



**CQI
Training
Academy**

HANDBOOK

Using Data to Implement Change

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Introduction to the CQI Training Academy Handbook

The CQI Training Academy was created to support continuous quality improvement (CQI) teams in building a common understanding of CQI practices and applying those practices as they work to strengthen families, deliver services, and build more resilient communities. The CQI Training Academy was updated in 2022 to reflect the latest thinking on CQI best practices. It was designed to enhance your understanding of the CQI and implementation process and help you apply related concepts to understanding your challenges, identifying and testing potential solutions, and using data to implement, test, and enhance interventions that result in improved outcomes for children, youth, and families.

Who Should Use This Handbook?

This handbook is designed to help child welfare professionals at all levels understand the CQI and implementation process and come to a shared understanding of how to implement CQI effectively in public child welfare agencies. Each person using this handbook has a unique set of experiences and level of exposure to CQI. Some work in agencies where CQI has been functional for some time and, as a result, have more experience with CQI and implementation processes. Others are just beginning their involvement with CQI. No matter where you are starting, this handbook can serve as a good foundation to help you make improvements in your agency.

Why Do You Need the CQI Training Academy?

Using a structured CQI and implementation process can help agencies take actions over time to improve practices and enhance outcomes for children, youth, and families in a sustainable and data-informed way. Despite the abundance of information available to identify the strengths and weaknesses of child welfare programs, many children, youth, and families still do not see improvements in their well-being. Many children continue to:

- ◆ Experience maltreatment in their own homes or in placement settings
- ◆ Enter care unnecessarily
- ◆ Have multiple placements while in foster care and endure delays in achieving permanency
- ◆ Face barriers to accessing needed services, as do their parents

Dive Deeper

This handbook and online modules are full of information showing you how the CQI and implementation process ideally looks. But how does it fit with your own experience?

Look for this symbol throughout the handbook for suggestions to help you deepen your understanding of concepts.

- ◆ Share your thoughts and questions with others to help you transfer ideas into your everyday practice.
- ◆ Look for opportunities to talk with colleagues in the car, on a lunch break, or at the beginning of a web conference.
- ◆ Seek the perspectives of a younger worker, someone close to your age, a person new to the agency, those with lived experiences, a child welfare veteran with many years with the agency, and system partners.

- ◆ Leave foster care without the education, skills, and social supports they need to advocate for themselves and be self-sufficient
- ◆ Struggle to advocate for their mental and physical health needs after exiting foster care

While more information gives a clearer idea of what the problems are, it does not always explain why these problems exist or what changes are needed to solve them. As a result, you may design improvement strategies based on anecdotal reports or solutions other agencies tried without any evidence that they will work for your agency.

Figuring out what is working and what is not will continue to be a struggle for an agency that makes decisions about programs, strategies, or other interventions but the agency does not:

- ◆ Systematically implement and test interventions across different populations
- ◆ Monitor how strategies may impact experiences and outcomes
- ◆ Include input from the families and youth it serves

The CQI Training Academy will help your agency build a common understanding among child welfare professionals at all levels about the benefits of using a structured CQI and implementation process in daily practice.

Chapter 1

Using Data and Implementation to Guide Improvement

Read this chapter to answer foundational questions, such as:

- ◆ What is CQI?
- ◆ Why should you use CQI?
- ◆ What are the steps in a CQI and implementation process?
- ◆ What are the key CQI roles, responsibilities, and functions?

What Is CQI?

CQI is the process of identifying, defining, and examining strengths and problems and then testing, implementing, learning from, and modifying the solutions. Since its introduction in the late 1940's, CQI models and systems have been adopted worldwide by a variety of industries and organizations, including child welfare agencies. (See [Children's Bureau 2012 Information Memorandum](#)).

Effective CQI systems are defined by five unique features:

- ◆ **Data-driven:** Making decisions based on collection, analysis, and interpretation of evidence
- ◆ **Comprehensive:** Including community and system partners and families and youth served by the child welfare agency
- ◆ **Proactive:** Anticipating the future rather than reacting to circumstances as they occur
- ◆ **Systematic:** Using specific processes in a standardized manner
- ◆ **Holistic:** Examining many systems and processes at the same time

While sometimes confused with quality assurance, CQI is a much broader process. Quality assurance in child welfare refers to the systematic review of case records and other activities to assess compliance with state, federal, and local requirements. CQI aims to foster continual improvement across programs and agencies.

Why Should You Use CQI?

A fully implemented CQI system helps child welfare agencies deliver more effective and accessible services that are more likely to result in the agencies' desired outcomes for children, youth, families, and communities. Child welfare data are collected and reported from a variety of sources (e.g., case file reviews, management information systems (MIS) from jurisdictions, Comprehensive Child Welfare Information Systems (CCWIS) and Statewide Automated Child Welfare Information System (SACWIS), program evaluation studies, demographic information, and reports), but often are not integrated or communicated in a meaningful way that connects back to practice. As a result, increased access to data does not always lead to improved outcomes for children, youth, and families.

Efficient collection and use of data through a CQI process not only helps agencies better identify the root causes of critical problems but also helps agencies stay nimble, making adjustments to programs and services over time, and more responsive to the changing needs of their communities. Without this, agencies may fail to fully understand and build upon the strategies that are working and risk losing progress by going back to the drawing board to overhaul programs and supports.

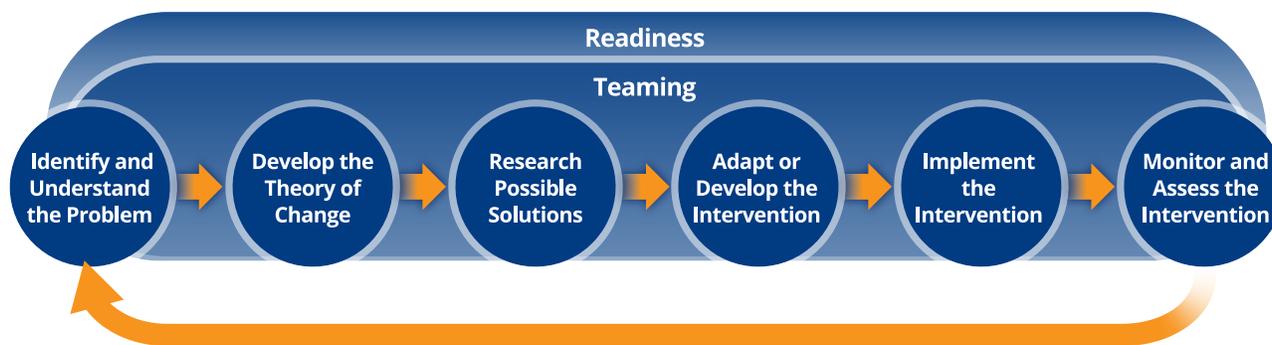
What Are the Steps in a CQI and Implementation Process?

A CQI and implementation process includes:

- ◆ Identifying and understanding the problem
- ◆ Developing a theory of change
- ◆ Researching solutions
- ◆ Developing or adapting an intervention
- ◆ Implementing an intervention
- ◆ Monitoring and assessing the change process
- ◆ Repeating the cycle

This process is supported by the collection, analysis, and interpretation of data; effective teaming, communication, and collaboration; assessing and building readiness for change; and ensuring support for sustaining CQI efforts. This cyclical process is illustrated in figure 1 below.

Figure 1. The CQI and Implementation Process



Step 1: Identify and Understand the Problem

To begin the cycle, first identify and understand what it is you are trying to solve by using data to inform these questions:

- ◆ What is the challenge?
- ◆ Who is it affecting?
- ◆ Why is it occurring?
- ◆ Does it stem from a wholly unmet need, or a current practice or process that needs improvement?
- ◆ What do you know about the population most affected and why is that the case?

As you explore the problem, pay attention to whether different populations in your community experience the problem differently or have varying needs. To better understand the underlying causes, engage those closest to the problem, including youth and families with lived experience in child welfare.

For more information on this step, see:

 [Chapter 3: Problem Exploration: Identifying and Understanding Issues](#)

A Few Words About Terminology

In this handbook, we use the phrase “CQI and implementation process” to emphasize that improvement efforts and implementation practices must work hand in hand. You may know the structured process that guides systems change and practice improvements by other names, including “CQI,” “cycle of learning and improvement,” “change and implementation,” “change management,” “plan, do, study, act,” or similar terms. For definitions of additional terms, see the glossary at the end of the handbook.

Step 2: Develop the Theory of Change

When working toward a solution to a challenge, think with the end in mind:

- ◆ What is your desired result?
- ◆ What will be different in your agency and community when the problem is solved?
- ◆ What conditions or changes will ultimately lead to this result?

A theory of change is a roadmap that charts the path from an identified problem, need, or opportunity to desired outcomes. It can be revisited throughout a CQI and implementation process to maintain alignment across teams. When co-created with community partners, a theory of change can anchor a shared vision for improvement efforts.

For more information on this step, see:

 [Chapter 4: Building a Pathway to Change](#)

Step 3: Research Possible Solutions

Choosing the right solution is crucial to improving outcomes. While there is often pressure to rush to a decision, taking time to research options and think critically about fit and feasibility can prevent wasted resources in the long run. When selecting an intervention, consider the following questions:

- ◆ Does it align with your theory of change?
- ◆ Do you have evidence the solution is effective?
- ◆ To what degree is the intervention usable?
- ◆ Is the solution appropriate for your target population?
- ◆ Has it been tested with other populations?
- ◆ Does it meet the needs of different population groups in your communities?
- ◆ Does the solution fit with your child welfare system and agency?
- ◆ Is implementation of the intervention feasible given your agency's capacity?

For more information on this step, see:

 [Chapter 4: Building a Pathway to Change](#)

Step 4: Adapt or Develop the Intervention

An existing intervention can be implemented as-is or adapted to better fit with the intended population's needs or your agency's specific circumstances. When adapting an evidence-supported intervention, make every effort to preserve the integrity of the core components. If no well-defined interventions meet agency and population needs and circumstances, teams may need to design a customized solution.

For more information on this step, see:

 [Chapter 4: Building a Pathway to Change](#)

To ensure your agency will be able to effectively put the new intervention in place, be sure to assess readiness. Readiness reflects the organization's capacity and staff motivation for change.

For more information on this readiness, see:

 [Chapter 2: Foundations for a Systematic Approach to Problem Identification](#)

 [Chapter 7: Taking Action to Drive Improvement](#)

Step 5: Implement the Intervention

Implementation science makes clear that planning, capacity building, and thoughtful implementation are important to achieving desired outcomes. An implementation plan with clear steps for preparing an agency, building capacity, and rolling out the intervention lays the groundwork for implementation success.

Before launching a new program or intervention on a large scale, test components or procedures through a pilot implementation on a small scale to introduce the intervention gradually. These processes support an agency in preparing for full-scale implementation by “working out the kinks” and planning for needed supports.

For more information on implementation, see:



[Chapter 5: Implementing Interventions](#)

Step 6: Monitor and Assess the Intervention

Monitoring and evaluation offer essential feedback loops to answer questions:

- ◆ Has the intervention been delivered as intended?
- ◆ Are there barriers to implementation and how can they be addressed?
- ◆ What strengths can be further advanced?
- ◆ Is the intervention achieving desired outcomes?
- ◆ How is the intervention impacting outcomes for different population groups?

For more information on this step, see:



[Chapter 6: Monitoring and Assessing Interventions](#)

Through structured processes, agencies can gather and use data to inform decision-making about spreading, adjusting, or discontinuing a program or set of practices.

All the Steps Are Done! What’s Next?

Once you have worked through all six steps, continue the CQI and implementation process by starting again with Step 1: Identify and Understand the Problem (see figure 1).

What Are Key CQI Roles, Responsibilities, and Functions?

Teaming throughout the entire CQI and implementation process is vital to the process of creating sustainable change. Agency staff at all levels, community and system partners, and families and youth affected by the child welfare system all play a significant role in agency CQI programs.

For more information on teaming, see:



[Chapter 2: Foundations for a Systematic Approach to Problem Identification](#)

Use the CQI Training Academy to help prepare your team for the CQI and implementation process. With this foundational knowledge you can work together to determine what is a priority problem and why it is occurring; take the necessary implementation process steps to identify, implement, test, and revise potential solutions to the problems; and figure out the relationship between what the agency does and improved outcomes for children, youth, and families.

Your ability to identify specific CQI roles and functions can further strengthen your agency's CQI program and build its efficacy so that children, youth, and families have better outcomes. As your agency continues to strengthen its CQI program, CQI will become more integrated into your daily work.

There are four key functions that are fundamental to effective CQI systems including:

- ◆ Data collection
- ◆ Data analysis and interpretation
- ◆ Effective communication, collaboration, and teaming for improvement
- ◆ Support for sustainable CQI

As you learn about these functional areas, you may recognize where you play a role in your child welfare system and whether your involvement is direct or indirect. You may also notice that the CQI activities you carry out are found in more than one functional area.

Consider how the tasks of your role are interwoven into these activities and help promote the movement of the cycle as you read about each of the functional areas.

Data Collection



There are many data collection methods involved in the CQI and implementation process and you may deal with data collection directly or indirectly. Data collection responsibilities include:

- ◆ Collecting data from your agency's statewide information system, the state's case review process, or other sources
- ◆ Ensuring that data collected from various sources are of high quality by considering if the data are:
 - ◆ From a credible source
 - ◆ Timely
 - ◆ Complete (i.e., little missing data)
 - ◆ Measuring what they are intended to measure
 - ◆ Free of errors (and if not, to what extent)
 - ◆ Representative of the population served by the agency (or the subpopulation of interest)
- ◆ Extracting data from various systems and compiling them into meaningful reports by using program-specific language and well-designed data visualizations, as well as running reports from automated systems
- ◆ Tracking trends within your agency, like placement stability of children in care, numbers of children having timely reunifications, and other measures
- ◆ Developing measures or determining changes in factors that help illustrate what success will look like in terms of data and other feedback

- ◆ Helping to ensure that direct delivery staff input accurate, timely data into the state's CCWIS or other data-gathering systems
- ◆ Ensuring necessary training and coaching are available to support quality and timely data entry and to address any data quality concerns with information entered into CCWIS/SACWIS
- ◆ Finding the causes of data quality issues and putting corrective measures in place
- ◆ Understanding issues and casual factors and deciding if more data are needed to determine an issue's root cause
- ◆ Collecting data from both process measures (e.g., were training and coaching provided as planned?) and outcome measures (for example, did placement stability improve?) so success can be determined as the projects and innovations unfold
- ◆ Determining if goals are being met and ensuring that appropriate data are collected to use in evaluation activities

Data Analysis and Interpretation



Like data collection, data analysis and interpretation cover a wide array of types of data and responsibilities. To select the best solution, you may need to dig deep into the data, asking “why” questions along the way to help determine the root causes of identified issues. Data analysis and interpretation responsibilities include:

- ◆ Ensuring that the right kinds of quantitative and qualitative data are being collected, and from multiple sources like administrative data, state or federal datasets and measures, data systems from universities and other agency partners, case reviews, surveys, focus groups, interviews with interested parties, and research
- ◆ Ensuring that data from the different sources are connected in a meaningful way to provide a more comprehensive picture of issues being explored
- ◆ Analyzing data to identify trends, strengths, and concerns so your agency can identify and understand its problems
- ◆ Ensuring that data are transferred into user-friendly, culturally responsive formats and languages tailored to your audiences, which may be staff, community partners, or other external community and system partners, including families, youth, and caregivers served by the agency
- ◆ Bringing data to life and presenting them as meaningful information that can be used to make and act on decisions
- ◆ Seeking, listening to, and incorporating the perspectives of youth, parents, caregivers, staff, community service providers, or other external community and system partners in understanding context behind the data and exploring root causes impacting performance
- ◆ Seeking, listening to, and incorporating the perspectives of families, community members, and staff to provide contextual knowledge to the data
- ◆ Investigating possible interventions, presenting information to others, and considering existing solutions or developing new ones
- ◆ Studying the effectiveness of new interventions to learn from consumers and partners about strategies that support their needs
- ◆ Developing a theory of change that shows the results the agency wants to achieve and how a problem will be addressed to obtain those results
- ◆ Helping select a specific intervention that appears best suited to address the identified concern and is appropriate for the populations served
- ◆ Focusing on solutions that are evidence-based, evidence-informed, or otherwise show promise
- ◆ Analyzing process and outcome data to determine if the intervention is being implemented as designed and planned and if desired results are being achieved
- ◆ Analyzing and interpreting data to evaluate the intervention according to the evaluation design
- ◆ Analyzing data throughout the intervention evaluation to monitor for unintended negative outcomes

Effective Communication, Collaboration, and Teaming



At the core of an effective CQI program is the involvement of multiple groups and perspectives. Staff and system and community partners (such as tribes, law enforcement, courts, service providers, foster and adoptive families, and families and youth served) need to understand and have input into where the agency wants to go and how it hopes to get there. CQI provides a unique opportunity for you to hear from those most affected by child welfare services. Involving all community and system partners promotes ownership of the agency and its services, fosters support for child welfare work and a recognition of the challenges, and greatly enriches the CQI and implementation process. Effective communication, collaboration, and teaming responsibilities include:

- ◆ Ensuring that information provided is open and transparent about agency goals, activities, and outcomes
- ◆ Disseminating data and information to others at regular intervals, following a dissemination plan
- ◆ Providing data, reports, and other information to CQI and implementation teams—information provided should be consistent and tailored to your audience so that it is accessible, with alternate language versions as appropriate to the community, and easily understood
- ◆ Sharing data bidirectionally with all involved parties and getting input on what is collected and measured by the agency to better understand and address any existing issues
- ◆ Involving all community and system partners actively in identifying opportunities to improve, set goals, consider solutions, and select interventions on an ongoing basis, and using that input to develop implementation plans and help see that infrastructure to support change is available
- ◆ Asking communities about what has already been successful to support the safety, permanency, and well-being of children in order to generate community-informed solutions
- ◆ Asking for feedback on an ongoing basis
- ◆ Engaging family and youth voice for the children in foster care
- ◆ Partnering with people with lived experiences by involving youth and family teams
- ◆ Making certain that family, youth, foster family, tribe, and provider voices are heard
- ◆ Combining and analyzing feedback information from the various partners
- ◆ Ensuring that all internal and external community and system partners play a role in helping to monitor if the project has been implemented as intended and if goals are being met:
 - ◆ If adjustments need to be made, community partners, families, and other system partners should fully participate to make decisions and help monitor changes
- ◆ Ensuring that different divisions within the agency such as legal, policy, program, information technology, training, and others routinely interact and are on the same page about new policies, projects, goals, and CQI or implementation activities

Among agency divisions and external community and system partners, data will be constantly shared, assessment will take place, and feedback information will be provided in planning and implementing. Communication activities will take place in an organized and systematic way according to predetermined dissemination and communication plans.

Support for Sustainable CQI



Everyone involved in the CQI and implementation process can provide support to sustain ongoing CQI by translating their agency's mission and vision into solid plans and actions. You will promote a culture of learning, adjusting, and improving, while also supporting your agency in building the capacity to implement and sustain a strong CQI system. Support for sustainable CQI responsibilities include:

- ◆ Engaging in strategic and project planning to determine where the agency is, where it wants to go, and how it will get there
- ◆ Leveraging the community voice and those with lived experience so that solutions are co-designed to promote well-being

- ◆ Helping remove barriers, such as a lack of community resources, in implementing new innovations
- ◆ Helping promote strong multidirectional communication linkages throughout the agency among all community and system partners to support staff and continue to drive meaningful change
- ◆ Ensuring that practice and CQI policies and procedures are in writing, are well-articulated, and are consistent throughout all divisions
- ◆ Ensuring that expectations across the agency are clear, that direct delivery, CQI, and implementation staff have the training and coaching they need, and that they are supported in their activities
- ◆ Advocating for other services and resources needed by CQI and field staff, like equipment, funding, administrative support, office space, and community services and support
- ◆ Helping to ensure a well-articulated, common approach across the state, in both the agency and with community partners, in implementing, reviewing, and adjusting any CQI or practice intervention process
- ◆ Helping make certain that any changes are made in a consistent, uniform way
- ◆ Promoting CQI and implementation processes, constant learning and improvement, and better outcomes for families and children

Taking time to understand your state’s entire CQI operation and your colleagues’ roles in the process and job responsibilities, even to the extent of some cross-training, results in increasing your own skills, versatility, and professional growth. Whether you or your colleagues are involved in one or more of the functional areas, each of you plays a critical and integral part in your state’s ongoing cycle of implementing, learning, and improving.

