

Innovation

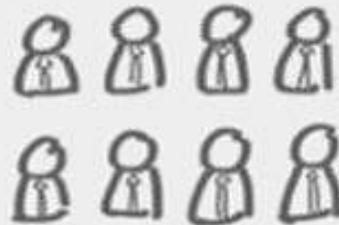


Vision

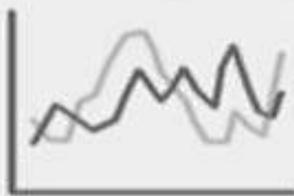


A Guide to Build Capacity for Child Welfare Using the CQI Process

Development



Analysis



Management



National Association of Public Child Welfare Administrators





National Association of Public Child Welfare Administrators



A Guide to Build Capacity for Child Welfare Using the CQI Process

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Dear Colleagues,

The National Association of Public Child Welfare Administrators (NAPCWA), an affiliate of the American Public Human Services Association (APHSA), is excited to announce the publication of *A Guide to Build Capacity for Child Welfare Using the CQI Process*.

In August 2012, the Children’s Bureau of the Administration for Children and Families (ACF) issued an Information Memorandum encouraging states to develop specific components of their CQI systems. The NAPCWA Executive Committee shares the belief that child welfare agencies need strong CQI systems if they are to achieve and maintain positive outcomes for the children, youth, and families they serve. At the NAPCWA Policy Forum in June 2013, the Executive Committee chartered NAPCWA to learn about states’ perspectives and priorities regarding CQI capacity building and to develop guidance for the field on how to move forward with those efforts.

In September 2013, NAPCWA convened a CQI Workgroup composed of child welfare staff from across the nation. The relevance and quality of this document depended heavily on input from this group with the incomparable expertise of those working in the field and direct knowledge of program needs and relevant outcome measurements.

The Workgroup was initially chaired by Christeen Borsheim, the director of Child Safety and Permanency of the Minnesota Department of Children and Families. When she retired in February, Claire Strohmeier, the Child and Family Services Review (CFSR) coordinator of the New York State Office of Children and Family Services, took over the reins of leadership—facilitating meetings and conference calls; overseeing and contributing significantly to the development of work products; writing sections; offering many helpful suggestions; and crafting language to ensure clarity. Her commitment and knowledge sustained this work through an extensive growth and review process. We would be remiss if we did not recognize Lily Alpert, a Chapin Hall researcher, who worked closely with the workgroup throughout the process of developing this material.

It is with deep appreciation that APHSA and NAPCWA thank the many people whose work contributed to this report. In addition to the CQI workgroup public child welfare staff across the nation—CEOs, direct service field workers, and support staff—provided valuable feedback, as did private agency contractor service providers and technical experts drawn from fields allied with child welfare. This inclusive and highly participatory process played a key role in shaping and strengthening the report, providing critical insight into how the CQI implementation has the potential to impact services, practice, and clients. The result is a resource that is both conceptually rigorous and broadly applicable, as it recognizes core CQI principles while acknowledging that each state has a unique legal and demographic environment within which CQI systems will be developed.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gregory E. Rose', is written over a light blue horizontal line.

Gregory E. Rose
President, National Association of Public Child Welfare Administrators
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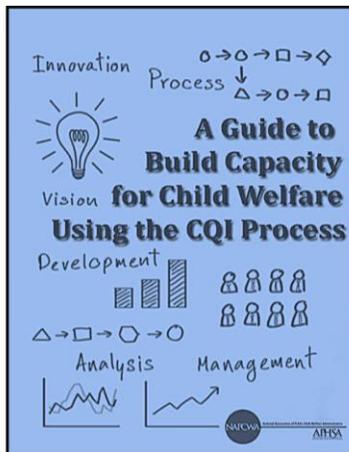
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Executive Summary



The Reason

The need for evidence in the design and implementation of health and human service programs has never been greater. In the face of shrinking resources, higher levels of need, and new calls for accountability that stress results over activities, policymakers and practitioners can benefit from understanding more about how to build capacity for generating and applying evidence. Technology and advancing data analytics can help tell the story of what works and what does not. There is broad support for gathering quantitative data, but we must gather qualitative evidence as well and the information must be accurate, correctly analyzed, and understood by all levels of staff to inform decision-making, undergird policy, and fuel momentum for continuous improvement.

The Audience

The report is directed primarily toward child welfare directors and managers responsible for directing, implementing, and/or overseeing Continuous Quality Improvement (CQI) at a state or local level. The material is also highly relevant to human service program directors that are responsible for applying the CQI process to programs under their purview. In addition, the report will be valuable to others who work on the behalf of children and families, including legislators, human service workers, legal system professionals, educators, researchers, interested citizens, and consumers.

The Goal

This report is not meant to be a stand-alone document, but a broadly applicable resource to augment the work of state and local, public and private, child welfare agencies as they diligently build their CQI systems. Many entities have already developed valuable guidance and this report is designed to recognize and support those efforts. As the workgroup members poured over these resources they determined that there are two CQI capacity-building essentials that need much greater attention: CQI education and CQI implementation support. The purpose of this report is to address these two areas.

Part 1: The Cycle of CQI and the Role of Evidence covers the basic elements of the CQI process and clarifies how evidence must be used to support each step. The report defines CQI as *“the complete process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions.”*¹ This CQI definition was developed in 2005 by Casey Family Programs and the National Child Welfare Resource Center for Organizational Improvement and advanced by ACF Information Memorandum in 2012. Drawing on this definition and from various CQI process models, including APHSA’s Define-Assess-Plan-Implement-Monitor (DAPIM™) cycle,² our workgroup developed a *cycle of CQI* model that distills the CQI process and identifies its basic demands—define the problem; understand its underlying conditions, identify and implement solutions, evaluate the results, and revise the approach as needed. The *type of quantitative and*

1. Administration on Children, Youth and Families. (August 27, 2012). Establishing and Maintaining Continuous Quality Improvement (CQI) Systems in State Child Welfare Agencies [ACYF-CB-IM-12-07].
2. For example, see Antony, J., & Banuelas, R. (2002). Key ingredients for the effective implementation of Six Sigma program. *Measuring Business Excellence*, 6(4), 20-27; Basso, P., Cahalane, H., Rubin, J., & Jones-Kelly, K. (2013). Organizational Effectiveness Strategies for Child Welfare. In H. Cahalane (ED.), *Contemporary Issues in Child Welfare Practice* (pp. 257–287). New York: Springer; Wulczyn, F. Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Language for Understanding CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago; The Child Welfare Research & Evaluation Framework Workgroup. (2014). *A Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare*. Washington, DC: Children’s Bureau, Administration for Children and Families.

qualitative evidence required will vary based on the CQI cycle stage and by the problem being addressed. Simply defined, “*evidence is information that is used to support an observation, claim, hypothesis, or decision.*”³

Part 2: CQI Implementation—Building CQI Systems that Demand and Make Use of Evidence reviews the organizational capacities required to support evidence-based CQI. The report hones in on implementation at the state and local levels. In addition to establishing a clear protocol and policy for how evidence-based CQI activities should be conducted, introducing an evidence-driven CQI system requires a number of other organizational supports, including leadership, accountability mechanisms, culture, knowledge and skill development, and access to pertinent information.

The report also identifies a number of technical assistance organizational resources that can help state and local agencies build their CQI capacity. These include a State CQI Assessment tool; a capability roadmap and a framework for designing, testing, applying, and sustaining effective practice; resources and technical assistance available through the Center for State Child Welfare Data at Chapin Hall; and APHSA’s DAPIM model that was created and refined with and through child welfare agencies and other health and human service program improvement teams.

Part 3: Recommendations are a starting point for collaboration with the Children’s Bureau to ensure that states receive the support they need to develop rigorous, sustainable CQI systems. The recommendations summarize what state and local agencies will need to build CQI capacity, both in terms of human capital and implementation. These include developing training curricula and needs assessment tools, data management support, and integrating CQI principles into planning, reporting, and funding documents.

Part 4: Appendices includes resources for further learning regarding the CQI process and CQI implementation.

In the **Conclusion**, we note that we must build support for CQI-related research that helps fulfill our most important obligation: improving outcomes for those we serve.

3. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Understanding of CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.

Background

In September 2013, in collaboration with The Center for Child Welfare Data at Chapin Hall, NAPCWA convened a National CQI Workgroup composed of state and local child welfare agency administrators to:

- discuss the core components of a sustainable, high-functioning CQI system as identified in the Children’s Bureau 2012 Information Memorandum;
- share promising practices related to CQI capacity building;
- identify the types of products and services needed to effectively enhance agencies’ internal CQI efforts;
- design a model for CQI implementation; and
- propose plans for communication and collaboration with the Children’s Bureau as federal CQI efforts advance.



After discussing the range of available guidance regarding CQI capacity building and the current strengths and limitations of their states’ own CQI systems, the workgroup members determined that public child welfare systems have two main CQI capacity-building needs:

1. **CQI Education.** State agencies will benefit from improved understanding of what the basic CQI process entails, particularly how the evidence required to fuel the process should be generated and applied to decision-making at each step of the cycle. Building this set of knowledge and skills is a *cross-cutting human capital matter*. All states, regardless of how they ultimately implement the CQI process, will need to build this type of expertise among their staff because the use of qualitative and quantitative evidence is a common requirement for all CQI activities.
2. **CQI Implementation Support.** State and local agencies are looking for guidelines and tools that they can use to structure and execute CQI activities at the state and local levels. Creating and instituting practical, tangible CQI protocols is an *agency-specific implementation matter*. How a state decides to conduct the CQI process (i.e., who will do what activities, when, and how) will vary depending on agency structure, resources, staffing patterns, organizational readiness, and other factors. Given that one size will not fit all, states will benefit from examining various CQI implementation models and approaches to CQI capacity building.

This report aims to address both sets of needs. *This is not a stand-alone document*. The purpose of this resource is to contribute to the discourse regarding what constitutes high-quality evidence use and how child welfare agencies can build structures and functions that support that behavior.

The content is directed primarily toward child welfare administrators and managers responsible for developing, implementing, and/or overseeing CQI procedures at the state or local level. The material is also highly relevant to program directors that will be responsible for applying the CQI process to the improvement of outcomes under their purview.

Relevant Work on CQI

As state and local, public and private, child welfare agencies work diligently to build their CQI systems, a number of entities have provided guidance that can supplement this report and support of those efforts. For example, ACF’s 2012 Information Memorandum (IM) to states on CQI capacity building outlines five essential CQI system components as well specific structures, processes, and functions related to each. ACF has also sponsored a national training academy focused on enhancing the knowledge and skills of child welfare administrators with responsibility for CQI functions. The Children’s Bureau’s Child Welfare Research and

Evaluation Framework Workgroup recently (February 2014) issued a framework for building the evidence base of interventions and scaling up promising practices.⁴ In October 2014, the Children’s Bureau issued Technical Bullet #8 to provide guidance specific to the third round of the CFSRs and new policies, guidelines, and support mechanisms regarding state CQI systems.⁵ Years ago, Casey Family Programs and the National Resource Center for Organizational Improvement (NRCOI) developed a document outlining key elements of a productive CQI system,⁶ and more recently, NRCOI developed an assessment approach designed to guide states through the process of assessing capacity vis-à-vis the IM and developing and implementing CQI system improvements.⁷ APHSA, through its Organizational Effectiveness practice and CQI model—Define-Assess-Plan-Implement-Monitor (DAPIM™)—developed in 2004–06⁸ as well as its more recent work with the National Workgroup on Integration (NWI), has also developed models, tools, and techniques for building analytic capacity within human service agencies.⁹ Finally, since its inception, The Center for State Child Welfare Data has provided states with analytic and decision support centered on the development and application of evidence about system performance and agencies’ return on investment in policies, practices, and CQI initiatives.¹⁰ These initiatives represent some of the many sources of guidance available to state and local agencies as they set out to bolster CQI within their child welfare agencies. All of these resources emphasize the importance of using evidence to inform CQI decision-making.

