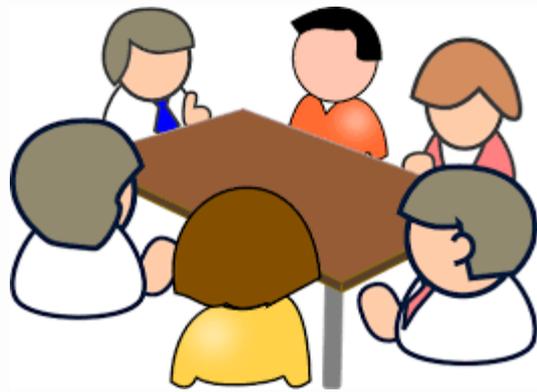


Goals of Testing With PDSA Cycles

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

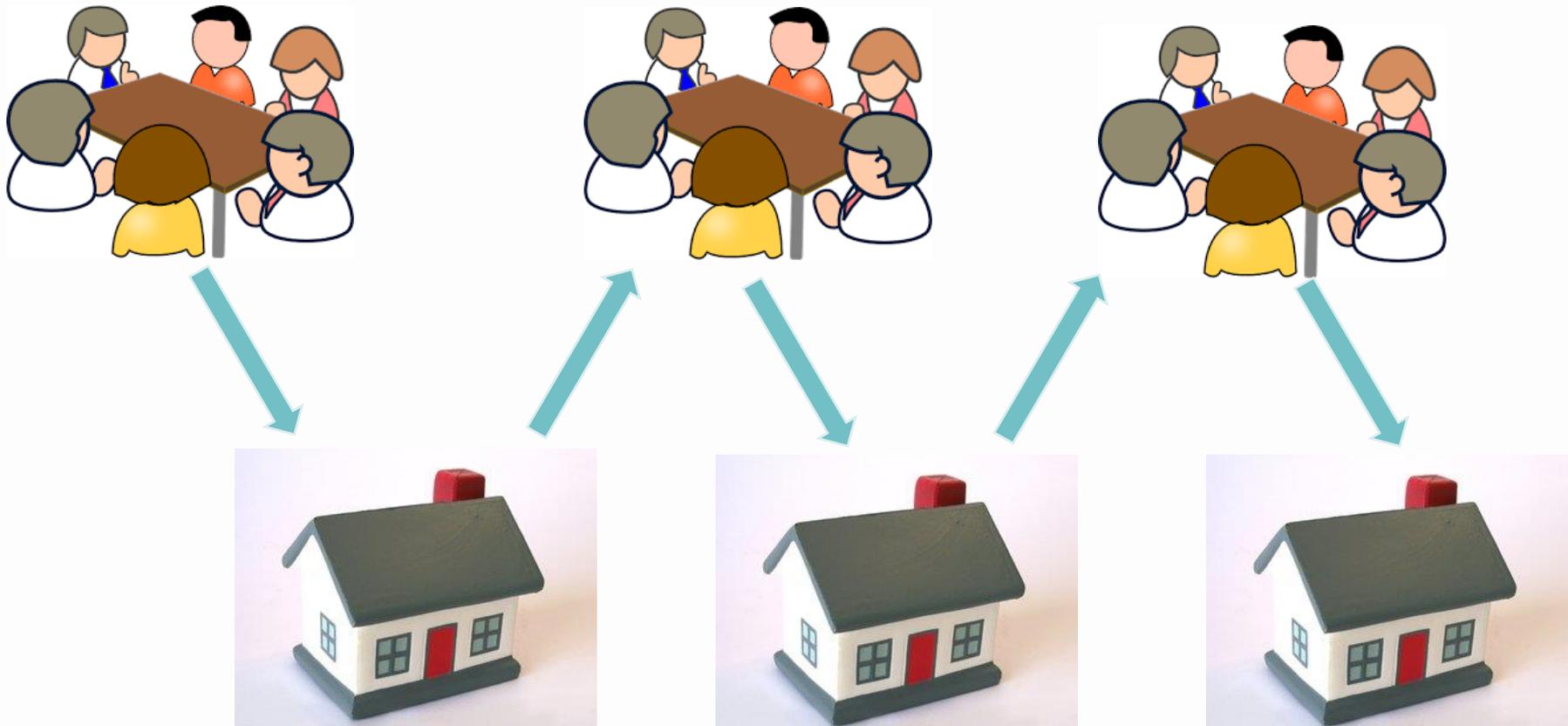
Common Practice



Implement



Quality Improvement



Test

Test

Implement

Maternal & Child Health Section