Summary

In this first chapter you learned that the CQI and implementation process consists of identifying the problem, researching a solution, developing a theory of change, adapting or developing the intervention, implementing the intervention, and monitoring and assessing the intervention. The CQI and implementation process helps to deliver more effective services that will likely result in better outcomes for children, youth, families, and communities. Understanding your and your colleagues’ roles in the CQI functional areas (data collection, data analysis and interpretation, effective communication, collaboration and teaming, and support for sustainable CQI) will help you contribute to a structured CQI and implementation process at your agency.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

- ◆ **Information Memorandum ACYF-CB-IM-12-07**
[IM-12-07 | The Administration for Children and Families \(hhs.gov\)](#)
 Children’s Bureau (2012)
- ◆ **Building and Maintaining a Sustainable CQI Process**
https://www.powershow.com/view/a3f2d-OGU2M/Building_and_Maintaining_a_Sustainable_CQI_Process_powerpoint_ppt_presentation
 Watson, P., Milner, J., and Phillips, J. (n.d.)

Dive Deeper

Think about a time you’ve worked with others on a team:

- ◆ What new perspectives did others bring to the team?
- ◆ Who did you appreciate collaborating with and why?
- ◆ What made the collaboration work?
- ◆ What can you do to invite collaboration at your agency?

Dive Deeper

Think of a time when you’ve worked with people with lived experiences or people outside of your agency:

- ◆ What worked to ensure that their voices were heard?
- ◆ What helped to establish trust?
- ◆ What strategies can you use to promote trusting relationships with your agency?

Chapter 2

Foundations for a Systematic Approach to Problem Identification

Now that you have learned about the systematic CQI and implementation process, you will learn about the foundational supports that child welfare agencies use to establish and sustain an effective process, including:

- ◆ Use of high-quality data and evidence
- ◆ Readiness for change
- ◆ Well-functioning teams and communication channels

Following a sound implementation process helps agencies assess and ensure readiness for change, overcome resistance, facilitate buy-in, and identify champions for change. Figure 2 describes each of these foundational supports.

Figure 2. Foundations for a Systematic Approach to Problem-Solving



These foundations help ensure that baseline standards are set so that the CQI and implementation process is thorough and methodical and uses all resources to their fullest extents.

This chapter provides an indepth discussion of each foundation, including strategies that should be employed in your agency's CQI and implementation process. Using these strategies should lead to greater outcomes for your agency and the children, youth, families, and communities you serve.

Promoting High-Quality Data

Data and evidence inform every step in the CQI and implementation process. Data are used to determine if a problem exists and why, to select an intervention, implement and ensure fidelity to the intervention, to monitor progress, determine if revisions are needed, and to see if you are moving in the right direction. Promoting high-quality, accurate data is essential.

In this section, you will learn how to promote and use high-quality data from the two main sources of CQI data:

- ◆ Management Information Systems
- ◆ Case review process

While there are other valid data sources such as data from courts and other system partners, program evaluations, and qualitative data from staff or community focus groups, MIS and the case review process constitute the main sources.

Management Information Systems

All 50 states have an MIS, a data collection and reporting system designed to meet federal reporting requirements. Most states are developing or enhancing their MIS to meet the requirements of the CCWIS; however, some still use an MIS that was designed to meet the SACWIS requirements or have decided not to pursue an MIS that meets CCWIS requirements. The MIS stores case-level data on the children, youth, and families an agency serves and each child or youth in foster care or in out-of-home placement. Data include:

- ◆ Information about the background, demographics, and status of the child and child's family
- ◆ Case activities related to the child
- ◆ Whereabouts of the child and family

Depending on the state or the system, MIS may not include the same level of information on children who are the subject of maltreatment reports and who are not involved with ongoing services from the agency. Data are used to manage and monitor case-specific activity. Caseworkers use the system to manage their cases, while agency supervisors use the system to monitor, review, and approve case work.

Although a state's MIS can be used in a variety of ways, the one most relevant to CQI is its use as a source of data for developing aggregate reports about agency performance. States use different technology, platforms, and methods to generate aggregate data reports such as dashboard reports, "report cards," data relevant to the federal Child and Family Services Review (CFSR) statewide data indicators, as well as other outcomes of importance to the agency. These reports assist administrators, practitioners, and supervisors in identifying problem areas and trends in performance over time and across localities, such as counties or regions.

States vary in their implementation of CCWIS or SACWIS, but most now have a sophisticated MIS that includes comprehensive case management functions and collects data far beyond federal reporting requirements. Child welfare agencies typically supplement MIS data with case reviews to provide more indepth information than is available from the MIS alone.

Data entry issues often hamper the quality of MIS data. The most frequently voiced concerns about MIS data are their accuracy, timeliness, and completeness. If data are not accurate, timely, and complete, the aggregate reports generated from the data cannot be considered valid; that is, they cannot be considered correct assessments of agency performance regarding a particular measure.

Poor data quality happens for a myriad of reasons, including:

- ◆ Extensive and competing demands on caseworker time
- ◆ Caseworkers' schedules not allowing for entering data promptly and accurately
- ◆ State agencies not requiring caseworkers to complete certain data-related items
- ◆ Caseworkers not asking families to self-identify race and ethnicity, leading to incomplete data on racial and ethnic demographics
- ◆ Incomplete or incorrect data conversion processes

Dive Deeper

- ◆ What's on your wish list for improving your agency's MIS data?
- ◆ In your role, how can you improve data quality in your agency?

- ◆ Data collection processes are not clearly communicated
- ◆ Personnel responsible for data entry lacking proper training

To close the gaps in the data collection process and ensure that all data are collected in a timely, accurate, and complete fashion, take the following steps:

- ◆ Cross-check MIS placement information with placement information from other documents
- ◆ Cross-check MIS placement information with placement information from interviews with caseworkers, supervisors, and the child
- ◆ Require “office” days for data entry
- ◆ Provide access to laptops or handheld devices and Wi-Fi hotspots in the field

The CQI Case Review Process

Often questions arise about case practice or the experiences of children, youth, and families served by the child welfare agency that cannot be answered by data in the MIS. This could be due to:

- ◆ Specific information not being collected in the MIS
- ◆ Difficulties getting that information out of the MIS in an aggregate report format
- ◆ The need for context to better understand the MIS data and case practice variables

When these situations occur, agencies often conduct a case review process to gather the needed information. The case review process usually involves reviewing a sample of cases, including both the computerized case file and any hardcopy case file available. The process may include interviews with caseworkers, children, youth, parents, and foster parents including relative caregivers. The case review process should achieve the following objectives:

- ◆ Capture data not in the MIS
- ◆ Capture data that cannot be retrieved from the MIS
- ◆ Capture more case-specific data

These case review steps allow practitioners to collect a generalization of findings that apply to the entire population:

1. Develop questions and a case review instrument by eliciting information regarding child outcomes or case practice.
2. Select a sample of cases that represent the populations of interest.
3. Review each case using the instrument and by conducting interviews.
4. Summarize case review findings across cases to depict agency performance regarding child and family outcomes.

The three main data quality concerns in the case review process are the reviewer subjectivity of the case review instrument and analysis of interviews and the lack of representativeness of the sample. To ensure the accuracy of findings, address the issue of subjectivity:

- ◆ **Establish clear criteria.** By establishing clear criteria and training reviewers to use the same criteria, the CQI practitioner can ensure consistency among the individuals who are reviewing cases.
- ◆ **Train reviewers on criteria,** as the inter-rater reliability process serves as a needs assessment by having different case reviewers score the same cases and then assesses for discrepancies.
- ◆ **Check consistency** using inter-rater reliability assessments. If the scores are inconsistent, more training is needed for reviewers to establish uniformity.

When conducting a case review, the child welfare agency must use a representative sample that allows generalization of the findings to the entire population. A sample is considered representative if the findings using the sample would be the same as if every case in the system were reviewed. Using a random approach to selecting cases will be discussed in more detail in a later chapter.

Your responsibilities regarding promoting high-quality data are to ensure that:

- ◆ Data answer key questions
- ◆ MIS data are accurate, timely, and complete
- ◆ The case review process incorporates a representative sample
- ◆ Scoring across case reviewers in the case review process is consistent

Additional Data Sources and Data Triangulation

In addition to MIS and the case review process, other data sources can enhance knowledge and understanding through data triangulation. Data triangulation uses and applies multiple forms of research to increase the validity of findings. It includes multiple observations from sources such as:

- ◆ Interviews and focus groups conducted in a culturally responsive manner and surveys of community and system partners, frontline staff, and family members and youth with lived child welfare experience
- ◆ Supervisor's logs or spreadsheets
- ◆ Foster Care Review Board reports
- ◆ Program evaluation data
- ◆ MIS data from system partners, including courts and other state child-and-family-serving systems (Medicaid, behavioral health data, etc.)

Surveys using a community's primary language, focus groups with families and youth, and exploration of data from other sources can help paint a clearer picture of the problem being addressed, as well as increase confidence, credibility, and validity of data collected in the MIS and case review process.

Ensuring Readiness for Change

Change is constant in today's workplace; however, even positive change can be unsettling, and significant change in an agency can be stressful. To successfully implement change, the agency must support employees and others affected by a change effort in a responsive and sensitive manner.

You can mitigate issues and manage change in your agency by helping staff adapt to and embrace change. This section will help you understand readiness for change, including building staff buy-in and support to enhance the chances of success for your agency's CQI efforts.

The Challenges of Change

Although child welfare agencies have made efforts over the years to improve outcomes for families, youth, and children, some have found it challenging to implement comprehensive reforms, sustain the changes made, and effectively monitor practice. A data-driven, well-planned, systematic way of resolving problems on an ongoing basis, such as CQI, will help sustain needed changes.

Making the changes required to implement systemwide, data-driven decision-making may mean involving new partners, implementing new processes, and at the same time maintaining employee morale and keeping staff involved and up to date. Improving multiple systems and processes rather than focusing on the performance of individual staff has been difficult for some.

Continually assess staff and partner readiness for change and address needs as they arise. Change can be difficult for individual employees. Resistance to organizational change may be due to lack of involvement in decision-making and planning, lack of knowledge or understanding of the change, or lack of trust that the change will yield better results. Staff may fear the loss of their roles and the comfort of familiar, established ways of doing things. They also may fear losing control of processes they have mastered or their status in the workplace, or they may have doubts about their own competence in the face of practice changes.

Supporting Readiness and Buy-In for Change

A CQI process uses a planned, organized approach to transitioning employees and teams toward ongoing improvement in agency practices and systems. Key aspects include careful planning and sensitive implementation as well as engagement of staff. Attitudes, beliefs, and behaviors play critical roles in people's ability to carry out the change. If change is forced on others without their buy-in, it may result in either a failure to implement interventions fully or implementation of them in a way that is not intended. Successful change management requires:

- ◆ Careful planning
- ◆ Sensitive implementation
- ◆ Engagement of staff

Unsuccessful change management is often the result of:

- ◆ Forced implementation
- ◆ Lack of employee buy-in

Agency leaders and staff at all levels must be both willing and able to put new programs and practices in place for such efforts to succeed. Assessing readiness involves taking a close look at factors that contribute to the organization’s overall ability to change, those that help the organization prepare for specific interventions, and the motivation of individuals involved with change. Assessments using data from surveys or focus groups can identify where supports are needed and help agencies set a strong foundation for interventions that address identified problems.

Factors That Contribute to Readiness

Three core components of readiness for implementation (Dymnicki et al., 2014; Scaccia et al., 2015) include:

- ◆ **Motivation:** The willingness or desire of individuals in an organization to change and adopt an intervention. Motivation is often reflected in the beliefs, attitudes, and commitment of those involved with the change.
- ◆ **General capacity:** To achieve change, an agency must be adaptable and have structures in place that support a change process. An agency with strong general capacity, for example, may have effective leadership, appropriate staff, and clear expectations and procedures for how to do things.
- ◆ **Intervention-specific capacity:** The human, technical, and physical conditions needed to implement a particular program or practice effectively. Areas of interest here may include the specific knowledge, skills, structures, and supports needed for a specific intervention.

Figure 3 provides more details on these factors.

Figure 3. Factors That Contribute to Readiness*

Motivation	General Capacity	Intervention-Specific Capacity
<ul style="list-style-type: none"> ◆ Belief that change is needed/valuable** ◆ Belief that the selected intervention is: <ul style="list-style-type: none"> ◆ Compatible ◆ Doable/manageable ◆ Important (a priority) ◆ Recognition that the intervention has: <ul style="list-style-type: none"> ◆ A relative advantage ◆ Visible outcomes 	<ul style="list-style-type: none"> ◆ Leadership ◆ Organizational innovativeness/receptivity to change ◆ Culture (shared behaviors and norms) ◆ Climate (staff perceptions of work environment) ◆ Resource availability/use ◆ Supportive structures ◆ Staff capacity 	<ul style="list-style-type: none"> ◆ Leadership buy-in and support** ◆ Program champions ◆ Intervention-specific knowledge, skills, and abilities ◆ Implementation supports and structures ◆ Relationships and networks

* This list was adapted from the work of Scaccia et al. (2015) on readiness for implementation. It presents commonly identified factors but is not exhaustive of all factors that may affect readiness.

** Item was added to the original conceptualization.

Source: Capacity Building Center for States. (2018). *Change and implementation in practice: Readiness*. Children’s Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.

Assessing Readiness

As agencies pursue CQI and implementation efforts, they should consider these contributing factors and assess whether they are present in their organization. Most agencies conducting CQI and embarking on change will not be strong in all areas. Through assessment and planning efforts, agencies can pinpoint strengths to leverage and areas to develop, and then identify strategies to build and sustain readiness over time. Most implementation frameworks suggest that organizations assess readiness before attempting to introduce a new program or practice (Meyers et al., 2012). Readiness assessments help teams consider strengths and gaps and identify areas for needed capacity building. The Change and Implementation in Practice series offers [a readiness assessment tool](#) aligned with the factors in figure 3.

To assess readiness, implementation teams should complete the tasks in figure 4.

Figure 4. Assessing Readiness



The readiness assessment findings will inform implementation planning and capacity building and may contribute to intervention selection. Because readiness is a dynamic concept and circumstances may shift over the course of a CQI and implementation process, teams may need to repeat these steps at various points. While completing the tasks in figure 4, teams should take the following steps:

Step 1: Assess Agency Culture

Assess how agency employees think, what they believe, and how they behave in the workplace by asking:

- ◆ Are there issues that need to be addressed before change can take place?
- ◆ Do other barriers exist?
- ◆ Is the agency ready for significant change?
- ◆ Is there buy-in for changes that would improve practice?

Step 2: Develop a Plan for Change

Significant transitions bring many changes, such as new leaders, role changes, and a demand for new skills. This workplace disequilibrium must be remedied through a planned approach, or change efforts will not have needed support and will likely go off track. To develop a plan for change, create a formal, step-by-step plan early in the change process. Development of your plan should include staff at varying levels, family and youth with lived experience, and external community and system partners. This will allow those involved to feel empowered, share ownership, and carry the vision to others to build further support.

Step 3: Acknowledge Losses

What employees often fear about organizational change is the loss of the way things were and the comfort familiarity affords, but change is both an agency and a personal journey. Staff members need to know how their work will change and what is expected of them, while working through their own personal transitions related to the changes going on.

Step 4: Use Data to Make the Case

Chances of success increase when everyone involved shares an understanding of the reasons for change, the goals the agency hopes to achieve, and the changes needed to meet those goals. Actions such as identifying issues, making decisions based on accurate, objective data, and helping staff, partners, and other community and system partners understand the data go a long way toward making a compelling case for the new path.

Step 5: Implement With Sensitivity and Flexibility

Thoughtful, sensitive implementation of the CQI process will help ensure that systematic problem-solving is productive and supportive. Informing, listening to, using information from, and involving others, will foster acceptance of the change process. Effectively managing change means continually assessing impact, determining if goals are met, and deciding to adapt as needed. With the support of those involved, necessary adjustments can be made along the way to maintain the momentum of the change effort.

Step 6: Engage Community and System Partners

Ensuring that staff, people with lived experience, and other community and system partners (such as courts, tribes, and private agencies) are involved in change efforts provides them with a role in the process, helps them take ownership of the change, and provides much-needed, even critical, support. Promote open communication by keeping people informed and soliciting feedback. Be mindful of power differentials and support people with

lived experiences in a way that they can fully contribute. Engage community partners and translate surveys, plans, and reports into a community's primary language. Celebrate successes, and privately and publicly acknowledge individual, team, family, and youth contributions.

Step 7: Pace the Changes

Individual staff members need to know how their work will change and what is expected of them. Leaders and management should be clear about expectations all along the way and should encourage "change champions," staff who embrace change. Choose change initiatives strategically rather than driving multiple changes at once.

Step 8: Model Desired Attitudes

Embrace the changes and new approaches and model the acceptance and enthusiasm you want to see from staff. Leaders and management must model the desired attitude for change by presenting a unified vision and voice, and be a settling influence to assuage negative feelings.

Embracing Change

You can support all the key components of effective change by communicating, modeling enthusiasm for change, involving others, supporting colleagues, and maintaining the momentum. Each of those involves specific actions and responsibilities, listed in figure 5.

Figure 5. Embracing Change



Communicate Effectively

- ◆ Present data to illustrate needs
- ◆ Clarify root causes
- ◆ Support needed changes



Advocate for CQI

- ◆ Link change efforts to the agency's vision and guiding principles
- ◆ Help staff see how change aligns with the organization's direction



Engage Stakeholders

- ◆ Explain new initiatives
- ◆ Clarify expectations
- ◆ Encourage feedback
- ◆ Serve as a liaison



Support Colleagues

- ◆ Listen to concerns
- ◆ Address apprehension
- ◆ Advocate for involvement
- ◆ Help staff see change as positive
- ◆ Assist frontline supervisors in developing strategies



Maintain the Momentum

- ◆ Sustain changes in attitudes, values, and behaviors
- ◆ Be passionate
- ◆ Celebrate short-term successes
- ◆ Remain steadfast

Teaming for Success

Effective CQI calls for a teaming approach because adaptive challenges require many perspectives to develop new and innovative solutions. CQI teams comprise of individuals who represent a variety of roles and experience, offer a range of talents and expertise, and include the professionals, community and system partners, and families who work with child welfare agencies. Teams must collaborate and communicate well to solve the problems that agencies are trying to address.

Responding to Adaptive Challenges

Many of the problems faced by child welfare agencies today are what Harvard University's Ronald Heifetz calls "adaptive challenges" (Heifetz et al., 2009). Heifetz distinguishes technical from adaptive challenges as follows:

- ◆ **Technical challenges:** Problems that can be solved by using existing organizational capabilities. With technical challenges, the problem definition, solution, and implementation should be clear.
- ◆ **Adaptive challenges:** Problems that require new learning. When faced with adaptive challenges, change must come from the collective intelligence of employees at all levels, as well as external community and system partners, so that together they learn their way toward solutions. When done effectively, teaming can capture this collective intelligence.

Taking a team approach to problem-solving helps ensure that a broader and more representative group contributes to understanding the issue, owning the solution, and spreading knowledge throughout the agency and community. Effective teams share common goals, commit to the mission, and have the skills, authority, and expertise needed to address the problem at hand. Effective teams also have the time to do the work required. Other characteristics of effective teams include:

- ◆ Accountability
- ◆ Organized communication
- ◆ Passion and commitment
- ◆ Clearly established objectives
- ◆ Established decision-making process
- ◆ Interdependence
- ◆ Flexibility

Dive Deeper

- ◆ What individuals and leaders from your community would you invite to the table to participate in problem-solving at your agency?
- ◆ What qualities can these individuals and leaders bring to the team?

Once the child welfare agency chooses a priority problem to address, multiple teams may form to tackle all aspects of the CQI cycle. During the process, team goals and team membership will vary, and clear communication channels must be established among all team members. You may already have an established team that can perform the task. For example, there may be existing training, policy and procedures, or human resources teams. Work closely with and leverage the experience and expertise of these teams to support all aspects of the CQI problem-solving cycle.

Identifying Staff Team Members

Large-scale CQI and organizational change requires input from representative staff from across all levels of an organization and in a variety of positions. This promotes staff engagement and buy-in, the team benefits from their knowledge and expertise, and it increases the likelihood of implementation fidelity. Participation of individuals outside the agency (e.g., families, youth, partners and service providers, and court and legal representatives) as consultants or advisors to the change process is also important for community responsiveness and to facilitate community buy-in for the intervention. Having team members with varied backgrounds, experience, knowledge, and skills encourages the team to consider multiple ideas and approaches, examine the implications of these ideas and approaches from various perspectives, and anticipate a range of outcomes or impacts.

Team members with experience in formal quality assurance and CQI processes, federal monitoring reviews and national accreditation processes (e.g., CFSR), and strategic, programmatic, and fiscal planning (e.g., Child and Family Services Plans) may be especially helpful in facilitating the CQI and implementation process. Include team members with these skills on a core steering team or subteams as appropriate.

