

---

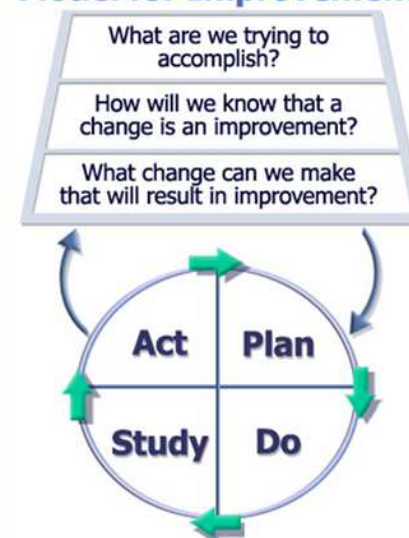
# Continuous Quality Improvement (CQI) for MIECHV

## FY2018 State CQI Project Kick-off: Safe Sleep

January 25, 2018



### Model for Improvement



Oregon  
Health  
Authority

Public Health Division  
Maternal & Child Health

---

## Expectations from participants (registration survey)

- Better understanding of statewide CQI project on safe sleep
- Clear, concise session
- how to help families to better understand importance of safe sleep
- Get everyone “on the same page”
- Learn new information that can be directly applied
- Clear guidelines and roles for engaging in CQI processes



Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# Logistics and expectations for today

## Expectations

- Phones on silent
- All teach all learn
- Steal shamelessly
- Take health/snack breaks as needed
- Ask questions as we go; use Parking Lot as needed
- Feedback and Evaluation

**9:45 –** CQI Statewide

**11:45** Plan Kickoff

**11:45 –** Break and lunch  
**1:45** (Speaker)

**1:45 –** CQI Statewide  
**3:45** Plan Kickoff,  
continued

**3:45 –** Final  
**4:00** Announcements  
and Closing

# 2018 Statewide CQI Kick-off

**GOAL: Participants will leave the session having completed most of the prep work for the PLAN stage of a CQI project**

Agenda	Objectives
1. Welcome and Overview	1. Generate excitement for CQI and the topic of safe sleep
2. Appreciative Inquiry Activity	2. Utilize program-level data to identify opportunities for improvement
3. State CQI Project and PDSAs	3. Identify root causes, opportunities and change strategies for increasing caregiver safe sleep practices
4. Developing PLAN stage of your CQI project	4. Develop AIM statements and identify possible measures and data collection methods

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# Appreciative Inquiry

Asset Based

Look at what we've got!!

Look at what we're missing!!

Deficit Focused

© J. Logan 2012

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

# Appreciative Inquiry - interviews



- Pair up with someone from a different LIA whom you have never met
- Take turns asking:

“Please tell a story about a time when you worked on a challenge with a home visiting client and you are proud of what you accomplished. What is the story and what made the success possible?”

- 3 minutes for each person
- Will share elements of success back to larger group

# Appreciative Interviews- Debrief

- What made success possible in the story your partner shared?
- How can we take these elements of success and apply them to CQI? To the topic of safe sleep?





Safe Sleep

# STATE-WIDE CQI PROJECT

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority



# FY2018 State CQI Project on Safe Sleep: Objectives

By the end of FY 2018, CQI teams will be able to:

- **Establish aims that are measurable and time-bound**
- **Identify data that can be collected at least monthly**
- **Create and use measures to track progress towards achievement of aims**
- **Conduct multiple PDSA cycles, including small rapid cycles (1 day, 1 HV, 1 client)**
- **Use time series charts to track results**
- **Share project successes and challenges with peers**

# Statewide CQI Project Structure

- All-LIA kick-off meeting
- PDSA tracking forms
- Learning Collaboratives
- CQI Newsletters
- Quarterly benchmark data reports
- Basecamp website



Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# Participant Expectations

- Participate in the Safe Sleep CQI project
  - kick-off meeting, learning collaboratives, quarterly webinars, submitting PDSA updates
- Home visitors are part of the CQI team
- “All teach, all learn”
- “Share seamlessly, steal shamelessly”

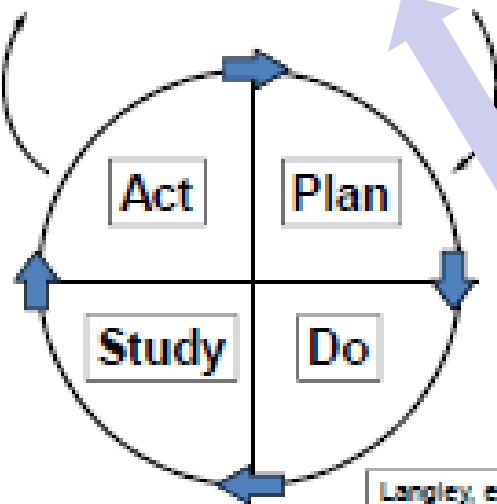
# FY2018 State CQI Project: Safe Sleep

## 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.  
(2009) p96

*Oregon MIECHV-funded programs will increase the percent of infants under the age of 1 who are always placed to sleep on their backs, without bed-sharing or soft bedding from 18.3% to 25% by September 30<sup>th</sup>, 2018.*

- % of infants ages 0, 3- and 6-months who are always placed to sleep on their backs, without bed-sharing or soft bedding
- % of infants under the age of 1 (overall) who are always placed to sleep on their backs, without bed-sharing or soft bedding

*To be determined by LIA programs*

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# CDC MMRW: *Vital Signs* Report on Safe Sleep Practices for Babies (Jan 9, 2018)

- *Pregnancy Risk Assessment Monitoring System (PRAMS)*: population-based data on self-reported pre and post-natal maternal behaviors and experiences
  - Oregon Health Authority's MCH section houses PRAMS

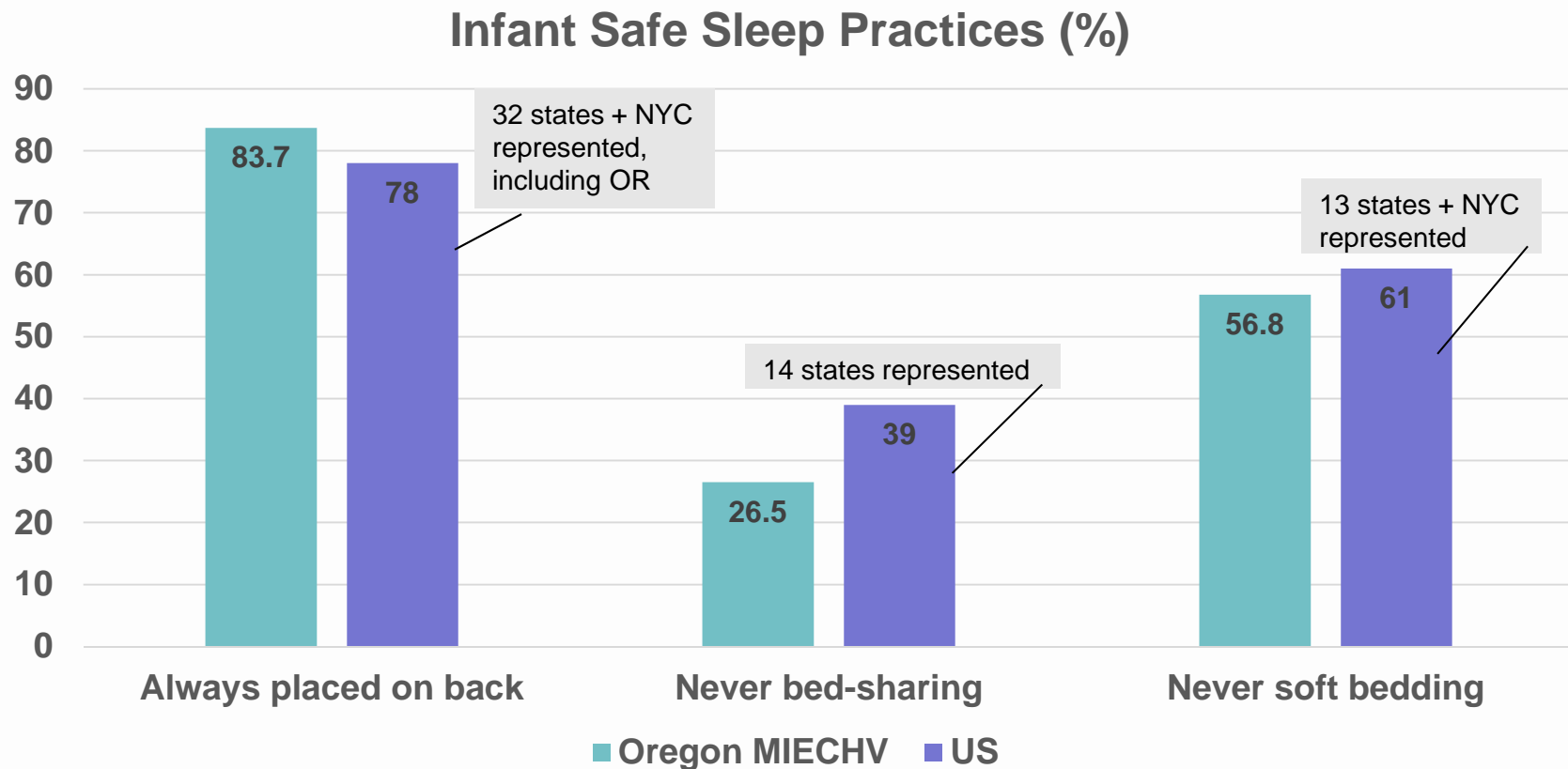
**In 2015, within the 32 states included in the analysis:**

- **21.6 percent reported placing baby to sleep on side or stomach; 61.4 percent reported any bed sharing with their baby; 38.5 percent reported using any soft bedding in the baby's sleep area**
  - Women surveyed 2-6 months postpartum

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# Safe sleep data from Oregon MIECHV Program (2017) vs National PRAMS Data (32 states + NYC reporting, 2015)



Source: MMRW. Vital Signs: Trends and Disparities in Infant Safe Sleep Practices — United States, 2009–2015. Jan 9, 2018. Vol. 67.

Public Health Division  
Maternal & Child Health



## Data Collection, Definitions and Terminology

# SAFE SLEEP

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority



# How are we Expected to Collect MIECHV Safe Sleep Data?

- Ensure HVs are consistently using AAP definitions
- Ensure caregiver has same understanding of definition of safe sleep terms (e.g. “soft bedding,” “bed-sharing,” co-sleeping,” “room sharing”)
- Ask questions verbatim or as part of natural conversation
- Avoid filling in based on observation or memory without verbal inquiry to confirm

# Acknowledge Complexities with Data Collection...

Infant sleep is complex!