Organization of the Report

The paper is organized into four parts:

Part 1: The Cycle of CQI and the Role of Evidence. This section covers the basic elements of the CQI process and clarifies how evidence must be used to support each step. The term “evidence” is defined and various types of evidence are discussed.

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4. Framework Workgroup. (February 2014). *A Framework To Design, Test, Spread, and Sustain Effective Practice in Child Welfare*. Children’s Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.
 5. Administration on Children, Youth and Families. (August 27, 2012). Establishing and Maintaining Continuous Quality Improvement (CQI) Systems in State Child Welfare Agencies [ACYF-CB-IM-12-07]. Retrieved November 12, 2014 from <http://www.acf.hhs.gov/sites/default/files/cb/im1207.pdf> Administration for Children and Families (October 10, 2014). Child and Family Services Review Technical Bulletin #8. Retrieved November 12, 2014 from <https://training.cfsrportal.org/resources/3044> and Administration for Children and Families 45 CFR Part 1355 Statewide Data Indicators and National Standards for Child and Family Services Reviews (October 10, 2014). *Federal Register*/Vol. 79, No. 197/Friday, October 10, 2014/ Rules and Regulations. Retrieved November 12, 2014 from <http://www.gpo.gov/fdsys/pkg/FR-2014-10-10/pdf/2014-24204.pdf>
 6. National Child Welfare Resource Center for Organizational Improvement and Casey Family Programs. (2005). *Using continuous quality improvement to improve child welfare practice* Retrieved November 12, 2014 from <http://muskie.usm.maine.edu/helpkids/rcpdfs/CQIFramework.pdf>
 7. National Child Welfare Resource Center for Organizational Improvement. (2014). “Lessons from the Field: Assessing and Improving CQI Systems in Child Welfare.” *Child Welfare Matters*, Winter/Spring 2014. Retrieved November 12, 2014 from <http://www.nrcoi.org/rcpdfs/cwmatters14.pdf>
 8. American Public Human Services Association (2010) *Organizational Effectiveness Handbook*. DAPIM™ was developed in the field with child welfare agencies. Based on a recent third-party evaluation it is considered an evidence-based model. Casey Family Programs has agreed to support the DAPIM™ expanding application in child welfare agencies. Child welfare agencies interested in receiving technical assistance in the DAPIM™ model should speak with their Casey strategic consultant.
 9. American Public Human Services Association. (2014). National Workgroup on Integration, Retrieved May 21, 2014 from www.aphsa.org/content/APHSA/en/pathways/NWI.html
 10. For more information see The Center for State Child Welfare Data’s web site at <https://fcda.capinhall.org>.

Part 2: CQI Implementation—Building CQI Systems that Demand and Make Use of Evidence. This section reviews the organizational capacities required to support CQI activities that are informed by evidence.

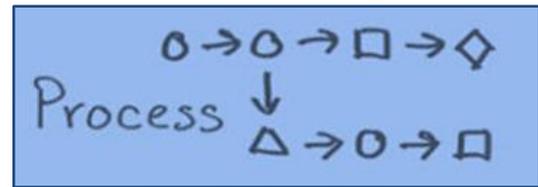
Part 3: Recommendations. This section summarizes themes emerging from workgroup discussions and stakeholder feedback regarding what state and local agencies will need in order to build CQI capacity, both in terms of human capital and implementation. The recommendations are framed as a starting point for ongoing collaboration with the Children’s Bureau in an effort to ensure that states receive the support they need to develop rigorous, sustainable CQI systems.

Part 4: Appendices. This section includes resources for further learning regarding the CQI process and CQI implementation.

Part 1: The Cycle of CQI and the Role of Evidence

The Cycle of CQI

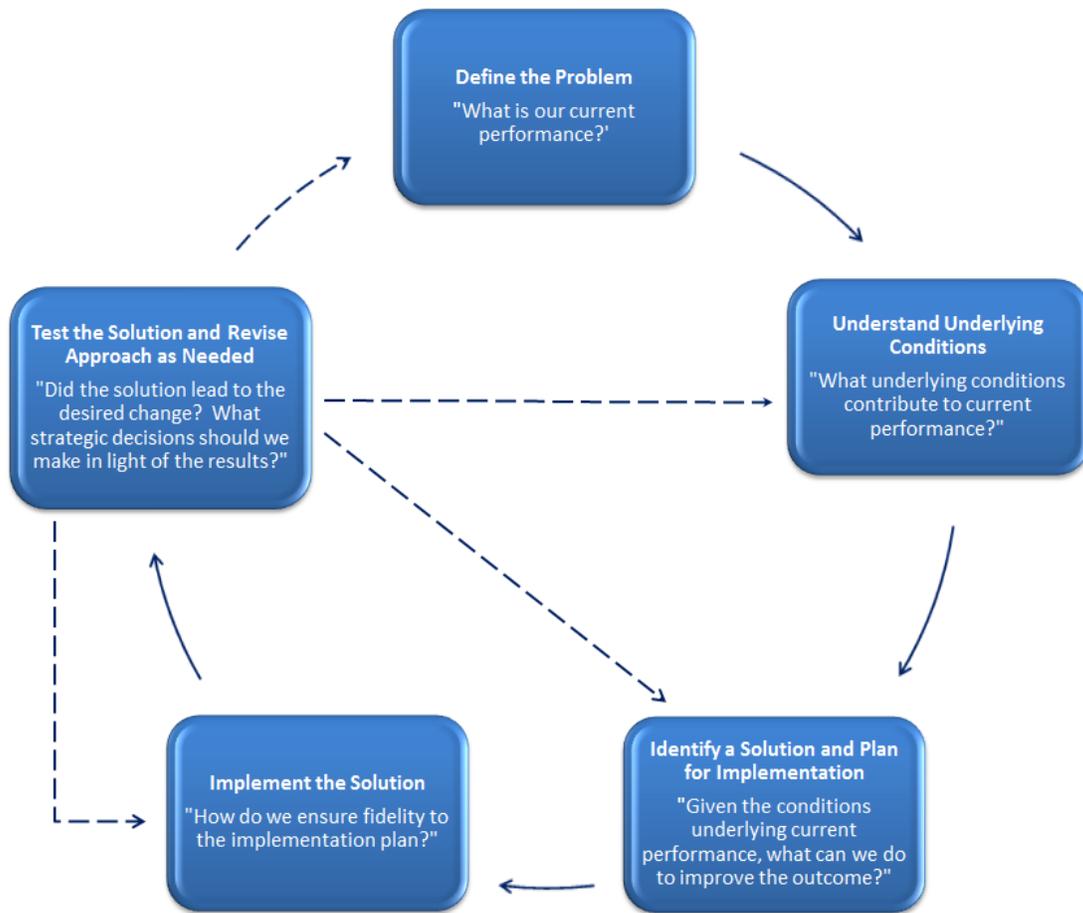
CQI is a cyclical process that has its origins in 20th-century literature on quality improvement in manufacturing.¹¹ What began as a method for identifying inefficiencies in production processes to improve the quality of tangible goods has been applied, over the years, to identify inefficiencies and improve outcomes in areas such as health care,¹² business,¹³ and government.¹⁴ Child welfare systems have been applying fundamental CQI concepts for many years in their efforts to improve outcomes for the children and families they serve. Today, using lessons learned, they work to build and sustain comprehensive CQI systems to enhance their practice and engagement strategies and build and sustain comprehensive CQI systems. For example: the Wisconsin Department of Children and Families is officially redesigning the CQI program that has been in existence since 2005. By conducting reviews of Wisconsin's tribal and county child welfare systems, the CQI team helps identify areas for improvement as well as uncover successful strategies.¹⁵



Though numerous descriptions of the CQI process exist, all of them follow a basic cycle that involves identifying gaps in system performance and testing interventions intended to improve performance. The CQI definition developed in 2005 by Casey Family Programs and the National Child Welfare Resource Center for Organizational Improvement was promulgated in ACF's 2012 Information Memorandum: **CQI is “the complete process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions.”**¹⁶ Drawing from various models, including APHSA's Define-Assess-Plan-Implement-Monitor (DAPIM™) cycle,¹⁷ and working with language from the CQI definition provided in the federal IM, this workgroup developed the model below to distill the CQI process to its basic demands.¹⁸

11. Best, M., & Neuhauser, D. (2006). Walter A. Shewhart, 1924, and the Hawthorne factory. *Quality and Safety in Health Care*, 15(2), 142–143.
12. O'Brien, J. L., Shortell, S. M., Hughes, E. F., Foster, R. W., Carman, J. M., Boerstler, H., et al. (1995). An integrative model for organization-wide quality improvement: Lessons from the field. *Quality Management in Health Care*, 3(4), 19–30.
13. Antony, J., & Banuelas, R. (2002). Key ingredients for the effective implementation of Six Sigma program. *Measuring Business Excellence*, 6(4), 20–27.
14. Administration on Children, Youth and Families. (August 27, 2012). Establishing and Maintaining Continuous Quality Improvement (CQI) Systems in State Child Welfare Agencies [ACYF-CB-IM-12-07].
15. Wisconsin Department of Children and Families. Retrieved November 10, 2014 from <http://dcf.wisconsin.gov/cqireview/index.htm>. KldStat and other Quality Improvement Reports
16. Administration on Children, Youth and Families. (August 27, 2012). Establishing and Maintaining Continuous Quality Improvement (CQI) Systems in State Child Welfare Agencies [ACYF-CB-IM-12-07].
17. For example, see Antony, J., & Banuelas, R. (2002). Key ingredients for the effective implementation of Six Sigma program. *Measuring Business Excellence*, 6(4), 20-27; Basso, P., Cahalane, H., Rubin, J., & Jones-Kelly, K. (2013). Organizational Effectiveness Strategies for Child Welfare. In H. Cahalane (ED.), *Contemporary Issues in Child Welfare Practice* (pp. 257–287). New York; Springer; Wulczyn, F. Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Language for Understanding CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago; The Child Welfare Research & Evaluation Framework Workgroup. (2014). *A Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare*. Washington, DC: Children's Bureau, Administration for Children and Families.
18. This model relies heavily on two proven and successful models that are complimentary and when aligned and combined provide a systematic series of steps that we believe strengthens the process. The models are:

Figure 1: The CQI Process



Briefly, the CQI process begins when the agency identifies an outcome that needs improvement (**Define the Problem**). Once identified, the agency gathers data that informs the development of a hypothesis and further informs an understanding of the problem and generates hypotheses about the conditions driving the current state of performance (**Understand Underlying Conditions**). From there, the agency identifies (or develops) an intervention designed to impact those underlying conditions in order to improve the outcome (**Identify a Solution and Plan for Implementation**). The next step is to implement the intervention and monitor fidelity to the implementation plan (**Implement the Solution**). Finally, the outcome of interest is measured again to determine the effectiveness of the intervention. Depending upon the findings, the cycle may continue in a

- Define, Assess, Plan, Implement, Monitor (DAPIM™), APHSA’s approach to continuous improvement.
- Plan, Do, Study, Act (PSDA) model initially developed as Plan, Do, Check, Act in 1950 by Dr. W. Deming later who, later in his career (1993), changed “check” to “study” to emphasize analysis over inspection. Many state and local agencies are using or have adapted one of these models. To ensure that foundational components are fully explored to develop a sound plan that is based on a well-understood desired future state and scope of improvement areas, DAPIM™ creates two steps prior to the Plan phase. PSDA incorporates these steps in its Plan phase. PSDA breaks the final DAPIM™ phase, Monitor, into Study and Act—emphasizing the need not only to analyze what is happening, but to act on it by refining solutions being tested, based on the experiential evidence being generated.

variety of ways. The agency may make a decision to continue with the intervention as implemented, make modifications to the intervention, revisit its hypotheses about the conditions driving performance, or revisit its definition of the problem altogether (**Test the Solution and Revise Approach as Needed**).

