

# Building Capacity for Evidence Use throughout the CQI process

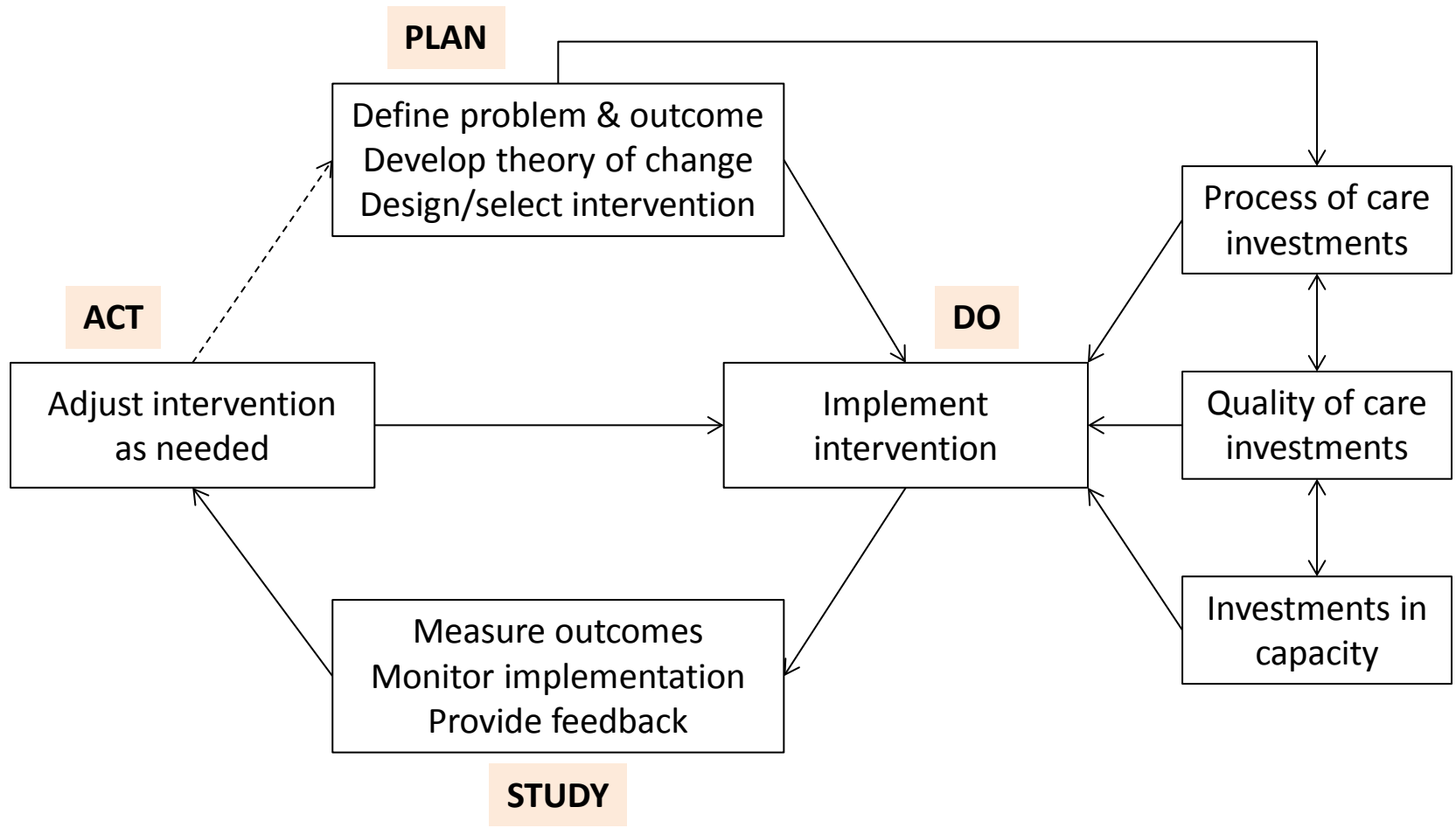
Lily Alpert

The Center for State Child Welfare Data  
Chapin Hall at the University of Chicago  
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# Agenda

- Review the Continuous Quality Improvement (CQI) cycle: Plan-Do-Study-Act
- Discuss how evidence is called for at each phase; types and sources of evidence.
- Given the call for evidence at each stage, how can states build capacity to use evidence throughout the CQI process?

