### Continuous Quality Improvement (CQI) for MIECHV

An introduction



#### **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?







### **Continuous Quality Improvement (CQI)**

- Deliberate and defined improvement process
- Focused on community needs and improving population health
- Continuous and ongoing effort to achieve measurable improvements
- Use data to identify strengths and opportunities

"While all changes
do not lead to
improvement, all
improvement
requires change."

Institute for HealthImprovement





### **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?"



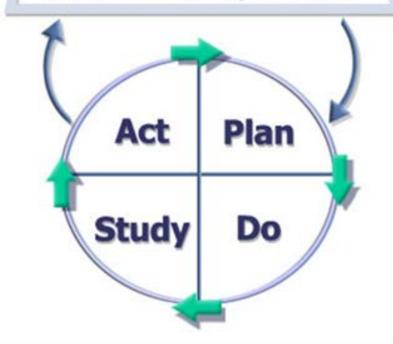


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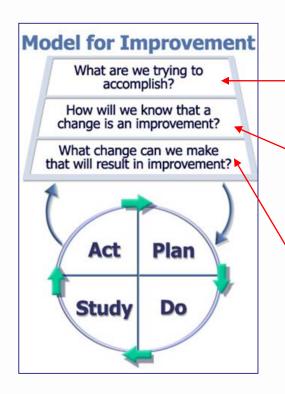
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### **Model for Improvement**



#### **Setting Aims**

The aim should be time-specific and measurable and define the specific population that will be affected.

#### **Establishing Measures**

Use quantitative and qualitative measures to determine if a specific change actually leads to an improvement.

#### **Selecting Changes**

Ideas for change may come from those who work in the system or from the experience of others who have successfully improved.

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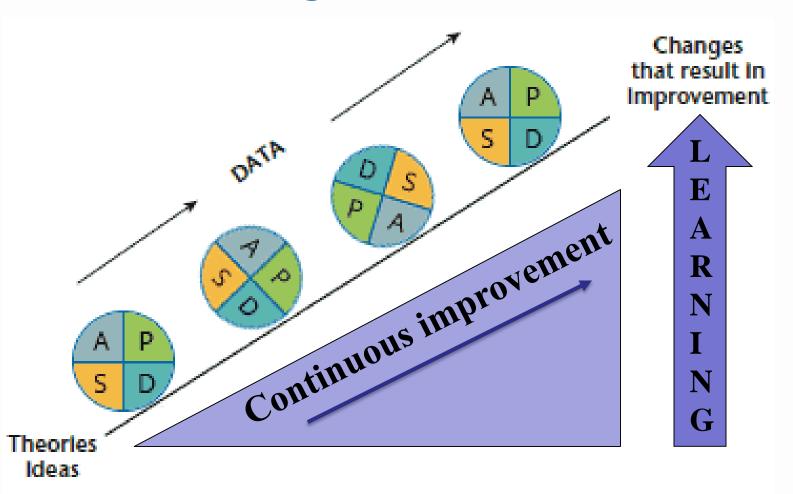
### Plan-Do-Study-Act (PDSA)

- Also known as Plan-Do-Check-Act (PDCA)
- 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





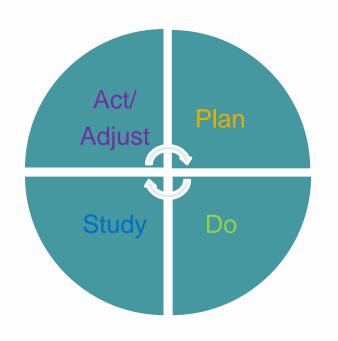
### PDSA: Cycle of Continuous Improvement and Learning







### Plan-Do-Study-Act (PDSA)



- Four stages
- Nine steps
- Repeatable steps
- Can be used by one person, a team, or an agency





# PLAN Stage Getting Started-Assemble the Team Steps One and Two



- > Identify area for improvement
- Convene team
- Discuss the improvement
- Identify roles and responsibilities
- > Establish initial timeline
- Develop initial aim statement