Appendix A contains a checklist that outlines the basic tasks that take place at each stage of the CQI process.

The Role of Evidence Throughout the CQI Process

Each of the steps identified above must be informed by evidence. Simply defined, “**evidence is information that is used to support an observation, claim, hypothesis, or decision.**”¹⁹ Evidence, which may be quantitative or qualitative, is critical because it provides the rationale or justification for decision-making at a given stage. If CQI is about doing something differently in order to bring about change, evidence is what builds the argument that some new way of doing business is going to be worth the investment.

Sometimes in order to satisfy the need for evidence, an agency will generate evidence itself. Examples include evidence generated through the quantitative analysis of administrative data and evidence generated through the qualitative analysis of case records, interviews, or focus groups. Other times, agencies must acquire evidence from elsewhere, for example, from statistics assembled by other government agencies, from peer-reviewed research articles, or from national clearinghouses. 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; this type of evidence is often referred to as research evidence.²⁰

Regardless of its type or source, evidence is only as strong as the analytic processes used to create it, and the analytic process is governed by a set of rules. For example:

- When it comes to quantitative analysis, analytical methods must be matched to the questions being asked (i.e., selecting the correct population, the correct statistic, etc.).
- When it comes to case review, sampling populations (from which cases are drawn) and case review instruments must be matched to the question the agency is using case review to answer.
- Data collection tools must collect valid information and be reliable.

These principles—among many others—comprise a set of analytical knowledge and skills that is not only relevant to analysts; in one way or another they will be important for all staff who will be responsible for consuming evidence generated by others, whether that evidence comes in the form of agency-generated reports, federal monitoring updates, the evidence-based practice literature, or some other source. Appendix B provides an example of how analytical discipline has implications for the storyline that evidence provides regarding system performance.

Types of Evidence

When considering evidence in a child welfare context, the first type of evidence that often comes to mind is evidence that describes the effectiveness of particular interventions with children and families—i.e., evidence-based practices. This is, however, only one form of evidence that the CQI process demands. Figure 2 shows each phase of the CQI process, the type of evidence required at that phase, and examples of the

19. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Understanding of CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.

20. 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.

general types of evidence that might meet those requirements.²¹ It is helpful to think about evidence of a strength or problem as a comparison between what is desired and its current state.

Figure 2: Evidence Required Throughout the CQI Process

CQI Phase	Required Evidence	Examples of Relevant Evidence
Define the Problem	Need evidence that supports the agency’s claim about current performance.	<ul style="list-style-type: none"> • Analysis of administrative data on child and family outcomes • Analysis of data from outside a specific program and the child welfare system and even beyond health and human services in such areas as education, labor and justice
Understand Underlying Conditions	Need evidence that supports the agency’s hypothesis about the underlying factors driving current performance.	<ul style="list-style-type: none"> • Analysis of data on system processes • Analysis of data on the quality of care • Findings from case record review • Findings from focus groups, interviews, or surveys • Findings from systematic policy analysis
Identify a Solution and Plan for Implementation	<p>Need evidence that supports the agency’s decision to implement the selected intervention (i.e., “evidence-based interventions”).</p> <p>Need evidence that justifies performance targets.</p>	<ul style="list-style-type: none"> • Published program evaluations/evidence-based literature • Ratings from evidence-based practice clearinghouses • Research that supports the theory of change • Analysis of historical system performance to support target setting and implementation timeframe • Cost analysis to determine affordability and feasibility
Implement the Solution	Need evidence of the extent to which the intervention is being implemented with fidelity to the implementation plan (i.e., with fidelity to process and quality standards).	<ul style="list-style-type: none"> • Analysis of process and quality data to determine implementation fidelity and intervention outputs

21. Adapted from Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Understanding of CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.

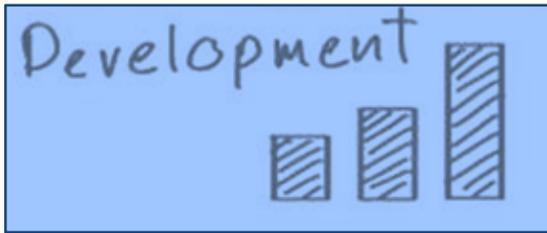
CQI Phase	Required Evidence	Examples of Relevant Evidence
Test the Solution and Revise Approach as Needed	Need evidence that supports the agency’s claim about the effectiveness of the intervention and decisions about what to do next.	<ul style="list-style-type: none"> • Analysis of data on proximal outcomes expected as a result of the intervention (i.e., change in workers’ knowledge, skills, and abilities to implement key practices; change in parents’ ability to change key behaviors, etc.) • Analysis of data on child and family outcomes (change over time with respect to baseline and target outcomes) • Cost analysis to determine return on investment

Appendix C contains a hypothetical vignette that provides a more concrete example of how an agency might apply evidence throughout a CQI cycle devoted to reducing length of stay in foster care.

It is true that the evidence necessary to support a particular decision or claim is not always readily available. When it comes to making observations about baseline and target performance, justifying a theory of change, or measuring the implementation and impact of a particular intervention, if a state does not have the capacity to generate/acquire, interpret, and apply the type of evidence called for, then the task for that state is to develop that capacity.

Obtaining meaningful outcome performance metrics may require data from outside a specific program and the child welfare system and even beyond health and human services in such areas as education, labor, and justice. For example, sobriety or recovery resulting from treatment of substance use or abuse treatment provided by Substance Abuse and Mental Health Services Administration (SAMHSA) may affect a parent’s capacity to provide adequate care for his or her child. Such sobriety or recovery may have an effect on out-of-home care placement and costs and a parent’s ability to obtain and sustain employment that, in turn, may affect the reduction of public benefit payments or homelessness. This example shows that individuals who are responsible for child well-being need to be able to link data in the health and educational systems. Understanding these cross-program benefits is critical when allocating resources for future programs. This, of course, requires careful review of the large amounts of data already being collected across programs and departments to assess whether and how these data can be used effectively.

Part 2: CQI Implementation—Building CQI Systems that Demand and Make Use of Evidence



To this point we have discussed the fundamental steps of the CQI process and explored how evidence must be used at each stage. The question from an implementation perspective is: How can states execute evidence-informed CQI activities at the state and local levels and specifically, what capacities must state or local agencies develop in order to support high-quality evidence use throughout the process?

State child welfare systems already implement Quality Assurance procedures, verified by the federal Child and Family Services Reviews (CFSR). The 2012 IM established additional CQI capacity components. For example, Component IV of the IM, “Analysis and Dissemination of Quality Data” suggests that a functioning CQI system has the capacity to, “...track, organize, process and regularly analyze information and results.” Additionally, within Component V, “Feedback to Stakeholders and Decision-makers and Adjustment of Programs and Process,” the IM notes that “...how States use this information is a critical component to driving change within the organization and is key to improving outcomes for children and families.”

Workgroup participants noted that most states, and many local agencies, already have a number of these CQI components in place. Implementing CQI is, therefore, not likely to be a matter of building an entire system of protocols from scratch, but rather the task of strengthening existing protocols that enable individuals involved in all levels of the CQI process to base their actions on evidence as they work through a systematic process of improving outcomes for children and families. Viewed in this way, CQI capacity building requires a state to ask itself whether it has what is necessary in order to fulfill the evidence use demands of the CQI process.

A Template for Assessing Capacity for Evidence Use

By reflecting on the requirements for evidence use, defined in Figure 2 above, a state can assess its capacity to use evidence at each stage of the CQI process. Specifically, the state can adapt Figure 2 by adding two columns to the right—one that lists the *sources/types* of evidence used at each stage (**Evidence Used**), and one that lists *how* the agency uses that evidence in order to successfully execute that stage (**CQI Activity**):²²

Figure 3: Template for Assessing Capacity for Evidence Use (column headers)

CQI Phase	Required Evidence	Examples of Relevant Evidence	Evidence Used What evidence is brought to bear?	CQI Activity Who does what with the evidence, when, and how?
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For example, imagine a state that wants to examine its capacity to execute the first stage of the CQI process, **Define the Problem**. According to the template, moving from left to right, the state knows that this stage of the CQI process is characterized as follows:

- **CQI Phase:** Define the Problem
- **Required Evidence:** Need evidence that supports the agency’s claim about current performance

22. Adapted from Alpert, L. (October 2014). *Building Capacity for Evidence Use throughout the CQI Process*. The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.

- **Examples of Evidence:** Analysis of administrative data on child and family outcomes

With those ideas in mind, the state sets out to determine what CQI activities it currently undertakes to make claims about current performance and the evidence it brings to bear on those activities:

Evidence Used What evidence is brought to bear?	CQI Activity Who does what with the evidence, when, and how?
<p>What evidence does the state use to define current (baseline) performance?</p> <ul style="list-style-type: none"> • The state CQI department quarterly management report includes the following: <ul style="list-style-type: none"> ▪ Length of stay, number of placement moves, and congregate care use for all children in care on the first day of the quarter. ▪ Updates on quarterly entry cohorts that indicate: <ul style="list-style-type: none"> ➤ The percentages of children in the cohort that have exited to permanency, exited to non-permanent settings, and are still in care. ➤ The percentage of children in each entry cohort that had a medical exam completed within two weeks of entering care. 	<p>How does staff use this evidence to define the problem?</p> <ul style="list-style-type: none"> • The state CQI department produces a quarterly management report detailing progress on a set of priority child and family outcomes. Each county receives two reports per quarter—one that reports on statewide progress, and one that reports on county-specific progress. • Each quarter, the senior management team in each county office meets to review quarterly management reports. • Following that, each quarter, all the county directors meet with the state executive team to discuss county-level trends and identify common outcomes that need improvement across counties. • The state’s university partner attends the state-level quarterly meeting and helps participants identify priority areas in light of the evidence.