When identifying potential team members, it is essential to consider availability and capacity to take on the tasks of serving on the team. Most implementation team members keep their regular positions within the agency while serving on the team and are expected to continue their regular organizational activities after the change is implemented (Maciolek et al., 2014).

Identifying Community and System Team Members

Individuals and leaders from the communities served by the agency should be invited to join the team or one of the subteams as needed, including:

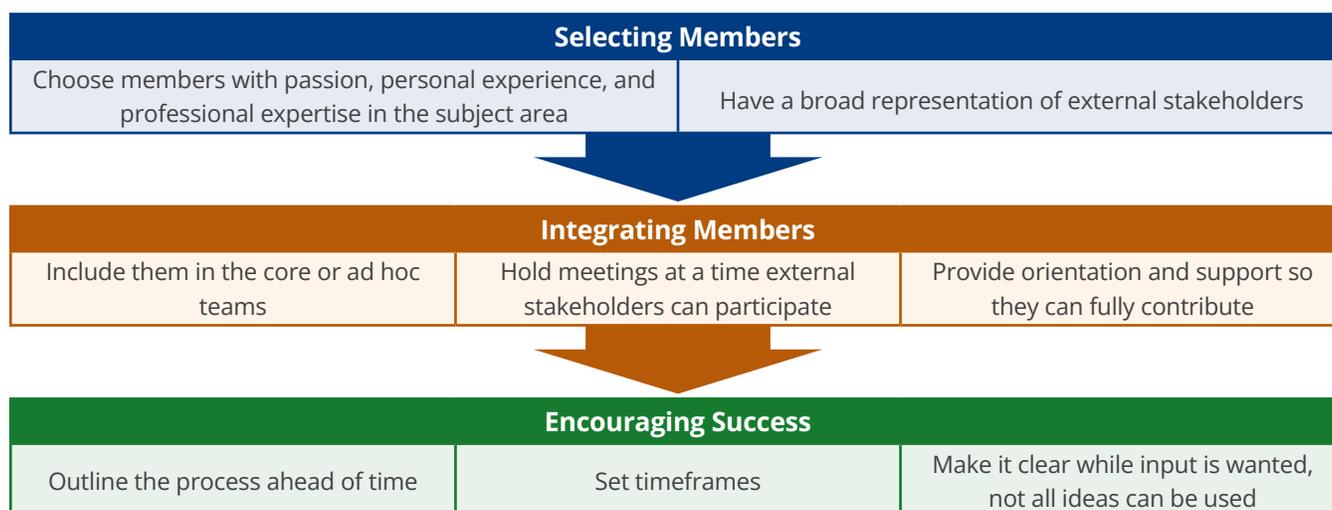
- ◆ Youth
- ◆ Families
- ◆ Tribes
- ◆ Foster and adoptive families
- ◆ Courts/legal community
- ◆ Education
- ◆ Public health

Team members who understand community strengths and challenges, and who have lived experience with child welfare, can be incredible assets to the team and promote stronger community-agency relations. At times, their involvement may be in a consulting or temporary capacity (e.g., to help in problem identification or plan for implementation).

Team leaders should consider the approaches that would be most useful for engaging these team members, preparing them to participate fully and build knowledge about the problem being addressed, and enabling them to derive the most benefit from their involvement. For example, agencies may conduct community outreach to identify team members with a variety of perspectives, make resources available to support their full participation in team processes (e.g., language interpreters), and provide coaching to support dialogue around potentially challenging topics.

Involving external community and system partners in problem-solving benefits everyone. It builds trust and ownership, helps to identify solutions that better fit the need, increases transparency, can lead to better decision-making, and can ultimately lead to increased consensus for the selected solution. Figure 6 provides an overview of how to select, integrate, and encourage community and system partners accordingly to promote success.

Figure 6. Process for Involving External Community and System Partners

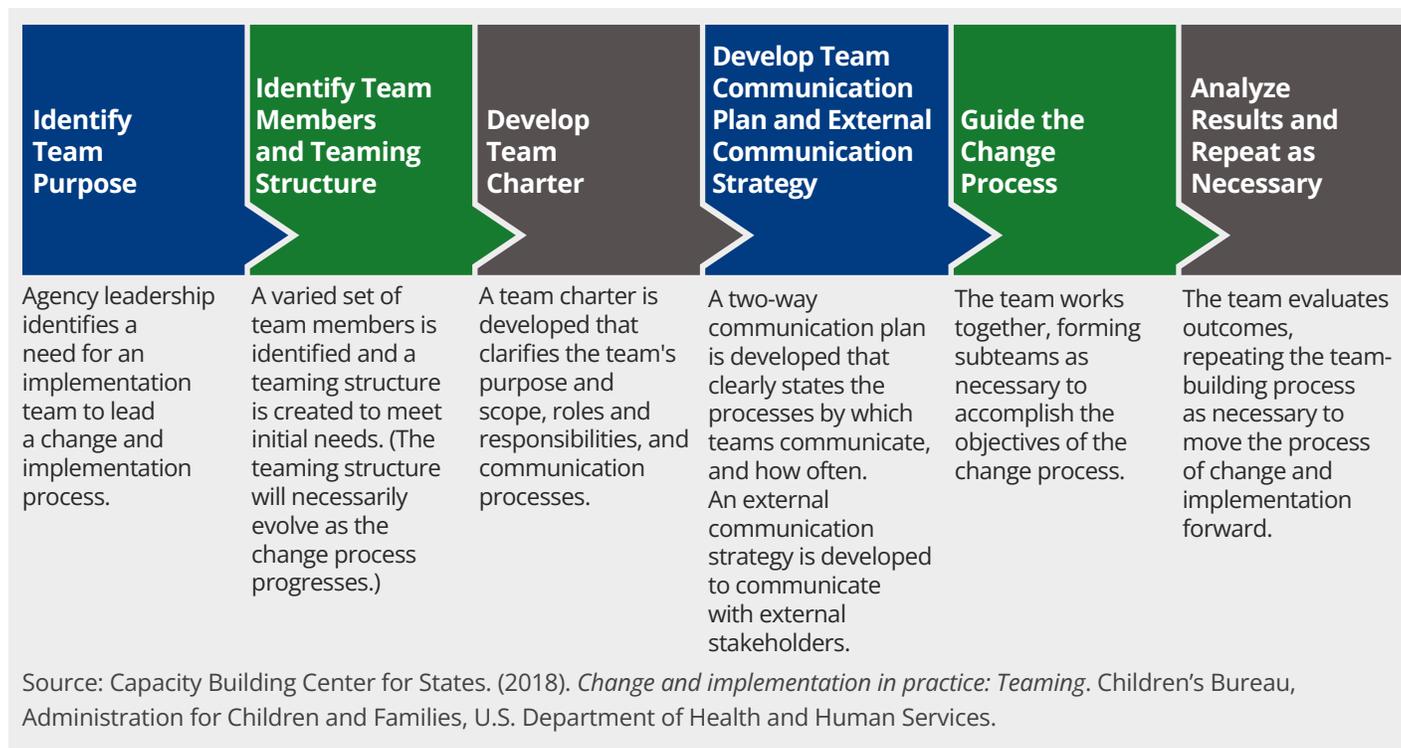


[Successful Strategies for Teams](#) includes a team member questionnaire. Find out your style as a team player.

Steps to Form an Effective Team

Agencies should follow certain steps to form effective teams, as illustrated by the Capacity Building Center for States' Change in Implementation Process shown in figure 7. The process of team formation may need to be revisited more than once as the CQI and implementation process unfolds; for example, the composition and goals of a team may evolve, or additional teams may be formed.

Figure 7. Essential Functions in Building Teams to Support the Change Process



Communication Plan and External Communication Strategy

Developing comprehensive communication plans and strategies is critical for any successful team. To be effective, team members need to have regular opportunities to share their ideas, thoughts, and opinions and weigh in on vital decisions. All interested parties, particularly those with lived experience, need clarity on how the information they share will be used. It may take time for the team to build trust and codify a shared understanding into a communication plan. Implementation teams should develop a team communication plan that:

- ◆ Ensures the flow of information to leadership, among the subteams, and across the agency, as appropriate
- ◆ Clarifies internal and external communication protocols and identifies the person responsible for maintaining them
- ◆ Provides relevant information to all interested parties (external and internal) so they have an opportunity to offer feedback, a critical step to the success of the team and its work

An external communication strategy should also be created as part of the team communication plan to communicate with external interested parties who do not participate in the daily work of the team. An external communication strategy clearly lay out (Permanency Innovations Institute [PII], 2016a):

- ◆ The roles that external interested parties will play
- ◆ What information will be shared
- ◆ The frequency of the communications

Communication with external interested parties usually is more formal and may consist of presentations, written reports, memos, and virtual or in-person meetings. Table 1 helps clarify what should be included in communication plans and external communication strategies.

Table 1. Communication Strategies

Category	Questions That Should Be Answered
Who?	<ul style="list-style-type: none"> ◆ With which other teams and interested parties will the team need to communicate? ◆ Who on the team has the primary responsibility to ensure clear and effective communication with those outside the team? ◆ Who on the team has the primary responsibility to ensure clear and effective communication among team members? ◆ Who on the team will have the responsibility to collect the necessary information to be shared with the team?
What?	<ul style="list-style-type: none"> ◆ What information needs to be shared, and with whom? ◆ What information feedback loops already exist that the team can use? What feedback loops need to be created? ◆ What resources will the team need to stay informed (e.g., electronic shared workspace, email systems, etc.)?
Where?	<ul style="list-style-type: none"> ◆ Where can team participants obtain the information they need for their work?
When?	<ul style="list-style-type: none"> ◆ How often should information (such as team progress reports, etc.) be shared, and with whom?
Why?	<ul style="list-style-type: none"> ◆ Why should information be shared with those external to the team? What are the criteria for deciding which information should NOT be shared externally? ◆ Why has a particular method of communication been chosen to communicate with a particular group?

Develop a Team Charter

An implementation team or subteam charter should include the following elements:

- ◆ Mission of the initiative
- ◆ Goals and objectives for the work of team
- ◆ Scope, boundaries, and timeframe for completing the work
- ◆ Expected deliverables
- ◆ Decision-making authority
- ◆ Decision-making policy
- ◆ The role of agency leadership relative both to the team and to the agency as a whole
- ◆ Brief description of communication strategies and frequency, both within the team and among other related teams
- ◆ Roles and responsibilities
- ◆ Determination of how conflict will be managed

A well-structured team with a clear charter and communication plan will help you better understand underlying reasons for complex problems, develop more effective solutions, and inspire ownership among a much larger community both inside and outside the agency.

Teams should “manage up” to promote change efforts with leadership, provide details regarding how family and child outcomes can be improved, and tailor messages to reflect leaders’ priorities and concerns. In order to be persuasive and gain buy-in when communicating with agency leadership, you should:

- ◆ Present the facts
- ◆ Use clear defensible data, with clear visuals
- ◆ Present solid evidence backed by well-reasoned arguments
- ◆ Be strategic in exploring solutions

- ◆ Discuss resources needed
- ◆ Make a good case and answer tough questions

To promote buy-in of practice changes when meeting with agency staff:

- ◆ Meet with staff during critical junctures in the change process
- ◆ Involve all staff in examining data and connecting them to practice
- ◆ De-emphasize hierarchy, create a safe environment for participation in meetings, and set up options for anonymous communication
- ◆ Answer questions and address concerns
- ◆ Help ensure consistent messaging to all agency divisions
- ◆ Pass staff concerns on to teams and leaders
- ◆ Brainstorm with staff about removing barriers
- ◆ Help staff understand that quality work is a timesaver for them

Use effective internal and external communication with key partners in a change effort by:

- ◆ Using compelling data
- ◆ Creating meaningful dialogue
- ◆ Empowering families and youth
- ◆ Passing on concerns and accolades
- ◆ Advocating for teams, partners, and families to actively participate in CQI
- ◆ Helping to ensure strong information flow between all involved
- ◆ Being prepared to deal with negatives of data transparency

Using data-driven decision-making has ushered in a new, exciting age of dialogue and engagement. Dynamic, strategic communication has become a core activity in fully engaging staff, partners, and families in planning, implementing, and overseeing the agency's change efforts and creating a CQI-rich environment. Implementing change skillfully while using effective communication techniques is fundamental to improving practice and outcomes for families and children, and you can employ all of these techniques and strategies successfully in agencies.

Summary

In this chapter, you learned that CQI can help you deliver more effective services that result in the outcomes you want. By implementing a CQI process that consists of identifying the problem, researching a solution, developing a theory of change, adapting or developing the intervention, implementing the intervention, and monitoring and assessing the intervention, you can positively effect change in your agency and improve outcomes for families and children. Understanding the CQI functional areas (data collection, data analysis and interpretation, ensuring readiness for change, effective communication and teaming for improvement, and support for sustainable CQI) will help you better collaborate on how to implement the CQI process at your agency.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

- ◆ **The Theory Behind the Practice: A Brief Introduction to the Adaptive Leadership Framework**
<http://cambridge-leadership.com/documents/Ch-2-Theory-Behind-the-Practice.pdf>
 Heifetz, R., Grashow, A., and Linsky, M. (2009)
- ◆ **Change and the Manager, in "Change Management: A Guide to Effective Implementation"**
<https://books.google.com/books?id=HA0FQOWx8ngC&lpg=PP1&pg=PP1#v=onepage&q&f=false>
 McCalman, J., and Paton, R. (2011)
- ◆ **The Oklahoma Pinnacle Plan: An Improvement Plan for Child Welfare Services**
<https://oklahoma.gov/okdhs/services/child-welfare-services/the-oklahoma-pinnacle-plan/pinnacle-plan-home.html>
 Powell, S. (n.d.)

Chapter 3

Problem Exploration: Identifying and Understanding Issues

Identifying the issue using data and evidence is the first step of the CQI problem-solving process. When starting the process, it is critical to make sure that the problem you identified truly is a problem, can be clearly defined through data, and be communicated to others. Without understanding the problem and its underlying causes, your agency may implement the wrong solution and make the situation worse. While it is important to know “what” a problem is, it is more important to understand the “why” behind a problem. To help you understand the “what” and “why” behind a problem, this chapter will help you:

- ◆ Gather data to explore the problem
- ◆ Analyze and interpret data
- ◆ Understand when data indicate a problem
- ◆ Recognize how data quality can affect your assessment of whether there is a problem
- ◆ Explore root causes and contributing factors
- ◆ Present your findings to agency administrators, other frontline staff and supervisors, community and system partners, families, and youth to communicate the problem

Key Types of Problems

As part of the CQI problem-solving process, you assess performance to determine if there is evidence suggesting that there are needed improvements, especially in the following two areas:

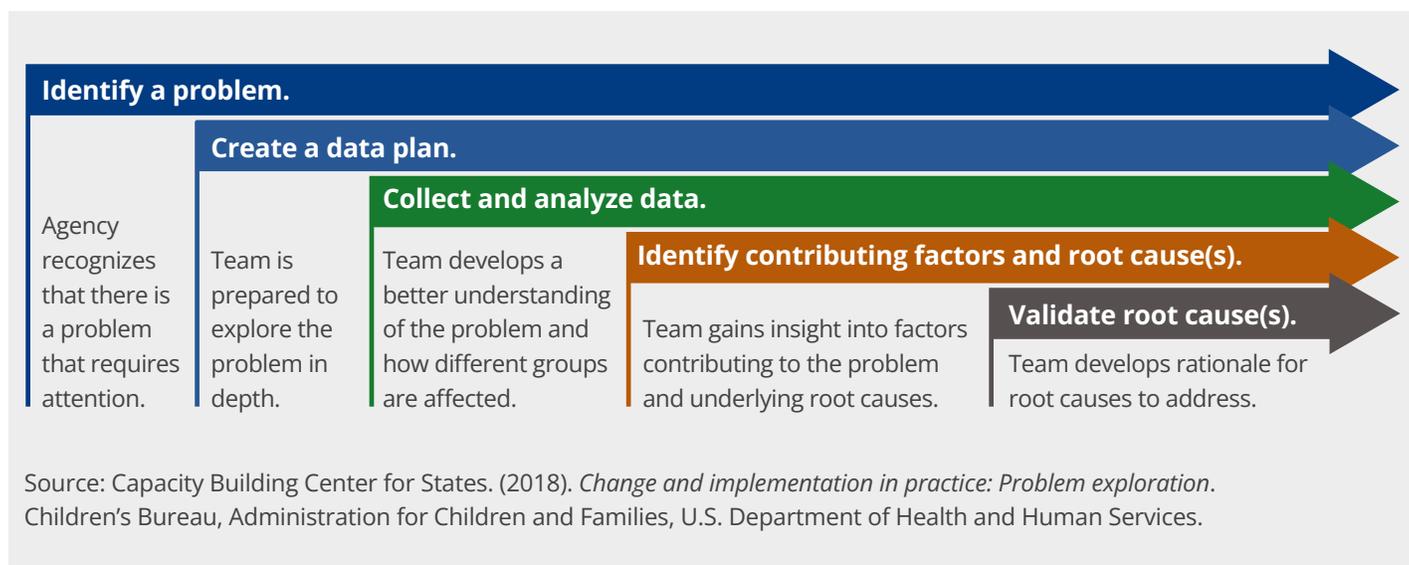
- ◆ **Child outcomes** – whether children are experiencing desired outcomes regarding safety, permanency, and well-being
- ◆ **Case practice** – whether caseworkers are meeting required practice standards on specific indicators or where there may be systemic barriers impacting practice

In addition to these two primary areas, organizational factors and CFSR systemic factors can have a direct bearing on practice that may be uncovered in the problem exploration. These and other factors may also be addressed.

Gathering Data and Exploring the Problem

The CQI problem-solving process includes a set of essential tasks that take you from problem identification to developing a credible hypothesis about its cause. The process may be iterative as the discovery of new information can lead to new questions and deeper data analysis. Figure 8 describes each task.

Figure 8. Essential Tasks in Gathering Data and Exploring the Problem



When examining a problem, consider the following questions:

- ◆ What evidence of the problem exists?
- ◆ Who is affected by the problem?
- ◆ Do key interested parties and agency leadership consider the problem important or urgent?
- ◆ What is the desired outcome of addressing the problem?
- ◆ Is the agency ready to address the problem?

As you form a team and answer these questions, create a data plan to help explore the problem further.

Creating a Data Plan to Explore the Problem

A data plan guides your team as you gather and analyze existing and new data to understand the problem and identify possible root causes. A comprehensive data plan includes:

- ◆ Research questions
- ◆ Data and information sources
- ◆ Proposed data analyses
- ◆ Timelines
- ◆ Roles and responsibilities for data collection, analysis, and quality

The team should consider and identify areas to explore:

- ◆ Problem scope
- ◆ Variations by:
 - ◆ Population groups
 - ◆ Services
 - ◆ Placement type
 - ◆ Geographic or regional differences
- ◆ Relationships among different contributing factors

Your investigation can focus on a point in time or change over time and can also identify places where the problem is less obvious.

What the Data Tell You

Generating and analyzing data are critical to each phase of the problem exploration process: from identifying the problem, its scope, and its impact, to exploring its core and ancillary cause(s), to identifying possible remedies. Each stage is dependent upon what is learned in the prior stage. Analyzing data helps you:

- ◆ Demonstrate the existence of a problem
- ◆ Define the problem type and characteristics
- ◆ Explore the root cause(s) of the problem
- ◆ Identify factors that contribute to the problem
- ◆ Determine who is most impacted by the problem
- ◆ Investigate best practices for addressing the problem
- ◆ Determine an appropriate response to the problem

Working With Statistical Information

The analysis method(s) you choose will depend on the types of questions the team wants to answer. In the ongoing monitoring process, you use specific measures to assess performance and generate statistics that describe a particular phenomenon. You can analyze the statistics using the following calculations:

- ◆ Percentage figures, the relative value that indicates proportion
- ◆ Medians, or midpoints
- ◆ Means, or averages
- ◆ Rates, the occurrence of events over a specific interval of time or within a population

While many child welfare agency performance measures are represented by percentages, the same questions and process could be applied if the statistic is a mean or a median. When you look at any measure, you should ask:

- ◆ What does the statistic represent? What question does this metric answer? What is being measured?
- ◆ Does the statistic indicate that there is a problem that must be addressed?
- ◆ Does the statistic accurately reflect the extent of the problem?
- ◆ Is the problem statewide, or is it restricted to a particular local area or type of local area—such as an urban or rural county?

To understand what a measure represents, CQI teams must specify (or operationalize) the calculation used to generate the measure. This specification must describe the denominator, numerator, and timeframe included in the measure. All data, even those from external sources, must have an operational definition of the measure to understand what it represents.