- Infants sleep in different places, at different times of day, in different physical environments(e.g. falling asleep in car seats, baby carriers, high chairs etc.)
- Data collection using absolutes (E.g., “Always, Sometimes, Never”) is difficult and doesn’t capture these complexities
- Accept that there will always be some level of survey response bias; focus on relationship, trust, honesty

## ...And Focus on What You *Can* Control



- Use of the same definitions by all HVs
- Asking the data collection questions in a similar way across home visitors
- Ensuring caregivers are using the same definitions you are using
- Ensure data is not missing

12. How often do you place your infant to sleep on their back?

- ☐ Always
- ☐ Sometimes
- ☐ Never

13. How often do you bed-share with your infant?

- ☐ Always
- ☐ Sometimes
- ☐ Never

14. How often does your infant sleep with soft bedding?

- ☐ Always
- ☐ Sometimes
- ☐ Never

# Definitions: Infant Sleep Locations

Co-sleeping	<ul style="list-style-type: none"><li>• parent and infant sleep in close proximity (on the same OR different surfaces)</li></ul>
Bed-sharing	<ul style="list-style-type: none"><li>• a specific type of co-sleeping, with infant sleeping on same surface with another person</li><li>• can include a bed, sofa, or chair</li></ul>
Room-sharing	<ul style="list-style-type: none"><li>• infant sleeps in the parents' room but on a separate sleep surface</li></ul>

# Definitions: Soft Bedding

Soft  
bedding

- Soft mattresses
- Pillows
- Blankets, comforters, quilts, other loose bedding such as non-fitted sheets
- Sheepskins
- Bumper pads
- Stuffed toys
- Infant positioner

# Overlapping Terminology

## Sleep Location

- Room-sharing
- ***Separate surface***
- No couches or armchairs

## Sleep Surface

- Firm mattress
- Fitted sheets
- Meets safety standards (CPSC)
- ***No soft bedding***

## No soft bedding

- Soft mattresses
- Pillows
- Blankets, comforters, quilts
- Other loose bedding (e.g. non-fitted sheets)
- Sheepskins
- Bumper pads
- Stuffed toys
- Infant positioner

Public Health Division  
Maternal & Child Health

# Model for Improvement and PDSA



Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority



## Model for Improvement



Public Health Division  
Maternal & Child Health

## Model for Improvement



An aim that is:  
Specific,  
Measurable,  
Actionable,  
Realistic,  
Time bound

### EXAMPLE OF A SMART AIM:

Oregon MIECHV-funded programs will increase the percent of infants under the age of 1 who are always placed to sleep on their backs, without bed-sharing or soft bedding from 18.3% to 25% by September 30th, 2018

Source:

Langley, G. J. (2009). *The improvement guide: A practical approach to enhancing organizational performance*. San Francisco: Jossey-Bass.

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

## Model for Improvement



**A measure,  
directly tied to  
the aim, to be  
collected  
regularly**

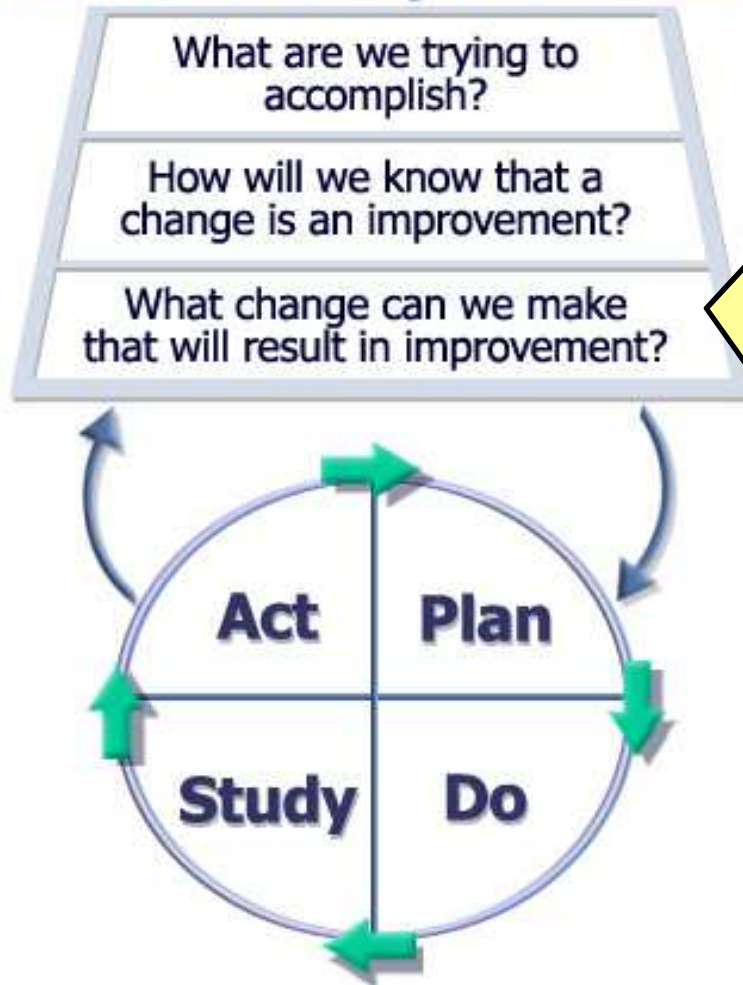
**EXAMPLES OF MEASURES:**  
% of infants ages 0-3, 3-6 and 6-12 months  
who are always placed to sleep on their  
backs, without bed-sharing or soft bedding

Source:  
Langley, G. J. (2009). *The improvement guide: A practical  
approach to enhancing organizational performance*. San  
Francisco: Jossey-Bass.

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

## Model for Improvement



- Your data
- HV assessments
- Literature/Research
- Team expertise
- What has been done elsewhere?
- QI Tools
- HV Models
- Peer sharing

Source:

Langley, G. J. (2009). *The improvement guide: A practical approach to enhancing organizational performance*. San Francisco: Jossey-Bass.

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

## Model for Improvement



**Rapid,  
small-scale  
testing of  
changes**

Source:

Langley, G. J. (2009). *The improvement guide: A practical approach to enhancing organizational performance*. San Francisco: Jossey-Bass.

Public Health Division  
Maternal & Child Health

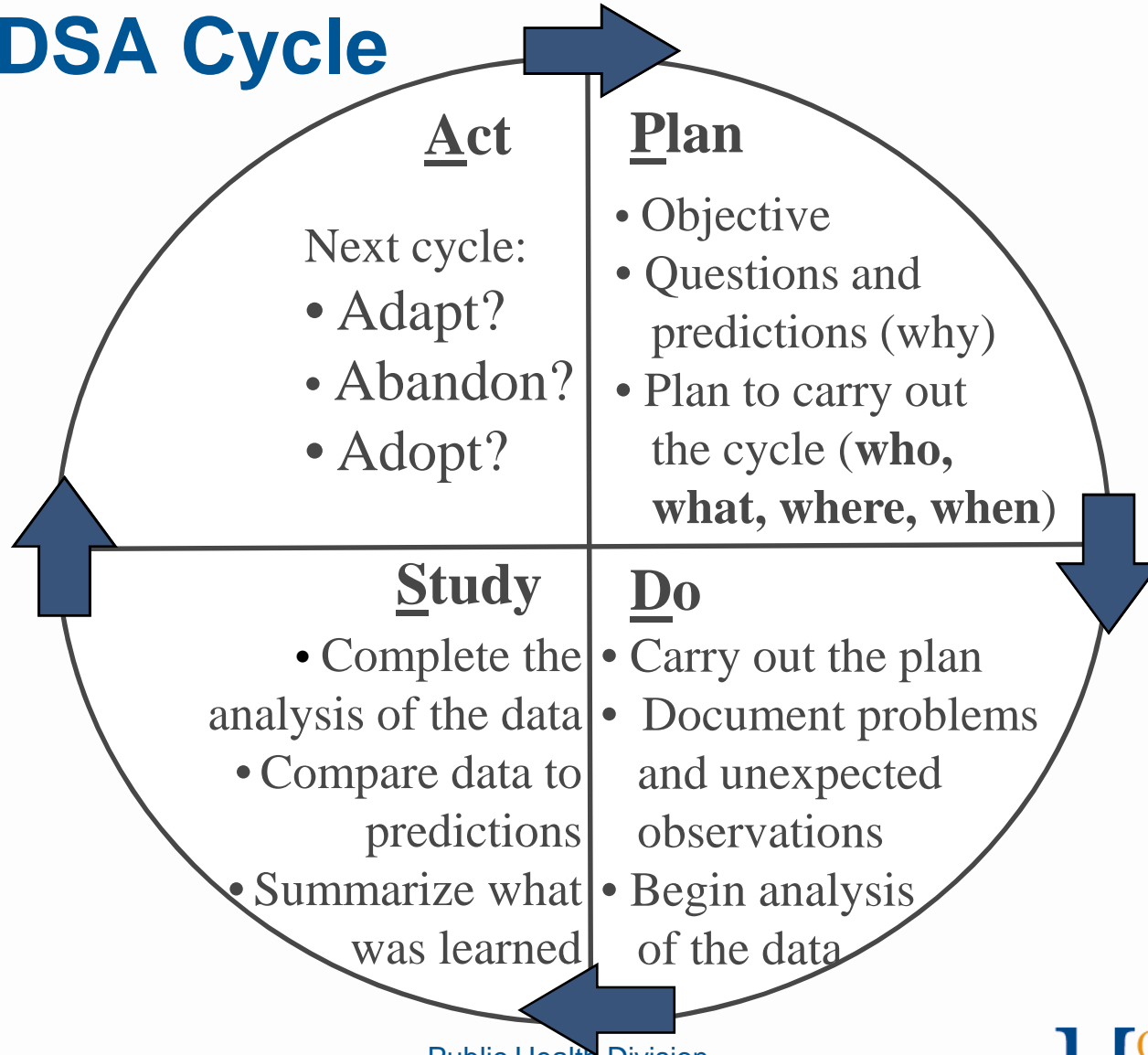
Oregon  
**Health**  
Authority

# Plan-Do-Study-Act (PDSA)

- Also known as Plan-Do-Check-Act (PDCA)
- Four stages, nine steps
- Used by quality professionals & health care professionals
- Science based and data driven: Hypothesize (plan), experiment (do), evaluate (study/act)
- Iterative (a repeating cycle)
- Turns ideas into action and connects that action to learning



# The PDSA Cycle



Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority



# Why Test our Changes?

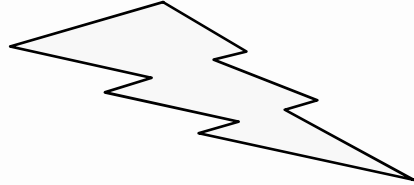
- Risk & cost reduction - Opportunity to learn without severely impacting performance or using many resources
- Increase (or decrease) your belief that the change will result in improvement
- Learn to adapt change to other conditions and your environment
- Gain buy-in for the change – this will make it easier when you are ready for implementation!