Having identified the activities it undertakes to define performance problems and the evidence it uses to support those claims, the task for the agency is to determine whether those activities and that collection of evidence is sufficient to move the CQI process forward. As in the example above, the state’s quarterly management report contains some findings that are more representative of system performance (entry cohort analyses) than others (point-in-time outcomes for children in care on the first day of the quarter). The state might decide to deepen its engagement with its university partner in an effort to revise some of its performance metrics, and provide training to state and county staff to help them understand the reason for the change. On the implementation side, the state may decide that the quarterly meetings are useful for identifying county-specific performance problems but that it could do more to strengthen the expectation that counties act on those findings.

The state can then replicate this assessment process for each of the remaining stages of the CQI process. A template that includes prompts for all five stages is provided in Appendix D.

Organizational Elements that Support Effective Evidence Use

CQI requires agency structure and governance to move beyond simple compliance to rules and regulations, to integrate evidence into its policy and field service delivery structure and move forward based on lessons

learned. In addition to establishing a clear protocol and policy for how evidence-based CQI activities will be conducted, implementing an evidence-driven CQI system requires a number of other organizational supports. These include:

Leadership. Indeed, the relationship between leadership support for evidence use and the extent to which organizations and their staff use evidence to support decision-making is well documented.²³ Some suggestions for leaders are:

- Lead by example by personally using evidence to make decisions.
- Set clear expectations and standards for gathering data and for evidence use throughout the agency, and enforce accountability to those standards.
- Develop strategies to increase agency and staff understanding and acceptance of the importance of data collection, use, and sharing to resolve competing needs, and address rules, regulations, and laws that present real or perceived barriers to data sharing.
- Provide training and establish hiring protocols to ensure that the knowledge and skills to translate and use evidence effectively are transferred to all levels of staff to apply in their daily work. All staff must clearly understand the implications of data findings on their work.
- Sponsor and ensure effective facilitation of improvement teams to embed CQI throughout the agency with all levels of staff. Have these teams explicitly identify strengths and gaps between the current and desired agency culture, the reasons for the gaps identified, related solutions, thoughtful implementation of these solutions and ongoing monitoring of their impact. The parallel process that is forged in this way is essential to create a CQI-driven culture and an agency that enables staff to apply CQI practice and principles to daily work.
- Employ sound communication strategies and be transparent about the direction that you intend to take their agency. Transparency and inclusion of staff at all levels must be extended to community, partners, customers, and other stakeholders to identify and address obstacles and challenges on ongoing basis.
- Be flexible and prepared for redesigning or revamping programs, policies, and processes within the confine of laws and regulations based on viable feedback from internal and external improvement teams as well as emerging evidence. This may impact the type and way services are delivered; such as streamlining and integrating programs, eliminating low value—programs and expanding those that are working. Keep in mind that some of our long-standing beliefs about what works may be impacted by environmental shifts or may prove to be inaccurate.
- Plan strategically for the most effective use of available and potential technology, budget, and human capital capacity performance at all levels and with all resources.

Accountability Mechanisms. The state’s policy regarding CQI implementation should include expectations for evidence use throughout the CQI process. The state may choose to install oversight procedures for holding staff and other stakeholders accountable to those expectations; indeed, the ACF IM alludes to the importance of oversight to ensure that the state’s CQI system is implemented as planned. For example, a state may decide to require its subdivisions or locally implemented service districts to document their use of evidence

23. e.g., Aarons, G. A., & Sommerfeld, D. H. (2012). Leadership, innovation climate, and attitudes toward evidence-based practice during a statewide implementation. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(4), 423-431; Walter, I., Nutley, S., Percy-Smith, J., McNeish, D., & Frost, S. (2004). *Improving the use of research in social care practice*. London: Social Care Institute for Excellence.

throughout each step in the CQI process and identify a state level administrator or outside expert to periodically review that documentation.

Culture Shift. CQI calls on us to revisit what we know, reframe our knowledge, and shape our actions to diffuse use of evidence throughout child welfare agencies and the system as a whole. Toward that end, organizational culture plays an important role. CQI relies on an organizational culture that is proactive and supports continuous learning. The implication for the agency culture is that we are called upon to be open to innovation, share “turf” so that information can be shared across departments and stakeholders, strive toward what is needed instead of settling for what is available, and be willing to persevere and be creative in the face of inevitable barriers to implementation.

CQI Knowledge and Skill Development. In addition to procedural accountability, an evidence-informed CQI process must optimize the *quality of evidence* available and the *quality of evidence use* during each stage of the process. Toward that end, agencies must ensure that analysts have specific knowledge and skill sets, including the ability to develop and answer CQI-relevant questions that produce representative and actionable evidence regarding system performance. It also means teaching staff to be savvy consumers of evidence and providing role-specific training that clarifies the implications that evidence has for different types of child welfare work. Identifying and establishing the right metrics is a critical component of any CQI plan or strategy. Valid and reliable qualitative and quantitative indicators that accurately establish clear levels of achievement must be identified. Such metrics can enable agencies and programs to sustain focus and balance long-term efforts against the crisis of the day. In addition, to address the tensions between long-term goals and the crisis of the day, agencies’ strategic plans should be publicly communicated and interested stakeholders engaged with the team assembled in each phase of the CQI process.

Access to Evidence: Staff and stakeholders throughout all levels of the child welfare system should have access to the evidence they need in order to make the policy and practice decisions relevant to their daily work. In part, this means developing an internal reporting system through which information can flow from the people who generate evidence to those who will use it. By the same token, such a structure should support evidence users to communicate to evidence generators about the types of evidence they need to do their jobs well. Improving access to evidence also means ensuring that staff can acquire evidence that exists outside the agency—i.e., via evidence-based practice clearinghouses, academic journals, university partnerships, and collaboration with experts.

Resources for CQI Capacity Building

Having assessed strengths and gaps in its ability to use evidence throughout the CQI process, the state can determine how to build capacity where needed. Agencies will differ in how they approach the capacity-building process and in the CQI structures and functions they ultimately develop to strengthen their use of evidence. A number of technical assistance organizations and products can provide agencies with guidance toward this end. Several of these are described briefly below; links to these resources and others are listed in Appendix E.

- **State CQI Assessment (National Resource Center for Organizational Improvement).** This approach to CQI system development is designed to help states examine their existing CQI capacity vis-à-vis the 2012 ACF Information Memorandum and develop action plans for strengthening that capacity. The approach involves conducting a series of meetings and activities intended to identify the structures, functions, policies, and processes that are needed to support CQI implementation.
- **Analytic Capability Roadmap 1.0 for Human Service Agencies.** The National Workgroup on Integration’s Analytics Committee developed the *Analytic Capability Roadmap 1.0 for Human Service*

*Agencies*²⁴ in 2014. The roadmap includes information about what is meant by analytics in the context of human services; an analytical framework for addressing analytics, including the Analytic Capability Curve and the Capability Assessment Tool; and strategies for state and local health and human service agencies to consider when developing analytic strategies, including considerations for seeking external assistance. This tool is intended for state and local health and human service agencies to help develop enterprise-wide and/or (cross) programmatic analytic strategies to assist in their organizational decision-making; reduction of fraud, waste, and abuse; demonstration of achievable outcomes for those served; and reductions of health disparities among certain populations.

- **DAPIM™ (APHSAs Organizational Effectiveness Team).** DAPIM™, which stands for Define-Assess-Plan-Implement-Monitor, is part of an overall CQI implementation model that organizes the CQI process by clarifying the role of leadership and sponsorship, scoping improvement efforts systemically, establishing effective practices for improvement team formation and facilitation, project management, and communication—ensuring that any solution being tested is supported by effective organizational functioning.
- **The Center for State Child Welfare Data at Chapin Hall.** The Center for State Child Welfare Data provides support for the full range of CQI capacity building and implementation activities. The center provides CQI and analytics education through its *Advanced Analytics for Child Welfare Administration* course and other custom trainings; develops longitudinal databases required for CQI-compliant data analysis; uses those databases (often in conjunction with others) to generate evidence regarding system performance; provides guidance in identifying CQI target populations and matched interventions; conducts fiscal analysis to help agencies understand the cost of and expected return on CQI interventions; and helps agencies build rigorous, sustainable CQI implementation protocols.
- **A Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare (Children’s Bureau, The Child Welfare Research & Evaluation Framework Workgroup).** This model provides specific guidance on building the evidence base for child welfare interventions and for adapting and scaling up promising practices.

24. APHSA. *Analytic Capability Roadmap 1.0 for Human Service Agencies*. 2014.
http://www.aphsa.org/content/dam/aphsa/pdfs/NWI/FINAL_NWI%20Analytics%20Capability%20Roadmap_4.17.14.pdf

Part 3: Recommendations



As part of this project, the workgroup began discussing the types of support it envisioned states would need as they endeavored to build capacity for evidence use throughout the CQI process. These supports included the following:

Training and Tools

Conceptual and Analytic Training. As agencies learn more about the stages of the CQI process and the use of evidence throughout the process, they may find the need to provide upper-level managers and analysts with additional training on how to generate the representative, actionable, and scientifically defensible evidence required for the CQI process and the CQI principles and concepts underlying those techniques. Chapin Hall's Advanced Analytics for Child Welfare Administration course is an example of this type of training.

- **Provide Flexible CQI Implementation Tools.** One common comment among workgroup participants was that states not only need to build capacity to generate and acquire the evidence required for the CQI process, but also need practical tools for implementing the cyclical CQI process, i.e., implementation protocols that guide the CQI process and help those involved understand their roles and responsibilities within that process. We use the term toolbox because a tool that works in one area may not contain all of the elements needed for another. States need to be allowed to adapt given tools—such as the CFSR Case Review tool—based on the component that the data suggest should be targeted for attention in a specific jurisdiction.
- **Make Role-Specific CQI Training Available.** State and local agencies may need role-specific training for staff throughout the agency on the CQI process and how evidence use plays a part of daily and strategic decision-making. Providing this type of training may involve an extension or adaptation of the current national CQI Training Academy or permission for states to use elements of that curriculum for internal staff training.
- **Offer Support to Facilitate CQI Capacity Building.** State and local agencies may need support for implementing efforts to evaluate CQI capacity, identifying areas that need strengthening, and implementing efforts to fill the gaps. This support may involve extending the model developed by the National Resource Center for Organizational Improvement.
- **Provide Support and Guidance for Culture Change.** Strategies to increase agency and staff acceptance of the importance of data collection and data sharing to resolve competing needs, and to address rules, regulations, and laws that present real or perceived barriers to data sharing are needed at a national level.

Data Management Support

- **Support to Develop Longitudinal Files.** The requirement to use evidence as part of a process for improving outcomes for children and families means agencies must be able to examine the factors that influence children's trajectories through the system. Toward that end, many states will need support to build databases that link data on preventive services, child protection services, out-of-home care, and aftercare.
- **Support to Link Child Welfare Data with Other Human Service Systems.** Using evidence to improve child and family outcomes also will require states to examine the relationships between children's experiences with the child welfare system and their experiences with other human service systems.

Toward that end, many states will need support to link child welfare data with data from education databases, health care and mental health care databases, and court databases, to name a few.