Interpreting Your Findings

Data are just pieces of information. When you analyze data, you work to uncover patterns and trends in datasets. Interpreting data differs from analysis because data interpretation seeks to explain those patterns and trends. When using data to guide your decision-making, you must interpret them first. Correct interpretation helps you to understand the problem and what may have caused it. If your goal is to help administrators and others make decisions based on data, you must communicate the data findings and meaning of those findings. Some of the key concepts to consider when interpreting data during the CQI problem-solving process include:

- ◆ Are your samples representative of the larger population?
- ◆ Are your data collection instruments reliable, and are the data valid?
- ◆ What is the nature of the relationships within our collected data?

Dive Deeper

Working with data can help us understand patterns and trends but can be confusing if you don't work with data regularly:

- ◆ What would you like to better understand about data analysis?
- ◆ At your agency, who can you ask for help and support?

- ◆ Is there evidence of correlation or causality?
- ◆ Can you identify statistical significance, strength of relationships, and causality?

Selecting a Representative Sample

To qualify as representative, the sample selection method must ensure that the sample provides a reflection of the population. The sample is a subset of the population and, if it is representative, has the same properties and proportions as that population. Gathering information from cases or individuals that are not representative can sometimes be informative and more convenient, but if the information that you find in your sample is not applicable to the full population, it cannot be used to answer the “what” or the “why” questions. Figure 9 illustrates two common representative sample selection methods: random sampling and stratified sampling.

Figure 9. Sample Selection Methods

Simple Random Sampling	Stratified Random Sampling
<ul style="list-style-type: none"> ◆ Every member of the population has an equal chance of being selected as part of the sample ◆ Easy to do 	<ul style="list-style-type: none"> ◆ Groups formed based on shared characteristics and percentage of those characteristics within the population ◆ Random samples are selected from each stratum and can be compared against each other to reach specific conclusion

Stratification can reduce the potential for error in the sample. It involves dividing members of the population into mutually exclusive subgroups or strata so that no member of the population can appear in more than one subgroup, but all members of the population are included. Once the subgroups are set up, random sampling is used to select the sample within each subgroup.

Although stratified random sampling can be done without the assistance of a sampling statistician, it is always best to consult a sampling expert whenever possible. A sampling expert is more likely to detect issues relevant to the sampling process that CQI practitioners or data analysts may miss.

Working With Population Samples

The level of confidence is determined by how many members of the population must be randomly selected for inclusion in the sample to have “confidence” that the sample findings can be generalized to the population. CQI teams must also discuss the confidence interval, also called the margin of error, that the team is willing to accept.

Level of Confidence

The level of confidence reflects the certainty that the findings from the sample are the same as they would be if the whole population was used. The larger the sample size, the greater the confidence is that it is representative of the population. Although there’s no absolute level of confidence, most survey developers adopt a level of confidence of 95% or 99% as a guide in determining their sample size. While this is a high percentage, if you want to use your sample findings to answer the “what” or “why” questions, or even to describe our population accurately, you must be confident that your sample findings reflect what you would find if you used the whole population.

Confidence Interval

Even if you have a high level of confidence due to sampling, there will always be a margin of error, even if only slight. The confidence interval or the margin of error is the amount of error that you are willing to tolerate. The smaller the margin of error or confidence interval, the bigger the size of the sample needed. To understand the confidence interval, you must understand that your sample is not likely to be 100% similar to the population. The question is, “How much variation from 100% are you willing to accept and still feel that the sample findings are meaningful?” Although there’s no required confidence interval, most surveys use 5% or 6%. A confidence interval of 5% means that you believe your sample finding reflects the “true” answer within a range that is 5 percentage points, plus or minus, from your finding.

Reliability and Validity of the Data Collection Instruments

Reliability and validity are important to interpreting findings, because if the tools used to collect the data are not reliable or valid, then the accuracy of findings is questionable. Reliability is the degree to which the data collection tool produces stable and consistent results, while inter-rater reliability examines the degree to which different judges or raters agree in their assessment decisions. Validity refers to whether the instrument is correctly assessing what it is intended to assess.

Statistical Significance of Findings

Statistical significance is critical to data analysis, but it only applies when you are using a sample because it relates to the error inherent in sampling. When you draw a representative sample from a large population and want to assess relationships between and among variables in that sample, you need to determine whether your findings regarding relationships are statistically significant. This means that the differences found between or among groups by comparing means between populations, or the associations found between or among variables (also called correlations), are not likely to have occurred by chance.

Strength of Findings

If you use MIS data and find differences between groups or associations between variables, you don't need to test for significance because when you use the full population, any difference between groups or associations between variables is "real." However, you may still want some guidelines to explain the meaning of your findings. For example, suppose that using MIS data, you find that the variable of placement instability is associated with the variable of child behavior challenges with a correlation coefficient of +0.68 (a correlation coefficient is the relationship between two variables). It is not appropriate to assess the significance of this correlation because you don't have a sample. You could ask:

- ◆ Is this correlation high enough to be considered meaningful?
- ◆ Is it high enough to indicate that this relationship is something that should be explored further as a possible cause of placement instability? That is, how strong is this finding?

Determining whether a correlation qualifies as meaningful can be a subjective decision. Often, you must understand the field to know when a correlation is higher than might be expected. For example, in child welfare, many variables tend to be associated with one another at some level of strength. When a correlation coefficient exceeds what you normally see when you look at interrelationships among variables in child welfare, then you may view that correlation as meaningful or at least as indicating a need for further investigation.

Does the Measure Indicate a Problem That Needs to Be Addressed?

While the goal is to work toward achieving what is in the child's best interest or agency's best practice, it is impractical to identify every outcome or data percentage that falls below 100% as a problem needing attention. There are several guidelines used for determining whether the data indicate a problem:

- ◆ The measure indicates that the state is not meeting local, state, or federal standards or that the state's performance has substantially declined in one or several areas substantially over time.
- ◆ The measure indicates that some areas of the state are not performing well on the indicator or that performance on a particular measure varied depending on individual factors pertaining to each child.
- ◆ Agency advisory boards or review panels identify the measure as a problem, such as difference in outcomes for children of different age groups.
- ◆ The measure indicates that the state is not meeting court-ordered standards established in a settlement agreement as part of a consent decree.
- ◆ If the data show that there is a problem that needs to be addressed, the next step in the process is to assess data quality.

Assessing the Quality of Data Used to Generate the Measure

If data quality is not assessed before deciding if you need to address a specific outcome or case practice, an agency could end up focusing resources on resolving something that is not really a problem or is not as serious a problem as thought.

The Importance of Data Accuracy

Data quality concerns can come from inaccurate MIS (i.e., SACWIS or CCWIS) data due to lack of entry or poor entry quality. CQI staff must conduct data quality checks to prevent wasting valuable resources addressing a nonexistent problem.

What if Your Sample Isn't Representative of Your Population?

If your data come from a sample (e.g., case review measures), the sample must be representative of the population. If the sample is not representative of your population, then you cannot apply the findings of the sample to the general population or use the findings to answer the “what” question.

Is the Problem Statewide?

Sometimes either an analysis of MIS data or of data from a representative sample of cases will reveal a problem. But in later investigation, you may find that the problem only exists in a few areas of the state. These may be large urban areas, so that, at first glance, it looks like a statewide problem because the numbers are high. You need to look at this as you answer the “what” question so that you are clear about what the measure reflects.

Presenting the Problem to Leadership

Once you have accurate data from your MIS or a representative sample, and the measure indicates a problem based on your criteria, you can present this information to agency administrators and practitioners with the recommendation that the problem be addressed.

Making the Case for Action

To ensure that agency administration and practitioners understand why this recommendation is being made, present the following information to them:

- ◆ A clear description of how practitioners have measured the problem
- ◆ The performance data resulting from the analysis of the problem and the source(s) of data
- ◆ The criteria used to identify the measure as a problem
- ◆ The steps taken to clarify why the performance data accurately represent the problem
- ◆ A rationale for how the problem was determined
- ◆ A recommendation regarding moving forward

The presentation may include more than one identified problem, but, for each problem, the above information enhances understanding.

Understanding the Causes of the Problem: Answering the “Why” Question

The answer to the “why” question is a clear, data-supported description of the potential cause or causes of the problem. When answering the “why” question, you should be able to:

- ◆ Explain the difference between the “what” and the “why” questions and when it's appropriate to ask and answer each
- ◆ Develop “why” questions
- ◆ Determine the data, the available resources, and various methods of data collection needed to answer your “why” questions

Root Cause Analysis

One process you can use to help understand the “why” is a root cause analysis. The basic approach of root cause analysis is to keep asking and answering the “why” question until you have identified possible contributing factors and you are satisfied that you understand the problem’s cause or causes. The seven-step process, illustrated in figure 10, will guide you through the process of asking “why,” collecting data, and ultimately presenting the findings.

Figure 10. Root Cause Analysis Steps



Step 1: Keep Asking “Why?”

Identifying the root cause won’t necessarily mean getting to the “bottom of it all.” The goal is to go as far down the chain of causality until you reach the point where you are satisfied that you have found a potential root cause that can be addressed by the agency.

Step 2: Use the Right Data

It can be difficult to identify and use the right data to answer the questions. The MIS, case record reviews, and surveys are likely to be the primary data sources for a data-driven investigation of the “why” question. When exploring a specific root cause, you may use other data sources from system partners, such as the court system or service providers, reports from foster care review boards and other review or oversight teams, interviews with interested parties, focus groups, and case studies to provide important information.

Step 3: Use Existing MIS, CCWIS, or SACWIS Data

A state’s MIS contains a wealth of information you can use to answer “why” questions. To use these data, however, they must be in a database format amenable for analysis. Two common software packages that allow us to enter data in a database and analyze them in a variety of ways are Statistical Package for Social Sciences (SPSS) and Statistical Analysis System (SAS). Ensuring the accessibility of quality data in your MIS to support the data analysis process is necessary to answer the “why” questions.

Once the data are in a format that permits various types of analyses, you can begin to look at the “why” question for the data from MIS and all other sources. You can do this by:

- ◆ Assessing the relationships between and among factors that may be associated with your topic of interest
- ◆ Looking at the relationships between and among the various outcomes that you are examining
- ◆ Exploring information in the research literature
- ◆ Accessing information from advocacy organizations and advisory groups
- ◆ Soliciting input from caseworkers and supervisors, caregivers, youth and families with lived experience, service providers, and people representing communities impacted by the problem

Examine all possible relationships as you explore the “why” questions. The analyses may require sophisticated research and analytic methods to more clearly understand complicated systems and the complex relationships that may unfold over time. The method deployed is dependent on the proposed question or hypothesis. Examples of such highly specialized analysis procedures include survival analysis, hierarchical modeling, factor analysis, and principal components analysis.

Dive Deeper

Think of a time your agency tried to get to the root of a problem:

- ◆ What data and strategies did you use to determine the root cause?
- ◆ What worked well?
- ◆ What could have been better?
- ◆ In your role, how can you improve this process in your agency?

Assess the agency's capacity to conduct complex analyses and use internal or external experts to assist when highly specialized types of analyses are necessary to answer the "why" question.

Step 4: Collect Data Through Case Record Reviews

Case record reviews, particularly those incorporating interviews with individuals involved in the case, can often be an important information source for answering the "why" question, especially when the question cannot be answered by MIS data. Use case reviews to go deeper when MIS data provide only "tip of the iceberg" information. The sample selected for the case record reviews must be sufficient so that findings can be considered representative of the full population.

Step 5: Collect Data Using Surveys and Focus Groups

Surveys, including alternate language versions appropriate to the community, also provide useful information that is not available from either the MIS or a case record review process. Focus groups, while not usually statistically representative, can provide qualitative data that can help you understand findings as you analyze data. Surveys and focus groups of specific people, such as foster parents, caseworkers, parents, supervisors, youth in foster care, service providers, and people representing communities impacted by the problem, can provide insights into the causes of a problem from a very different perspective than can be found in the case record review process. Again, the usefulness of survey information will depend on the representativeness of the sample.

Step 6: Analyze the Data to Find out the Reason "Why"

Analyzing the data is a multistep process that may require additional external help from data analysis experts. Some ways to analyze data are to run a correlational analysis and/or cross-tabulations to identify potential factors for their problems. Consider digging deeper, using different data sources, and asking "why" if the data do not present a clear reasoning from initial analyses.

Step 7: Report Findings to Leadership

In this step, the goal is to ensure that key agency decision-makers clearly understand what the problem is and why the agency is experiencing this problem.

Causality

You make assumptions based on underlying theories or knowledge that the relationship between variables is causal—that is, one variable causes the other to happen. You can be aided in moving toward causality by statistical approaches or modeling that can be used to predict or estimate particular events in a causal manner.

Child welfare agencies rarely possess data that can be strictly interpreted as providing empirical information about cause and effect. To get to cause and effect, you would need to use a fully experimental methodology as part of a research effort. With such a methodology, you would have a treatment group and control group, with random assignment of participants to each group so that resulting findings could be contributed to the treatment and not to other potential factors. When you are answering the "why" question, you are not usually dealing with treatment and control group designs. You are instead examining associations among factors and attempting to understand the contributions that specific factors make to the phenomenon of interest.

In the child welfare field, there often are multiple interrelationships among variables and you need some way of grouping them so you can better understand potential causality. This is where analyses such as regression analysis, principal factor analysis, or cluster analysis can be useful. They can result in groupings of factors highly associated with one another and not associated with other groupings of variables. This allows you to better understand interrelationships and how you can use them to get at root causes of a problem. However, even these methods do not establish causal relationships. You must always be aware that your decisions about causality often are just assumptions. For example, child behavior challenges may result in placement instability, but placement instability may result in child behavior challenges.

Presenting Your Findings

Along with identifying the “what” (the problem) and the “why” (the root causes), you should also present findings to agency leadership and the practitioners, administrators, and community and system partners who will make the decisions about how to proceed.

To do this, you can use a reporting structure to ensure that agency leadership and community and system partners understand both the process and the results of your inquiries. The structure incorporates the specific questions asked and the answers and provides a solid basis for making decisions about whether and how to proceed. Table 2 provides details on the structure.

Table 2. Report Domains

Domain	Details
Executive Summary	◆ Summarizes the report’s most important points
Identified Problem	◆ Includes the data source and validation process ◆ Defines the problem as it was operationalized ◆ Uses precise language to help avoid misinterpretation of findings
Questions Explored	◆ Presents questions explored, the findings for each question, and conclusions for each question
Methods Used	◆ Delineates the steps taken to identify the root causes
Findings for Each Question	◆ Shares information along the way to help build the case ◆ Describes the “bottom line” findings regarding the root cause(s)
Conclusions for Each Question	◆ Draws upon MIS data, case review data, and other data collected to answer each of the questions
Recommendations	◆ Builds upon the process and findings to lay out a case for recommendations ◆ Shows the logically constructed and data-driven progression of the series of “why” questions that lead to a root cause

Try these strategies to create a more effective presentation:

- ◆ Use tables and graphs to demonstrate findings in ways that are easily accessible and digestible
- ◆ Describe the confidence level and confidence interval that were used to determine the sample size
- ◆ Report significance levels so community and system partners know that findings were not due to chance
- ◆ Present the strength of correlations in MIS data

Summary

This chapter introduced data analysis and interpretation to gain understanding that the data indicate a problem and to use ongoing performance monitoring of various data sources to identify performance measures. Then, identify whether the measures are accurate and what they represent, and determine if the measures indicate a problem that needs to be addressed. All of this information answers the “what” question, and those conclusions are presented to agency leadership.

Next is the “why” question. In effective CQI, you want to know why you have a problem. To do this, first identify the factors that may be associated with the problem. This may be done through analysis of additional data, a literature review, focus groups, surveys, advisory group, or panel report. The first answer to the “why” question may generate further “why” questions, so keep asking the “why” question until you think you have identified a root cause. Then, present the findings to interested parties and agency leadership.

When interpreting the data and presenting findings, it is critical to know about the representativeness of the sample (if a sample was used, such as a case review sample or survey of a portion of the population), the validity and reliability of data collection instruments and processes, the significance of findings when using a sample, the strength of relationships, and the concept of causality.

Cover both the “what” and the “why” of the problem or problems and propose recommendations when presenting results to agency leadership and interested parties. Charts and tables with important statistical information should be included to support the report. Once the report is completed, it will be used for discussion and determination of possible solutions and theories of change.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

◆ **Glossary of Evaluation and Statistical Terms**

<https://www.stat.berkeley.edu/~stark/SticiGui/Text/gloss.htm>

McCowan, R. (1999)

◆ **Root Cause Analysis for Beginners**

<https://ldh.la.gov/assets/medicaid/hss/docs/NH/RootCauseForBeginners.pdf>

Rooney, J., and Vanden Heuvel, L. (2004)

Quality Progress, 37(7), 45–53

Chapter 4

Building a Pathway to Change

Now that you have learned how data can be used to identify and understand problems, you will begin to learn about the next steps of the CQI and improvement process:

- ◆ Building a theory of change
- ◆ Researching solutions
- ◆ Adapting or developing interventions

In this chapter, you will learn more about answering “why” questions with persuasive evidence to identify the root cause of the problem, developing a theory of change, and discovering potential solutions to address the root cause. You will explore key issues to consider before starting to research solutions, how to find and explore possible solutions (or interventions) for the identified problem, and how the preliminary process and key factors help you assess the “fit” of the intervention. The data you gather from asking “why” questions should be kept front and center throughout this process.

Exploring and Developing Interventions: Building a Theory of Change

Building a strong theory of change helps articulate the pathways to a desired outcome. A theory of change, shown in figure 11, consists of a series of hypotheses about the relationships between factors leading to the ultimate desired outcome and provides:

- ◆ A conceptual map for reaching desired outcomes by articulating the ultimate outcome
- ◆ Causal links that make up a pathway of change to the outcome
- ◆ Indicators at each causal link
- ◆ Assumptions underlying the theory

Figure 11. Theory of Change Process



Developing the theory of change should:

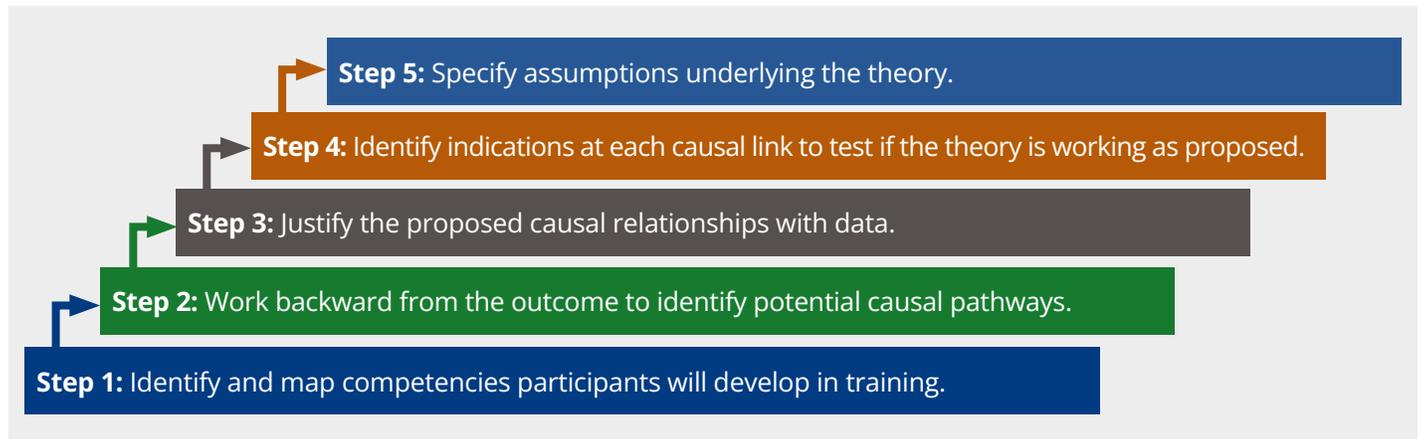
- ◆ Be a team process and incorporate various levels and expertise of agency staff
- ◆ Approach the problem using a theoretical framework that provides an overarching picture
- ◆ Allow you to look clearly at the actions required to reach an outcome
- ◆ Use data already generated or additional data and evidence

The team may research possible solutions while at the same time developing the theory of change so that when the theory of change is completed, there will be a broad variety of possible interventions to then consider through the lens of the theory of change.

Developing a Theory of Change

Figure 12 lists the steps that are critical for developing a theory of change:

Figure 12. Developing a Theory of Change



When developing a causal pathway for the theory of change, you need to provide a justification for why you propose a particular causal link. The data from the CCWIS or other data collection processes should justify the causal links and be readily available. This is critical for understanding why a particular problem exists.