# Why use Small Tests ?

Consequences of Failed Test

Major

Minor

	 <b><u>Disaster Zone</u></b>

✓ **Small**      *Size of your Test*      **Large**

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

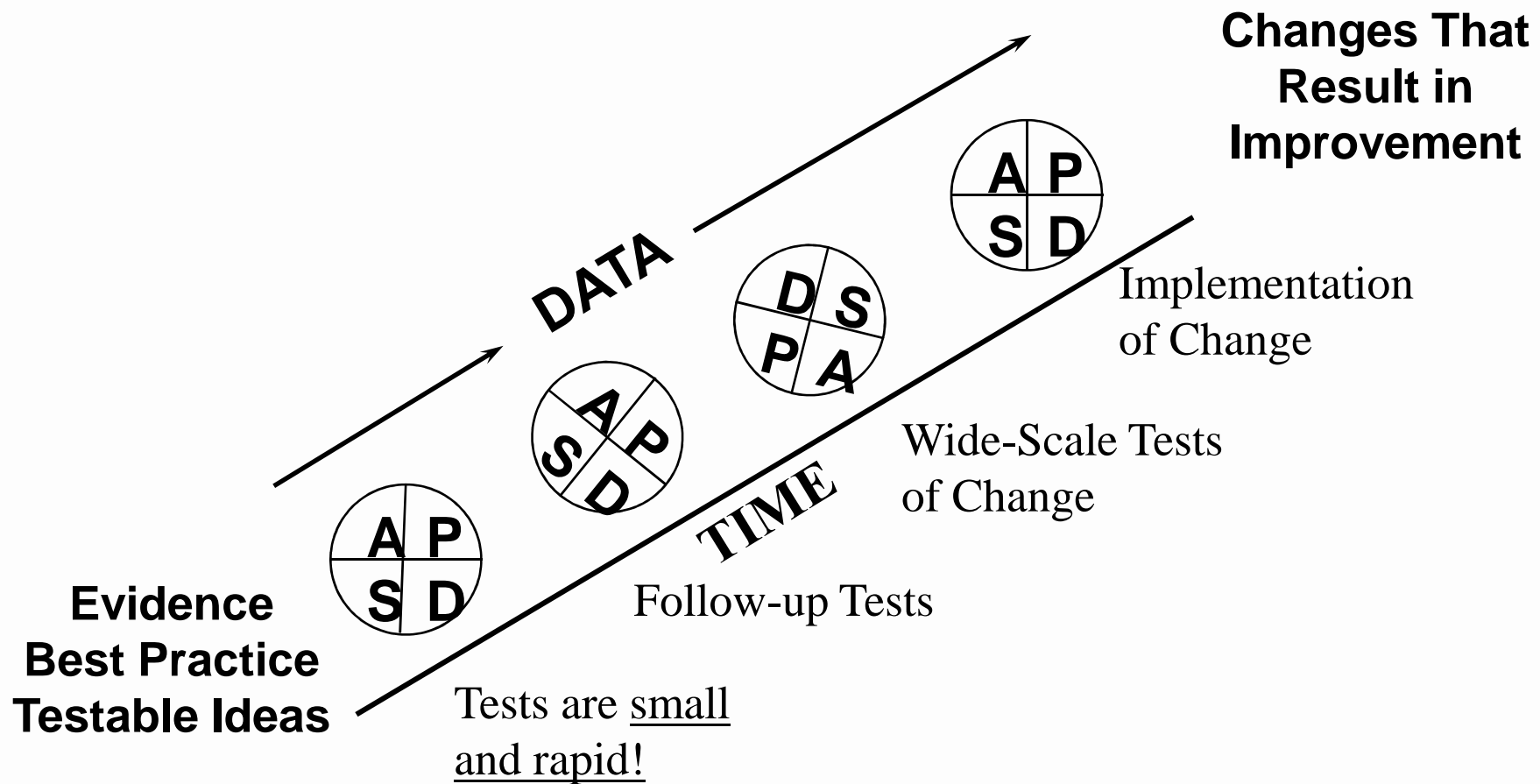
# PDSA Cycles

**Keep it small and fast!**

- One family
- One visit
- One day
- One home visitor



# Multiple PDSA Cycles = Ramp



# Multiple PDSA Cycles = Ramp

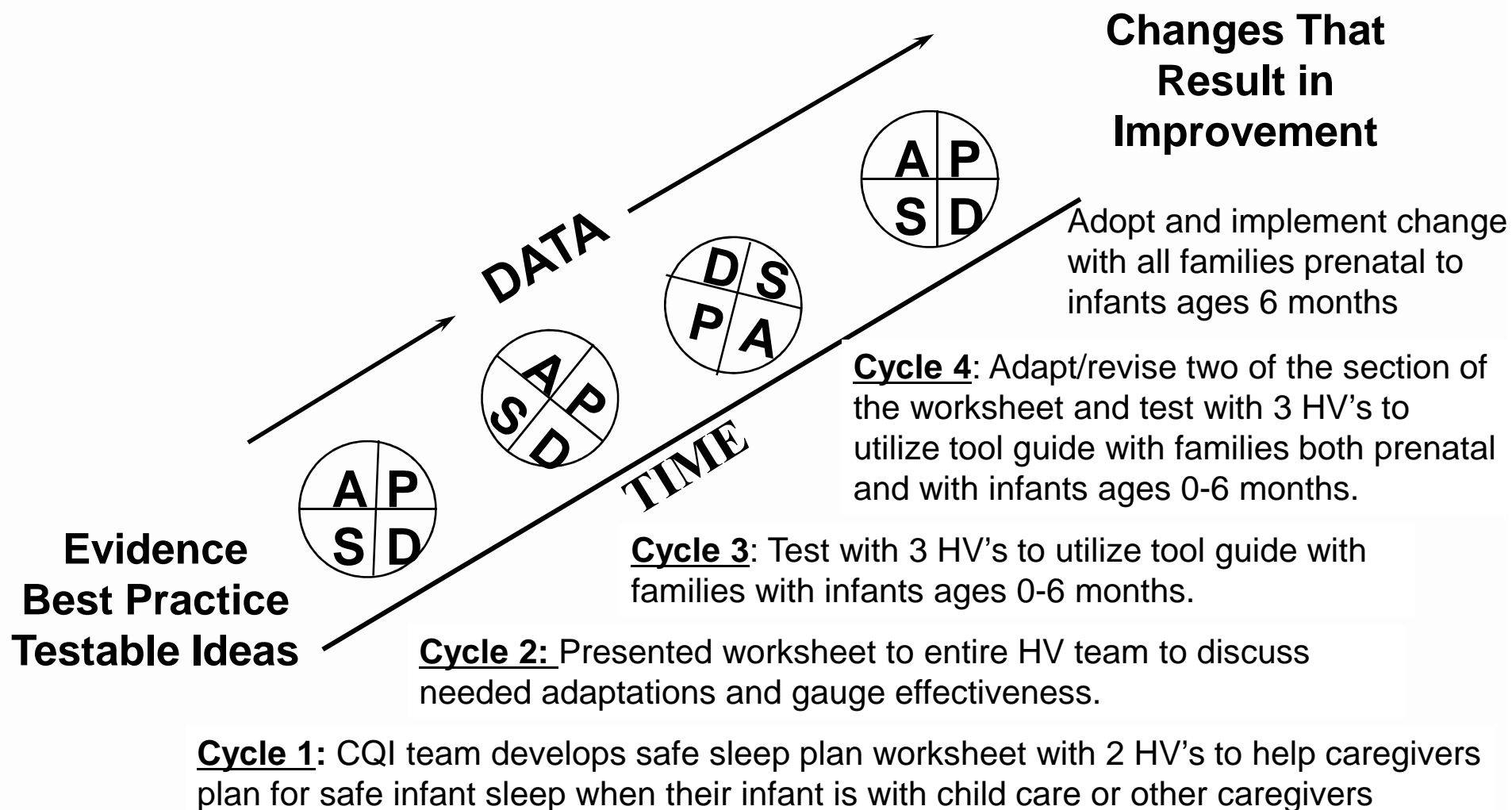


Table 1. Safe Sleep by Quarterly Reporting Period, FFY 2017, 10/1/2016 - 9/30/2017

		ALL of 3 safe sleep conditions met?		
Reporting period		Yes- ALL conditions met	No- Not met	Total number of surveys
FFY 2017, Quarter 1 (10/1/2016 - 12/31/2016)	Count	32	168	200
	%	16.0%	84.0%	
Quarter 2	Count	55	223	278

Oregon MIECHV Home Visitor Safe Sleep Assessment - HS of Yamhill C

#### QUESTIONS

Oregon MIECHV Home Visitor Safe Sleep Assessment - HS of Yamhill Co.

Head Start of Yamhill Co. Home Visitors Safe Sleep Assessment

The 2018 Oregon MIECHV CQI project is on Safe Sleep. The purpose of this brief assessment is to learn more about Home Visitor knowledge, practices and beliefs related to safe sleep and the safe sleep practices of their clients. Your responses and those of your home visitor colleagues will be used as part of your team planning for your CQI project by helping to identify possible areas for improvement. The survey should take about 10 minutes.  
THANK YOU for your dedication to the families and communities you serve!

1. What are the greatest risks or risk factors you observe among your clients around infant sleep practices? Please check the top 3-5 risks or risk factors you have observed.