Integrating CQI Principles into Planning and Reporting

- **With State Input, Align Child and Family Services Plan (CFSP)/Annual Progress and Services Report (APSR) Planning and Reporting Process with CQI Process and Principles.** CQI must be infused throughout the CFSP/APSR program instructions and the CFSR process. The five-year CFSP could be an opportunity for states to comprehensively define and understand the problems before moving to planning and implementation of the solution; however, the language and processes outlined in the relevant program instruction (ACF-CB-PI-14-03) do not significantly incorporate CQI components or processes.
- **Support Integration of CQI Activities and the CFSR 3.** As of this writing, the new performance indicators for CFSR 3 have been finalized.²⁵ Child and Family Services Review Technical Bulletin #8 is designed to accompany the Final Notice of Statewide Data Indicators and National Standards for Child and Family Services Reviews (CFSRs) published in the *Federal Register* on October 10, 2014.²⁶ The information is specific to the third round of the CFSRs and new policies, guidelines, and support mechanisms regarding state CQI systems. It provides technical detail on how we calculate whether a state has met the national standards. It also provides technical information on establishing program improvement goals relative to the statewide data indicators for states not meeting national standards. The proposed measures represent an improvement over CFSR 2 as they are better representatives of system performance and are therefore more actionable in a CQI context. To advance integration of CQI activities and the CFSR 3:
 - Support states to leverage the new indicators—among others—as fuel for their internal CQI processes.
 - Continue to afford states the flexibility to use evidence generated through state-specific CQI processes to satisfy requirements for federal reporting.
 - Regional offices collate the content of their feedback on state self-assessment of their CQI capacity vis-à-vis the federal IM and ACF, identify which aspects of CQI capacity building most commonly need improvement across states, and focus future support to states on those common priorities.

Funding

- **Explore New Financing Model.** New funding models that allow flexibility in applying child welfare funding streams and, when appropriate, to blend and braid funding streams across human services and from entities outside the human service sector are needed. As states and local jurisdictions test innovative initiatives, they need flexibility to shift and reallocate funds to target resources to interventions that monitoring and data analyses show are effective with the population that they serve. The population served by child welfare agencies, the needs of that population, and the structure of those agencies vary greatly across the nation. In addition, in times of strapped budgets,

25. Administration for Children and Families (October 10, 2014). Child and Family Services Review Technical Bulletin #8. Retrieved November 12, 2014 from <https://training.cfsrportal.org/resources/3044>.

26. Administration for Children and Families 45 CFR Part 1355 Statewide Data Indicators and National Standards for Child and Family Services Reviews (October 10, 2014). *Federal Register*/Vol. 79, No. 197/Friday, October 10, 2014/ Rules and Regulations. Retrieved November 12, 2014 from <http://www.gpo.gov/fdsys/pkg/FR-2014-10-10/pdf/2014-24204.pdf>

any service duplication needs to be reduced or eliminated and administrative functions streamlined to achieve the most improvement for the least cost.

- **Provide Funds for Data Management.** Explicitly, funds are needed to upgrade technology to draw down data from other systems (education, Medicaid, and other human service programs) and analyze the large quantities of administrative data currently gathered, so core issues that are in need of improvement can be identified and focused on. Advances in technology enable rigorous ways to measure outcomes. Too many states are challenged to gather and use data effectively due to aging technology.
- **Support Innovative Interventions.** Explore ways to test innovative interventions. Support potentially effective interventions with demonstration grants, recognizing that all may not achieve the intended results but that progress is made through trial and error.

Conclusion

In order to build practices and programs that achieve positive results, the environments in which agencies work must incorporate a systematic approach to evidence-based decision-making and a sustainable infrastructure that supports CQI. Both are necessary to achieve our ultimate objective: improving the lives of those we serve. Gathering that evidence requires the use of modern data analysis tools that not only measure the activities we undertake, but the results we achieve. Identifying markers of success gives agencies the credibility to ask policymakers for allocation of the resources and technical assistance necessary to provide the leadership and services their constituents deserve.

Innovative change can suffer temporary setbacks but, in the long run, credible evidence will build lasting support for progressive child welfare programs among consumers, policymakers, the media, and the public at large. To this end, we must be able to translate what data mean, be open about sharing them, learning from constructive criticism that they inevitably generate, and fine-tune our programs and strategies as needed.

Some of our long-standing beliefs about what works may be inaccurate. *Example:* Recent research indicates that *Differential Response*, a widely accepted and adopted practice for more than two decades is popular with workers and families, but children in families that received these intensive services were more likely to become victims of child abuse and neglect than those who received traditional investigative services.²⁷

On a more macro level we have the responsibility to widely disseminate the results of our CQI studies—what has worked, what has not and *why*—to build a repository of replicable and scalable interventions. There is no single CQI method that fits all practice settings. We must use the best methods and measures for what we need at a given time—measures that clearly demonstrate real and lasting progress for those who come to our doors. It is critical that we collect and analyze longitudinal data that ferret out the relationships between key indicators (such as child permanency, high-school completion, and diversion from the juvenile justice system) and long-term success for children and families in every facet of their lives. And if we want to generate the human and economic resources we need to deliver evidence-based services, it is equally important to engage in CQI that identifies cost-benefit relationships.

The federal administration has a significant role in promoting CQI. In addition to being the primary funder and carrying the legislative mandate to hold public agencies accountable for the effective and efficient use of

27. Heimpel, Daniel. (June 24, 2014) Differential Response Dealt a Heavy Blow. *The Chronicle for Social Change*. Retrieved July 29, 2014 from <https://chronicleofsocialchange.org/analysis/differential-response-dealt-heavy-blow-2/7289>)

federal funds, its oversight brings credibility to child welfare services.²⁸ If we want to ensure that their assessment of our services is accurate and that we receive the funds we need to do our job effectively, the child welfare field must provide information that is supported by evidence-based training and assessment tools, sophisticated data management, and well-designed program evaluation methods that span the full range of programs, functions, and departments.

28. American Public Human Services Association. (June 2013). *Accountability in Human Services, An APHSA Innovation Center Issue Brief—June 2013*

Part 4: Appendices

Appendix A: CQI Checklist

This checklist details how evidence use is embedded among other key parts of the CQI process such as leadership support, stakeholder engagement, and planning for intervention implementation.

Define the Problem
Establish organizational/leadership commitment to the outcome of interest.
Ensure the outcome of interest reflects a core performance issue given the child welfare agency's mission and priorities (i.e., safety, permanency, and well-being).
Include critical stakeholders in the process of identifying and defining the outcome of interest.
Determine the data sources required to establish baseline performance on the outcome and ensure that they are up to date, accurate, and complete.
Define baseline performance with quantitative or qualitative data that are collected and analyzed using methods that are objective, systematic, and matched to the performance question at hand.
For administrative data analysis, use an analytic technique that produces results that are able to be generalizable to the population about whom you wish to make an observation.
For case record review, use a representative sample of records (i.e., ensure that the population of cases from which the case records are drawn is the same as the population about whom you are using case record review to make an observation).
Understand Underlying Conditions
Construct a process map or flowchart to diagram the service delivery process and identify inefficiencies in process or quality of care that may contribute to the outcome.
Engage process owners in examining factors contributing to baseline performance.
Generate and/or acquire evidence to determine the extent to which the baseline outcome is driven by variation in the quality or process of service delivery (e.g., quantitative analysis of data on system processes; results of systematic case record review or other quality service review; analysis of policy documents; analysis of focus groups/interviews with relevant stakeholders).
Generate and/or acquire evidence to determine the extent to which the baseline outcome is driven by child and family characteristics (e.g., analysis of administrative data on child/family demographics; analysis of child/family assessment data).
Identify Solution and Plan for Implementation
Design or select an intervention that addresses the conditions contributing to baseline performance and that, ideally, is evidence based or evidence informed.
Engage relevant stakeholders and external experts to select an effective intervention, especially process owners who (a) have the authority to implement change and (b) who are needed to implement the intervention.
Determine the cost and timeframe of the intervention and determine that the agency is prepared to make the tangible and human capital investments required to implement the intervention with fidelity.
Articulate a theory of change that explains the mechanisms by which the elements of the

intervention are expected to bring about change in the outcome of interest.
Determine the data that will need to be collected and analyzed in order to determine program effectiveness.
Use evidence (e.g., historical system performance and guidance from the evidence-based literature) to establish the target outcome.
Use evidence to determine the performance period. (How long do you expect it to take for the intervention to have an effect?)
Determine the data that will be collected during implementation to measure fidelity to the implementation plan (i.e., process and quality standards) and when those data will be collected and analyzed.
Define the implementation plan. (How will the intervention be implemented, where, and with whom? Who will be responsible for implementing which elements, and when?)
Implement Solution
Implement the intervention according to the implementation plan (i.e., according to process and quality standards).
Collect and analyze process and quality data used to monitor fidelity during the implementation period and to address gaps in fidelity throughout the implementation process.
Collect the data required to measure progress toward the target outcome.
Test Solution and Revise Approach as Needed
Review outcome evaluation to determine progress toward the target outcome using methods that are objective, systematic, and matched to the performance question at hand.
Share the results of outcomes and process evaluations with relevant stakeholders, process owners, and decision-makers.
Use the results of outcomes and process evaluations to support/refute the initial theory of change.
Conduct a cost-benefit analysis to determine the return on investment in the intervention.
Use the results of outcomes and process evaluations to determine whether adjustments to continue, modify, or discontinue the intervention.
Summarize lessons learned and document plans for next steps.

Appendix B: Example of Analytic Discipline: Identifying the Correct Population

In its 2014 paper on the core principles underlying CQI,²⁹ The Center for State Child Welfare Data at Chapin Hall provides a high-level overview of the analytic knowledge and skills required to generate and apply evidence throughout the CQI process. One of the critical skills they identify is understanding which population to analyze when asking and answering questions about system performance. Using the example of calculating length of stay in foster care, the example illuminates the implications that population (denominator) selection has for the representativeness of analytic findings and, in turn, the utility of those findings as evidence that can support CQI decision-making. This example is printed in its entirety below.

Converting Data to Evidence: The Denominator and its Implications for Understanding Performance

Making an accurate observation about an outcome that an agency is trying to prevent or promote requires an analysis that accounts for all of the children at risk of experiencing that outcome. Mathematically speaking, this is the denominator of the calculation.

There are three popular denominators in foster care data analysis: a point-in-time sample, which includes all children in care on a particular day; an exit cohort, which includes all children who left care during a specific time period; and an entry cohort, which includes all children who entered care during a specific time period. A simple analysis of median length of stay in foster care highlights the implications of using each. Consider the table below, which shows findings from a real state:

Research Question	Denominator	Median Length of Stay
Point-in-time: Of all children who were in care on 1/1/2010, what was their median length of stay as of that day?	All children who were in foster care on 1/1/2010	28.2 months
Exit cohort: Of all children who exited foster care in 2010, what was their median length of stay?	All children who exited foster care in 2010	8.13 months
Entry cohort: Of all children who entered foster care in 2010, what was their median length of stay?	All children who entered foster care in 2010	7.63 months

The utility of these figures for CQI purposes lies in their generalizability. Neither exit cohort nor point-in-time analyses provide fully representative information. Point-in-time samples capture the experience of children in care on a given day, but ignore all the children who entered and exited care before that date. As a result, these analyses tend to over-represent the experience of long stayers. Exit cohort samples capture the experience of children who have left care, but ignore children who are still in care. For that reason, exit cohorts may over-represent the experience of short stayers and are likely to contain a mix of children that varies greatly with regard to the length of their exposure to foster care. In most cases, the best way to summarize the typical experience of children in foster care is to use an entry cohort sample because an entry cohort includes all the children at risk of experiencing the outcome being measured.