# The CQI Cycle



# The Role of Evidence

- **Evidence** is information that is used to support an observation, claim, hypothesis, or decision.
- May be qualitative or quantitative.
- Can be found in or derived from a number of sources.
  - **Generated**: analysis of administrative data, case record reviews, or systematic focus groups
  - **Acquired**: peer-reviewed research articles, reviewing program evaluations, accessing information clearinghouses, drawing on statistics compiled by government and other organizations.
- The most reliable evidence is usually that which is generated through the process of **research** — scientific data collection and analytic procedures that are objective, systematic, and open to scrutiny (**research evidence**).<sup>†</sup>

<sup>†</sup>Davies, H. T. O., & Nutley, S. M. (2008). *Learning more about how research-based knowledge gets used: guidance in the development of new empirical research*. William T. Grant Foundation, New York, NY.

# Converting data to evidence

- Move from data-driven to **evidence-driven** decision making.
  - Data are converted to evidence through the process of analysis
  - **Discipline** to converting data into evidence
    - Match the analysis with the data to produce the evidence needed to support an observation, a claim, a hypothesis, or decision at hand.
- Quantitative:
  - Selecting the correct denominator
  - Selecting the correct statistic
- Qualitative: e.g., case record review
  - Drawing cases from the correct sampling frame
  - Using a case review instrument that collects data needed to answer the research question

# When is evidence needed?

- The first type of evidence that often comes to mind is evidence that a certain practice leads to its intended outcomes. (**Evidence-based practice**)
- “Identifying an intervention” is not the first or only point in the CQI process where evidence is necessary.
- Each stage of the Plan-Do-Study-Act cycle has its own requirements for evidence and presents a different type of opportunity for using evidence to drive action.

## Evidence Use throughout the CQI Process

CQI Phase	Hypothesis Development/Testing	Evidence Use
<b>Plan</b> 	Define the problem. ("I observe that...")	What evidence supports this observation?
	Hypothesize as to the cause of the problem. ("I think it's because...")	What evidence supports this theory of change?
	Identify a solution. ("So I plan to...")	What evidence supports the hypothesis that this intervention will have the intended effect on the target population?
	Set a performance target. ("...which I think will result in...")	What evidence supports the hypothesis that the proposed dose of the intervention will lead to this specific degree of improvement?
<b>Do</b> 	Implement the intervention.	Collect data required for an analysis of intervention effectiveness and analysis of implementation fidelity.
<b>Study</b> 	Measure progress toward the target outcome.	What evidence is there that the intervention was effective (or not effective)?
	Monitor implementation.	What evidence is there that the intervention was (or was not) implemented with fidelity?
	Provide feedback to relevant stakeholders and decision makers.	Transmit evidence regarding outcomes and fidelity to those who will interpret the findings and make decisions accordingly.
<b>Act</b> 	Determine the extent to which the problem still exists.	What evidence supports this observation?
	Confirm or refute the theory of change.	What evidence supports this claim?
	Adjust the intervention as needed.	What evidence supports the decision to continue, modify, or discontinue the intervention?