Public Health Division

Oregon
Health
Authority

The Power of One

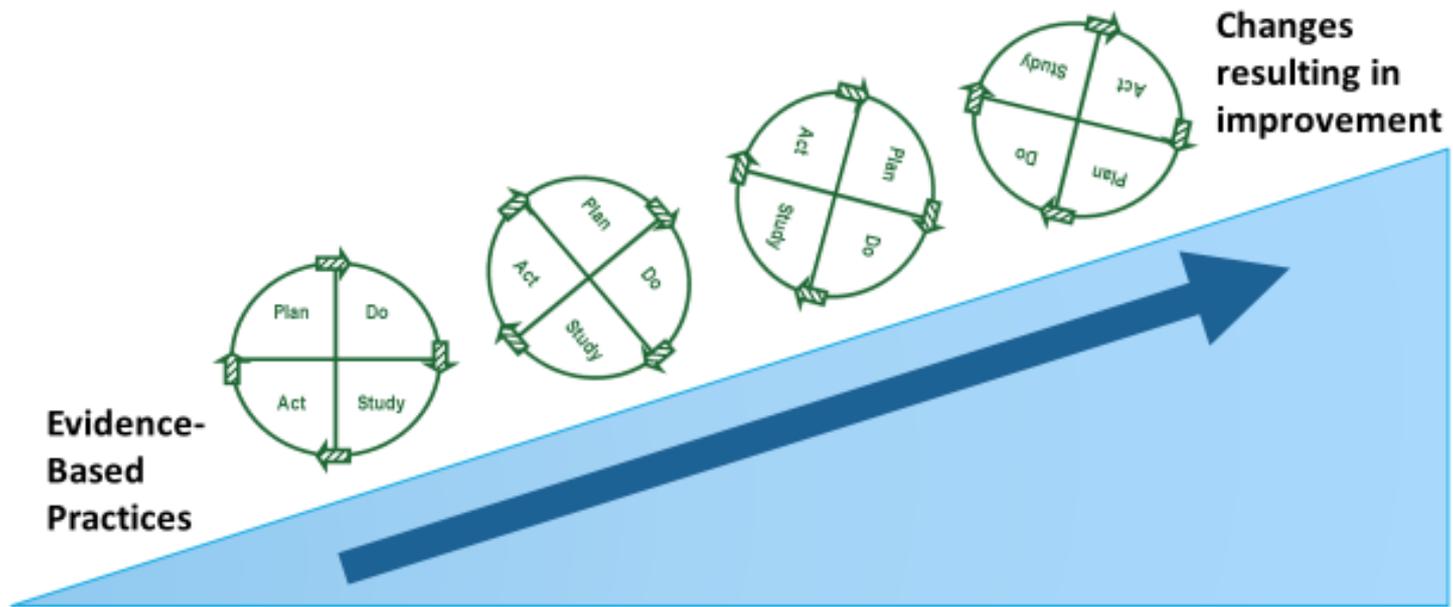
One child/family
One encounter
One day
One provider



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?**

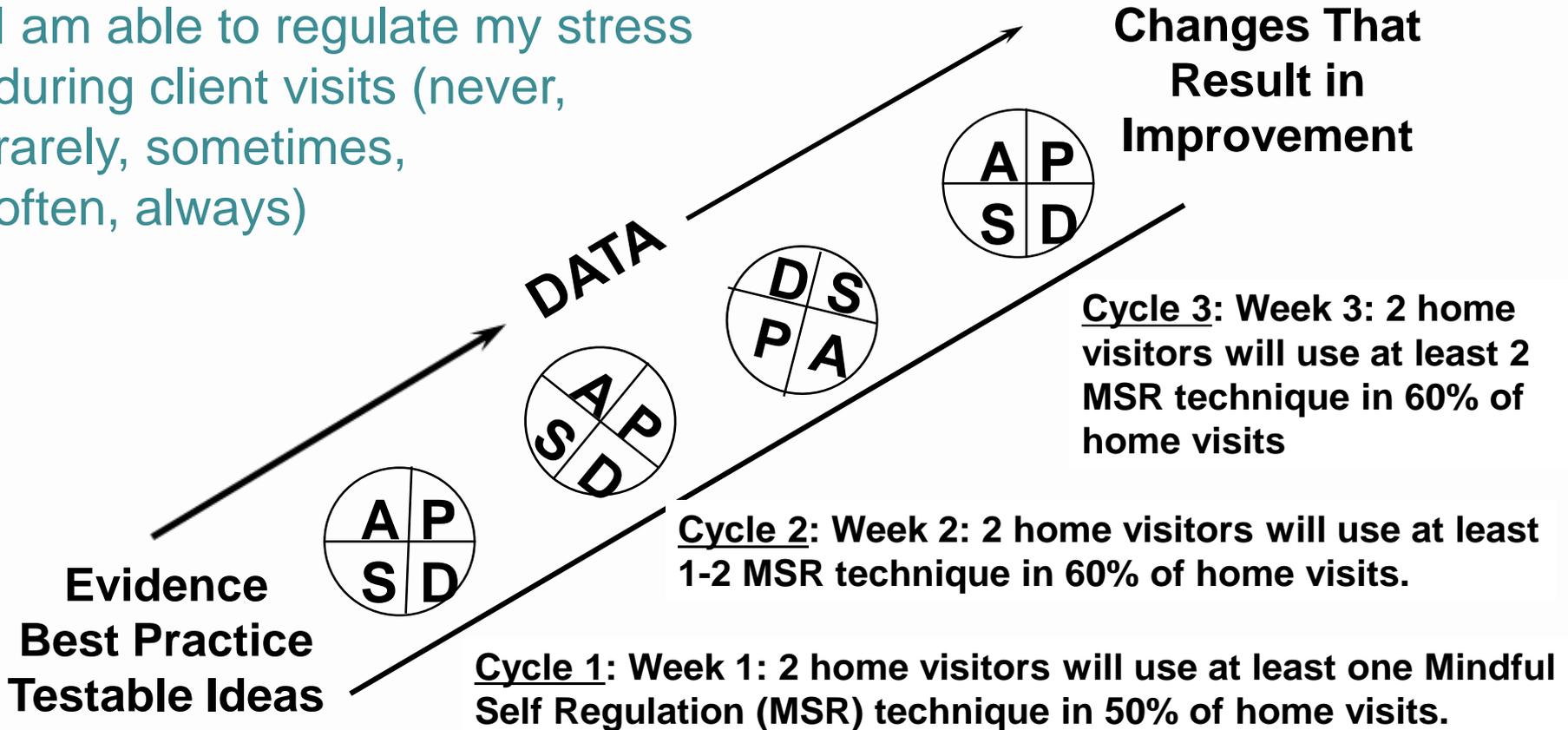
Each PDSA cycle is just one test...



