

The CQI Process: Using the Plan-Do-Study-Act Cycle to Improve Outcomes

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Agenda

- Introductions
- Briefly explore the structure of a **sound CQI system** and **differentiate the CQI system** from the **CQI process**.
- Define the **CQI process** as a tool for structuring the “process of getting better.” Review the stages of the **Plan-Do-Study-Act cycle** and each stage’s demand for **evidence**.
- Emphasize that **the CQI process starts with a question** the agency has about safety, permanency, or well-being. Explore the outcome and performance questions that private child welfare agencies have to answer and why.
- Explore the **CQI system** structures that exist at your agency to support the CQI process and evidence-based decision making?

Quality Assurance → Quality Improvement



Tracking compliance & adherence to regulations



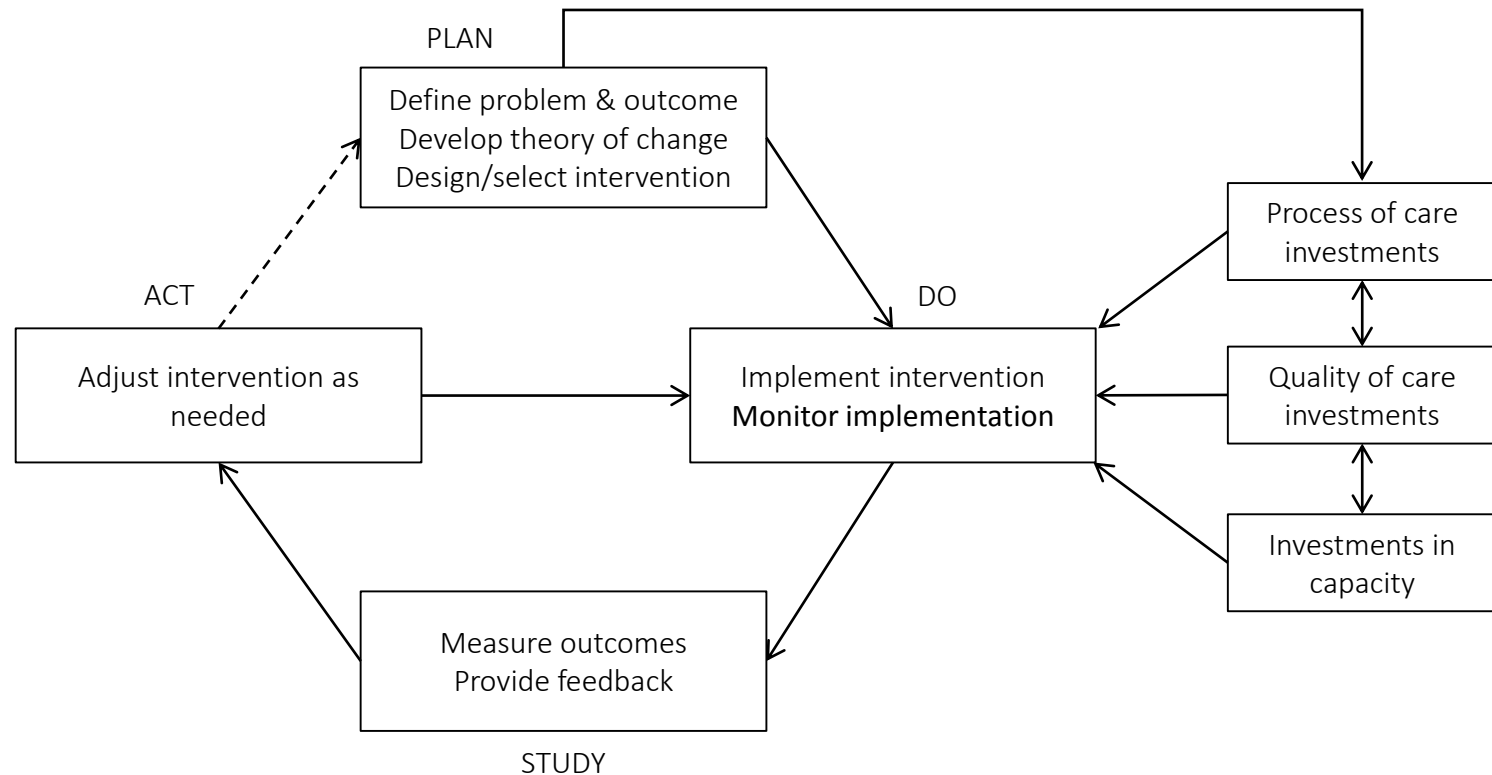
Science of improving outcomes

A sound CQI **system** supports the CQI **process**

“A CQI system is a coherent set of structures, functions, policies and procedures that facilitate the CQI process....[It] is the supportive context inside which the CQI process runs.”



The CQI Process: Plan-Do-Study-Act



The CQI process begins **with a question.**

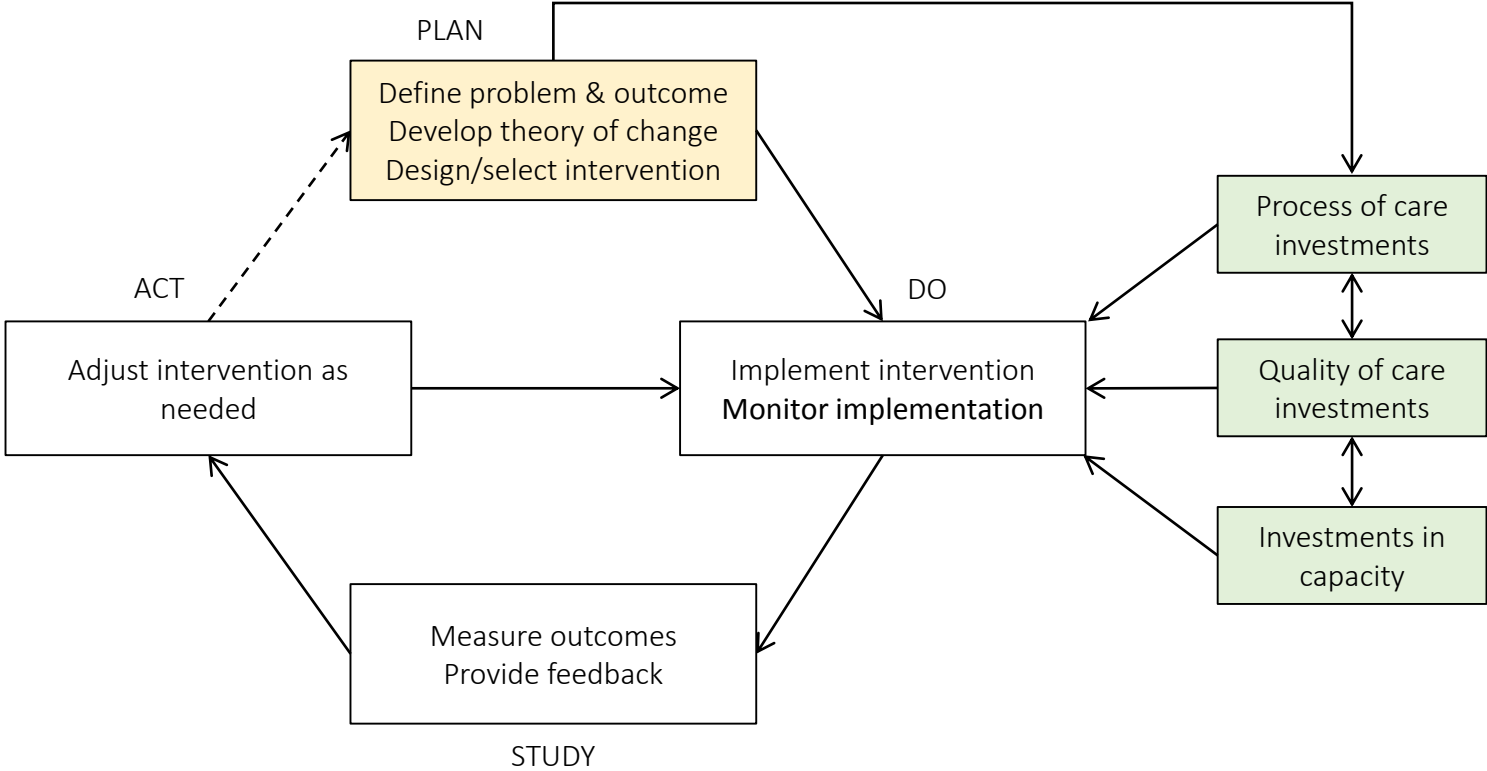
Questions about what?