## Examining your Current Approach

# PLAN STAGE

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

# PDSA – Plan Stage

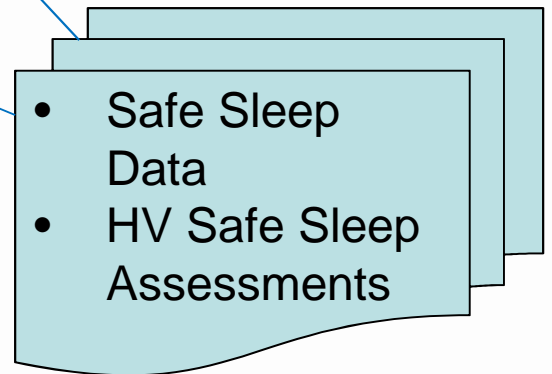
- Step 1: Getting Started
- Step 2: Assemble the Team
- **Step 3: Examine the Current Approach**
- Step 4: Identify Potential Solutions
- Step 5: Develop an Improvement Theory





# PLAN Stage Step 3: Examining the Current Approach

- Obtain and analyze existing baseline data, or collect baseline data to understand current approach
- Examine the current approach or process flow
- Obtain stakeholder/client input
- Determine root cause(s) of problem
- Develop smart aim statement
  - 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?



# Emerging Themes from HV Safe Sleep Assessments



## Safe Sleep Data Collection and Training

- Personal beliefs and experiences *do* impact discussions
- Need for safe sleep trainings, including definitions and collecting data
- Desire for handouts and visual aids, and in multiple languages
- Want to know more about safe sleep:
  - MI for bed-sharing and risk reduction strategies; research and statistics; **why** different safe sleep practices are unsafe; sleep options when parents don't have other sleep surface available; culturally responsive dialogues

# Emerging Themes from HV Safe Sleep Assessments

## Client risks and barriers

- Greatest risk factors:
  - Soft sleep surface and use of soft bedding
  - Routinely putting infant to sleep in car seat, stroller etc.
  - Bed-sharing with caregivers
  - Too many blankets/clothes
- Barriers:
  - Economic factors
  - Cultural norms, beliefs and values
  - Parents having used similar practices with previous children



Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

# Questions LIA CQI teams raised from Safe Sleep Data review document

Table 1. Safe Sleep by Quarterly Reporting Period, FFY 2017, 10/1/2016 - 9/30/2017

Reporting period		ALL of 3 safe sleep conditions met?		Total number of surveys
		Yes- ALL conditions met	No- Not met	
FFY 2017, Quarter 1 (10/1/2016 - 12/31/2016)	Count	32	168	200
	%	16.0%	84.0%	
Quarter 2 (1/1/2017 - 3/31/2017)	Count	55	223	278
	%	19.8%	80.2%	
Quarter 3 (4/1/2017 - 6/30/2017)	Count	57	238	295
	%	19.3%	80.7%	
Quarter 4 (7/1/2017 - 9/30/2017)	Count	30	149	179
	%	16.8%	83.2%	
FFY 2017, Total (10/1/2016 - 9/30/2017)	Count	174	778	952
	%	18.3%	81.7%	

- Do parents really understand the questions/terms?
- What qualifies as soft bedding for the purposes of MIECHV data?
- Can we look at data by home visitor?
- Can we view data by ethnicity to see if there are cultural differences?
- Does this data take into account forms home visitors may not have turned in?

# Team Activity: Examine Safe Sleep Data and HV Safe Sleep Assessments

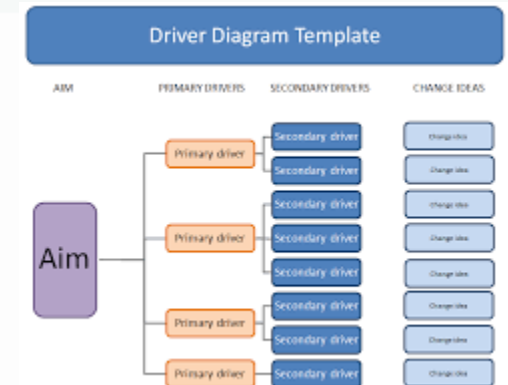
- Review your safe sleep data and HV Assessments – **20 minutes**
- Assign note-taker
- Answer the following questions:
  1. What are the greatest safe sleep risk factors and barriers identified in the HV Assessment?
  2. What HV training, materials or resources are needed?
  3. How is safe sleep data collected?
  4. Based on your safe sleep data, what infant ages and safe sleep component(s) have the greatest opportunity for improvement?



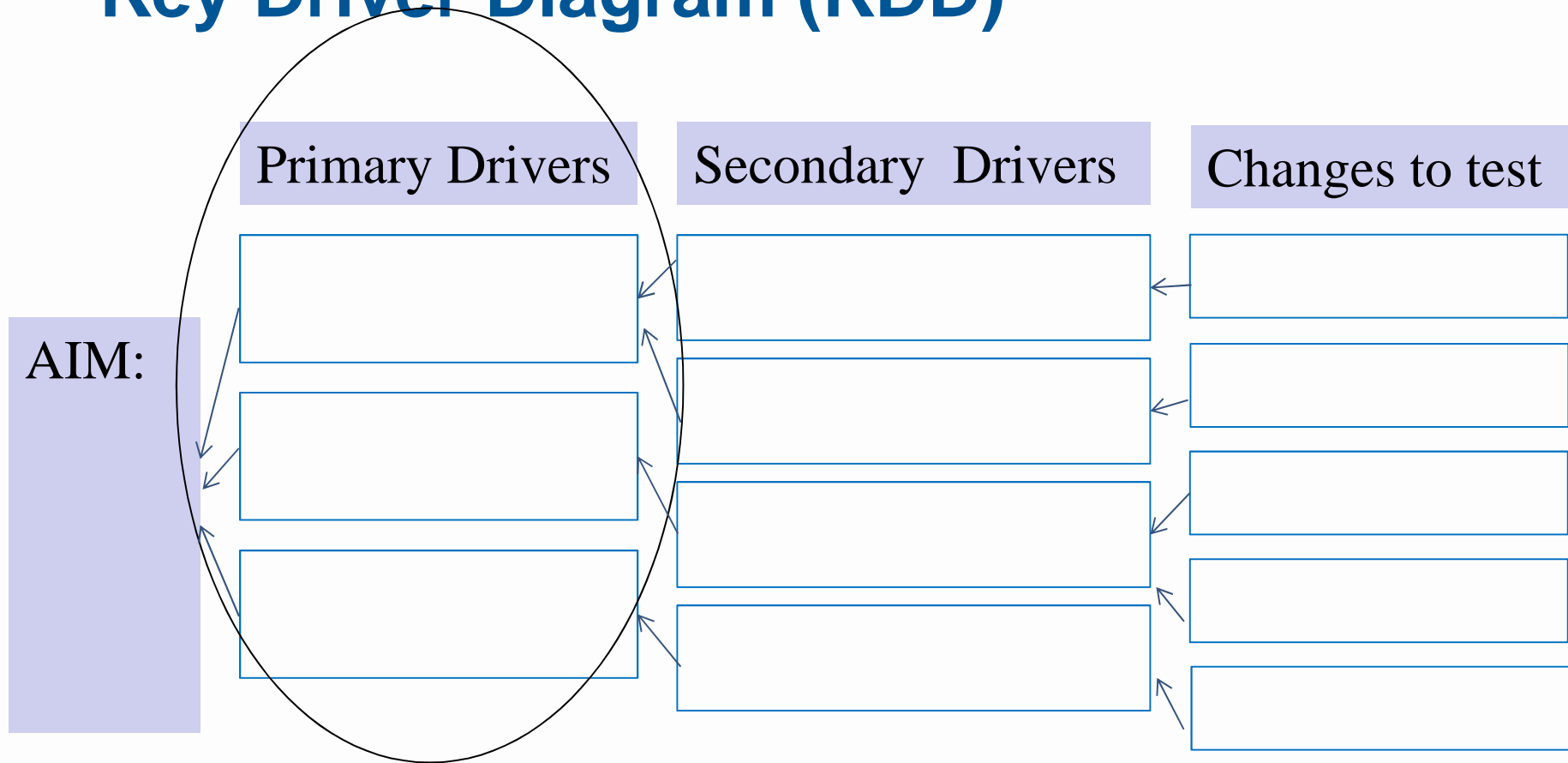
# Key Driver Diagram (KDD)

## A KDD:

- Organizes the "theory behind improvement" for a specific aim
- Connects the aim/desired outcome with the interventions to create a "Learning Structure"
- Helps focus the selection of changes to test
- Provides a common mental model for a team
- Provides a living document for improvement work which is continuously updated and tells "the story" (along with data chart(s))