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)



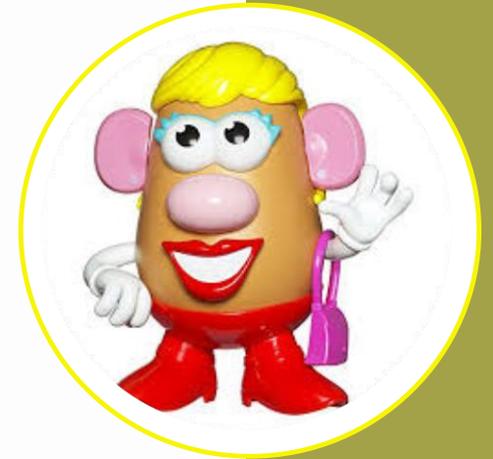
A young girl with dark hair, wearing a black long-sleeved shirt with white polka dots and a pink heart on the chest, is shown from the chest up. She has a confused or questioning expression on her face, with her eyes squinted and her mouth open in a grimace. She is pointing her right index finger upwards towards three large, grey, hand-drawn question marks floating in the air to her right. The background is a plain, light-colored wall.

QUESTIONS?

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



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.

PDSA #	Theory being tested	Prediction
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		

Precision Scoring:

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

		Time					
Seconds	80						
	70						
	60						
	50						
	40						
	30		14	13			
	20		seconds	seconds			
10		X	X				
		Baseline	1	2	3	4	5
		PDSA Cycle #					
		Precision					
Precision	3						
	2			X			
	1		X				
		Baseline	1	2	3	4	5
		PDSA Cycle #					

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

Reflections

What was your fastest time?

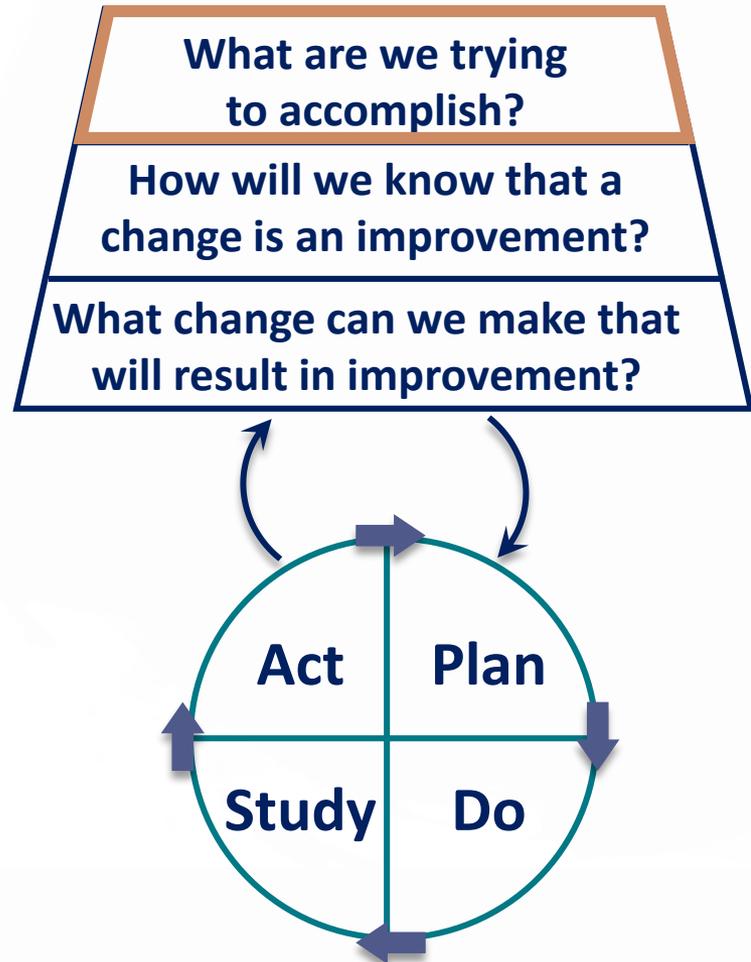
What did you try that got you there?

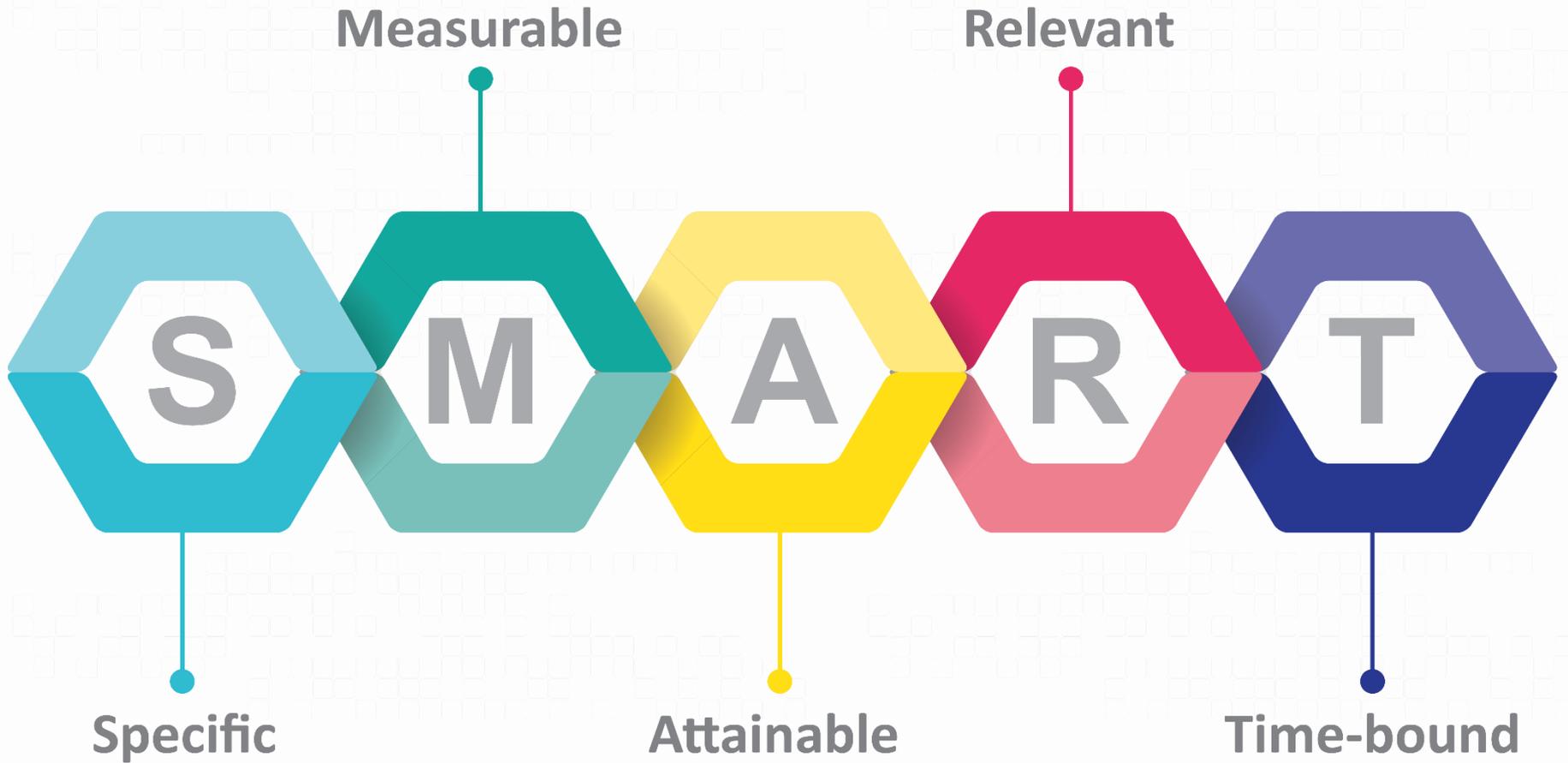
Did your results match your predictions?