- The questions we ask in the CQI process should be based on the things we care about.
- The things we care about mainly concern optimal experiences and outcomes for the children and families we serve.
- The optimal outcomes we are striving for are usually articulated as measurable goals and objectives outlined in:
 - Agency-wide strategic plans
 - Program specific plans
 - Regulatory and contractual requirements

The CQI process begins **with a question.**

1. What is the average length of stay for children in foster care?
- 2.
- 3.
- 4.
- 5.
- 6.

Outcomes, process, quality, & capacity



Questions about...

Outcomes	Processes	Quality	Capacity

Hypothesis development

I observe [**some outcome that I want to improve**].

I think it's because of [**this reason**].

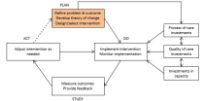


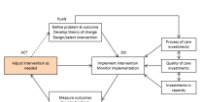
So I plan to [**implement this intervention**],

which I think will result in [**an improved outcome**].

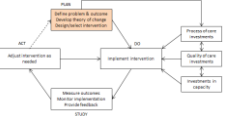
Fill in this template given the issues and challenges you are confronting at your agency.

I observe that	I think it's because	So I plan to	Which I think will result in

Using Evidence in the PDSA Cycle

CQI Phase	Hypothesis development/testing	Evidence use
<p data-bbox="276 287 330 311">Plan</p>  <p>The diagram shows the 'Plan' phase of the PDSA cycle. It starts with 'Identify a problem or opportunity for improvement'. This leads to 'Hypothesize as to the cause of the problem'. From there, it branches into 'Identify a solution' and 'Set a performance target'. Both lead to 'Implement the intervention'. This is followed by 'Monitor implementation', 'Measure progress toward the target outcome', and 'Provide feedback to relevant stakeholders and decision makers'. The cycle then loops back to 'Identify a problem or opportunity for improvement'.</p>	<p data-bbox="575 234 815 297">Define the problem. ("I observe that...")</p>	<p data-bbox="1103 251 1609 275">What evidence supports this observation?</p>
	<p data-bbox="494 338 902 401">Hypothesize as to the cause of the problem. ("I think it's because...")</p>	<p data-bbox="1074 355 1638 379">What evidence supports this theory of change?</p>
	<p data-bbox="587 448 809 511">Identify a solution. ("So I plan to...")</p>	<p data-bbox="967 448 1746 511">What evidence supports the hypothesis that this intervention will have the intended effect on the target population?</p>
	<p data-bbox="504 555 894 618">Set a performance target. ("...which I think will result in...")</p>	<p data-bbox="967 555 1750 618">What evidence supports the hypothesis that the proposed dose of the intervention will lead to this specific degree of improvement?</p>
<p data-bbox="285 679 320 704">Do</p>  <p>The diagram shows the 'Do' phase of the PDSA cycle. It starts with 'Implement the intervention'. This leads to 'Monitor implementation'. From there, it branches into 'Measure progress toward the target outcome' and 'Provide feedback to relevant stakeholders and decision makers'. The cycle then loops back to 'Implement the intervention'.</p>	<p data-bbox="527 679 867 704">Implement the intervention.</p>	<p data-bbox="967 665 1746 728">Collect data required for an analysis of intervention effectiveness and analysis of implementation fidelity.</p>
	<p data-bbox="546 789 848 813">Monitor implementation.</p>	<p data-bbox="987 775 1727 838">What evidence is there that the intervention was (or was not) implemented with fidelity?</p>
<p data-bbox="266 898 340 922">Study</p>  <p>The diagram shows the 'Study' phase of the PDSA cycle. It starts with 'Measure progress toward the target outcome'. This leads to 'Provide feedback to relevant stakeholders and decision makers'. From there, it branches into 'Determine the extent to which the problem still exists' and 'Confirm or refute the theory of change'. The cycle then loops back to 'Measure progress toward the target outcome'.</p>	<p data-bbox="479 883 915 946">Measure progress toward the target outcome.</p>	<p data-bbox="967 883 1750 946">What evidence is there that the intervention was effective (or not effective)?</p>
	<p data-bbox="488 993 906 1056">Provide feedback to relevant stakeholders and decision makers.</p>	<p data-bbox="967 993 1746 1056">Transmit evidence regarding outcomes and fidelity to those who will interpret the findings and make decisions accordingly.</p>
<p data-bbox="282 1116 324 1140">Act</p>  <p>The diagram shows the 'Act' phase of the PDSA cycle. It starts with 'Determine the extent to which the problem still exists'. This leads to 'Confirm or refute the theory of change'. From there, it branches into 'Adjust the intervention as needed' and 'Determine the extent to which the problem still exists'. The cycle then loops back to 'Determine the extent to which the problem still exists'.</p>	<p data-bbox="488 1093 906 1156">Determine the extent to which the problem still exists.</p>	<p data-bbox="1103 1108 1609 1132">What evidence supports this observation?</p>
	<p data-bbox="459 1189 935 1213">Confirm or refute the theory of change.</p>	<p data-bbox="1141 1189 1570 1213">What evidence supports this claim?</p>
	<p data-bbox="488 1270 906 1295">Adjust the intervention as needed.</p>	<p data-bbox="987 1256 1727 1319">What evidence supports the decision to continue, modify, or discontinue the intervention?</p>

Where do you go for evidence?