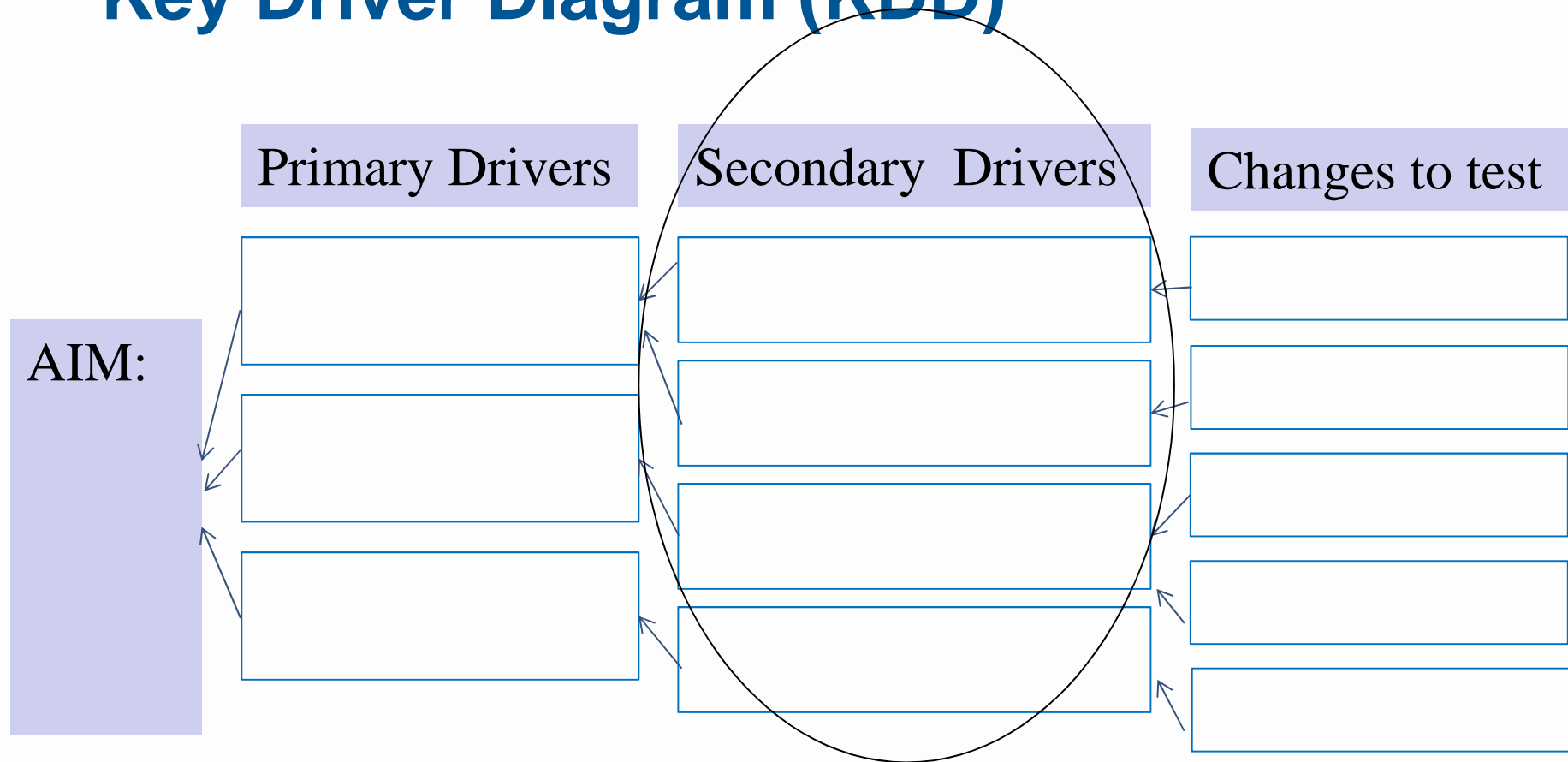


# Key Driver Diagram (KDD)



**Primary Drivers:** factors which contribute directly to achieving the aim

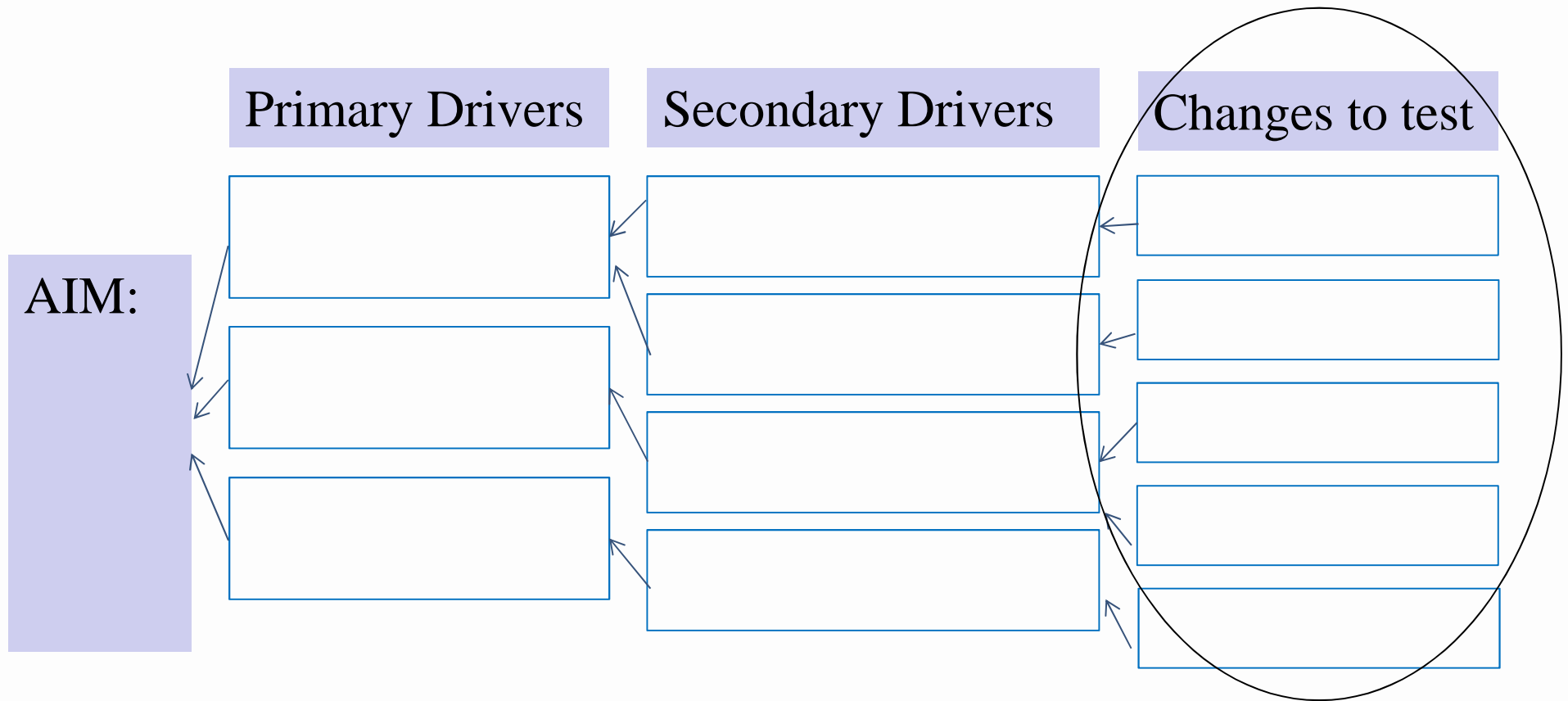
# Key Driver Diagram (KDD)



**Secondary Drivers:** components necessary to achieve the primary drivers



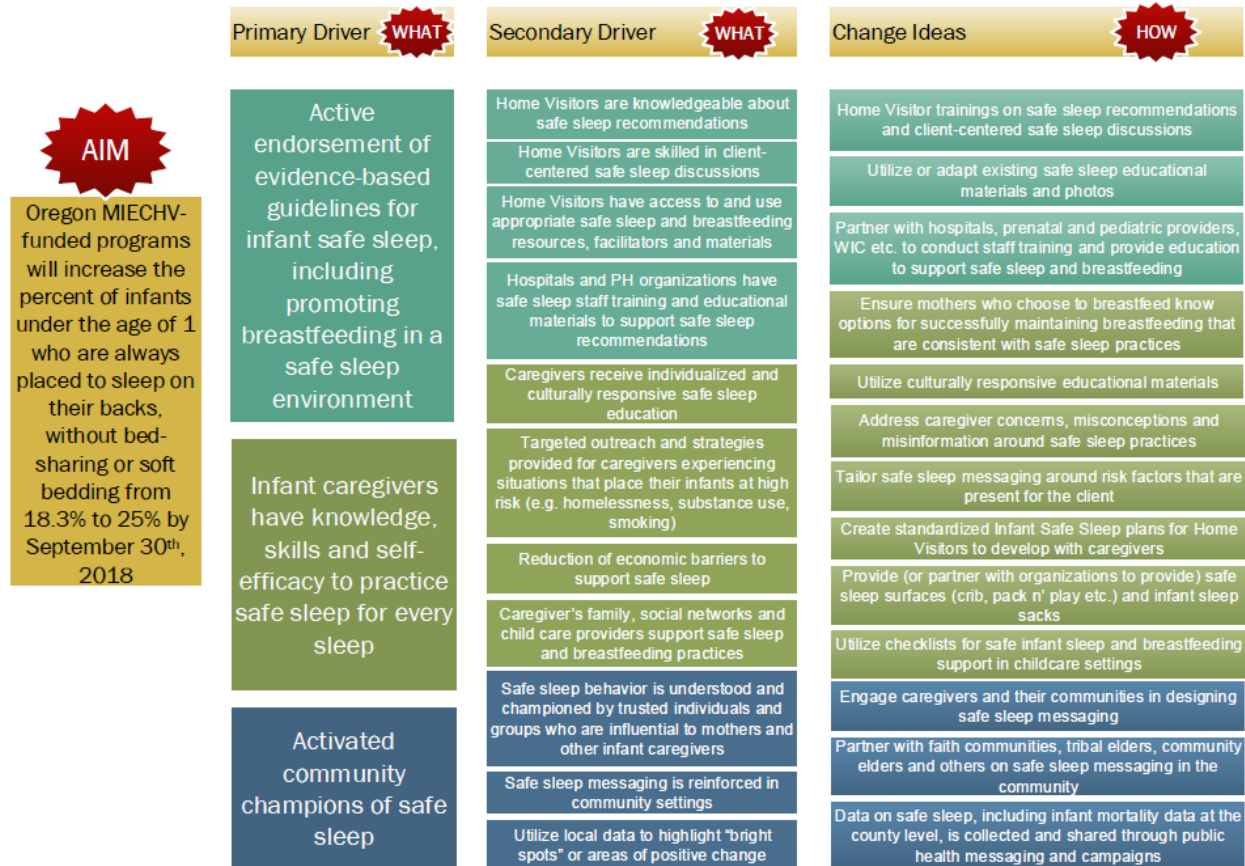
# Key Driver Diagram (KDD)



*Changes that can be tested in order to affect the primary and secondary drivers*

# Safe Sleep Key Driver Diagram

## Oregon FY 2018 MIECHV Statewide CQI Project: Safe Sleep Key Driver Diagram



Global Aim: Reduce Infant Mortality due to SUIDS in Oregon

Public Health Division  
Maternal & Child Health

# Team Activity: Identify Primary and Secondary Driver to focus on for CQI PDSA



10 minutes

- Based on your review of the current approach...
- Identify what opportunity for improvement you might like to focus on, then...
- Select a primary and secondary driver from this KDD that the opportunity you have identified best fits into