What are we Trying to Accomplish?

Creating a SMART Aim Statement





Aiming SMART

Less SMART

Families will receive 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%.



Your Turn!

Example AIM:

More moms
with breastfeed
their babies



Oregon MIECHV Program's FY2020 Joy in Work Learning Collaborative

CREATING A SMART AIM

WHAT IS A SMART AIM?

- A SMART Aim helps us answer the question, "What are we trying to accomplish?"
- A SMART Aim is specific, measurable, achievable, realistic and time-based.

WHY DO WE NEED A SMART AIM?

- A SMART Aim gives your team a clear, simple and realistic direction for your improvement work.

		EXAMPLE	YOUR IDEAS
Step 1	What do we want to change? (Our topic/ primary driver)	Staff wellness and resiliency	
Step 2	Get specific- what do we want to change about our topic?	Increase the % of home visitors who feel that they are satisfied with their work-life balance	
Step 3	How much of a change do we want to see?	An increase from our baseline team pulse survey measure average of 3.2 to 4.0	
Step 4	By When? What is our timeframe?	By January 31, 2020	
Step 5	For Whom? Who are we trying to effect?	Home Visiting Staff	

Example: increasing the percentage of % of home visiting staff who feel that they are satisfied with their work-life balance by January 31, 2020, as measured by an increase from 3.2 to 4.0 in our team's average pulse survey measure.

DRAFT SMART Aim (How much, by when and for whom):



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)

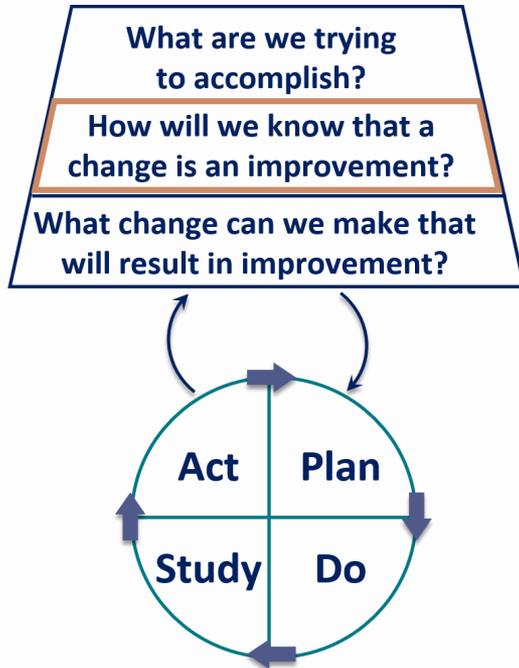
will _____.
(what result, change, benefit)

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.”



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



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

Data for Improvement, Accountability and Research

Aspect	Stability	Accountability	Improvement
Purpose	Control	Accountability	Outcomes
Bias	Control	Accountability	Outcomes
Data/samples	Control	Accountability	Outcomes; small
Testing strategy	Control	Accountability	Sequential, control; accelerate the rate of improvement
Flexibility of prediction	No prediction	Fixed prediction	Flexible; changes as learning takes place

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

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?



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*



QUESTIONS?