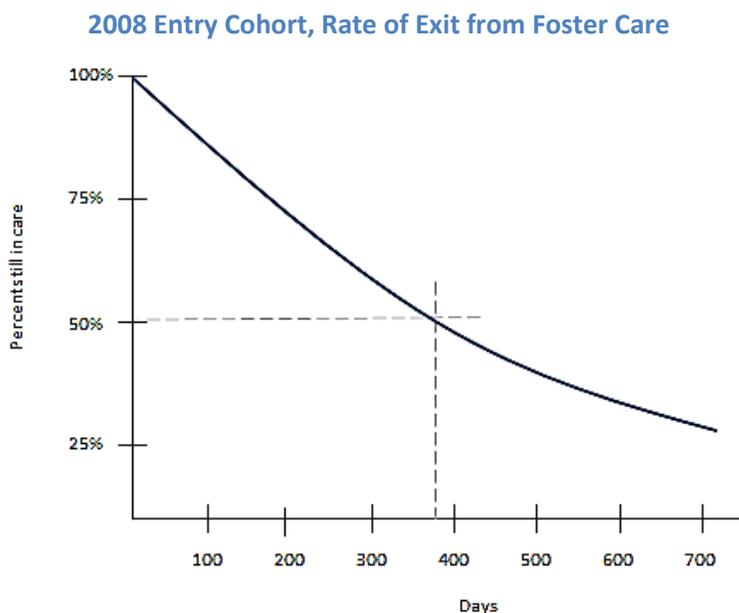
In the end, the sample drawn has to fit the question being asked and, in some cases, an exit or point-in-time sample may be appropriate. However, when it comes to understanding what happens to children who are placed, it is almost always best to examine all the children who were placed rather than restricting one's view to those who left or those who are still in care.

29. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Understanding of CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.

Appendix C: CQI Vignette—Reducing Length of Stay in Foster Care

The vignette below presents a mock example of how a state can move through the CQI process to address and improve a specific outcome—length of stay in foster care. The example is purely hypothetical and is not intended to be comprehensive—that is, it is not intended to cover all the relevant types of evidence that could be brought to bear on a decision about how to reduce length of stay or describe every type of intra- and inter-agency collaboration that could contribute to integrated analysis and decision-making, nor is the example intended to account for the broader administrative, regulatory, financial, and political contexts that shape agency decision-making. The purpose is simply to outline an example of defensible, evidence-informed decision-making in a performance improvement context.

1. Define the Problem. In the spring 2011, the state Department of Children’s Services pulled together a committee to examine length of stay in foster care. The committee consisted of line staff, supervisors, program managers, data analysts, the state director, the finance director, and the directors of the state’s five regional offices. At the initial meeting, the director framed the problem: A recent national research report noted that the state had one of the longest lengths of stay in the country. The director wanted to start a campaign to reduce length of stay statewide and tasked the committee to develop a targeted initiative. The data analysts started the process by asking the basic research question: How long do children in our state stay in foster care? They used an entry cohort approach to examine length of stay in order to be certain that their findings represented the typical experience of children moving through the system. Specifically, they looked at the length of stay of children who entered care for the first time in 2008 and found that those children had a median length of stay of 372 days.³⁰

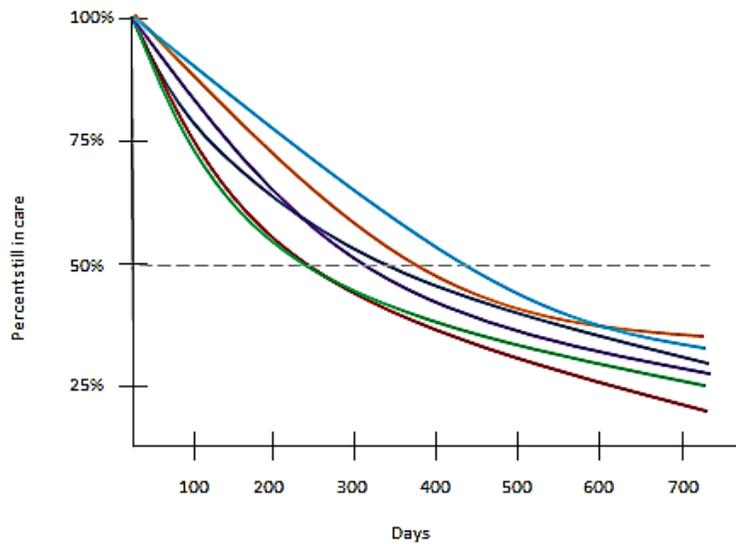


Knowing that outcomes vary within a system,³¹ the analysts took the inquiry a step further and examined whether length of stay varied by region. This more granular view showed that length of stay (LOS) actually varied considerably across the five administrative units, ranging from 248 days in Region 1 to 457 days in Region 5.

30. The median length of stay is the amount of time it takes for 50 percent of children in an entry cohort (children entering care) to exit foster care.

31. Wulczyn, F. (2007). *Monitoring Child Welfare Programs: Performance in a CQI Context*. Chicago: Chapin Hall.

2008 Entry Cohort, Rate of Exit from Foster Care, Statewide and by Region



Region	Median LOS
Region 1	248
Region 2	249
Region 3	322
Statewide	372
Region 4	393
Region 5	457

2. Understand Underlying Conditions. The analysts brought the findings to the next committee meeting and posed the next question in the CQI process: Why does length of stay vary from region to region? One caseworker referenced a report from the previous quarter that showed that in Regions 4 and 5, the most likely reason for entry to foster care was parental substance abuse, whereas in the other regions, the most likely reason for entry was inadequate guardianship; she suggested that perhaps children from Regions 4 and 5 stayed in care longer because of the higher level needs that they had as a result of their parents’ substance abuse. A supervisor added that those two regions were also known specifically for placing infants, and she recalled reading a research brief that said that nationally, infants generally had longer lengths of stay than older children.³² The regional directors from Regions 4 and 5 suggested that the extended length of stay in their counties was due to high worker caseload, referencing last year’s statewide annual report that showed their regions had the highest caseloads in the state.

After the meeting, the analysts examined the length of time in care, controlling for region, children’s age at placement, worker caseload size, and whether the child had a substance-abusing parent. The results showed that the only significant predictor of length of stay was child age; younger children stayed in care the longest. Length of stay had little to do with whether children had a substance-abusing parent or the size of their

32. Wulczyn, F., Ernst, M., & Fisher, P. (2007). Who are the infants in out-of-home care? An epidemiological and developmental snapshot. Chicago: Chapin Hall.

workers' caseloads. A demographic breakdown of the 2008 entry cohort by region seemed to support the hypothesis about the effect of child age; Regions 4 and 5—the ones with the longest lengths of stay—were the ones with that had the highest proportions of infants entering care.

2008 Entry Cohort, Age at Entry into Foster Care, Statewide and by Region

Region	Under 1	1 to 5	6 to 12	13 to 17	Total
Region 1	12%	35%	33%	20%	100%
Region 2	18%	44%	27%	11%	100%
Region 3	21%	35%	25%	19%	100%
Statewide	24%	35%	25%	15%	100%
Region 4	26%	38%	22%	14%	100%
Region 5	31%	33%	24%	12%	100%

3. Identify a Solution and Plan for Implementation. The committee reviewed the findings at their next meeting. Given the strong relationship between child age and length of stay, the group decided to craft a length-of-stay reduction initiative to specifically address permanency for infants. They decided to target Regions 4 and 5 for implementation because they hypothesized that a high proportion of long-staying infants was driving up length of stay in those regions. Over the next several months, the committee researched evidence-based interventions shown to improve permanency for young children. A program manager came across a series of journal articles describing the effectiveness of a court-based program to expedite permanency for infants. He looked the initiative up on a national clearinghouse for evidence-based interventions, which described the intervention as a promising practice supported by evidence.

At the next meeting, the program manager presented the intervention to the committee. He explained that the initiative combined collaboration between court and child welfare staff with intensive concurrent planning practices and an evidence-based parenting program for parents of infants. A few core hypotheses made up the theory of change: Education for court staff and collaborative meetings between court and child welfare staff were expected to improve the quality and speed of permanency hearings for infants. Intensive concurrent planning efforts were also expected to have a direct effect on permanency. The evidence-based parenting program was expected to improve parenting skills, which was expected to increase the likelihood of reunification and reduce the likelihood of re-entry among reunified infants. The group agreed that not only did the intervention address the permanency outcome that they were trying to improve, but that it also promoted aspects of child and family well-being at the heart of the agency's mission.

The finance director asked how much it would cost to implement the program in Regions 4 and 5; in order to be cost-effective, the initiative could not cost more than the amount of foster care days the team expected to save by expediting permanency for infants in those regions.³³ Working with the director of human resources, the finance director calculated the cost of implementation and determined that in order to be affordable, Regions 4 and 5 would have to reduce the number of days newly admitted infants spent in foster care by 10 percent. The committee went back to the evidence-based literature and saw that when implemented in similar child welfare populations, the program decreased length of stay by between 6 percent and 11 percent.

33. For more on care days as a strategic quantity, see The Center for State Child Welfare Data. (2014). *Using care days to identify opportunities and manage funds under a IV-E Waiver*. Retrieved May 1, 2014 from <https://fcda.chapinhall.org/length-of-stay/using-care-days-identify-opportunities-manage-funds-iv-e-waiver/>. For more on the concept of social return on investment see APHSA. (2013). *Social Return on Investment*. Retrieved May 1, 2014 from <http://www.aphsa.org/content/dam/aphsa/pdfs/Innovation%20Center/2013-05-Social-Return-on-Investment-Brief.pdf>.

At the next meeting, after reviewing all of the decisions to date, the committee agreed to implement the initiative and a rollout date was set for January 1, 2012.

To set a baseline, the analysts looked at several years of historical data regarding length of stay for infants entering care in Regions 4 and 5. Using those data they projected the number of infants that would enter care during the first year of the intervention (Calendar Year 2012), the number of foster care days those infants would use over a two-year performance window (1/1/2012 to 12/31/2013) if no intervention was implemented, and the number of care days those infants would use if the two regions decreased their care day use by 10 percent:

Baseline and Target Performance, Regions 4 and 5

Region	Estimated number of infants entering care during CY 2012	Baseline		Target	
		Total care day use by infants during performance window	Average care day use per infant during performance window	Total care day use by the end of performance window (90% of baseline)	Average care day use per infant during performance window (90% of baseline)
Region 4	74	26,344	356	23,710	320
Region 5	150	58,650	391	52,785	352

Regions 4 and 5 spent the fall of 2011 preparing for the rollout. Among other things, preparations involved establishing the necessary working relationships with court personnel, developing the required data collection tools—both for measuring the program outcomes as well as implementation fidelity, and training staff on the new modes of casework.