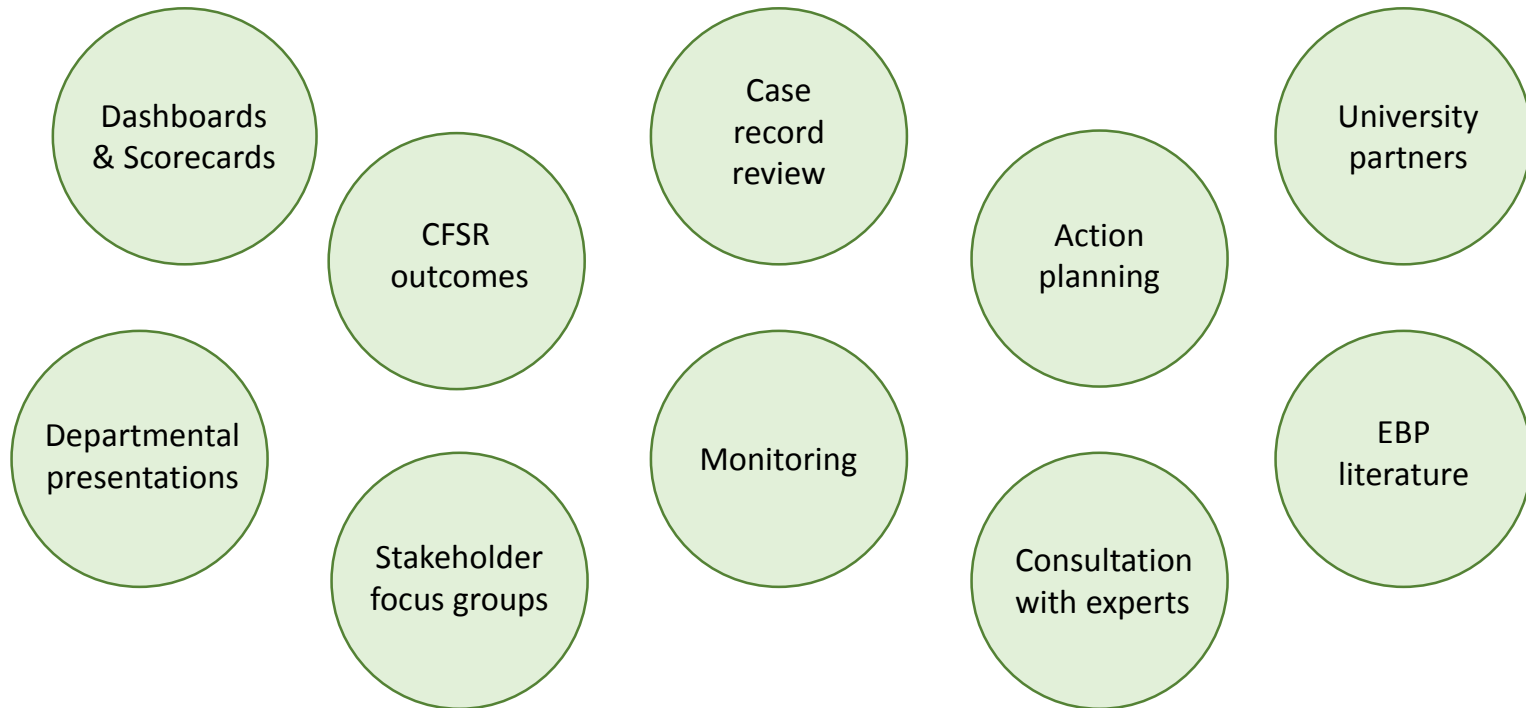
CQI Phase	Hypothesis Development/ Testing	Evidence Use	What evidence sources help you answer this question?
<p>Plan</p> 	<p>Define the problem. ("I observe that...")</p>	<p>What evidence supports this observation?</p>	
	<p>Hypothesize as to the cause of the problem. ("I think it's because...")</p>	<p>What evidence supports this theory of change?</p>	
	<p>Identify a solution. ("So I plan to...")</p>	<p>What evidence supports the hypothesis that this intervention will have the intended effect on the target population?</p>	
	<p>Set a performance target. ("....which I think will result in...")</p>	<p>What evidence supports the hypothesis that the proposed dose of the intervention will lead to this specific degree of improvement?</p>	

CQI system structures

- The basic steps of the **CQI process**—and the demand for evidence—are the same regardless of:
 - the problem at hand
 - the role of the person attempting to solve the problem
 - the place where the problem exists
- How an agency **implements** the CQI process—who does which activities and when—and the **structures** an agency builds to support implementation will differ from place to place.
- From a **capacity building** perspective, this means asking:
 - What do we have in place that supports the use of evidence?
 - What should we do/change/build in order to strengthen the use of evidence?

CQI system structures and evidence sources

“We have some of the pieces in place...”



The CQI Process: Using the Plan-Do-Study-Act Cycle to Improve Outcomes - PART 2...

- What makes good evidence?
 - There are basic ground rules for identifying the analytic question that produces evidence to fuel the CQI process (identifying the right population; numerators and denominators, etc.).
 - Becoming more adept at this discipline makes you a more savvy consumer and user of evidence.
- What do you do at your agency to support the use of good evidence?
 - Refer to the PDSA process and evidence use grid to ask questions about your own agency's CQI structures and functions.

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