Oregon FY 2018 MIECHV Statewide CQI Project: Safe Sleep Key Driver Diagram

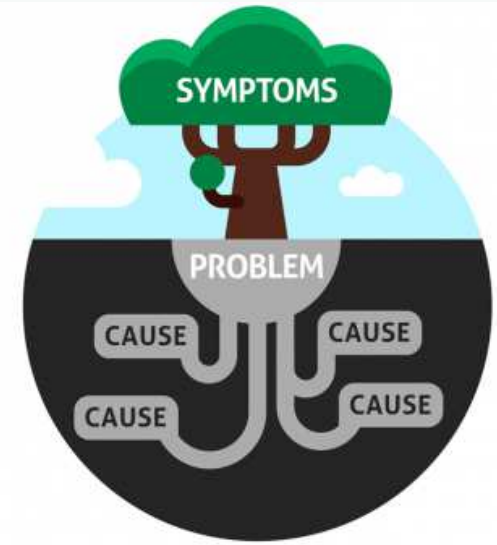
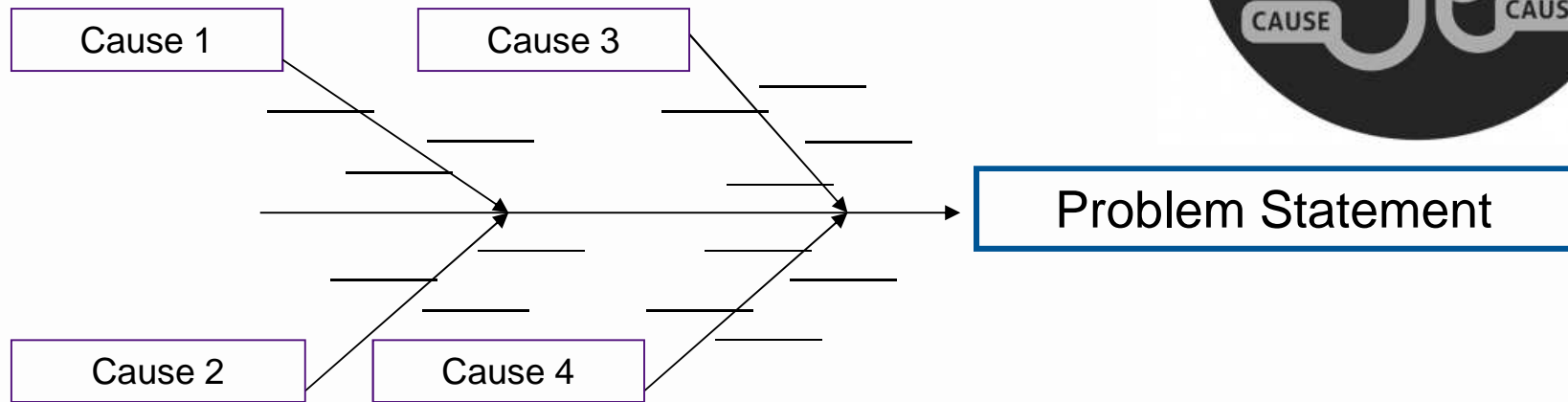


Global Aim: Reduce Infant Mortality due to SUIDS in Oregon

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

## PLAN Stage Step 3: Examining the Current Approach – Root Cause Analysis

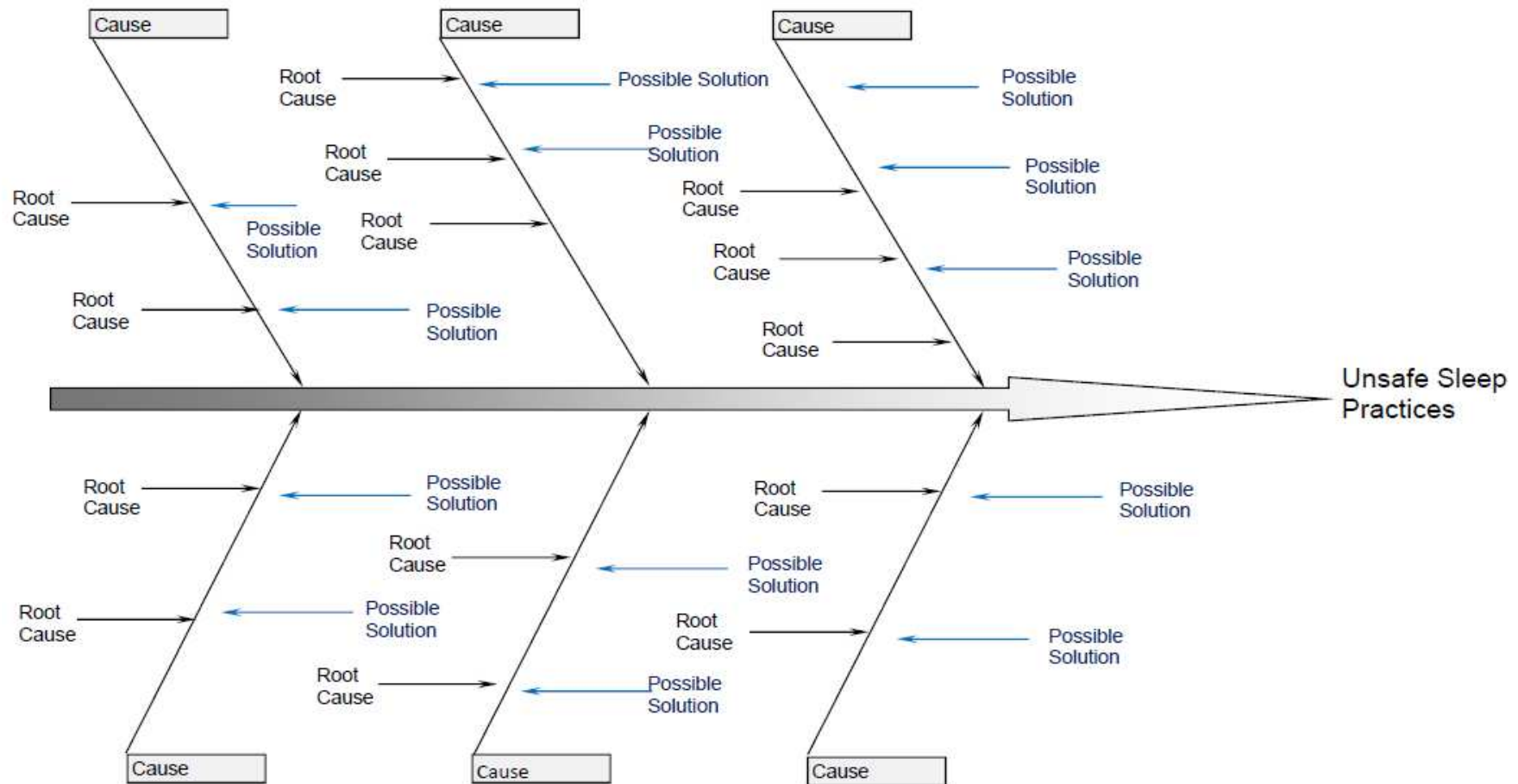


- Focuses on the cause, rather than the symptom
- Identifies and displays multiple potential root (true) causes for a problem
- Can also be used to identify solutions
- Goal is to prevent problem from reoccurring

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

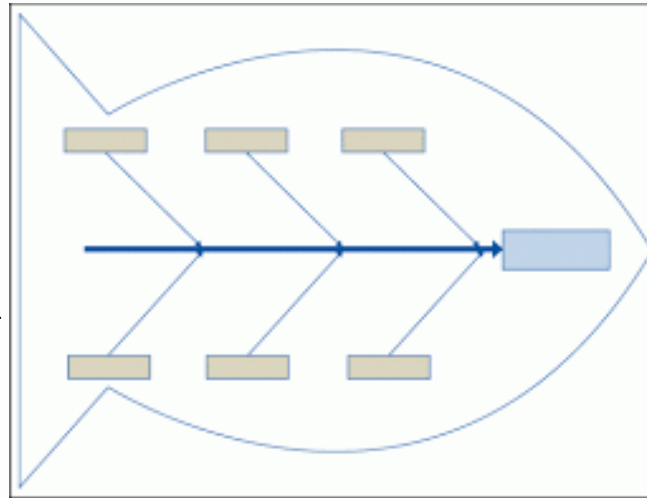
# Root Cause Analysis: Fishbone Diagram



Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

# Team Activity: Creating a Fishbone Diagram



- ▶ Use the secondary driver you selected from the KDD and turn it into a problem statement.
- ▶ Write the Problem in a box on the far right side.
- ▶ Brainstorm major causes and fill them in on the rectangles.
- ▶ For each cause, brainstorm minor causes related to it and note them on the diagram.

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority





Use a firm sleep surface, such as a mattress in a safety-approved\* crib, covered by a fitted sheet.

Do not use pillows, blankets, sheepskins, or crib bumpers anywhere in your baby's sleep area.

Keep soft objects, toys, and loose bedding out of your baby's sleep area.

Do not smoke or let anyone smoke around your baby.



Make sure nothing covers the baby's head.

Always place your baby on his or her back to sleep, for naps and at night.

Dress your baby in sleep clothing, such as a one-piece sleeper, and do not use a blanket.

Baby's sleep area is next to where parents sleep.

Baby should not sleep in an adult bed, on a couch, or on a chair alone, with you, or with anyone else.