4. Implement the Intervention. The program began as scheduled at the start of 2012. Implementation data were monitored closely to ensure that the program was being executed as intended; this enabled the regional directors to target gaps in fidelity and intervene quickly to address them. For example, in the early months of the program, it became clear that data on infants’ permanency hearings were not being entered into the data collection system in a timely way in Region 4; it turned out that there was confusion in the field as to whether it was the responsibility of the court staff or the child welfare staff to enter that information. The problem was quickly rectified with a policy memo to the staff and booster training on how to use the online data entry system.

Region	Estimated number of infants entering care during CY 2012	Baseline		Target		Actual			
		Total care day use during performance window	Average care day use per infant during performance window	Total care day use by the end of performance window (90% of baseline)	Average care day use per infant during performance window (90% of baseline)	Number of infants entering care during CY 2012	Total care day use by the end of performance window	Average care day use per infant during performance window	Percentage change
Reg. 4	74	26,344	356	23,710	320	89	25,290	284	-4%
Reg. 5	150	58,650	391	52,785	352	147	51,612	351	-12%

5. Test the Solution and Revise Approach as Needed. At the end of the implementation window, the analysts tested to see if Regions 4 and 5 had met their reduced length of stay targets for infants. Region 4 had made a modest gain, decreasing care day use for entering infants by 4 percent; Region 5 surpassed its target, decreasing care day use for entering infants by 12 percent.

The original planning committee reconvened in early 2014 to discuss the outcomes. Although implementation had gone relatively smoothly in both regions, the Region 4 director reported that in the second half of 2013, her jurisdiction experienced an unforeseen increase in infant entries to care. She attributed the increase to the appointment of a new judge who was more prone than his predecessor to placing young children in foster care. The regional director suggested that if the child welfare agency could work to bring this new judge on board with the intervention, they would be able to reduce the infant entry rate at least to what had been previously. Indeed, a more nuanced analysis limited only to outcomes for infants entering care earlier in the implementation period (not shown) showed that infants entering care in Region 4 experienced similar benefits (in terms of reduced length of stay) as the infants in Region 5.

Baseline, Target, and Actual Performance, Regions 4 and 5

The state director decided to keep the program going for another year. This would give Region 4 time to address barriers to implementation. In the meantime, having learned of the intervention’s effectiveness in Region 5, the Region 1 director wondered if the program could be replicated in his jurisdiction. Although, in general, Region 1 had the shortest length of stay of all the five regions, and relatively speaking, a smaller proportion of infants, he was aware that infants in his jurisdiction stayed in care much longer than older children. He began working with the state finance director on a feasibility study and reached out to the program developer to inquire as to whether any modified versions of the intervention were associated with similar benefits.

Appendix D: A Template for Assessing Capacity for Evidence Use

As noted above, one of the hallmarks of the 2012 ACF IM on CQI is that it calls upon states to assess their capacity for CQI and, in particular, its capacity to use evidence. Component IV, “Analysis and Dissemination of Quality Data” suggests that a functioning CQI system has the capacity to, “...track, organize, process and regularly analyze information and results.” Additionally, within Component V, “Feedback to Stakeholders and Decision-makers and Adjustment of Programs and Process,” the IM notes that “...how States use this information is a critical component to driving change within the organization and is key to improving outcomes for children and families.”

The template below is an expansion of the template provided in Figure 3 above.³⁴ The first three columns identify the CQI phase, the requirement for evidence at each phase, and general examples of evidence that may fill each requirement. The fourth column—*Evidence Used*—poses questions the state can answer in order to identify the specific types of evidence it brings to bear at each stage. The fifth column—*CQI Activity*—poses questions the state can answer in order to clarify *how* staff use that evidence in order to make the observations, claims, and/or decisions relevant to the stage in question.

CQI Phase	Required Evidence	Examples of Relevant Evidence	Evidence Used	CQI Activity
Define the Problem	Need evidence that supports the agency’s claim about current performance	Analysis of administrative data on child and family outcomes	What evidence does the state use to define baseline (current) performance?	Who does what with the evidence, when, and how? How does staff use this evidence to define the problem ? Who is responsible for asking and answering questions about system performance? How is the evidence disseminated? Who is involved in reviewing and drawing conclusions from the evidence? How frequently does this process occur?
Understand Underlying Conditions	Need evidence that supports the agency’s hypothesis about the underlying factors driving current performance.	Analysis of data on system processes Analysis of data on the quality of care Findings from case record review Findings from focus groups, interviews, or surveys Findings from systematic policy analysis	What evidence does the state use to understand the conditions (root causes) that underlie or drive the identified problem?	How does staff use this evidence to understand underlying conditions ? Who is responsible for posing and testing hypotheses about root causes? What is the process for developing a Theory of Change?

34. Adapted from Alpert, L. (October 2014). *Building Capacity for Evidence Use throughout the CQI Process*. The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.

CQI Phase	Required Evidence	Examples of Relevant Evidence	Evidence Used What evidence is brought to bear?	CQI Activity Who does what with the evidence, when, and how?
Identify a Solution and Plan for Implementation	Need evidence that supports the agency’s decision to implement the selected intervention (i.e., “evidence-based interventions”). Need evidence that justifies performance targets.	<p>Published program evaluations/evidence-based literature</p> <p>Ratings from evidence-based practice clearinghouses</p> <p>Research that supports the theory of change</p> <p>Analysis of historical system performance to support target setting and implementation timeframe</p> <p>Cost analysis to determine affordability and feasibility</p>	<p>What evidence does the state use to identify the most appropriate intervention to address the underlying factors and improve performance?</p> <p>What evidence does the state use to establish performance targets?</p>	<p>How does staff use this evidence to identify solutions and plan for implementation?</p> <p>What is the process for researching and proposing evidence-based interventions?</p> <p>What is the process for determining whether proposed interventions are feasible and cost effective?</p> <p>What is the process for agreeing on new interventions?</p> <p>What is the process for setting performance targets?</p> <p>What is the process for establishing and communicating implementation standards and training staff as necessary?</p>
Implement the Solution	Need evidence of the extent to which the intervention is being implemented with fidelity to the implementation plan (i.e., with fidelity to process and quality standards).	Analysis of process and quality data (outputs) to determine implementation fidelity (e.g., evidence regarding compliance and participation)	What evidence does the state use to determine whether its interventions are implemented with fidelity to the intended process steps and with the expected quality?	<p>How does staff use this evidence to implement the solution with fidelity?</p> <p>What is the process for the collection and analysis of implementation data?</p> <p>How do parties use evidence about implementation to monitor and, as necessary, improve fidelity? Who participates and with what frequency?</p>
Test the Solution and Revise Approach as Needed	Need evidence that supports the agency’s claim about the effectiveness of the intervention and decisions about what to do next.	<p>Analysis of data on proximal outcomes expected as a result of the intervention (i.e., change in workers’ knowledge, skills, and abilities to implement key practices; change in parents’ ability to change key behaviors, etc.)</p> <p>Analysis of data on child and family outcomes (change over time with respect to baseline and target outcomes)</p> <p>Cost analysis to determine return on investment</p>	<p>What evidence does the state use to determine whether its interventions are effective?</p> <p>What evidence does the state use to determine whether modifications to interventions are needed?</p>	<p>How does staff use this evidence to test and revise interventions?</p> <p>What is the process for reviewing and interpreting evidence on an intervention’s effectiveness? Who participates and how often?</p> <p>Who is responsible for using evidence to determine next steps regarding the intervention?</p>

Appendix E: Key Terms—Guiding Language for Reading the Report

This document has two purposes:

1. To strike a balance between using language that resonates with and is understood by the field and educating the community on more technical concepts of CQI, some of which we will use this document to introduce and explain.
2. To provide a set of guiding language for reading the report.

Accountability: Responsibility to provide evidence to stakeholders and funders about the effectiveness and efficiency of programs. (NY)

Benchmarks: Performance data that are used for comparative purposes. (NY)

Capacity: The ability to produce. The ability or power of an organization to apply its skills, assets, and resources to achieve its goals.³⁵

Capacity Building: ongoing evidence driven process to improve the ability of an individual, team, or organization, network, sector, or community to create measurable and sustainable results.

Continuous Quality Improvement: The complete process of identifying, describing, and analyzing strengths and problems in relation to a desired state and well-defined scope of interest, and then testing, implementing, learning from, and revising solutions to the reasons for problems and current gaps. It relies on an organizational culture that is proactive and supports critical thinking and continuous learning. “CQI is firmly grounded in the overall mission, vision, and values of the agency. Perhaps most importantly, it is dependent upon the active inclusion and participation of staff at all levels of the agency, children, youth, families and stakeholders throughout the process.”³⁶

CQI Structures and Functions: The agency structures and functions that support high-quality, sustainable CQI; structures/functions are needed to ensure that CQI is well-sponsored and occurring at all levels of the agency. (e.g., agency administrative units/departments, designated staff roles, communication procedures, policies on the books, technological infrastructure, and other tangible resources, etc.)

Critical Thinking: A wide range of thinking skills that are systematic and systemic, purposeful, reasoned, and goal directed for solving problems, formulating inference, calculating likelihoods, and making decisions. In the context of child welfare it is the focused use of cognitive skills that increase the art of analyzing, evaluating, and connecting the higher-level information that workers now receive through evidence-informed practice and research-based assessments with what the worker knows from experience to guide and improve practice and allow solutions to emerge. Problems are formulated precisely, evidence is gathered and assessed, concepts are formed, assumptions and implications are examined, and allowing informed solutions to emerge.³⁷

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35. Tuggle, Felicia, Peebles, Dana. (Presenters). (2013). *Constructing Capacity: Strategizing Sustainability*. Third Annual Teen Pregnancy Prevention Grantee Conference: Ready, Set, Sustain: Continuing Our Success. May 20–22, 2013. National Harbor, MD. Georgia Department of Human Services. Retrieved November 11, 2013 from http://www.hhs.gov/ash/oah/oah-initiatives/teen_pregnancy/training/Assests/leadership_capacity_building.pdf
 36. ACF Information Memorandum ACYF-CB-IM-12-07, August 27, 2012 from “Using Continuous Quality Improvement to Improve Child Welfare Practice – A Framework for Implementation,” Casey Family Programs and the National Child Welfare Resource Center for Organizational Improvement, May 2005.
 37. The University of Hawaii System. Reflective Thinking: RT (ND). Retrieved November 2013 from <http://www.hawaii.edu/intlrel/pols382/Reflective%20Thinking%20-%20UH/reflection.html> and see www.criticalthinking.org/files/Concept_Tools.pdf.

Evidence: “Information that is used to support an observation, claim, hypothesis, or decision. Evidence may be quantitative or qualitative and can be found in or derived from a variety of sources. For example, child welfare agencies may generate evidence themselves through the analysis of administrative data, case record reviews, or systematic focus groups or interviews. Agencies can also acquire evidence generated by others by reading peer-reviewed research articles, reviewing program evaluations, accessing information clearinghouses, or drawing on statistics compiled by government and other organizations. The most reliable evidence is usually that which is generated through the process of research.”³⁸ Evidence points to the outcomes that need improvement; informs the selection of interventions; guides the evaluation of interventions, and informs decisions about what to do in light of evaluation results.