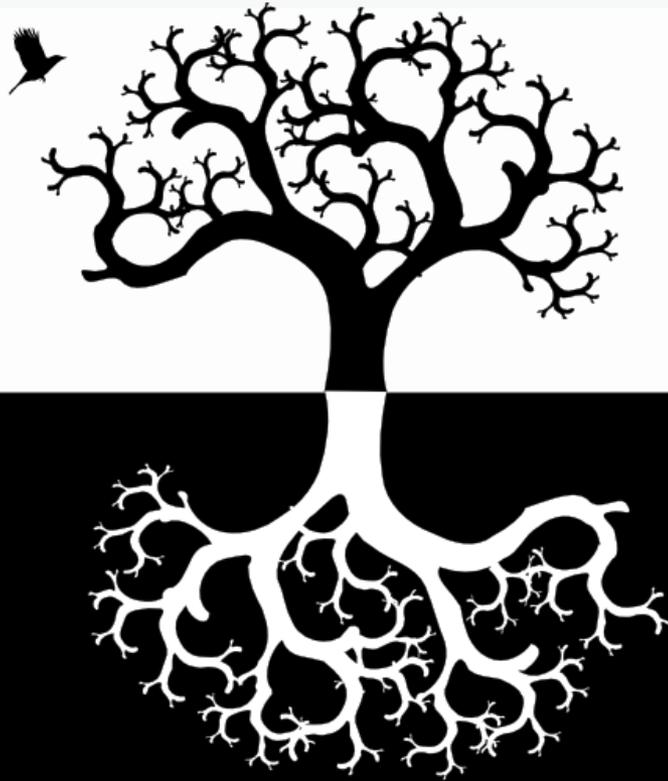
Time for *change*

Understanding Root Causes



What Is Root Cause Analysis?

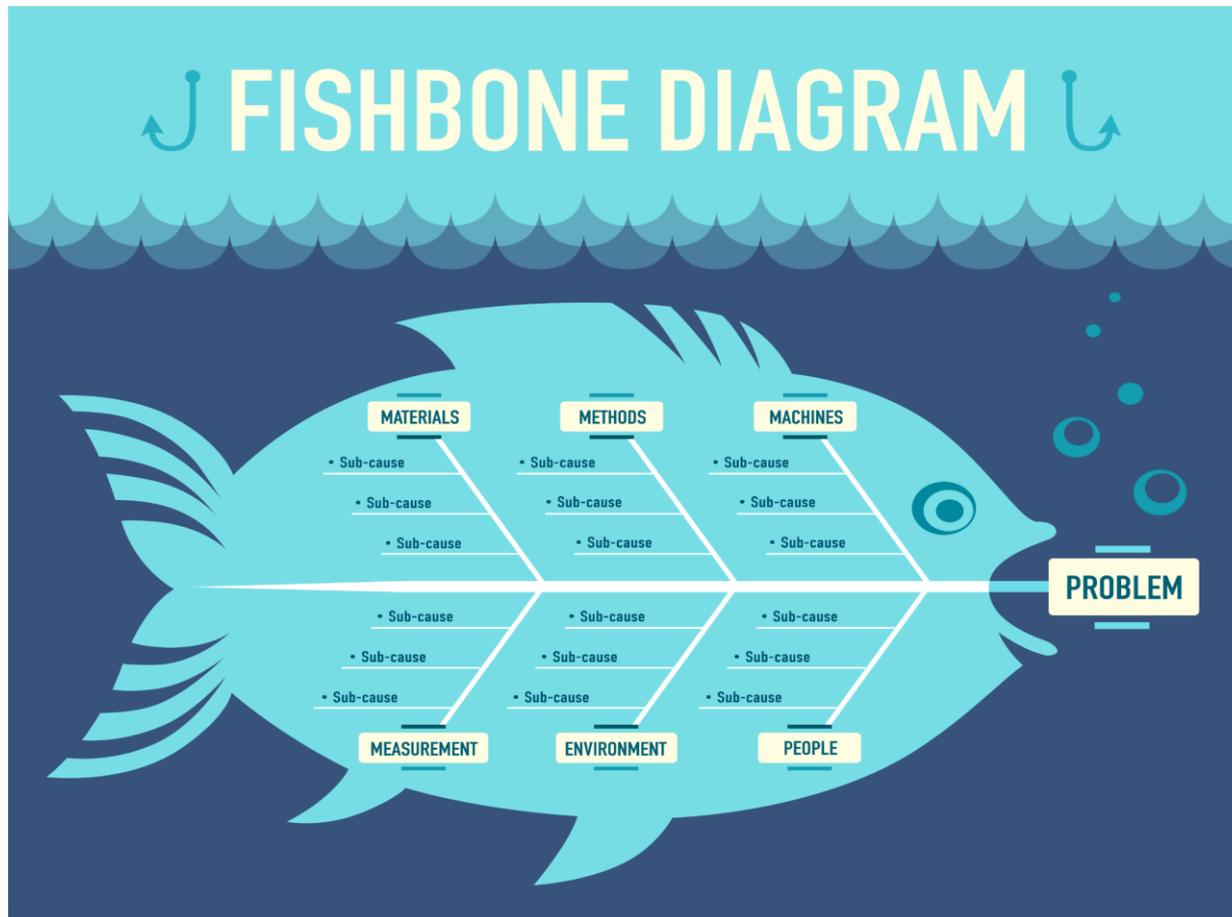
- Systematic process
- Identifies causes associated with a problem of interest
- Detects why causes are present



Why Root Cause Analysis?