To support your CQI team, try the following approach:

- ◆ Present a description of the root cause analysis
- ◆ Help team members clearly understand the findings from the “why” process
- ◆ Clarify the implications of the findings for a theory of change
- ◆ Facilitate the team’s understanding of the steps in developing a theory of change

At this point, the desired outcome, backed by data, should be clear and can be used to work backward from the outcome to identify potential causal pathways. The following strategies will help you fill in the potential causal pathways:

- ◆ Conduct analyses of the “why” questions
- ◆ Form “If ... then ...” hypotheses that work through each causal link to the agency’s identified problem
- ◆ Use data from the CCWIS or other data collection processes to justify the proposed causal link
- ◆ Establish indicators signaling achievement of each causal link as implementation happens

Keep in mind that, although your hypotheses should be based on data, you must specify any assumptions being made.

In presenting the final product, the CQI team can share both a graphic representation and a narrative with other internal and external interested parties to help them understand the proposed process of change.

Differences Between a Logic Model and a Theory of Change

Child welfare staff may be more familiar with the concept of a logic model since they have become a standard component of program design. There are clear differences between a logic model and a theory of change:

- ◆ A logic model is *descriptive*, but a theory of change is *explanatory*.
- ◆ A logic model lays out the *specific components* of a program, including the inputs, activities, outputs, and expected outcomes for each component, while a theory of change lays out the *causal pathways* to achieve the desired outcomes.
- ◆ A logic model requires the *identification* of an intervention, while a theory of change is used to develop and guide the *selection* of interventions.

After interventions are selected, a logic model can be integrated with the theory of change.

Seeking a Solution

Use a team approach to understand the problem, the characteristics, and needs of the target population and to seek different solutions.

Using a Team Approach



Researching solutions should be a team effort. The collective talents, wisdom, experience, and energies of a team of internal and external community and system partners can make an invaluable contribution during this phase. Consider different options for task assignments. For example, an Intervention Selection Team (IST) might be formed to conduct a search and preliminary assessment of solutions. Or CQI staff might do the initial search and assessment, reporting back to the IST or the core CQI team. When these tasks have been accomplished, team members can move to the more in-depth assessment phase.

Understand the Problem Type



First, recall that there are two types of problems:

- ◆ Technical problems, which have clear-cut solutions
- ◆ Adaptive problems, which do not have clear-cut, tested solutions

Making progress with adaptive problems requires changing people's values, attitudes, or behaviors. Technical solutions cannot address adaptive problems, or vice versa, so it is important to understand the type of problem you are trying to solve before making further steps.

Know the Characteristics and Needs of the Target Population



Use the information collected from the root cause analysis, for example, a representative survey that provides an accurate sampling of foster families. Information to understand the needs of the target population or information from a literature review can also be included here.

Be Open to an Array of Solutions and Interventions



You should also be open to a variety of potential solutions and interventions that will fit the needs and characteristics of the target population. In some cases, you may need to develop a solution that borrows elements from a variety of innovations. After you discuss where to find solutions, you can review the questions to ask in your preliminary assessment.

Selecting, Adapting, and Developing Interventions

The next step, selecting, adapting, and developing solutions or interventions, covers how to decide which of your identified interventions is most likely to achieve the desired outcomes and the strategies for adapting interventions or developing new ones. This should be a team process, but agencies can adapt their CQI team structure to fit the context. The team can be either the agency's core CQI team or an ad hoc team, also referred to as an IST.

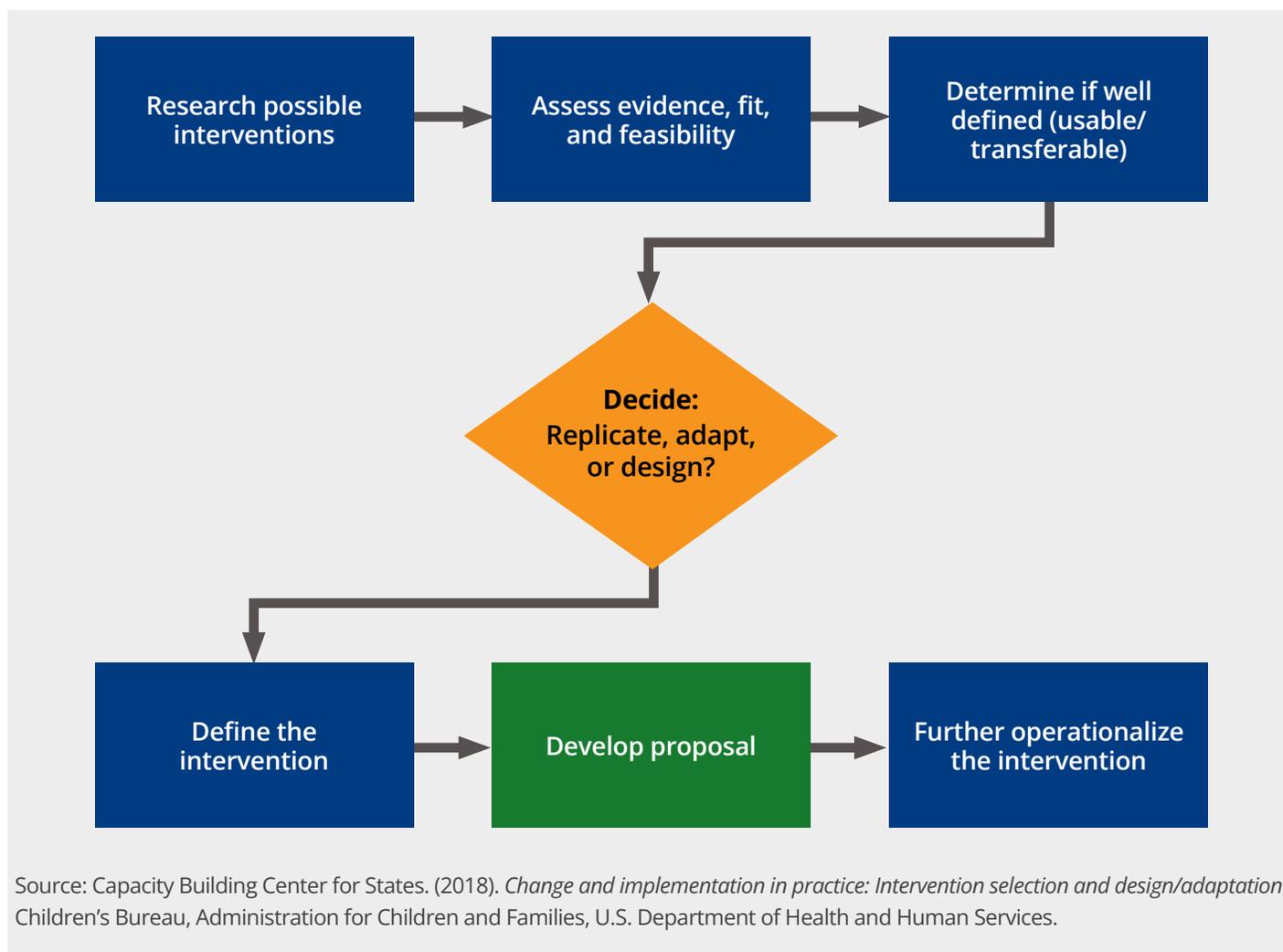
The activities shown in figure 13 are important steps in the selection and adaptation of an intervention. While they are depicted in a series, in practice the steps may overlap and teams may need to take an iterative approach, revisiting actions as information is gathered and analyzed.

Dive Deeper

Think about a time when you had a goal that took multiple steps to achieve:

- ◆ What steps did you take to get from point A to point B?
- ◆ In what way was your plan similar to either a theory of change or a logic model?

Figure 13. Essential Functions for Selecting and Adapting or Designing an Intervention.



Intervention Considerations

Selecting an intervention for implementation is a systematic process that includes an assessment of:

- ◆ The consistency of the intervention with the causal pathways identified in the theory of change
- ◆ The feasibility of implementing the intervention in the agency and community context
- ◆ The possible unintended consequences of interventions
- ◆ Whether there's enough information about the intervention to replicate it with fidelity
- ◆ Potential practitioners and barriers that may affect successful implementation

To determine if the intervention is consistent with the theory of change, each potential intervention needs to be examined to see how it aligns with the theory of change. Interventions may have a theory of change associated with them that can be found in the intervention's literature. A review is necessary to make sure that the intervention's theory of change matches the proposed theory of change. Figure 14 provides a list of key questions and considerations for intervention selection.

Figure 14. Considerations for Intervention Selection

Key Questions	Related Consideration
Does the intervention address the agency's identified problem and theory of change?	<ul style="list-style-type: none"> ◆ If the intervention does not address the problem and theory of change, teams should look for another intervention.
Is there evidence that the intervention will work?	<ul style="list-style-type: none"> ◆ Where possible, teams should prioritize evidence-supported interventions with strong evidence of positive outcomes for their target population from rigorous research. ◆ While there may not be rigorous prior evaluations, there should be support that the intervention will make a meaningful difference. That is, there should be some research support, practice evidence, and/or strong theoretical backing.
Is the intervention well defined? Is it usable/transferable?	<ul style="list-style-type: none"> ◆ Consider whether the intervention already has the following: <ul style="list-style-type: none"> ◆ A clear definition ◆ Identified core components ◆ Operational definitions ◆ Practical performance assessment (fidelity process) ◆ If the intervention is not well defined but can be, teams will need to do further work to define and operationalize before implementation. (See functions 5 and 7 below.)
Does the intervention fit the agency and population?	<ul style="list-style-type: none"> ◆ Consider whether adaptation is needed to: <ul style="list-style-type: none"> ◆ Improve the accessibility and relevance of the intervention to the target population ◆ Accommodate differences in organizational structure or service delivery ◆ If so, can the above be achieved through adaptation, without changing the core components? ◆ If adaptation of core components is necessary, is it doable without compromising the intervention's integrity and effectiveness?
Is the intervention feasible for the agency to implement?	<ul style="list-style-type: none"> ◆ If it seems reasonable that the agency can build capacity to implement, then teams may consider the intervention; if it does not seem realistic to build sufficient capacity, then teams should look for another intervention.
Is a new intervention necessary?	<ul style="list-style-type: none"> ◆ Consider whether the agency has time and resources to devote to development and design of a new intervention.

Source: Capacity Building Center for States. (2018). *Change and implementation in practice: Intervention selection and design/adaptation*. Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.

Once the IST identifies interventions consistent with the theory of change, it determines the feasibility of implementing the intervention given the community context. The team needs to consider whether the agency and community culture, or resources, present any insurmountable obstacles to implementing the intervention effectively.

Replicating the Intervention With Fidelity

Once you have assessed alignment with your theory of change and feasibility, your next step is to determine whether you can replicate the intervention with fidelity. It is important that you don't deviate too much from the intervention design to ensure you can still achieve the desired outcomes. To find out if the intervention can be replicated with fidelity, you can guide the IST in assessing whether there is sufficient information about the intervention to replicate it. Once the assessment is complete, the IST can identify and explore information gaps.

If IST members decide they do not have enough information to replicate the intervention with fidelity, they can either reject the intervention or assign one or two people from the team to gather the information. The IST can contact the people who developed the intervention and/or people who have experience implementing the intervention. Contacting other states or localities that have implemented an intervention also provides useful information about the potential barriers that might be encountered during implementation. Consider joining a related Center for States peer group, which offers networks for child welfare professionals to connect virtually with peers working in similar practice areas or on common initiatives.

Adapting an Intervention

An intervention is not a one-size-fits-all approach and must be adapted prior to implementation. For example, what if you select an intervention that was originally implemented for a target population that is different from yours? There might be differences in age, social class, education, urbanicity, income level, or other characteristics. Such population characteristics may represent different cultures, since people in different age groups, for example, may have different belief systems, different ways of responding to the same situation, different expectations that apply to interpersonal relationships, and different attitudes toward child welfare services.

Differences in child welfare system structures can also necessitate adapting an intervention. System differences can include:

- ◆ The intervention was implemented in a county-administered child welfare system, but yours is state-administered
- ◆ The intervention was implemented in an all-public child welfare agency system, but yours is fully privatized or a hybrid of both
- ◆ The intervention was initially implemented where caseworkers provide services directly to children, youth, and families, but in yours, caseworkers only manage cases and private contractors provide all direct services
- ◆ The intervention was initially implemented in a system that has a practice model and program policies that are different from yours

Again, you can help IST members understand whether these structural differences may affect the intervention and how this might influence a decision about adapting the intervention. Adaptation requires a thoughtful approach. Some strategies include:

- ◆ Delineating what is different about circumstances or conditions
- ◆ Specifying how these differences might affect replication of the intervention with fidelity and supporting this with research findings, if available
- ◆ Identifying the necessary changes and the number of components that will require adaptation
- ◆ Making sure that you retain the key theoretical constructs, the core components, and the theory of change that underlies the intervention, if that information is available—if these are changed, then it really is not the same intervention

Should You Adapt an Intervention?

There is some disagreement in the field about whether it's okay to adapt an intervention, particularly if it is an evidence-supported intervention. Professionals who oppose adapting interventions stress that if an evidence-supported intervention is changed in any way (that is, if you don't replicate it with fidelity) you cannot expect the intervention to be effective. In this view, it becomes a different intervention and, therefore, is no longer evidence supported. However, if you don't select an evidence-supported intervention, then adaptation is less of a concern.

Other experts argue that if you don't adapt an intervention, even an evidence-based intervention, and your target population or child welfare system is different than the one that the intervention was tested on, then it will not be possible to fully implement the intervention with fidelity anyway, so you might as well adapt it in a thoughtful way rather than needing to make changes as you progress in the implementation process. This does not mean, however, that adaptation is necessary every time there is a difference in a population or system. Some interventions are appropriate for most populations and systems.

Developing an Intervention

Sometimes interventions that meet your needs, even with adaptation, are unavailable. This does not necessarily mean that an intervention needs to be created from scratch. You can take pieces from existing interventions and put them together in a way that makes sense, fits the target population and child welfare structure and system, and is consistent with the theory of change. You play an important role in facilitating the development of a new intervention and may provide the following support:

- ◆ Specify the core components, including how each component is aligned with and will address key aspects of the identified problem
- ◆ Create practice profiles clearly outlining the essential functions and core activities needed to deliver the intervention as intended
- ◆ Ensure the profiles describe the behavior expected so that practitioners know how to conduct the intervention

Locating Potential Solutions and Interventions

Information about evidence-based, promising practices and programs in child welfare or related fields can be found on numerous websites. Some reliable internet resources to consider are:

- ◆ [Title IV-E Prevention Services Clearinghouse](#)
- ◆ [Substance Abuse and Mental Health Services Administration \(SAMHSA\)](#)
- ◆ [Friends National Resource Center for Community Based Child Abuse Prevention](#)
- ◆ [Office of Juvenile Justice and Delinquency Programs Model Practice Guide](#)
- ◆ [RAND Social and Economic Well-Being: Promising Practices](#)

For literature review resources, you can find offline, paper-based materials with the assistance of librarians at [Child Welfare Information Gateway](#). Other counties, areas, or states may have promising practices taking place in their child welfare programs. For more information on potential solutions and interventions, try:

- ◆ Conducting online searches of the practice area
- ◆ Contacting local, regional, statewide, and national professional networks
- ◆ Sending inquiries to Children's Bureau regional offices via appropriate state agency channels
- ◆ Asking for other training and technical assistance (TA) resources of the Children's Bureau

You might find potential solutions through other agencies serving similar populations, such as:

- ◆ Early childhood intervention services
- ◆ Mental health organizations
- ◆ Substance abuse treatment programs
- ◆ Juvenile justice programs
- ◆ Other countries that implemented innovative approaches and tools

Dive Deeper

- ◆ In what ways have you seen interventions replicated, adapted, or developed in your agency?
- ◆ What were the struggles?
- ◆ What were the successes?

Summary

In this chapter you learned how to identify potential solutions and interventions to address the problem. When identifying a solution or intervention, use a team approach and keep in mind the type of problem (technical or adaptive), what each requires, and the characteristics of the target population.

Building a theory of change can help your agency better understand the causal pathways, or factors that lead to a desired outcome. By creating a theory of change, your agency can create a data-based hypothesis to select potential solutions and interventions.

Teams should consider a wide array of potential solutions, as you may find that the best intervention can be developed using elements of several different solutions. Once a set of possible interventions has been gathered, the team can assess the potential fit of each solution by asking questions to determine whether a solution aligns with the desired outcomes for the target populations, if it has undergone rigorous evaluation, if the practice has been replicated with fidelity, and if your agency has the capacity to implement the intervention effectively.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

- ◆ **The Hexagon Tool: Exploring Context**

- <https://implementation.fpg.unc.edu/resource/the-hexagon-an-exploration-tool/>

- Metz, A. & Louison, L. (2018)

- ◆ **NCWWI E-Resources List: Evidence-Based & Evidence-Informed Practices**

- <https://www.ncwwi.org/index.php/resourcemenue/resource-library/evidence-based-practice>

- National Child Welfare Workforce Institute. (2013).

- ◆ **The PII Approach: Building Implementation and Evaluation Capacity in Child Welfare**

- <https://www.acf.hhs.gov/opre/report/pii-approach-building-implementation-and-evaluation-capacity-child-welfare>

- Permanency Innovations Initiative Training and Technical Assistance Project & Permanency Innovations Initiative Evaluation Team (2013)

- ◆ **10 Great Resources for Creating a Theory of Change**

- <http://philanthropy411.wordpress.com/2010/03/29/theoryofchange/>

- Putnam-Walkerly, K. (2010).

- ◆ **Knowing the Best of What's Out There: Understanding and Identifying Evidence-Based Practices in Child Welfare**

- https://www.cebc4cw.org/files/CEBC_Knowing_the_Best_of_Whats_Out_There_12_8_2011.pdf

- Walsh, C., and Zimmet, B. (2011)

Chapter 5

Implementing Interventions

Now that you have learned how to research solutions, build a theory of change, and adapt and develop interventions, you will learn about the next step of the CQI and implementation process: implementing the intervention.

Implementation means putting a plan or practice into action. Implementation science helps inform agencies about the elements that drive successful implementation. Child welfare agencies can implement and sustain new interventions more effectively by drawing on this body of research to inform implementation efforts.

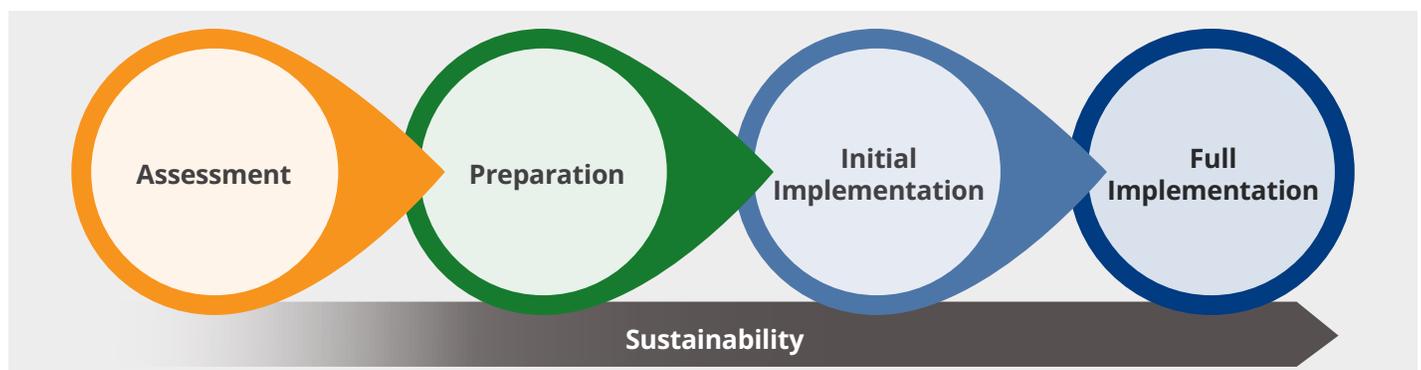
To help you plan and assess intervention implementation, this chapter presents:

- ◆ Preparing for effective implementation of interventions
- ◆ Understanding factors that drive successful implementation
- ◆ Creating an implementation plan
- ◆ Building capacity for sustainability

Though your role may vary based on the type of intervention selected, pay close attention to the lessons learned and what drives effective implementation. Regardless of how an intervention is implemented, you need to ensure that the model can be replicated to gain the same beneficial outcomes for the target population.

Implementation Stages

Figure 15. Implementation Stages



There are four major stages of implementation that the CQI Training Academy has adapted from the [National Implementation Research Network](#) (NIRN) Framework as illustrated in figure 15. Each stage is fluid, dynamic, and complex, some may overlap with others, and activities may not necessarily occur sequentially. Occasionally, you may need to go back to a previous stage to repeat training or return to an assessment if evaluation findings do not show that the intervention is having an impact. However, some critical activities must be completed before moving on to other stages, and you may play different roles in each stage.