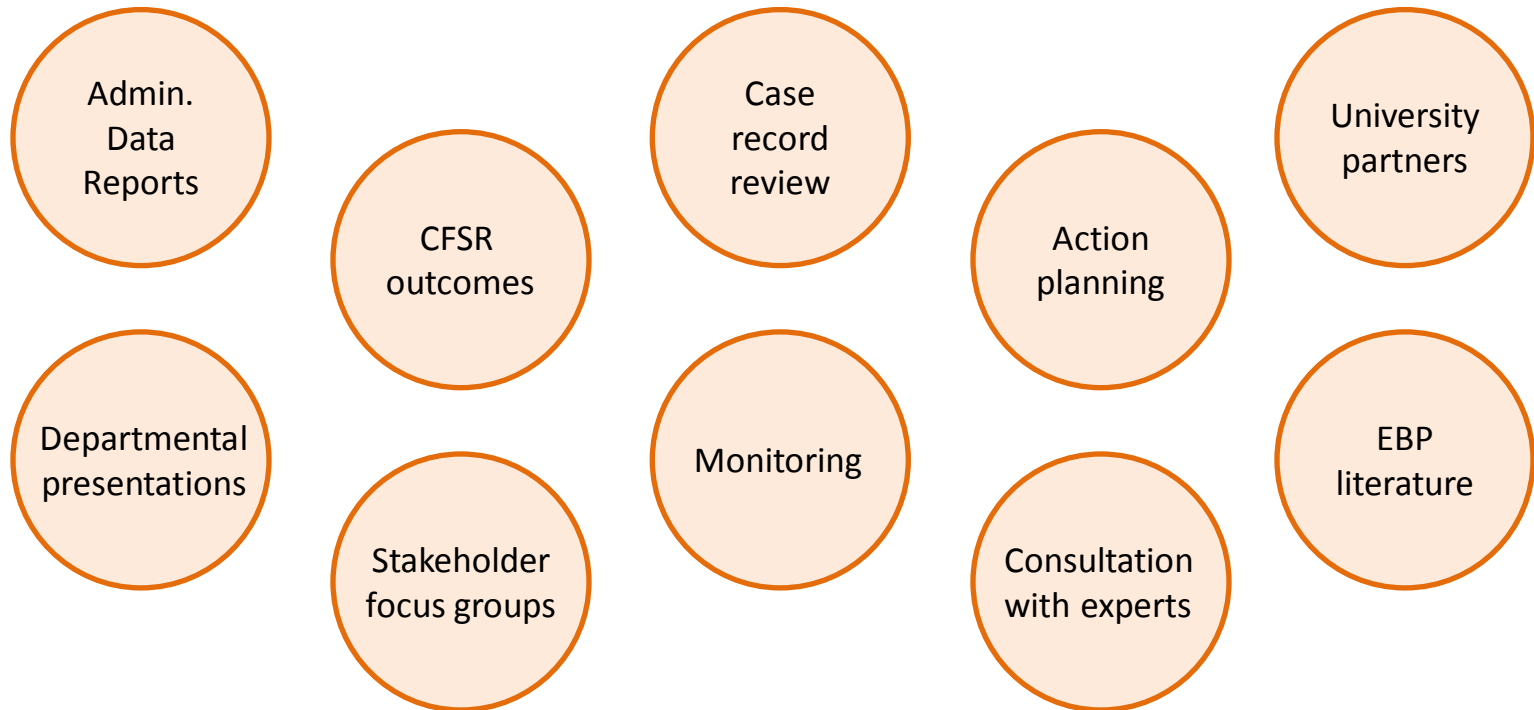
# Building Capacity for Evidence Use

- 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 **system** 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?