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

Root Causes Analysis Tool

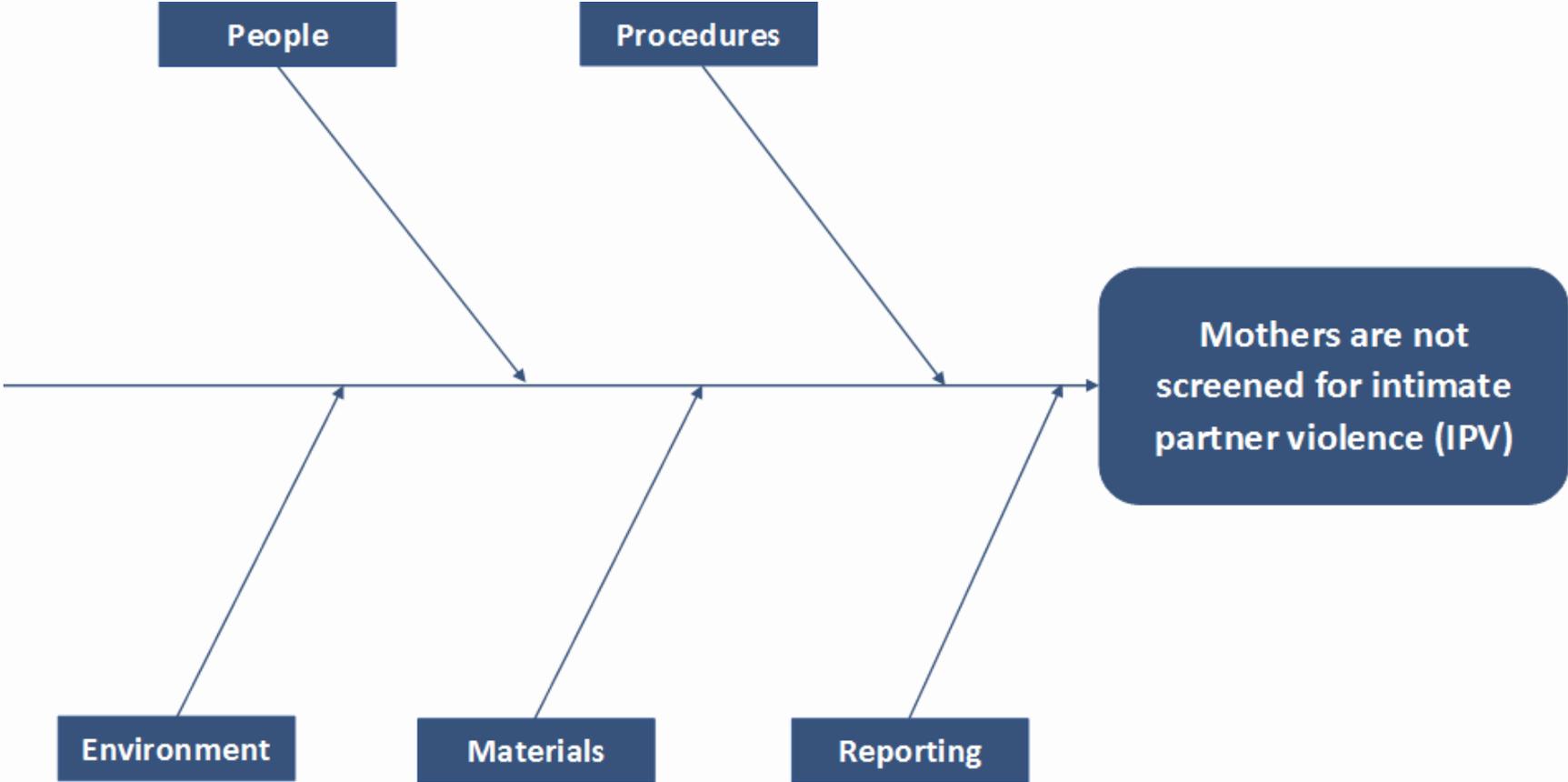


Fishbone Diagram

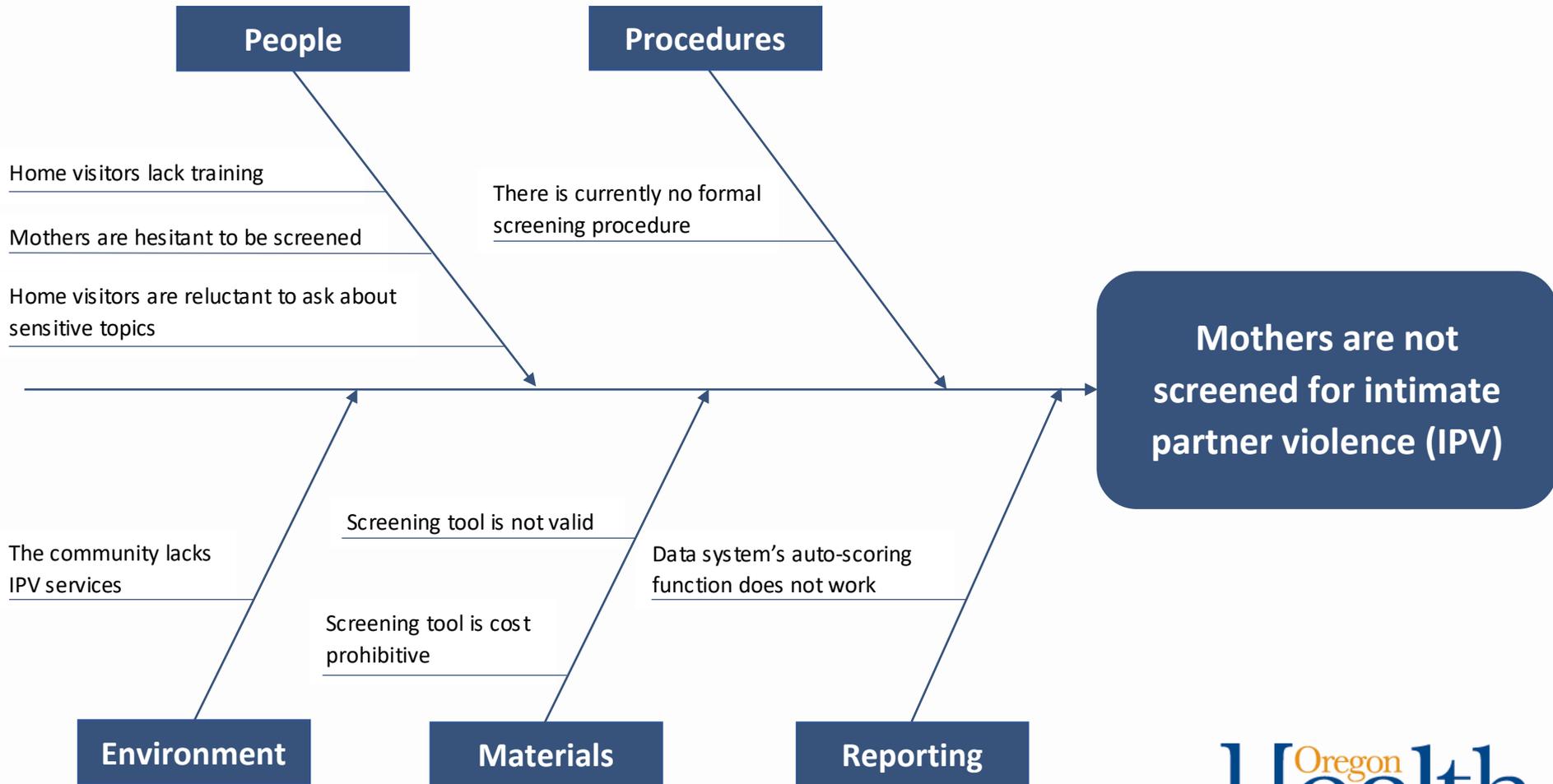


Mothers are not screened for intimate partner violence (IPV)