Stage One: Assessment

In stage one, data are collected to identify and understand the problem and then an intervention is identified. You sustain feedback, buy-in, and support for the intervention by continuing to provide and receive information from staff, partners, and people with lived experience. You ensure that data presented to the various groups are easily understandable; they assess the strength of important implementation supports such as office space, availability of equipment, training and TA, staffing, supervision, policy alignment, and accessibility to the target population. A portion of the readiness assessment tool developed by the Capacity Building Center for States is shown in figure 16.

Figure 16. Portion of Checklist of Key Change and Implementation Milestones

Milestone	Yes	Not Yet	Topic Area for Additional Resources
A team was established to guide the change and implementation process.			Teaming
The problem or need was researched and clearly identified.			Problem Exploration
The root cause(s) of the problem was analyzed.			Problem Exploration
A theory of change was developed that reflects a clear pathway to move from identifying the problem to achieving a desired long-term outcome.			Theory of Change
An assessment of readiness for change was completed.			Readiness
An appropriate intervention to address the root cause(s) of the identified problem was identified.			Intervention Selection and Design/Adaptation
Core components and related activities of the intervention were clearly defined.			Intervention Selection and Design/Adaptation
Readiness for implementation was assessed. (Note: Readiness assessment may occur multiple times.)			Readiness
Strategies were identified to address readiness gaps, build capacity, and support implementation.			Implementation Planning and Capacity Building
Implementation plan was developed.			Implementation Planning and Capacity Building
Data were collected and used to monitor, assess, and adjust the intervention and implementation strategies.			Monitoring, Evaluating, and Applying Findings
Decision was made to continue, adjust, or discontinue the intervention based on evaluation findings.			Monitoring, Evaluating, and Applying Findings

Stage Two: Preparation

In this stage, agencies prepare the intervention and the organization for implementation. Based on findings in the assessment stage, the team strengthens staff and organizational capacity to support the intervention. A systematic process for reporting any implementation barriers and establishing plans for addressing those barriers is critical. The implementation team develops an implementation plan. Coaching and TA are put into place, and the evaluation design is finalized. Thoroughly preparing for an intervention dramatically increases the chances of its viability. Formulating and finalizing the implementation plan involves:

- ◆ Engaging community partners and people with lived experience
- ◆ Defining process, outcome, and fidelity measures
- ◆ Developing methods for gathering data
- ◆ Determining baselines for measuring performance and participating in designing the evaluation and monitoring approach

Stage Three: Initial Implementation

Once both the intervention and organization are ready, implementation starts as families and children begin receiving the new service. Sometimes, this will be in select geographical sites or on a pilot basis so that issues can be better managed as they arise. The implementation team begins the monitoring and assessment process, gathering data and asking questions like “Is the model being implemented as intended, or with fidelity?” “Are more training and TA needed?” and “Are there any systematic barriers impacting implementation fidelity?” (E.g., is there sufficient staffing: are supervisors and coaching supports in place?) Data, including staff and partner feedback, are generated, assessed, and analyzed on an ongoing basis as “glitches” or more serious issues may occur, mistakes are made, and lessons are learned, and adjustments are made to improve impact, eliminate barriers, and increase fidelity.

If evaluation data show that the intervention is ineffective or if it’s perceived as causing harm, the intervention will be halted. In your role, you may assist in:

- ◆ Monitoring and assessing the implementation process
- ◆ Identifying trends, strengths, and concerns, including the impact on marginalized populations
- ◆ Determining when adjustments are needed to ensure stronger fidelity or to increase effectiveness in the full implementation of the initiative
- ◆ Providing feedback to leadership, staff, and partners to sustain support and improvement
- ◆ Acting as messengers for effective communication
- ◆ Ensuring consistency in practice adjustments among offices and sites and that policies and procedures are updated as needed

Stage Four: Full Implementation

At this stage of implementation, decision-makers determine whether the intervention is ready for expansion. It is key to ensure that the intervention has been implemented with fidelity to the model and that the agency has the staff and organizational capacity to go full scale. If it’s a new intervention, you will want to be confident that the intervention works and that you’re ready to expand it. New skills and practices become more fully integrated into the policies, activities, and services of an agency. Decision-makers and others involved reflect on the implementation process and learn how to improve future efforts. Your role may include the following activities:

- ◆ Collecting data
- ◆ Ensuring data are accurate and reliable
- ◆ Developing and running requested reports
- ◆ Helping ensure that decisions throughout are based on high-quality data
- ◆ Providing information to and soliciting feedback from leadership and interested parties on implementation progress
- ◆ Promoting a culture of learning from information gathered in the monitoring and evaluation process

Sustainability

Sustainability is not a separate stage or activity and should be built into every stage of implementation from the beginning. If the intervention is not sustainable, it cannot be replicated across an agency and is not a viable solution to the problem. Sustainability activities that might take place initially and throughout include:

- ◆ Proactively disseminating intervention information to community, potential funders, practitioners, researchers, and academics in the broader child welfare field to ensure continued awareness and support
- ◆ Solidifying ongoing funding
- ◆ Incorporating volunteers for specific components
- ◆ Strengthening capacity of partner organizations to provide components like training curricula that can be adapted for their use
- ◆ Using evaluation data in a systematic way to illustrate progress

With full implementation of an intervention, sustainability activities become the focus and a critical part of the ongoing maintenance of that intervention.

Factors and Supports That Drive Successful Implementation

Literature from successfully implemented projects identify critical factors for effective implementation, including:

- ◆ Staff selection and capacity building through developing job protocols; recruiting, selecting, or assigning staff with appropriate qualifications; and ensuring initial and ongoing training, supervision, and coaching
- ◆ Quality TA initially and on an ongoing basis
- ◆ The design and implementation of a strong, comprehensive evaluation
- ◆ Policies and procedures that are updated throughout implementation to reflect new legislation, practices, and programs
- ◆ Office space, equipment, and administrative supports, as well as adjustments and updates to data systems to capture new information
- ◆ Initial and sustained buy-in of leadership, staff, and partners
- ◆ Agency advocates or “champions” who have a strong belief in the intervention, help manage the intervention, and have the clout to move projects into action

Many of the most successful projects have been purposeful and aggressive through all the stages by putting options in place to sustain their interventions over the long term. The degree of engagement, involvement, and advocacy of top child welfare leadership in the change effort has also been shown to be a pivotal factor in its success or failure.

Preparing for Implementation

Intervention readiness is a duty that the implementation team and CQI practitioners need to tackle. NIRN suggests the following standard for determining intervention readiness—an intervention must be *teachable, learnable, doable, and readily assessed in practice*. For this to be possible, several criteria must be met, including:

- ◆ A clear description of the intervention, including the philosophy, values, and principles, and the population that will benefit
- ◆ Delineation of the features or core components that must be present to say the intervention exists (sometimes referred to as essential functions, active ingredients, or practice elements)
- ◆ Behaviorally based indicators for each core component that are observable and measurable, sometimes referred to as practice profiles, to ensure consistency across practitioners delivering the intervention
- ◆ A method of assessing whether the core components are being performed as intended

The team must also assess the agency’s overall readiness for effectively implementing the intervention. Agencies may use readiness tools to measure motivation, general capacity, and intervention-specific capacity for effective implementation of a program, practice, or other intervention.

Adapting Existing Intervention

In the last chapter you learned about adapting strategies to interventions. These strategies help you to identify conditions in your agency that differ from previous implementations and whether such differences might affect replication of the intervention. You can then identify the core components of the intervention that would require adaptation. Based on that analysis, carefully review existing guidelines, protocols, and policies to determine exactly how to modify core components and existing practice profiles.

Developing Practice Profiles

A practice profile is a tool that breaks down large concepts into discreet skills and activities that can be taught, learned, and observed. For new interventions, new practice profiles will need to be created. This may be a good time to use an ad hoc team to focus on practice development and fidelity throughout the implementation process.

Dive Deeper

When implementing an intervention, how would the importance of readiness apply as:

- ◆ A director?
- ◆ A caseworker?
- ◆ A community service provider?
- ◆ A family or youth with lived experience?
- ◆ Another member of the team?

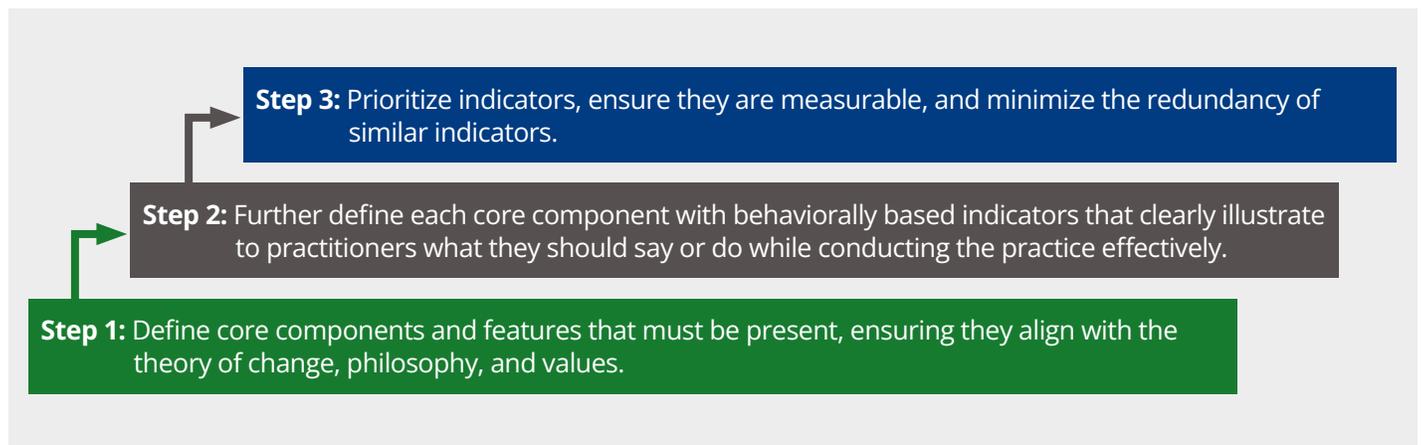
The ad hoc team can report back to the full implementation team on the practice profiles and later, the fidelity measures and ongoing assessments.

This team will need strong facilitation and leadership when developing practice profiles and may benefit from the following supports:

- ◆ Consultants or developers with experience creating practice profiles
- ◆ Practitioners, leadership, supervisors, and trainers to ensure early engagement and buy-in
- ◆ Representatives from the target population to assist in thoughtful exploration of the lived experiences of families and children during the crafting of behaviorally based indicators

Practice profiles clearly articulate an intervention so that the agency can develop and deliver effective training, staff know exactly what is expected of them, and you can say with some certainty whether the intervention is being delivered as intended. To develop practice profiles, follow the steps listed in figure 17.

Figure 17. Steps to Creating Practice Profiles



For a more detailed review of how to develop practice profiles, check out the [NIRN Active Implementation Hub](#).

Building Staff Capacity

Team members must be responsible for developing the practice and maintaining fidelity to conceptualize and articulate the core components, or unique activities, and describe them in behaviorally based, observable, measurable terms. This can be a challenging endeavor for those new to the process. Team members need practice profile examples and support to ensure that the core components and indicators are research informed. You can build team member capacity to develop profiles and syntheses of the research literature to inform the articulation of core components and indicators.

Selecting Staff

The first step in building staff capacity is identifying and selecting the practitioners who will deliver the intervention. There are desired competencies that need to be considered and applied to establishing a process for identifying and selecting staff. How this is done depends on the scope of the intervention. For a larger intervention:

- ◆ Begin with staff who are better prepared to deliver the intervention, are excited and eager to try the practice change, and have expertise in engagement, partnership, and collaboration
- ◆ Place greater emphasis on training and coaching to ensure that knowledge and skills are developed where they may not currently exist

For a smaller intervention, or even discrete aspects of a larger intervention, you may have the ability to select staff to conduct the intervention but should still:

- ◆ Articulate the core competencies desired for practitioners to effectively deliver the core components as defined in the practice profiles
- ◆ Develop protocols for recruiting and selecting the most highly qualified staff for the intervention

Training, Supervising, and Coaching

During the practice profile development, teams should have identified potential trainers, supervisors, and/or coaches that understand the core components and behavior expectations needed to develop a strong training curriculum. Your agency should integrate established trainers or internal training teams into the implementation process to develop curricula and prepare drafts for review by the entire implementation team. This ad hoc team can also create specific plans to train and coach staff, as well as supervision protocols for those who will be managing their work.

Think carefully about and plan for how and in what sequence staff at all levels will be trained. Train supervisors prior to or with frontline staff so that all understand how to conduct the intervention.

Components of Fidelity

Fidelity measurement is critical regardless of the type of intervention being implemented. If you don't know that the core elements of the intervention are being performed as designed, you cannot be certain whether positive or negative outcomes are the result of implementation fidelity or the intervention's effectiveness. According to implementation science experts, fidelity has three components:

- ◆ Contextual components, also referred to as structural components, are the prerequisites that must be in place for a program or practice to operate. Examples include necessary dosage or participation frequency, staffing qualifications or numbers, or the location of service provision.
- ◆ Adherence is the extent to which the practitioner uses the core intervention components prescribed by the practice or program.
- ◆ Competence is the level of skill shown by the practitioner in using the core components as prescribed.

Performance assessment focuses on adherence and competence as key aspects of building staff capacity. Look to the practice profiles to develop performance assessment measures. The practice profiles clearly articulate the core components of the intervention and include observable, behaviorally specific, and measurable indicators of whether a practitioner is conducting each function as intended. These indicators can be translated into performance assessment measures.

After measures are established, you will need to determine how to collect the data to assess fidelity. Common assessment methods include:

- ◆ Project documentation and client records
- ◆ Ratings by experts based on direct observation, videotaped sessions, and interviews
- ◆ Surveys or interviews completed by program staff or participants

In child welfare agencies, where risk and public scrutiny can be substantial, fidelity assessment can heighten staff anxiety and impact the implementation and success of the CQI process if staff are too afraid to try new things or take a few calculated risks. Differentiating performance assessment related to fidelity from annual performance reviews is important. The purpose of fidelity assessment is to ensure that the intervention is being implemented as intended. Findings from fidelity assessment looking at staff performance should not be used in punitive ways or to make employment decisions. Instead, make it clear to all that the findings are used to understand what additional supports might be needed to enhance staff confidence and competence with the new practice.

Depending on the child welfare system, a CQI practitioner may lead the evaluation or partner with an internal or external evaluation team. You may work closely with the ad hoc and implementation teams to develop fidelity measures, tools, and protocols and may have a role in conducting the fidelity assessment.

Dive Deeper

- ◆ What role do you play in building staff capacity?
- ◆ How can you be an agent of change for those who may struggle with implementing interventions?

Building Organizational Capacity

Administrative Supports

In addition to staff capacity, ongoing support at an organizational level ensures that interventions are implemented effectively. The implementation team assesses:

- ◆ Required resources (for example, facility space, technology, transportation, and software and clerical support) and the team then creates a plan to supply those resources to staff
- ◆ Whether new policies or procedures need to be established to support the intervention or whether existing policies or procedures may need to be modified to avoid conflict or staff confusion

External Community and System Partners

Depending on the nature of the intervention, success may depend on formal partnerships with other organizations or systems. Identify strategic partners, engage them in dialogue about the intervention, and develop specific agreements for working together. Build external community and system partner participation by:

- ◆ Making the case for the intervention with clear data about the rationale and potential outcomes
- ◆ Fostering continuous communication by keeping people informed, soliciting feedback, and celebrating successes
- ◆ Acknowledging individual and team contributions
- ◆ Pacing change in a way that is respectful of workload and competing staff priorities
- ◆ Making recommendations for how to use the existing MIS data needed to assess fidelity and outcomes or recommending other methods of data collection
- ◆ Developing agreements for working together

Creating the Implementation Plan

The implementation plan is a living document that reflects both necessary and unanticipated adaptations made in process and practice as activities progress. The plan can be used as a monitoring tool to determine whether the process of implementing the intervention is on track. An implementation plan provides numerous benefits that include:

- ◆ Fostering proactive versus reactive behavior by following a well-developed, logical plan
- ◆ Encouraging forward thinking and helping to ensure that best practices in implementation and factors for success are at the foundation of the plan
- ◆ Anticipating challenges early in the process and developing strategies to address those challenges
- ◆ Promoting common interpretation and understanding among all parties involved
- ◆ Reinforcing feedback and communication strategies described in the communication plan
- ◆ Delineating responsibilities and encouraging sharing the work and commitment to the process with agency partners

Major Components of an Implementation Plan

A detailed implementation plan describes all implementation activities and resources required for those activities, outlines all involved teams, workgroups, and partners, and defines responsibilities of key people or groups involved within or outside the agency. An implementation plan should also contain information listed in table 3.

Table 3. Implementation Plan Components

Topic	Topic Details
Target Population	<ul style="list-style-type: none"> ◆ Clearly define the problem and the target population ◆ Describe how the identified need will be met and the desired short- and long-term outcomes
Staffing and Organizational Supports	<ul style="list-style-type: none"> ◆ Include a clearly defined intervention ◆ Provide plans for coaching, supervision, training and TA, and administrative support ◆ Contain findings from the assessments of the existing strengths of these supports ◆ Contain a description of all implementation activities, along with resources required for those activities ◆ Outline all involved teams, workgroups, and partners
Communication Lines and Methods	<ul style="list-style-type: none"> ◆ Reflect any communication plans that already exist ◆ Provide fidelity measures for assessing staff performance ◆ Explain the design for usability testing ◆ Define responsibilities of key involved people or groups within or outside the agency ◆ Highlight strategies for sustainability in the plan throughout all stages, including sources of funding and any planned fund-seeking activities
Measurements	<ul style="list-style-type: none"> ◆ Measures to assess the process and outcomes of the intervention ◆ Address site-specific data collection and monitoring ◆ Outline a clear and detailed plan for rollout to different areas ◆ Describe challenges, real or anticipated, as well as ways to address those challenges ◆ Include a projected timeline of activities for each component of the intervention

Answering the following questions can also help you develop an implementation plan:

- ◆ What type of intervention is being implemented?
- ◆ Is it a new and untested type of intervention, or is it an evidence-based or promising practice?
- ◆ What is the purpose of our implementation? Is it to spread an intervention statewide, to pilot and further develop a new intervention, or to test efficacy on a small scale?
- ◆ Is peer support available between sites?
- ◆ What implementation supports are in place? What needs to be developed in each site?
- ◆ Have external community and system partners been involved in the development and planning in a respectful way, and is the community supportive of the intervention in each site?
- ◆ What contextual components should you consider in each area?
- ◆ Will these factors require any essential functions of the intervention to be adapted?
- ◆ What challenges can you anticipate in each site? How can they be dealt with?

Figure 18 below shows implementation plan elements.

Figure 18. Implementation Plan Elements

Implementation Plan Elements	
1. Background and contextual information	<ul style="list-style-type: none"> ◆ Statement of problem or need ◆ Desired outcomes and theory of change ◆ Target population ◆ Required implementation timeframes and requirements, when applicable
2. Intervention overview	<ul style="list-style-type: none"> ◆ Intervention description ◆ Purpose and underlying principles ◆ Core components
3. Implementation team	<ul style="list-style-type: none"> ◆ Teaming structure ◆ Membership and roles
4. Readiness assessment	<ul style="list-style-type: none"> ◆ Findings related to motivation ◆ Findings related to general capacity ◆ Findings related to intervention-specific capacity
5. Work plan	<p>A. Plans for activities prior to implementation</p> <ul style="list-style-type: none"> ◆ Activities to complete intervention adaptation or design ◆ Activities to develop or strengthen implementation supports ◆ Activities to strengthen motivation and build capacity <p>B. Plans for testing and implementation</p> <ul style="list-style-type: none"> ◆ Usability testing ◆ Piloting and/or staging approach ◆ Initial site selection ◆ Activities to support implementation
6. Data collection, evaluation, and CQI	<ul style="list-style-type: none"> ◆ Monitoring and adjustment processes ◆ Plan for measuring changes in readiness (motivation and organizational capacity) ◆ Overview of implementation evaluation ◆ Overview of outcome evaluation
7. Engagement and communication strategies	<ul style="list-style-type: none"> ◆ Internal and external communication
8. Anticipated challenges	<ul style="list-style-type: none"> ◆ Potential challenges and barriers ◆ Strategies to address challenges

Source: Capacity Building Center for States. (2019). *Change and implementation in practice: Implementation planning and capacity building*. Children’s Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.