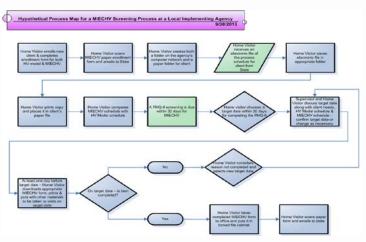


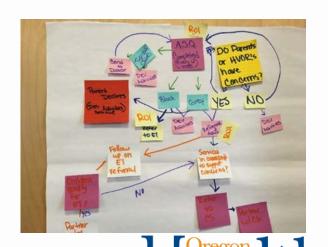


### PLAN Stage Examine the Current Approach Step Three



- > Examine the current approach using a process map
- Obtain existing baseline data, or collect baseline data to understand current approach
- Obtain stakeholder/client input





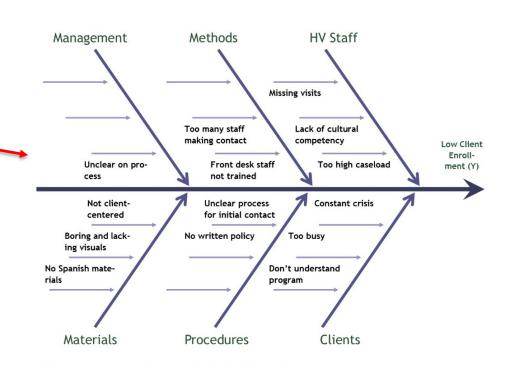


### PLAN Stage Examine the Current Approach Step Three (cont.)



Determine root cause(s) of problem

Revise aim statement based on baseline data as needed



6M Fishbone Diagram Template from Bright Hub Project Management





# PLAN Stage Identity Potential Solutions Step Four



- Using root cause analyses
- Brainstorm for possible solutions
- 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
- Revisit AIM statement and revise if needed





# PLAN Stage Develop an Improvement Theory Step Five

Act Plan
Study Do

- Develop a theory for improvement
  - What is your prediction?
  - Use "If...then" approach

"If we provide homework activities for parents on developmental milestones, then it will increase family engagement in healthy child development."

- Develop a strategy to test the theory
  - What will be tested? How? When?
  - Who needs to know about the test?

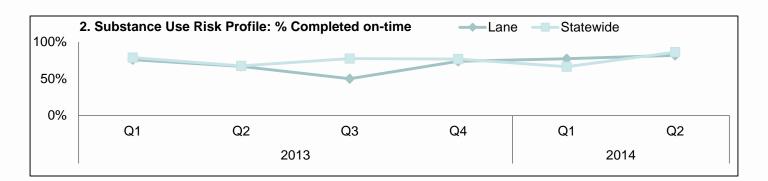




# DO Stage Test the Theory Step Six



- Carry out the test on a small scale
- Collect, chart and display data to determine effectiveness of the test
- Document problems, unexpected observations and unintended side effects







# CHECK Stage Study the Results Step Seven



- Compare results against baseline data and the measures of success in the AIM statement
  - Test work?
  - Results match prediction?
  - Trends?
  - Unintended side effects?
  - Improvement?
  - More testing?
- Describe and report what was learned





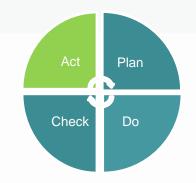
# ACT Stage Standardize or Repeat? Step Eight



- If improvement was successful on a small scale test it on a wider scale
- Continue testing until an acceptable level of improvement is achieved
- Make plans to standardize the improvement (Update policies/procedures/staff trainings)
- If theory was not an improvement, develop a new theory and test it; often several cycles are needed to produce the desired improvement



### ACT Stage Future Plans Step Nine



- CELEBRATE success!!
- Communicate accomplishments to internal and external stakeholders
- Take steps to preserve gains and sustain your accomplishments
- Make long term plans for additional improvements
- Conduct additional PDSA cycles, when needed





#### **MIECHV CQI Technical Assistance**

### Statewide CQI Coordinator provides:

- CQI Introduction
- Project kick-off meetings
- Technical assistance during project
- Quarterly data reports
- Quarterly State CQI Project meetings
- Learning Collaborative meetings
- Ongoing contact and support





### CQI projects to date - achievements

- Process and data improvements
- Increased comfort with CQI tools and methods
- Development of a "culture of quality"
- Collaborating with home visiting staff and programs from outside MIECHV
- Implementing projects that support coordination across early childhood system





#### More Information and CQI Resources

Michigan Public Health Institute
 www.mphi.org/work/public-health-systems/

 Public Health Quality Improvement Exchange (PHQIX) <u>www.phqix.org</u>

Institute for Healthcare Improvement

http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementHowtoImprove.aspx



#### **Thank You!**

For more information related to MIECHV and CQI please contact:

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