## Identify Possible Solutions

# PLAN STAGE

Public Health Division  
Maternal & Child Health

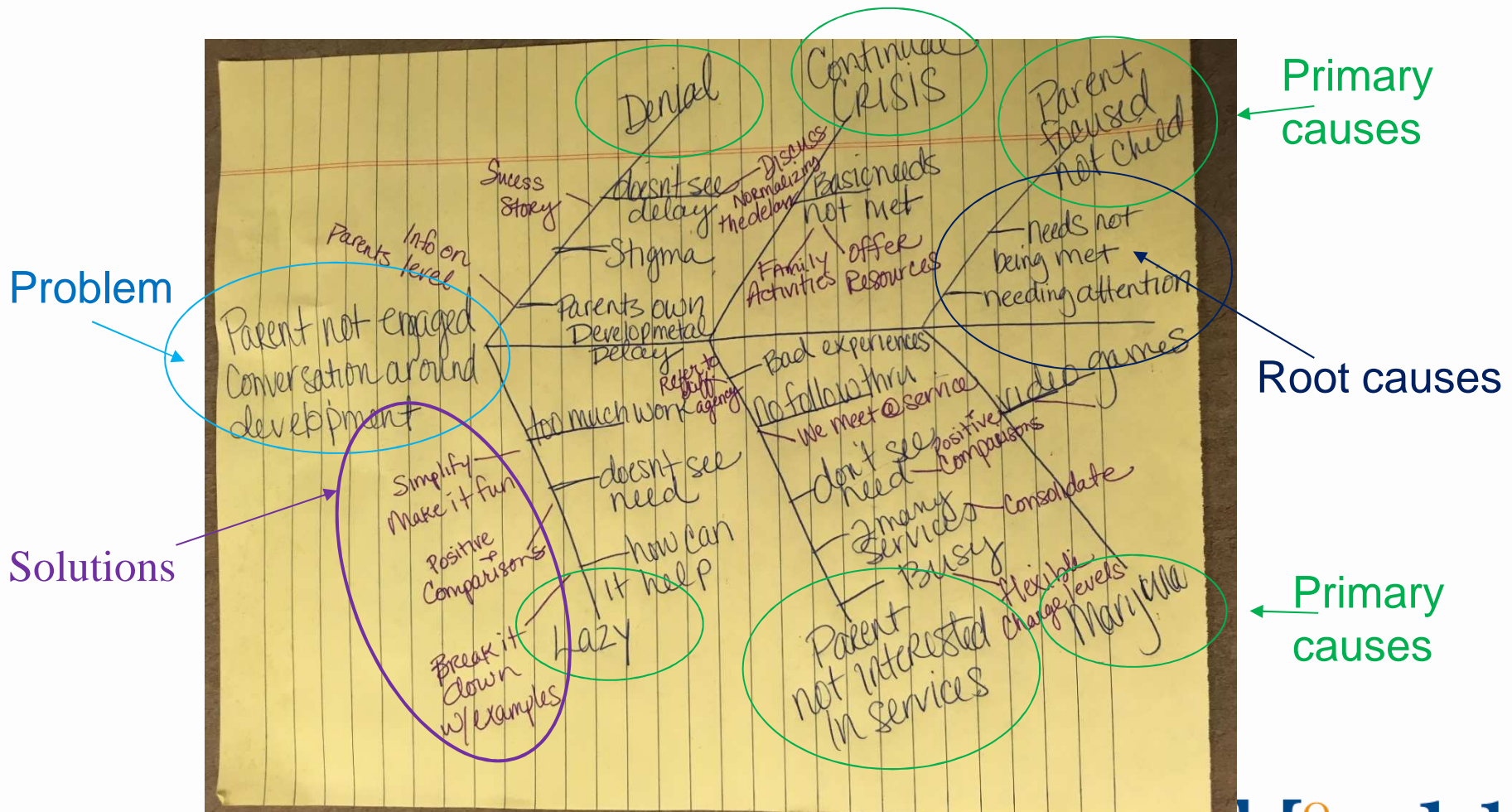
Oregon  
**Health**  
Authority

## PLAN Stage Step 4: Identity Potential Solutions

- Using fishbone diagram...
- Brainstorm for possible solutions to the minor causes (*Solutions can be based on best practices, research, guidelines or educated guesses*)
- Select 1-2 solutions:
  - Those you have control and influence over
  - Those that will have a greater impact
  - That is/are most likely to be accomplished

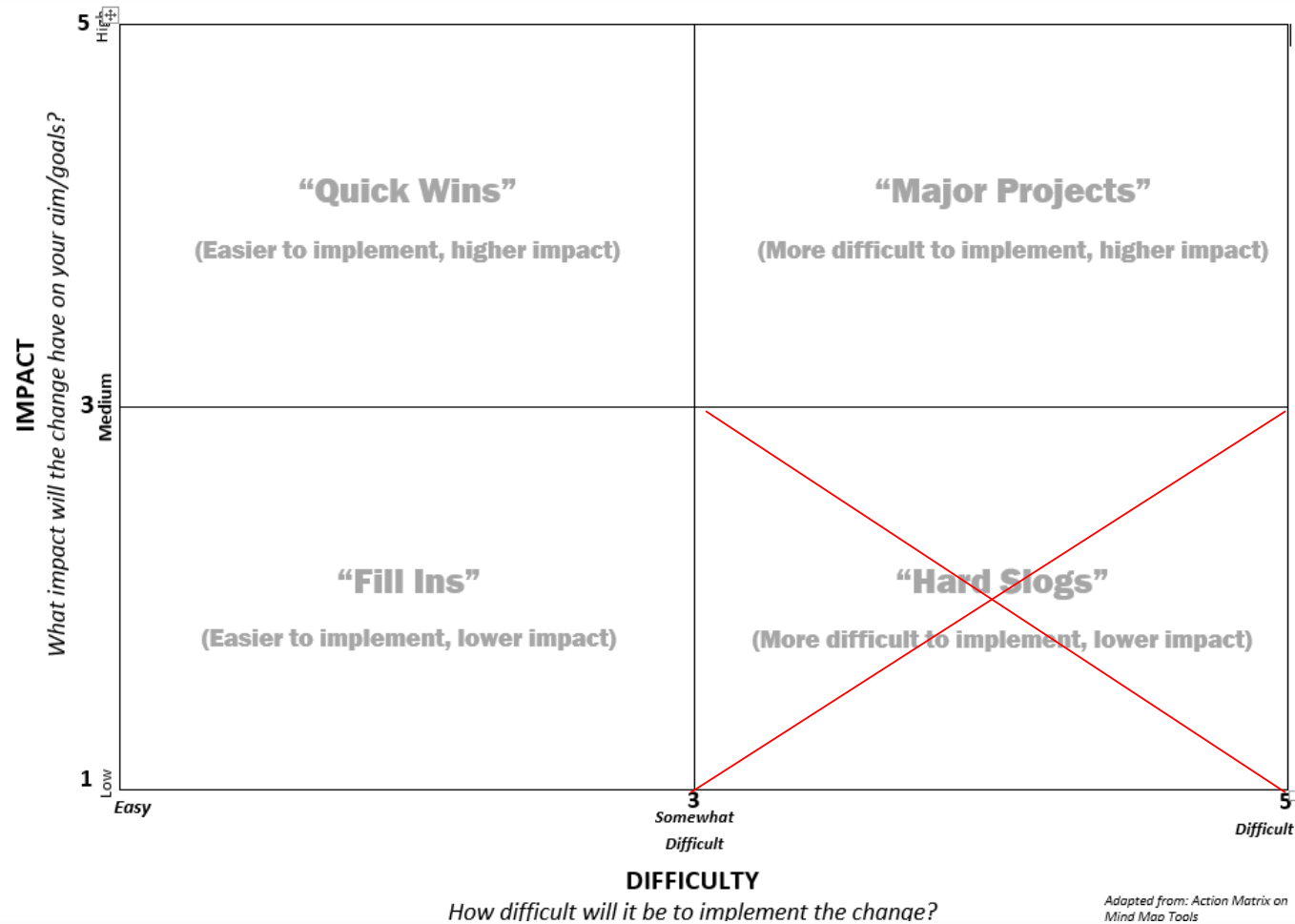


# Example Fishbone: Engagement of families in promotion of healthy development



Public Health Division  
Maternal & Child Health

# Impact Matrix



Public Health Division  
Maternal & Child Health

# Team Activity: Identifying Solutions and Changes to Test

20 minutes



## Part 1: (10-15 minutes)

- Using fishbone diagram, write in possible solutions for the minor causes related to your major causes (HINT: use a different pen color)

## Part 2: (5-10 minutes)

- Use the impact matrix handout to categorize the solutions by level of impact and difficulty
- Select 1-2 that you think would make the greatest impact (HINT: you may want to select 2 from different quadrants, e.g., 1 “quick win” and 1 “major project”)

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

Type	Name of Measure	Operational Definition	Data Sources	Data Collection (schedule, method)
Outcome Measure				
Process Measure				
Additional Measures				

- **S**pecific
- **M**easureable
- **A**chievable
- **R**elevant
- **T**ime-Bound

Develop an Improvement Theory

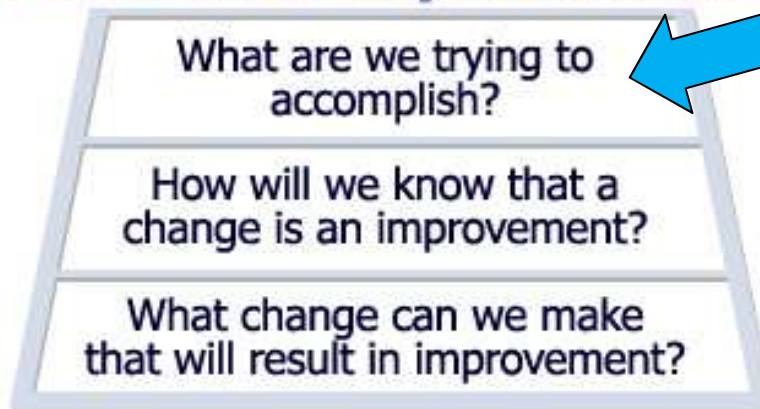
## PLAN STAGE

# PLAN Stage Step 5: Develop an Improvement Theory

1. Develop a theory for improvement
  - What is your aim?
  - What is your prediction?
2. Develop a strategy to test the theory
  - What will be tested? How? When?
  - How will you measure the test?

# Developing an Aim Statement

## Model for Improvement



- **S**pecific
- **M**easurable
- **A**chievable
- **R**elevant
- **T**ime-Bound




*EXAMPLE: Oregon MIECHV-funded programs will increase the percent of infants under the age of 1 who are always placed to sleep on their backs, without bed-sharing or soft bedding from 18.3% to 25% by September 30<sup>th</sup>, 2018.*

# Team Activity: Develop a SMART Aim Statement

- Use the handout provided
- *HINT: Use your baseline safe sleep data to include measureable # or % for increase/decrease*



Worksheet	
<b>Aim Statement Criteria:</b>	<b>Developmental Questions:</b>
<b>S</b> pecific	Who are the target population and persons doing the activity? What is the action or activity?
<b>M</b> easurable	How much change is expected? Will there be an increase or decrease? Can you measure it?
<b>A</b> chievable	Can it be done? Can you accomplish it in the prescribed timeframe? How will you carry out the work and reach your overall aim? Think of the resources at your disposal.
<b>R</b> elevant	Does the action relate to what you want to accomplish? Is it important & meaningful? Does it relate to broader program or organizational goals?
<b>T</b> ime-Bound	What is the timeline for change? When will this be accomplished by? Month, day, time, or year?
<b>Aim Statement</b>	Write your SMART aim statement below:
	



# 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	Improvement	Accountability	Research
<b><u>Aim</u></b>	Improvement of care (efficiency & effectiveness)	Comparison, choice, reassurance, motivation for change	New knowledge (efficacy)
<b><u>Methods:</u></b>			
• Test Observability	Test observable	No test, evaluate current performance	Test blinded or controlled
• Bias	Accept consistent bias	Measure and adjust to reduce bias	Design to eliminate bias
• Sample Size	"Just enough" data, small sequential samples	Obtain 100% of available, relevant data	"Just in case" data
• Flexibility of Hypothesis	Flexible hypotheses, changes as learning takes place	No hypothesis	Fixed hypothesis (null hypothesis)
• Testing Strategy	Sequential tests	No tests	One large test
• Determining if a change is an improvement	Run charts or Shewhart control charts (statistical process control)	No change focus (maybe compute a percent change or rank order the results)	Hypothesis, statistical tests (t- test, F-test, chi square), p-values
• Confidentiality of the data	Data used only by those involved with improvement	Data available for public consumption and review	Research subjects' identities protected

©Copyright 2010 Institute for Healthcare Improvement/R. Llo

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

## Data for Improvement, Accountability and Research

Aspect	Improvement	Accountability	Research
<b><u>Aim</u></b>	Improve patient safety	Accountability	Knowledge (efficacy)
<b><u>Methods:</u></b>			
• Test			Bias
• Bias			
• Sample Size			
• Flexibility of Hypothesis			Hypothesis
• Testing Strategy			Significance test
• Determining if a change is an improvement	Control chart Statistical process	Maybe a change or not res	Hypothesis Statistical tests (t-test, chi square, p-value)
• Confidentiality of the data	Data used only by those involved with improvement	Data available for public consumption and review	Research subjects' identities protected

**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

©Copyright 2010 Institute for Healthcare Improvement/R. Llo

Public Health Division  
 Maternal & Child Health

Oregon  
**Health**  
 Authority

# Types of Measures

- Outcome measures
  - What is the outcome or result?
  - Aligns with the SMART Aim
- Process measures
  - Is each step/part in the process performing as planned?
  - Reveals steps where the process might break down
- Balancing measures
  - Unrelated processes that might be affected by the changes
  - What happened as we improve outcome and process measures?