Responsibilities of the Implementation Team

In creating an implementation plan, consider the responsibilities of the implementation team, the role of the CQI practitioner, and the speed of the rollout. In conjunction with other staff, the implementation team is responsible for:

- ◆ Developing, reviewing, and updating all facets of the implementation plan
- ◆ Revising the communication plan as needed
- ◆ Assessing readiness for moving on to next steps
- ◆ Evaluating data to determine baselines prior to implementation
- ◆ Measuring progress toward meeting process and outcome measures and goals
- ◆ Determining when process and practice adjustments are needed
- ◆ Reviewing the structure, roles, and functioning of existing teams that support the intervention
- ◆ Making recommendations for changes as needed
- ◆ Enlisting support from staff, partners, and the larger community on an ongoing basis

CQI Team Roles in Implementation Planning

You can be involved in implementation planning in various ways, including contributing to the planning component of the implementation team and helping to determine the scope of the implementation or rollout. You might help assess and strengthen current supports and help determine adaptations to the intervention. You might assist in developing process, fidelity, and outcome measures, which is particularly important if the intervention has limited supporting evidence. Additionally, you might help design the evaluation approach.

Timing of an Implementation Plan

Implementation plans can be rolled out incrementally or all at once. Weigh the pros and cons in determining the speed of rollout. Decision-makers will use the pros, cons, and issues listed below to decide on how the new initiative will unfold. This may include the scope of activities in the various areas, criteria for selecting different areas, how the rollout activities will be sequenced, what the pace of the expansion will look like, and how different phases in different areas will be coordinated. Timelines for the various activities should be clear, with a projected date for full implementation.

Some benefits of a phased rollout are:

- ◆ The agency does not have to deal with all the implementation issues at the same time but can focus on a smaller geographic area
- ◆ Staff has time to adjust to the change gradually
- ◆ Lessons learned from early implementation areas can guide the rest of the process
- ◆ If the intervention goes well, staff enthusiasm in implementation sites will increase chances of success and smooth the way for the broader rollout

Some disadvantages of rolling out incrementally include:

- ◆ Possible confusion caused by groups of staff working with different systems or practices and data quality issues may result
- ◆ Staff already reluctant about the change may hear negative feedback from those who've made the change, causing even more resistance
- ◆ Engaging the developer or other TA consultant in assisting at multiple sites at different times will involve cost and feasibility issues
- ◆ Poor current practice and outcomes may drive the need for wholesale change as rapidly as possible

Other issues to consider in determining priority areas for a rollout include:

- ◆ Readiness of the intervention
- ◆ Overall capacity in different areas, such as staff and organizational issues, infrastructure, and training and TA needs

- ◆ Whether there are adequate numbers of the target population to warrant implementing the intervention in a particular area
- ◆ The geographic context of an area, or whether it's rural, urban, or a mix of rural and urban
- ◆ Whether partners and the community are receptive and committed
- ◆ Whether accessible support services are available in the community to bolster the intervention
- ◆ The capacity of data systems to support the new intervention
- ◆ Organizational culture issues in the different areas
- ◆ Stability of area staff and leadership
- ◆ The readiness of staff and leadership to engage in the proposed change in terms of their attitude, current level of performance, and degree of new skill mastery and the differences in outcomes and urgency of need between offices and communities
- ◆ Selecting sites or areas for initial implementation where strengths exist that will foster relatively quick successes

Creating the Logic Model

In the last chapter, you learned about how logic models compare to a theory of change. A logic model is developed after the need is clearly defined and the problem is thoroughly understood. It can be completed at various points but is most effective when integrated into the project conceptualization and planning process, as it serves as a blueprint to guide the intervention development and implementation. The logic model is a tool that:

- ◆ Describes the resources, implementation activities, and program outputs that link an intervention and target population to intended outcomes
- ◆ Clarifies and communicates by diagramming the logic or rationale behind a program
- ◆ Serves as a method to communicate with and enhance buy-in of staff and partners
- ◆ Guides the development of a systematic capacity to implement
- ◆ Helps determine the inputs the agency must put into place to support the intervention
- ◆ Needs to be periodically updated like other planning and implementation tools and processes

Once the implementation plan is in place and the logic model is clear, initial implementation can begin.

Summary

Effective implementation of interventions is a vital component in the ongoing CQI cycle for child welfare agencies. Though you may not have primary responsibility for all aspects of implementation, you can play an important role throughout the process to ensure an intervention's success. Preparing for an intervention includes developing clear practice profiles and performance assessment measures and methods. This implementation activity is too often overlooked and yet extremely critical to success. Ensuring that your system can support fidelity to the intervention involves building both staff and organizational capacity and is a critical step in getting the system ready for implementation.

Implementation planning enables teams to carefully think through and plan implementation activities in a systematic, orderly way. Particularly important is clarifying the purpose and scope of implementation. Deciding whether to initially roll out the intervention in phases or all at once requires numerous considerations and will be a significant part of your implementation planning. A well-developed implementation plan combined with a logic model conceptualized early on provides a blueprint of activities and allows you to clearly communicate the project design to staff and partners. Once your plan is in place and your logic model is clear, you can begin initial implementation.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

◆ **Active Implementation Frameworks for Program Success: How To Use Implementation Science To Improve Outcomes for Children**

[The National Implementation Research Network | NIRN \(unc.edu\)](#)

Metz, A., and Bartley, L. (2012)

Zero to Three Journal, 32(4), 11–18

◆ **The PII Approach: Building Implementation and Evaluation Capacity in Child Welfare**

<https://www.acf.hhs.gov/opre/report/pii-approach-building-implementation-and-evaluation-capacity-child-welfare>

Permanency Innovations Initiative Training and Technical Assistance Project & Permanency Innovations Initiative Evaluation Team (2013)

Chapter 6

Monitoring and Assessing Interventions

At this point in the CQI cycle, your intervention should be clearly defined and implementation started. This chapter will help you plan for the next and final step of the CQI and implementation process, monitoring and assessing interventions. Use the theory of change and logic model to identify questions of interest and involve community and system partners in shaping the questions. Reflecting together on each element of the logic model—inputs, outputs, and outcomes—spurs thinking about the fundamental questions. Select those questions most critical to understanding whether the intervention was successful.

This chapter will help you:

- ◆ Understand common approaches to monitoring and assessing interventions
- ◆ Use the theory of change and logic model to develop research questions and indicators
- ◆ Analyze and report outcome data
- ◆ Make intervention decisions based on monitoring and assessing

Approaches to Monitoring and Assessing

Your approach to monitoring and assessing depends on the research questions your agency wants to answer. You can choose one or all approaches and conduct them sequentially since they complement each other. You can also combine approaches, but for each approach, teams should discuss what questions the approach is intended to address and the tradeoffs for choosing the approach. These common approaches to monitoring and assessing are explained in detail below:

- ◆ Output and outcome measurement
- ◆ Implementation fidelity assessment
- ◆ Formative evaluation
- ◆ Summative evaluation

Output and Outcome Measurement

MIS quantitative data can be extracted from the state MIS to monitor and assess desired outputs and postimplementation outcomes. Appropriate MIS enhancements may be needed to effectively capture desired outputs and to report on outcomes. Other child-and-family-serving systems' MIS data may be informative in answering questions about outputs and desired outcomes as well. For example, court data systems, mental and behavioral health systems, and education system data could all be paired with child welfare MIS data to form a more complete picture. Using an outcome measurement approach helps you answer, "what happened?" Some benefits of using MIS data outcome measurements include:

- ◆ Provides valuable information about whether you invested and delivered what you had planned
- ◆ Helps determine whether desired short-, medium-, and long-term outcomes improved over time
- ◆ Helps measure outputs and outcomes across a large population (vs. case review or other methods that only sample the full population)

The big tradeoff for this approach is that it's hard to assess whether outcomes can be attributed to the intervention.

Assessing Implementation Fidelity

Assessing implementation fidelity helps you answer questions about whether practitioners are delivering the intervention as designed and whether you're providing the right supports to practitioners to promote their skills. This assessment should be conducted before expending resources to assess whether the intervention is producing the outputs and outcomes you want. This type of assessment helps you identify barriers and adjust implementation supports to promote greater staff adherence to the model and improve skills. Assessing implementation fidelity alone does not tell you whether the intervention has achieved the intended outcomes, but if it's combined with other forms of assessment, you can more confidently attribute outcomes to how well the intervention was implemented.

Not every monitoring and assessment approach is appropriate or cost-effective for all interventions. You should strongly consider assessing implementation fidelity in a couple of situations: to ensure that an evidence-supported intervention is being implemented as designed to replicate the same positive outcome and to ensure that the intervention is effective. These are not the only instances you should assess implementation fidelity, but they are two important examples of what to consider before beginning to make sure your intervention is ready.

Preparing for Assessing Implementation Fidelity

Before assessing implementation fidelity, make sure that the intervention is ready. [NIRN](#) suggests that the intervention must be teachable, learnable, doable, and readily assessed in practice. You can make sure your intervention is ready by answering these questions:

- ◆ Do you have a clear description of the intervention?
- ◆ Have you delineated core components that must be present to say the intervention exists?
- ◆ Have you completed your practice profiles with behaviorally based indicators?
- ◆ Do you have a method of assessing if core components are performing as intended?

Usability testing helps you understand whether all elements of the implementation plan are feasible in the actual service setting by implementing the intervention on a small scale (pilot) to test whether the plans for implementation work. Usability testing can help you determine whether the theory of change is valid, if all service activities operate as expected, and if the data collection tools are well-designed. As testing results come in, the implementation team can engage in rapid problem-solving to adjust and improve the intervention, implementation supports, and evaluation methods.

After determining if the intervention is ready, you must decide specifically what is going to be tested. It's helpful to prioritize certain processes for usability testing. First, test the core components of the intervention that are likely to be the most challenging to implement as planned, particularly if a new or adapted intervention is being implemented. It's also important to test service activities that involve shared responsibility or that require transitions for children or caseworkers. Finally, new, or complex data collection processes and tools should be tested. When planning your usability testing approach:

- ◆ Be clear about the tests by asking questions about the core components and processes
- ◆ Identify the key outcomes that can be revealed quickly
- ◆ Plan logistics, including coordinating testing, reporting results, and length of the testing cycle
- ◆ Decide who makes decisions based on the findings and establish criteria for when processes need to be adjusted or are acceptable

Usability testing is an ongoing process and can be revisited until the team is confident that the intervention has been refined and will not be changed again. For more information on planning for usability testing, please see the PII-TTAP Usability Testing Tool, which you'll find in PII-TTAP's [Guide to Developing, Implementing, and Assessing an Innovation Volume 4: Initial Implementation](#).

When conducting tests, have selected staff use a "Plan, Do, Study, Act" cycle in which teams quickly prepare, implement, monitor, and gather feedback about a process or tool and then make corrections (see <https://deming.org/explore/pdsa/>). All team members involved provide feedback on how it went and highlight any obstacles or

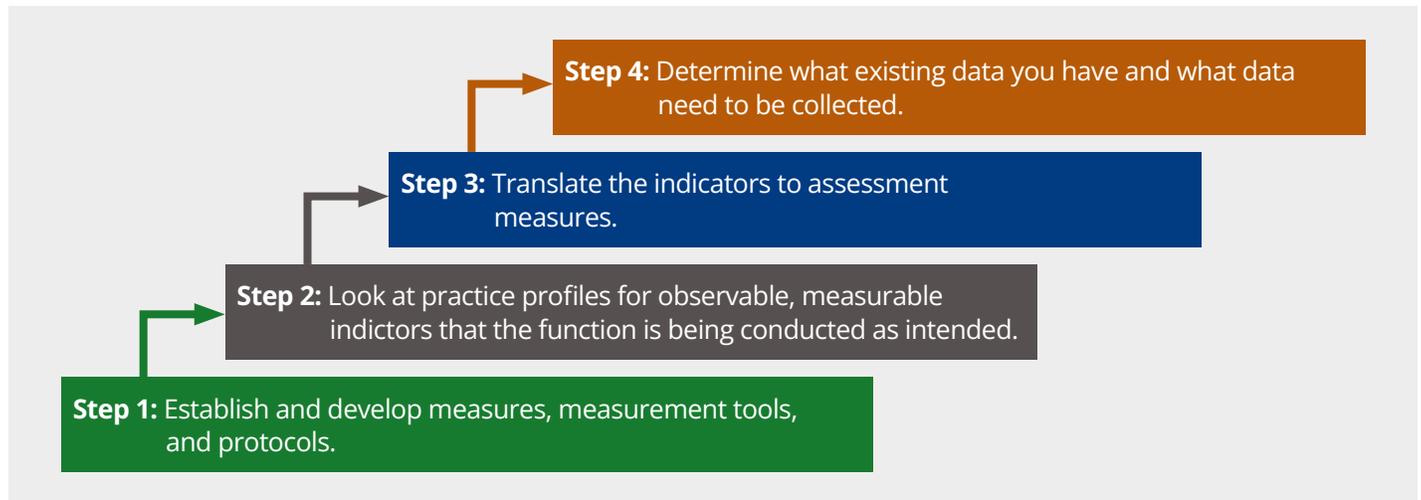
areas for improvement. The implementation team then assesses feedback to adjust either the intervention's practice profiles or implementation supports.

At this stage in the process, the implementation team should:

- ◆ Determine what data to collect on key outputs and how to collect them
- ◆ Develop criteria for when to adjust processes and when they are working well enough
- ◆ Define the scope and timeframe for the testing cycle
- ◆ Coordinate data collection and analysis and create user-friendly reports on the findings to help make decisions about the implications of findings

Assessing fidelity is a four-step process illustrated in figure 19.

Figure 19. Steps for Assessing Implementation fidelity



When assessing fidelity, you should also:

- ◆ Assess the structural aspects of fidelity
- ◆ Review administrative data from the MIS
- ◆ Review project documentation and client records

Two key elements for assessing implementation fidelity:

- ◆ Assessing practitioner performance, which evaluates how faithful they are to the core components of the intervention and their level of competence performing the core components
- ◆ Assessing fidelity, which looks at the structural prerequisites for the intervention to operate and practitioner performance

Assessing Practitioner Performance

When opting for this type of evaluation, it is important for everybody involved to understand the intended purpose of the evaluation and the nature of observations and feedback that often accompany fidelity evaluations. Performance assessments often feel intimidating, so it's important to be clear that the objective is continuous learning and improvement. Without the appropriate preparation, team members can feel pressure to "perform" when learning new skills instead of practicing them.

To do this, develop and communicate a plan for how findings from assessments will be used and with whom they will be shared. Find multiple ways to communicate to everybody involved the purpose of the assessment throughout the process, and explain how frequently the assessment will occur, who will complete the assessments, how measures will be scored, and how findings will be scored, maintained, and reported. Your role in the process may be in helping to design assessment methods and tools, to conduct the actual performance assessments, or to analyze and present findings to guide decision-making.

Assessing Implementation Supports

Another element of implementation fidelity is the assessment of implementation supports, as illustrated in table 4. The type of intervention selected determines its form of assessment. Knowing if you have a strategy or outcome-based intervention, and whether it's evidence-based, adapted, or new, helps you understand what implementation supports should be put in place.

Table 4. Assessing Implementation Supports

Type of Intervention	Evidence-Based or Adapted Intervention	New Intervention
Strategy	◆ Learn as much from the intervention developer about the supports that were instrumental and why	◆ Turn to the implementation science literature to learn practices associated with each support
Outcome	◆ Puts the most effective supports into place	◆ Shows what these supports look like when done well

When assessing implementation supports, review project documentation and administrative data to help understand if supports are in place. Then, conduct surveys or interviews with program staff, participants, family and youth with lived experience, or other community and system partners, using respectful methods and translating documents as appropriate for the community. When assessing implementation supports, the implementation team should:

- ◆ Determine what data to collect and how to collect them
- ◆ Develop criteria to determine when to adjust implementation supports
- ◆ Define the scope and timeframe for the assessment
- ◆ Coordinate data collection and analysis
- ◆ Create user-friendly reports on the findings to help make decisions

Formative Evaluation

Formative evaluations use output and outcome data, information about implementation fidelity, and carefully chosen evaluation methods to help assess whether the intervention appears to be working as intended.

It's often used in the development or early implementation of an intervention to more closely examine how an intervention operates, investigate whether early outcomes suggest that the intervention is achieving desired results, and inform decisions about whether the intervention should be modified, continued, or stopped. For example, if monitoring throughout implementation for disparity, a formative evaluation may show unintended consequences that exacerbate existing disparities and can be used to adjust or stop the intervention.

Formative evaluations help reduce the risk of prematurely investing resources in an intervention and in further evaluation. If the team moves onto a summative evaluation, the data can be combined with the formative evaluation's complementary data to understand more about why it was effective.

To plan a formative evaluation, the implementation team includes the design for a formative evaluation in the monitoring and assessment plan. When designing a formative evaluation, consider:

- ◆ What questions do you want to answer?
- ◆ What data will you use and how will you collect them?
- ◆ Who is responsible for coordinating the evaluation and reporting findings?
- ◆ What is the timeframe for the formative evaluation?

To collect data for a formative evaluation:

- ◆ Review project documentation
- ◆ Conduct surveys with eligible participants using alternate language versions as appropriate
- ◆ Review administrative data from the MIS
- ◆ Review client records
- ◆ Conduct interviews with program staff, participants, or community and system partners

Making Decisions Based on Findings

The implementation team can develop research questions, measures, and data collection methods and tools and conduct data collection and analysis. User-friendly reports on the findings can help implementation team members make decisions on what to do next. The team should review formative evaluation findings continuously and decide whether the intervention or implementation supports need to be adjusted. If the intervention isn't implemented as designed or the short-term outcomes are not moving in the right direction, stop and adjust the fidelity of the intervention design, the quality of delivery service, or exposure to the intervention.

If the intervention is being implemented as intended but short-term outcomes are not being met, you may need to rethink the intervention. Return to the planning stage and adapt the theory of change, core components, or practice profiles. If the intervention is making the expected outputs and short-term outcomes, consider moving on to the summative evaluation.

Formative evaluation helps answer many of the same “what happened” questions that you can address with outcomes measurement. It also goes beyond “what happened” to understand questions of “how” and “why” and relate to the outputs and short-term outcomes. For example, for an intervention focused on increasing kin caregiver access to new benefits and services, a formative evaluation can help answer questions like these:

- ◆ Did caseworkers find the training on their new responsibilities valuable? Do they believe the training helped them to do their job better? Why or why not?
- ◆ If kin caregivers are accessing the new benefits and services, what factors are contributing to that success? If they are not accessing them, why not? What could be done to improve their access?
- ◆ Do kin caregivers report that having the new benefits and services make it easier to assume responsibility for their relative children in foster care?
- ◆ Are kin caregivers that are served by trained caseworkers accessing benefits and services at higher rates than kin caregivers served by caseworkers that haven't been trained or offices that haven't begun performing outreach yet?

The major advantage of formative evaluation is that it helps you know whether your initial results are promising. If they are, you'll feel confident moving ahead, and if not, you can make midcourse adjustments. In addition, if you do choose to move onto summative evaluation, the formative evaluation provides complementary data. That is, if a summative evaluation shows the intervention was effective, you can combine that with your formative evaluation findings to understand more about why it was effective. Be aware that formative evaluation can be time-consuming. It often relies heavily on qualitative data, which take time and effort to collect and to analyze.

Summative Evaluation

A summative evaluation, using rigorous research design, is conducted once the intervention is fully implemented in a pilot site. Summative evaluations take a step beyond outcome measurements to help you assess if the intervention was effective and the extent to which your intervention is likely to have caused improved outcomes. It can also help explain who benefited most from the intervention and what aspects of the intervention and its implementation contributed to the intervention's effectiveness. Finally, a well-designed summative evaluation lets you build valuable evidence about effective practice in child welfare.

If you choose to conduct a summative evaluation, include your activities and procedures in your overall monitoring and assessment plan. Your summative evaluation plan should include the elements illustrated in figure 20.

Figure 20. Summative Evaluation Elements



An effective summative evaluation relies on output and outcome measurement, implementation, and fidelity data and is informed by findings from formative evaluation. Using the example of an intervention focused on increasing kin caregiver access to new benefits and services, a summative evaluation can help you answer these questions:

- ◆ Were kin caregivers who were provided with new benefits and services more likely to care for relative children when those children were first placed in foster care than kin caregivers who did not receive benefits and services?
- ◆ Of all children for whom reunification wasn't possible, did the percentage who achieved permanency through adoption or guardianship with relatives within 24 months of entering care increase more when kin caregivers received benefits and services than when they did not?
- ◆ Did differences in implementation (training, caseworker engagement strategies with relative caregivers, etc.) affect the effectiveness of the intervention?

Potential Challenges and Mitigation Plans

A summative evaluation plan should also identify potential challenges to conducting the evaluation or interpreting findings clearly and provide potential solutions to address challenges should they arise. The most typical challenges apply to data—the availability of data, the resources and time needed to collect new data, and concerns about the accuracy of data. To be ready for possible challenges, assess the availability of resources prior to implementing the intervention and monitoring and assessment plan and have additional resources lined up in case they are needed.

The major advantage of summative evaluation is that it allows practitioners to confidently say whether the intervention caused improved outcomes and builds valuable evidence about effective practice. It can be complex, resource-intensive, and time-consuming, and agencies may not have the internal capacity to conduct the statistical analyses needed to conduct summative evaluation. If it is within the agency's financial means, it can be helpful to hire an outside evaluator that can maintain independence and objectivity related to findings.