Human Capital: A measure of skill sets, capabilities, and readiness at the individual, the group/team, unit and organizational levels.

Reflective Thinking: is a part of the critical thinking process that focuses on the processes of analyzing and making judgments about what has happened. It is the step back to assess what you know, what you need to know, why things are as they are, and to create a knowledge base about how to bridge the gap.

Research Evidence: Information produced as a result of research that is used to support an observation, claim, hypothesis, or decision.³⁹

Smart Measures: Measures that connect activities to outcomes. For child welfare, this requires layering of data across programs, governmental agencies at all levels, and from nongovernmental sources as well.

38. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, Language, and Shared Meaning: Toward a Common Understanding of CQI in Child Welfare*. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago (p. 2).

39. Adapted from 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

Appendix F: CQI References and Resources

The following is a list of CQI- and evidence use-related resources collated by members of the CQI workgroup; some models, tools, and protocols have been implemented widely whereas others may be at earlier stages of implementation and testing. Resources already cited in footnotes in the body of the report are not repeated here.

The CQI Process and Evidence Use

Annie E. Casey Foundation and the Center for the Study of Social Policy. (2011). Counting is not Enough: Investing in Qualitative Case Reviews for Practice Improvement in Child Welfare. Retrieved May 2, 2014 from http://www.aecf.org/~media/Pubs/Topics/Child%20Welfare%20Permanence/Other/CountingisNotEnoughInvestinginQualitativeCaseReviews/QCR_vrevisedFINAL_R10.pdf

Mind Tools. (n.d.). Gap Analysis. Identifying What Needs to be Done in a Project. Toolkit-Project Management-Scheduling. Retrieved April 23, 2014 from <http://www.mindtools.com/pages/article/newL6144.html>

National Resource Center Child Welfare Data Technology (NRCCWDT). (2014, January 24). Managing with Data Framework. Retrieved April 11, 2014 from <http://www.nrccwdt.org/managing-with-data/managing-with-data-framework/>

Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). Principles, Language, and Shared Meaning: Toward a Common Understanding of CQI in Child Welfare. Chicago: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago. https://fcda.chapinhall.org/wp-content/uploads/2014/07/2014-07-Principles-Language-and-Shared-Meaning_Toward-a-Common-Understanding-of-CQI-in-Child-Welfare.pdf

Wulczyn, F. (2007). Monitoring Child Welfare Programs: Performance in a CQI Context. Chicago: Chapin Hall at the University of Chicago. <http://www.chapinhall.org/research/report/monitoring-child-welfare-programs>

CQI Implementation Support

American Public Human Services Association, National Workgroup on Analytics. (2014). Analytic Capability Roadmap 1.0 for Human Service Agencies. http://www.aphsa.org/content/dam/aphsa/pdfs/NWI/FINAL_NWI%20Analytics%20Capability%20Roadmap_4.17.14.pdf

American Public Human Services Association. (2010). Building Markers of Effectiveness. Retrieved April 2014 from <http://www.aphsa.org/content/dam/NAIPM/PDF%20DOC/Past%20Conference/Building%20Organizational%20Effectivenesshandout%20by%20Kathy%20Kelly.pdf>

American Public Human Services Association. (2012). A Guidebook for Building Organizational Effectiveness Capacity; A Training System Example. Retrieved April 2014 from <http://www.aphsa.org/content/dam/aphsa/pdfs/OE/2012-09-Guidebook-Building-OE-Capacity.pdf>

American Public Human Services Association. (2011). Continuous Improvement Plan Guide and Template. Retrieved November 2014 from <http://www.aphsa.org/content/dam/aphsa/pdfs/OE/2011-Continuous-Improvement-Plan-Guide-Template.pdf>

American Public Human Services Associations. (2014). APHSA's Organizational Effectiveness (OE) Practice: Evaluation Fact Sheet. Available January 2015 from <http://www.aphsa.org/content/APHSA/en/resources/OE/PUBLICATIONS.html>

Basso, P., Cahalane, H., Rubin, J., & Jones-Kelly, K. (2013). Organizational Effectiveness Strategies for Child Welfare. In H. Cahalane (ED.), *Contemporary Issues in Child Welfare Practice* (pp. 257–287). New York; Springer.

Casey Family Programs and the National Child Welfare Resource Center for Organizational Improvement (NRCQI). (May 2005). Using continuous quality improvement to improve child welfare practice—A framework for implementation. <http://muskie.usm.maine.edu/helpkids/rcpdfs/CQIFramework.pdf>

Martin, K.T. (n.d.). Continuous Quality Improvement: Methods and Tools. RC Educational Consulting Services, Inc. Riverside CA. Retrieved May 2, 2014 from <http://www.rcecs.com/MyCE/PDFDocs/course/V7029.pdf>

Rubin, Jon. (2009, December). Front line practice: Define, Assess, Plan, Implement, Monitor. *Policy and Practice*, 68 (6) 11–13. <http://www.aphsa.org/content/dam/aphsa/pdfs/OE/2009-12-FrontLinePractice-DAPIM-PolicyPractice.pdf>

National Child Welfare Resource Center for Organizational Improvement. (2014). Lessons from the field: Assessing and improving CQI. *Child Welfare Matters*. (Winter/Spring 2014). <http://www.nrcoi.org/rcpdfs/cwmatters14.pdf>

National Implementation Science Network (NIRN). (2013). *Implementation Drivers: Assessing Best Practices*. Frank Porter Graham Child Development Institute. University of North Carolina Chapel Hill. <http://implementation.fpg.unc.edu/resources/implementation-drivers-assessing-best-practices>

U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children’s Bureau. (August 27, 2012). Continuous Quality Improvement in Title IVB and IVE Programs [Information Memorandum Log No: ACYF-CB-IM-12-07]. <http://www.acf.hhs.gov/sites/default/files/cb/im1207.pdf>

U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children’s Bureau. (2014, March 14). A Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare. <http://www.acf.hhs.gov/programs/cb/resource/framework-workgroup>

State-Specific CQI Efforts and Documentation

National Child Welfare Resource Center for Organizational Improvement. (n.d.) CQI Research Project—Descriptions by State. <http://muskie.usm.maine.edu/helpkids/CQIproj/cqistate.htm>

New York State Office of Children and Family Services (OCFS). (n.d.). New York State Child Welfare Program Improvement Data Guide: Logic Model Framework for Continuous Improvement. Data Packet Excerpt. <http://muskie.usm.maine.edu/helpkids/CQIproj/NYLogicModelOverviewGuide.pdf>

Maryland Department of Human Services. (2013, June 20). Maryland’s Child Welfare Continuous Quality Improvement Gap Analysis, based on ACYF-CB-IM-12-07. <http://www.dhr.state.md.us/documents/Data%20and%20Reports/SSA/2013%20Child%20and%20Family%20Annual%20Progress%20and%20Services%20Report/Appendix%20L.%20Maryland%20CQI%20Gap%20Analysis.pdf>

Virginia Root Cause Analysis for Process Improvement. (2009). VA Root Cause Analysis for Process Improvement. Source: (Adapted from Okes, Duke. *Root Cause Analysis: ASQ Quality Press* (March 10, 2009). *The Core of Problem Solving and Corrective Action—The DO IT Problem Solving Model*). <http://muskie.usm.maine.edu/helpkids/QINetwork/StateDocs/VA%20Root%20Cause%20Analysis%20for%20Process%20Improvement.doc>

CQI Knowledge and Skill Building

The Center for State Child Welfare Data. (n.d.) Advanced Analytics for Child Welfare Administration. <https://fcda.chapinhall.org/knowledge-in-action/education-training-and-technical-assistance/advanced-analytics-child-welfare-administration/>

U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children's Bureau. (n.d.). Child Welfare Evaluation Virtual Summit Series.

<http://www.acf.hhs.gov/programs/cb/assistance/program-evaluation/virtual-summit>

U.S. Department of Health and Human Services, Administration on Children, Youth and Families, Children's Bureau. (n.d.). Training and Technical Assistance. <http://www.acf.hhs.gov/programs/cb/assistance>

U.S. Department of Health and Human Service, Agency for Healthcare Research and Quality (April 2014). AHRQ Quality Indicators Toolkit. Tool D.5 Instructions Gap Analysis. Retrieved April 23, 2014 from <http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/d5-gapanalysis.pdf>

Evidence-Based Policy and Practice

California Evidence-Based Clearinghouse for Child Welfare. <http://www.cebc4cw.org/>

Coalition for Evidence-Based Policy. <http://toptierevidence.org/>

Appendix G: About APHSA and its NAPCWA Affiliate

The American Public Human Services Association (APHSA) is a bipartisan, nonprofit organization representing appointed state health and human service agency leaders. APHSA was founded in 1930 as the American Public Welfare Association and changed its name to APHSA in 1997. APHSA is the only association of the nation's top government human service executives from states, the District of Columbia, and territories—and their key state program managers, plus hundreds of county-level directors of human services throughout the nation—for the exchange of knowledge, data, best practices, policy review and development, networking, and advocacy.

The National Association of Public Child Welfare Administrators (NAPCWA) is a national organization representing public child welfare agencies. Founded in 1983, it is an affiliate housed within the American Public Human Services Association. NAPCWA's vision is ensuring that children in the public child welfare system are safe; nurtured in loving, permanent homes; and supported in their social and emotional growth and development. NAPCWA's mission is to provide national leadership for the development of sound policy, successful and innovative practices, and critical capacity building to improve agency performance and consumer outcomes.

NAPCWA is governed by a 25-member Executive Committee (EC) whose members are elected annually by the state and local public agency membership. The EC provides input to APHSA on child welfare policy, guidance on administrative and regulatory reforms, and leadership on promising and emerging practices. It also examines essential stakeholder relationships necessary to carry out the work of public child welfare. More information is available at www.aphsa.org/content/NAPCWA/en/home.html.

NAPCWA has ongoing dialogue with state child welfare leaders regarding the effectiveness of child welfare practices and policies. Workgroups comprised of NAPCWA members and other experts in the field are convened as necessary to address specific issues deemed critical by the NAPCWA Executive Committee. Working with APHSA and its other affiliates, NAPCWA is able to gather the right people together when a pressing child welfare issue calls for high-level and/or cross health and human services cross-program dialogue. This is increasingly important as emerging practices seek service integration and regulatory flexibility to enable transformation into a holistic people oriented system.

This work fits into APHSA/NAPCWA's broader agenda for strengthening states' ability to use evidence and support states' needs to sustain a strong CQI environment to achieve and improve positive outcomes for the children, youth and families that come to its attention. In *Pathways: The Opportunities Ahead for Human Services* initiative,⁴⁰ APHSA has set out a transformation agenda with four priority impact areas—gainful employment and independence; stronger families, adults, and communities; healthier families, adults, and communities; and sustained well-being of children and youth. More information is available at www.aphsa.org/content/NAPCWA/en/home.html.

40. American Public Human Services Association. (2010) *Pathways: The Opportunities Ahead for Human Services*. Retrieved July 2, 2014 from <http://www.aphsa.org/Policy/PW-about.asp>