# Examples of Measures



- Outcome
  - % of caregivers with infants ages 0-6 months who report they “never” bed-share with their infant
- Process
  - % of caregivers that intend to never bed share prenatally
  - % of infants that have a safe sleep surface
- Balancing Measure
  - % mothers breastfeeding any amount at 3 months

# Types of Measures



- Outcome measures

- What

For your projects, we recommend that you identify and track one project outcome measure and one process measure that aligns with your SMART

## Aim

*\*you may include additional measures*

- Monitoring

- Unrelated to the aim, not affected by the changes we make
  - What happened in the system, how we improve the outcome and process measures

Public Health Division  
Maternal & Child Health

Oregon  
Health  
Authority

# Team Activity: Selecting Outcome and Process Measures



- ✓ Define 1 Project Outcome Measure and 1 Process Measure that can be reported at least every month.
- ✓ Brainstorm how you will define and collect this data

Type	Name of Measure	Operational Definition	Data Sources	Data Collection (schedule, method)
Outcome Measure				
Process Measure				
Additional Measures				

20 minutes

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# PDSA Planning Form

**Step 1.** Write in the Primary and Secondary drivers you are focusing on and the change being tested

**Step 2.** Choose the timeframe in which you will run your test.  
*\*Tip: the quicker, the better!*  
*\*Tip 2: schedule your 'study' at the earliest possible time your team can huddle to discuss the test*

Local Implementing Agency Program and Model:					
CQI Team Members:	<table border="1"> <tr> <td>Primary Driver:</td> <td>Secondary Driver</td> </tr> <tr> <td>Change being tested:</td> <td>                     Cycle #:                      Start date:                      End date:                 </td> </tr> </table>	Primary Driver:	Secondary Driver	Change being tested:	Cycle #: Start date: End date:
Primary Driver:	Secondary Driver				
Change being tested:	Cycle #: Start date: End date:				
<b>Objective of Cycle</b> <input type="checkbox"/> Collect Data (Learn) <input type="checkbox"/> Test a change <input type="checkbox"/> Implement a change	<b>Please Describe:</b> 1. What do we want to accomplish (aim)?  2. How will we know a change is an improvement (indicators)?   3. What ideas do we have that will result in improvement (change to test)?				
Questions we want to answer with this PDSA cycle					
Prediction (if/then)					
Tasks/Tools Needed to Complete the Cycle					

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority



# PDSA Planning Form

**Step 3.** Answer the 3 questions for the Model for Improvement.

*\*Tip: Answers to Q1 and Q2 will remain the same for multiple PDSA cycles. The answer to Q3 should shift slightly or a lot with each cycle, as you adapt the change*

Local Implementing Agency Program and Model:		
CQI Team Members:	Primary Driver:	Secondary Driver
	Change being tested:	Cycle #: Start date: End date:
<b>Objective of Cycle</b> <input type="checkbox"/> Collect Data (Learn) <input type="checkbox"/> Test a change <input type="checkbox"/> Implement a change	<b>Please Describe:</b> 1. What do we want to accomplish (aim)?  2. How will we know a change is an improvement (indicators)?   3. What ideas do we have that will result in improvement (change to test)?	
Questions we want to answer with this PDSA cycle		
Prediction (if/then)		
Tasks/Tools Needed to Complete the Cycle		



# PDSA Planning Form

**Step 4.** What questions do you want to answer in *this* PDSA Cycle?

*E.g.*

*--Will caregivers like the new safe sleep plan worksheet?*

*--How long will it take to fill out together?*

Local Implementing Agency Program and Model:		
CQI Team Members:	Primary Driver:	Secondary Driver
	Change being tested:	Cycle #: Start date: End date:
<b>Objective of Cycle</b> <input type="checkbox"/> Collect Data (Learn) <input type="checkbox"/> Test a change <input type="checkbox"/> Implement a change	<b>Please Describe:</b> 1. What do we want to accomplish (aim)?  2. How will we know a change is an improvement (indicators)?   3. What ideas do we have that will result in improvement (change to test)?	
Questions we want to answer with this PDSA cycle		
Prediction (if/then)		
Tasks/Tools Needed to Complete the Cycle		

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# PDSA Planning Form

**Step 5.** Make a prediction – what will happen *this time, with this test, with the people involved?*

Local Implementing Agency Program and Model:		
CQI Team Members:	Primary Driver:	Secondary Driver
	Change being tested:	Cycle #: Start date: End date:
<b>Objective of Cycle</b> <input type="checkbox"/> Collect Data (Learn) <input type="checkbox"/> Test a change <input type="checkbox"/> Implement a change	<b>Please Describe:</b> 1. What do we want to accomplish (aim)?  2. How will we know a change is an improvement (indicators)?   3. What ideas do we have that will result in improvement (change to test)?	
Questions we want to answer with this PDSA cycle		
Prediction (if/then)		
Tasks/Tools Needed to Complete the Cycle		

# PDSA Planning Form

**Step 6.** What tasks or tools need to be done in order to run your test?

*E.g. make a data collection Excel sheet; develop a draft safe sleep plan worksheet*

Local Implementing Agency Program and Model:		
CQI Team Members:	Primary Driver:	Secondary Driver
	Change being tested:	Cycle #: Start date: End date:
<b>Objective of Cycle</b> <input type="checkbox"/> Collect Data (Learn) <input type="checkbox"/> Test a change <input type="checkbox"/> Implement a change	<b>Please Describe:</b> 1. What do we want to accomplish (aim)?  2. How will we know a change is an improvement (indicators)?   3. What ideas do we have that will result in improvement (change to test)?	
Questions we want to answer with this PDSA cycle		
Prediction (if/then)		
Tasks/Tools Needed to Complete the Cycle		

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

**CAUTION: You will likely need to complete some tasks to complete a PDSA cycle, but a task is NOT a test**



**Task = An activity that must be completed or something that needs to get done**

Examples of common tasks:

- Information gathering
- Training stakeholders
- Collecting data/creating a data collection instrument
- Deciding when the test will be done or who will run it

**Test = Trying a change on a small scale (PDSA cycle) to see if the change results in improvement**

Tests of change:

- Answer a specific question
- Require a theory and a prediction
- Are done on a small scale, collecting data over time
- Build knowledge over multiple cycles
- Tried in a wide range of conditions

# PDSA Planning Form

**Step 7.** What is your plan for conducting the test?  
What is your plan for collecting the data?

Plan	<b>Plan for this test</b> <ol style="list-style-type: none"><li>1. <i>Who will implement the change?</i></li><li>2. <i>What will take place?</i></li><li>3. <i>When will the change happen?</i></li><li>4. <i>Where will this change occur?</i></li></ol>
	<b>Plan for Data Collection:</b> <ol style="list-style-type: none"><li>1. <i>Who will collect the data?</i></li><li>2. <i>What data will be collected?</i></li><li>3. <i>Where will the data be collected?</i></li><li>4. <i>When will the data be collected?</i></li></ol>

# Team Activity: Begin completing draft PDSA form



Local Implementing Agency Program and Model:		
CQI Team Members:	Primary Driver:	Secondary Driver
	Change being tested:	Cycle #: Start date: End date:
<b>Objective of Cycle</b> <input type="checkbox"/> Collect Data (Learn) <input type="checkbox"/> Test a change <input type="checkbox"/> Implement a change	<b>Please Describe:</b> 1. What do we want to accomplish (aim)?  2. How will we know a change is an improvement (indicators)?   3. What ideas do we have that will result in improvement (change to test)?	
Questions we want to answer with this PDSA cycle		
Prediction (if/then)		
Tasks/Tools Needed to Complete the Cycle		

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# FY18 State CQI Project Timeline

## February

- Submit draft PDSA form (Due Feb 16) and begin implementing

## March - August 2018

- PDSA cycles start
- Monthly PDSA updates
- Monthly Learning Collaborative Calls
- Quarterly Webinars
- CQI Newsletters

## September 2018

- Celebrate success!



Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

# Safe Sleep Resources



- CDC
  - MMRW: *Vital Signs* Report on Safe Sleep Practices for Babies (Jan 9, 2018)
- National Center for Education in MCH – Georgetown University/ National Action Partnership to Promote Safe Sleep (NAPPSS)
  - Online learning module “*Building on Campaigns with conversations: Individualized approach to Helping Families Embrace Safe Sleep and Breastfeeding*”
  - Handouts for home visitors
  - SUID/SIDS prevention toolkit: includes list of available trainings and resources related to safe sleep

Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority



## Safe Sleep Resources, cont.

- National Institute for Children's Health Quality (NICHQ)
  - Infant Mortality CoIN includes Safe Sleep toolkit
  - Quality Improvement online learning modules
  - Safe sleep and breastfeeding image gallery
- National Institute of Child Health and Human Development (NICHD)
  - *Safe to Sleep* campaign materials
- Healthy Children (AAP website)
- Oregon Health Authority
  - Vital records data
  - Safe sleep for babies website



Public Health Division  
Maternal & Child Health

Oregon  
**Health**  
Authority

---

# Thank You!

For more information related to MIECHV and CQI  
please contact:

**Drewallyn Riley:** [Drewallyn.b.riley@dhsosha.state.or.us](mailto:Drewallyn.b.riley@dhsosha.state.or.us)

Public Health Division  
Maternal & Child Health