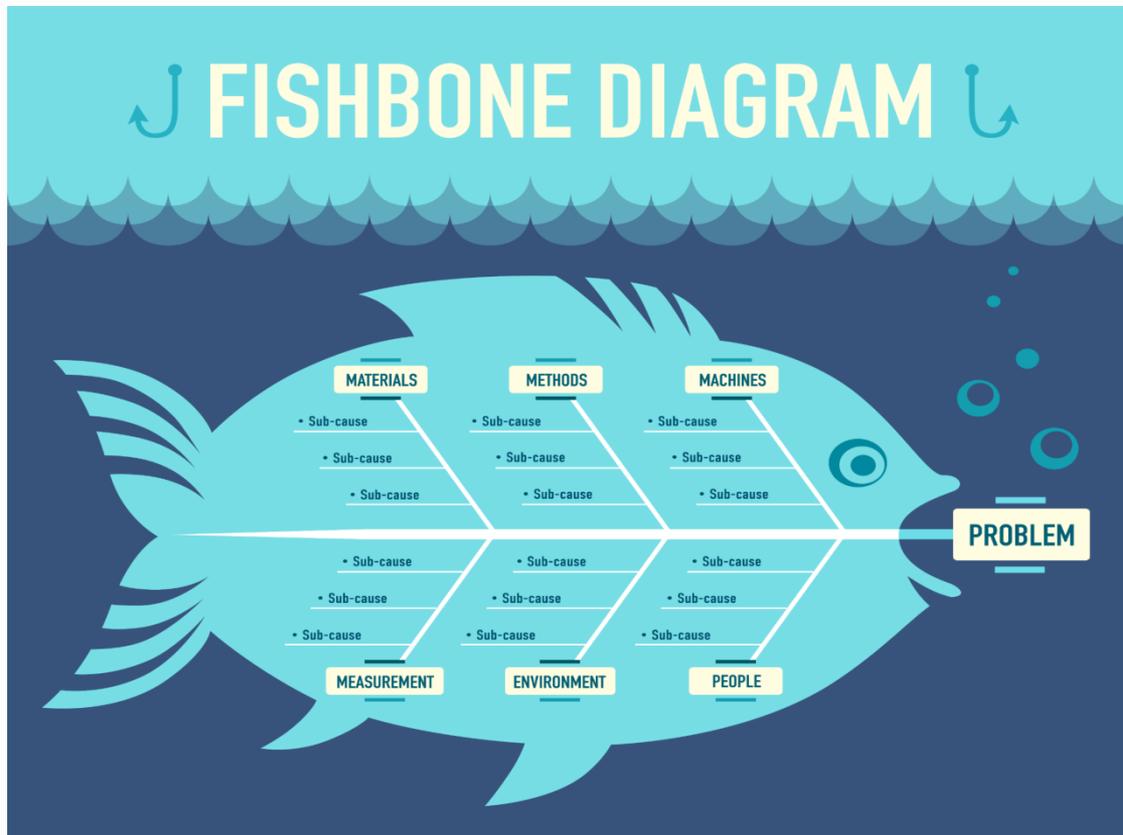
Fishbone Diagram



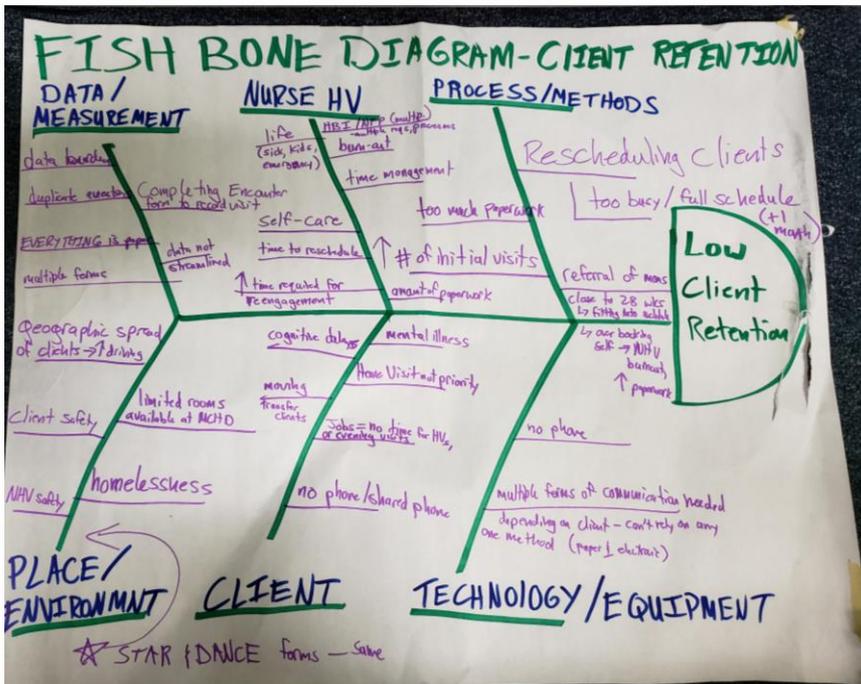
Example Fishbone Diagram



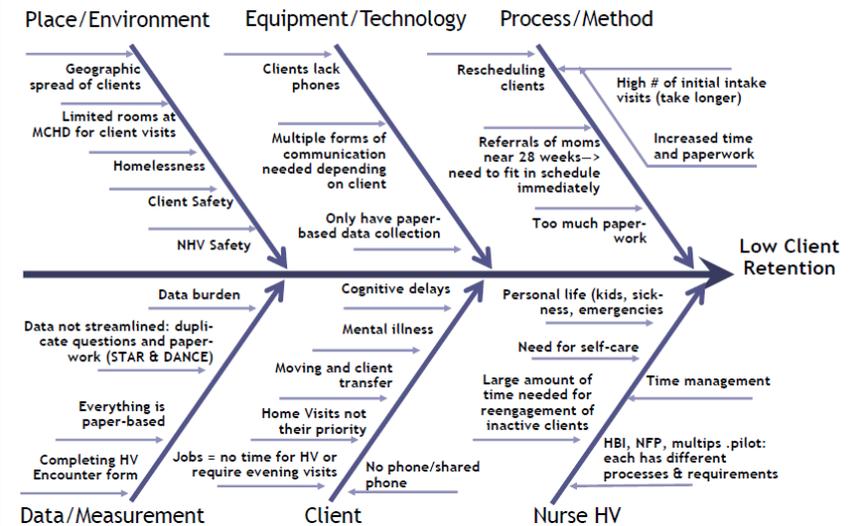
Let's try this together!



Example Root Cause Identification using Fishbone Diagram: Client Retention



MCHD Health Birth Initiative—Nurse-Family Partnership Program CQI Project: Client Retention



But where do we begin?

Problem Selection Grid

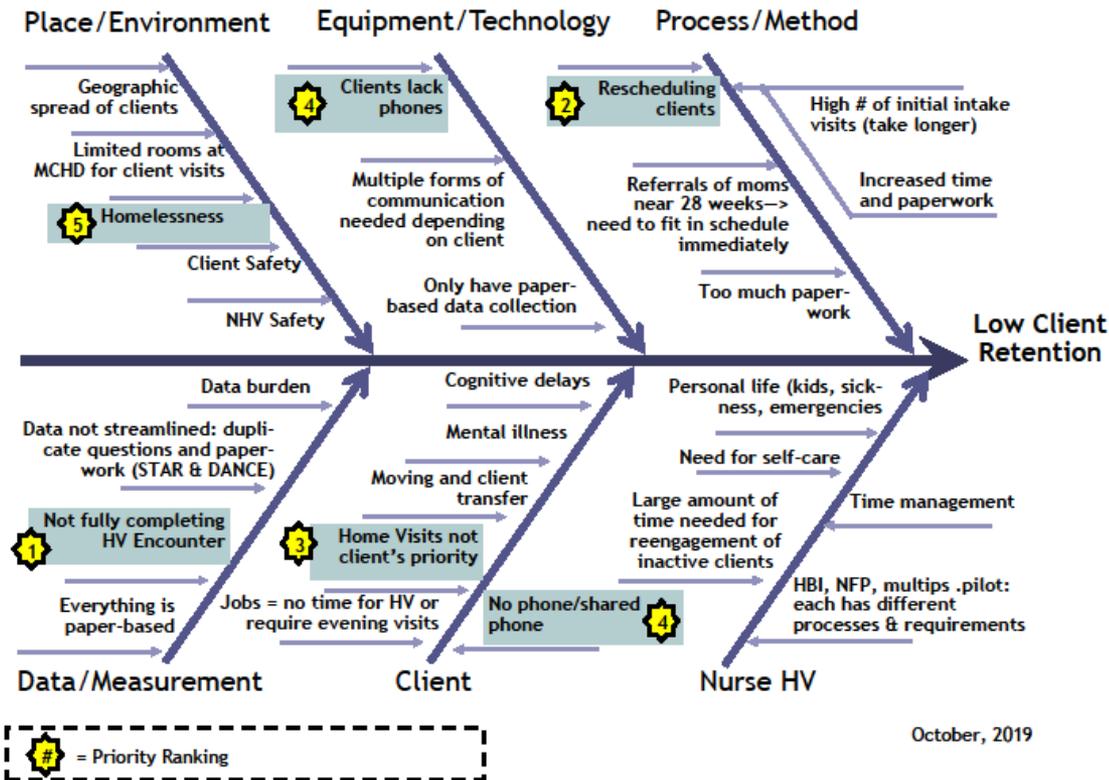
Problem	Importance (High, Medium, Low)	Impact (High, Medium, Low)	Control / Influence	Improvement Opportunity Ranking

Instructions:

1. Ask the team to identify approximately 5 problems related to client retention outlined in the Fishbone Diagram (e.g. "Rescheduling Clients")
2. Using the above matrix, write down each problem under the Problem column
3. As a team, rate the importance and the impact of each problem as "high, medium or low"
4. Identify whether the team has control or influence on each problem
5. 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

Prioritized Fishbone Diagram

MCHD Health Birth Initiative—Nurse-Family Partnership Program CQI Project: Client Retention



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



QUESTIONS?

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?

Thank You!

For more information related to CQI please contact:

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Public Health Division
Maternal & Child Health

Oregon
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