# Building Capacity for Evidence Use

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

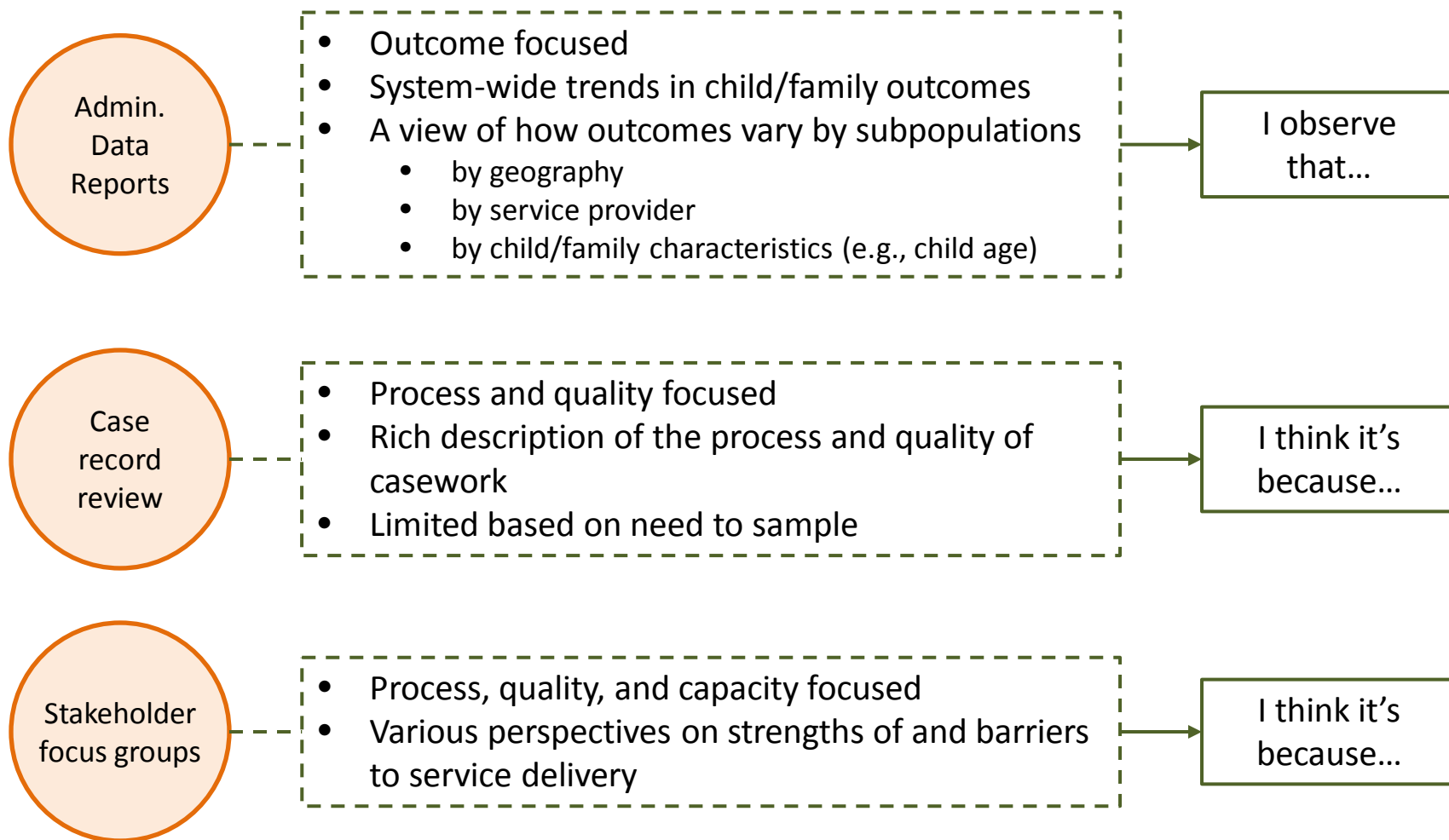


# Building Capacity for Evidence Use

- Which activities should be invoked when?
  - *How does the activity contribute to the production, acquisition, processing, or application of evidence?*
- **Match the activity to the part of the CQI cycle where that type of evidence use is needed.**



# Building Capacity for Evidence Use

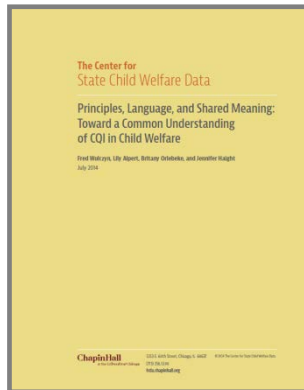


# Building Capacity for Evidence Use

CQI Phase	Hypothesis Development/ Testing	Evidence Use	What do we do	What evidence do we rely on?
<p><b>Plan</b></p>	<p>Define the problem. ("I observe that...")</p>	<p>What evidence supports this observation?</p>	<p><i>What activities do we undertake to observe performance on the outcomes we care about?</i></p>	<p><i>What evidence do we rely on to support those observations?</i></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><i>What activities do we undertake to develop and hypotheses about what drives the performance we observe?</i></p>	<p><i>What evidence do we rely on to support those hypotheses?</i></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><i>Having identified outcomes that need improvement, what activities do we undertake to identify interventions aimed at solving those problems?</i></p>	<p><i>What evidence do we rely on when we make decisions about what interventions to implement?</i></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>	<p><i>What activities do we undertake to set performance targets?</i></p>	<p><i>What evidence do we rely on when we set performance targets?</i></p>

# For more information

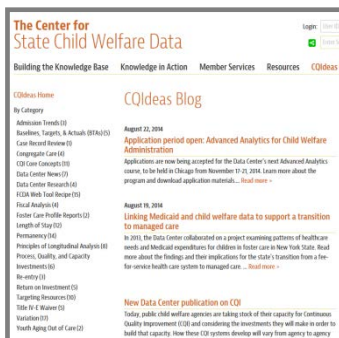
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*Principles, Language, and Shared Meaning:  
Toward a Common Understanding of  
CQI in Child Welfare*



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