Additional Considerations When Selecting an Approach

In addition to the questions whose answers will guide you in selecting the best monitoring and assessment approaches, consider these factors:

- ◆ If you have selected an existing intervention, what degree of evidence already exists about implementation and effectiveness?
- ◆ How large is the scope of the intervention—how much of the agency's service array will be affected?
- ◆ What is the scale of the intervention? For example, will it be implemented in a single county, region, or an entire state?
- ◆ What is the potential risk that the proposed intervention could have unintended, adverse effects on children, youth, and families? For example, what if your intervention causes rates of maltreatment to increase?
- ◆ How much will the monitoring and assessment approach cost, and will you need to bring in external experts to assist?

Dive Deeper

If your agency cannot hire an outside evaluator to maintain independence and objectivity in findings, how can you and your team members work together to fill this need?

Research Questions and Indicators From the Theory of Change

A theory of change includes a description of causal pathways to achieving desired goals. You use these causal pathways to develop specific research questions or hypotheses to be tested in the summative evaluation. A research question asks, "What do we want to know?" while a hypothesis is a statement that specifies what would happen if a particular condition were met. Your hypothesis provides a framework for the remainder of the summative evaluation plan.

The theory of change also includes a description of the indicators. These indicators are measured to assess whether the causal link has been confirmed. In your plan, restate these indicators in measurable terms. Try to include planning for monitoring and assessment while you develop a theory of change and decide on an intervention. It's key to integrate monitoring and assessment activities with the change process so that data can be documented and analyzed early and you can modify plans as needed.

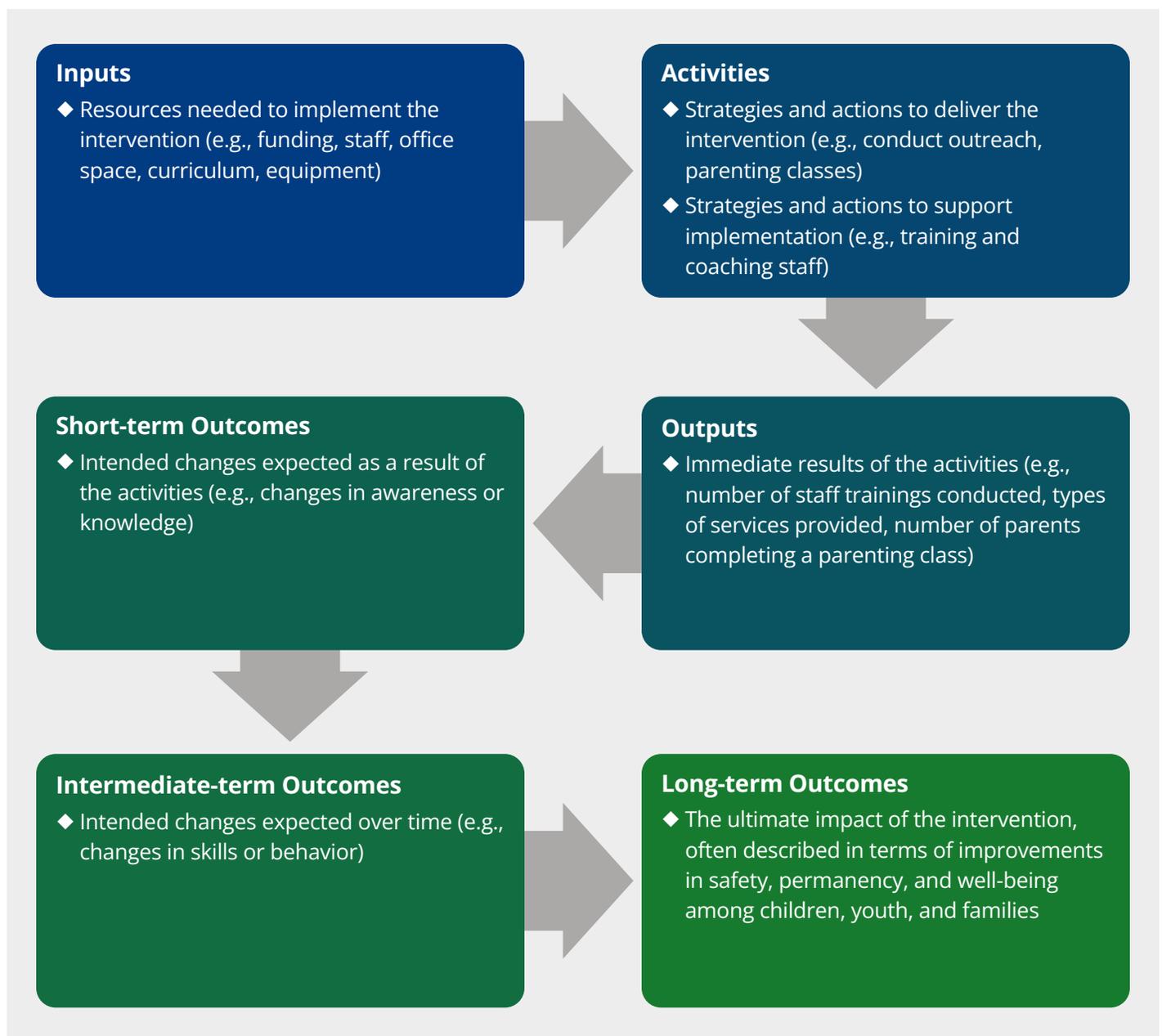
The Role of the Logic Model

A logic model provides a high-level overview of the planned intervention steps and the outcomes that should occur as a result of those steps. It provides a structure for monitoring and assessment. Logic models are related to theory of change, although they differ. While a theory of change represents the path from a problem to a long-term outcome and explains the process of change, a logic model provides a structured illustration of that path showing the expected outputs and outcomes.

Logic models are typically represented in linear form as a series of components, enabling the team to consider each element in the change process as part of an integrated effort. Figure 21 shows an example of a logic model's key components.

The logic model can help you structure your monitoring and assessment plans, define your data collection needs, and help you develop outcome measures. You can take the information from the logic model related to inputs, activities, outputs, and outcomes and transform it into concrete measurable statements. Key components may be tracked during monitoring and explored in more depth during the assessment.

Figure 21. Logic Model Key Components



Who Should Be Involved in Monitoring and Evaluation?

Experienced evaluators can provide critical support with data collection and analysis. Other professionals whose perspective and experience are important include:

- ◆ Individuals with evaluation, CQI, and data expertise
- ◆ External partners with evaluation and monitoring expertise (e.g., university partners)
- ◆ Program staff that manage and deliver services
- ◆ Partner systems (e.g., courts) and community organizations involved in the intervention
- ◆ Service recipients (e.g., youth, parents, resource families, community members)
- ◆ Funders, policymakers, and decision-makers
- ◆ Program developers

Research Design

Determine which research design to use for monitoring and evaluation. According to a publication from the Children's Bureau, the *Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare*, experimental designs, also referred to as randomized controlled trials (RCT), are considered the most rigorous evaluation design to use for determining the effectiveness of an intervention. Well-designed quasi-experimental studies can also be used as an alternative method if an RCT is not an option.

A quasi-experimental design uses two groups where one group receives the intervention and another group that does not receive the intervention. These two groups are then compared to one another. A quasi-experimental design differs from an experimental design (also referred to as a "non-equivalent control group design") in that the members of the group are not randomly assigned. Although a quasi-experimental design isn't an ideal design, randomization isn't always feasible in child welfare field research.

One advantage of quasi-experimental designs is that they are easier to implement because you don't need to develop random assignment protocols or to train staff in adherence to the protocols. One disadvantage of a quasi-experimental design is the potential for preexisting factors or external factors to affect performance on the outcome measures being assessed. Therefore, when using a quasi-experimental design, you should pay attention to factors that can affect outcomes and be cautious in making causal inferences.

You can also use time series designs such as pre- and post-intervention assessments. These designs have no comparison group, and everyone receives the intervention. The analysis compares baseline data on the outcome measures before and after implementing the intervention. Making causal inferences is difficult with this design and the absence of a comparison group makes it difficult to know whether the outcomes may be impacted by something other than the intervention. To strengthen this design, you should monitor any potential external factors that can affect performance on the outcome measures.

Pilot Location

If the intervention is new, it may be helpful to implement it in a pilot site and then conduct a formative and summative evaluation before deciding to roll it out statewide. Evaluating a pilot can help you determine whether:

- ◆ The intervention is effective enough to be implemented statewide
- ◆ Substantial changes are needed in the intervention
- ◆ Another solution to the problem should be considered

Conducting a pilot can save your agency significant time and money in the long run.

Data Collection Instruments

If the review of data sources indicated that not all data are accessible from the MIS, you'll need to specify the type of data collection methods that will be used to collect additional information from key sources. The plan should consider how you will ensure that new instruments are valid and reliable. It may be helpful to seek assistance from an outside consultant in the process of developing new data collection instruments. The monitoring and assessment

plan will also need to describe who will collect the data, how data collectors will be trained, how the data will be monitored for inter-rater reliability, and potential concerns.

The CQI Team's Role

The role of CQI team members is primarily advisory in developing the implementation plan and in the actual implementation of the intervention. However, you might also play a key role in developing the overall monitoring and assessment plan and helping to gather data. With a summative evaluation, you'll likely work closely with outside evaluators. Bringing in an outside evaluator or evaluation team helps your agency preserve the independence and objectivity of the evaluation.

Data Analysis Plan

Intervention evaluations include ongoing data analysis and reporting. Being familiar with analyzing and reporting data will help you provide guidance to external evaluators for your agency. Your analysis plan should include the elements listed in figure 22.

Figure 22. Planning for Analysis and Sustainability



Data Collection and Analysis Timeframes

The analysis plan specifies timeframes for collecting and analyzing data. The first time period you use should be from prior to intervention implementation and serves as your baseline data period. This baseline data should be:

- ◆ Collected on both the treatment and comparison groups so you can be sure that they are equivalent in performance on the outcome measures prior to implementation
- ◆ Used as the standard against which you measure all subsequent changes
- ◆ Analyzed shortly after collection and prior to implementation to provide a look at interrelationships among variables that can be included in later analyses

When setting baseline periods, keep in mind common patterns of variation in the local service delivery system. Variations in performance on a measure may be related to a child's age, geographic area of the state, or seasonal variation. If you're collecting new data, a shorter baseline period may be necessary so that implementation is not too delayed.

The analysis plan also includes a discussion of timeframes for collecting data after baseline. If you're conducting a rigorous program evaluation, you may collect outcome data once at baseline and again at the end of the evaluation period. However, the process may focus instead on ongoing monitoring of outcome measures to see whether change is occurring in the desired direction. The monitoring period may vary from monthly to every 6 months or longer depending on the types of data needed for the measure, the data source, and the available staff resources.

Staff Responsible for Data Analysis

The analysis plan should outline staff responsibilities for data analyses and the types of analyses to be performed. Expertise needed for data analysis varies depending on your research questions, types of data, and analysis methods selected. While some agencies have a variety of analysis expertise internally, others may need to access external resources like university partners or evaluation consultants. An advantage in working with universities and consultants to gather and analyze data is that it increases the independence and objectivity of the study, thus bolstering the credibility of the findings.

Data Analysis Methods

The analysis plan describes the method of data analysis for each of the outcome measures specified in the summative evaluation plan. The primary focus of data analyses for a summative evaluation is to explore the differences between groups and to answer, “What happened?” Answering this question usually involves looking at differences over time and between groups. The most common methods of data analysis when answering the “what happened” question are trend analyses and statistical tests.

Trend Analysis

In a trend analysis, you look at performance on a measure over time and assess the range of performance levels. You then select a performance level that indicates improvement because it’s outside of the identified range. The actual performance level set is left up to the agency. The important thing is that the level is outside of the range of performance for at least a year prior to the intervention.

Statistical Tests

If data come from a sample, there are many statistical tests that can be used. Statistical tests tell you the likelihood or probability that a particular finding happened by chance and cannot be attributed to the intervention or some other variable. If the probability is equal to or less than a particular level, the finding can be described as significant.

Additional Variables Considered in the Analysis Plan

Other variables to consider in the analysis plan include:

- ◆ Challenges to implementing the intervention
- ◆ Any changes in agency policy that occurred during the intervention
- ◆ A change in administration during the intervention that resulted in less buy-in for the intervention
- ◆ A change in the general agency context, such as an economic boom or bust, a natural disaster, or even severe winter weather

The level of influence that these factors have on your outcome measures will vary depending on the measure. Although you usually will not know up front, if you can identify variables that you think may have an effect, build them into your analysis plan.

Reporting Analysis Findings to the Implementation Team

An analysis plan includes a section on reporting findings to the implementation team or designated oversight team. The reporting section of the analysis plan describes what will be reported to the oversight team and when. This includes the timeframes for reporting each measure, such as monthly, quarterly, or biannually, with justification provided for the timeframe selected. These timeframes are not likely to be the same for all measures because of variations in types of data and data sources.

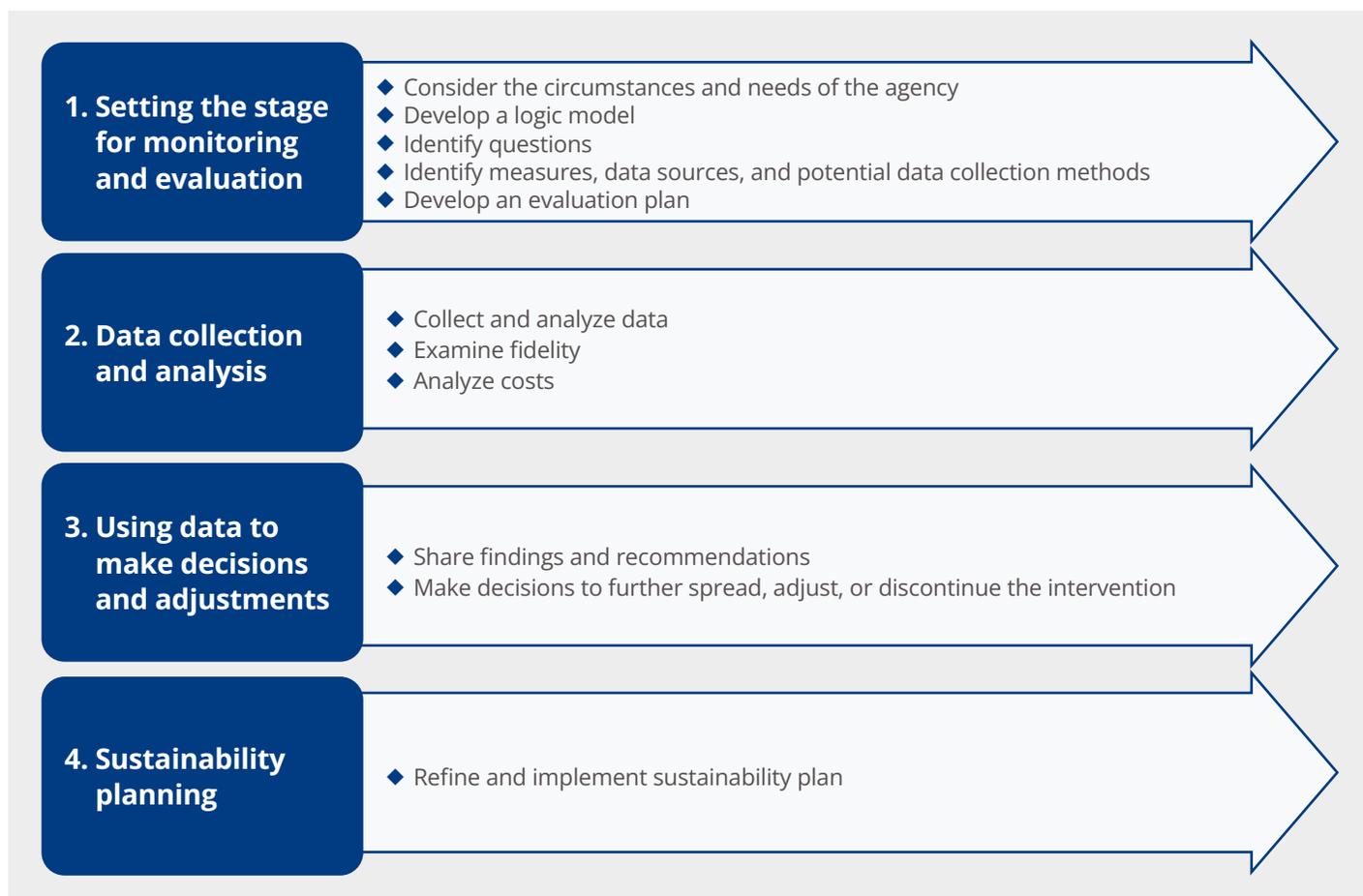
In the analysis plan remember to:

- ◆ Specify how data for each measure will be presented and provide the data sources and any assessment of data accuracy
- ◆ Provide graphic representations of data for reporting findings, particularly when using a trend analysis
- ◆ Identify the level of probability and whether you are considering that level as significant when a statistic analysis is used
- ◆ Report any findings regarding implementation concerns that may affect performance on the outcome measures

Essential Tasks

Figure 23 provides an overview of the essential tasks in monitoring, assessing, and applying your findings.

Figure 23. Essential Tasks



Deciding What's Next

With the findings in hand, the implementation team must decide if there is enough evidence to conclude that the intervention is or isn't working as planned. You'll also need a clear understanding of the factors that contributed to the success of the intervention or factors that were barriers. Even if the intervention is effective, you may need to decide about continuing it if the costs of staff time and financial resources are too high. In cases where you're phasing in or piloting an intervention, you can use this information to decide whether to move to the next step with rollout.

Sustainability Planning

Even though it may seem like it occurs after the intervention is underway, planning for sustainability begins at the point of selecting, adapting, or designing an intervention. Elements in a sustainability plan include the following:

- ◆ Purpose and objectives
- ◆ Evidence for sustaining or adapting an intervention
- ◆ Plans for continuing the full intervention or selected components
- ◆ Action steps
- ◆ Timelines, roles, and responsibilities
- ◆ Projected costs and potential funding sources
- ◆ Needed supports
- ◆ Monitoring, fidelity assessment, and CQI approaches
- ◆ Anticipated challenges and solutions

In addition, consider strategies to maintain and support organizational capacity in these areas:

- ◆ Resources such as funding, staffing, and materials

- ◆ Infrastructure elements that support staff recruitment and retention, training, coaching, fidelity assessment, data systems, and communication avenues
- ◆ Knowledge and skills—not only intervention-specific knowledge and skills to carry out service delivery, but also program management and evaluation knowledge and skills
- ◆ Culture and climate, including strategies that encourage continued buy-in, motivation, and continuous improvement for the intervention throughout the agency
- ◆ Engagement and partnership, such as partnering with system partners, community organizations, families, and youth to support service delivery

Summary

In this chapter, you reviewed common monitoring and assessment approaches including outcome measurement, assessing implementation fidelity, formative evaluation, and summative evaluation. These approaches are accomplished by reflecting on the questions you want to answer, the tradeoffs you'll need to make, and other contextual factors such as whether your intervention is evidence supported, its scope and scale, the level of risk to participants in conducting a rigorous evaluation, and whether the cost of evaluation is worth the benefits you'll gain.

This chapter also covered how to conduct the monitoring and assessment activities that help you build implementation fidelity. During this assessment phase, you will likely strengthen your implementation supports to ensure the intervention is being delivered as designed.

You also learned how formative evaluations help you understand your intervention. Once you get to a point in your evaluation where you're confident that your intervention is producing the intended outputs and you see your short-term outcomes moving in a positive direction, the implementation team members can decide if they are ready to move to a summative evaluation. You approach summative evaluation by identifying research questions and then collecting data.

Lastly, this chapter provided information on establishing baseline data and analyzing and reporting data regarding performance on outcome measures. It focused on developing an analysis plan that would guide these processes and described the types of information that should be included in your plan.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

- ◆ **A Framework To Design, Test, Spread, and Sustain Effective Practice in Child Welfare**
<https://www.acf.hhs.gov/cb/training-technical-assistance/framework-design-test-spread-and-sustain-effective-practice-0>
 Framework Workgroup (2014)
- ◆ **Title IV-E Prevention Services Clearinghouse**
<https://preventionservices.acf.hhs.gov/>
 Prevention Services Clearinghouse Resources (2021)

Dive Deeper

Consider what you've learned in this chapter about monitoring and assessing interventions:

- ◆ What are your strengths in this area?
- ◆ What are your weaknesses?
- ◆ How will you apply the new information you've learned to your agency?

Chapter 7

Taking Action to Drive Improvement

Once your team has an understanding of the processes, the skills, and the interested parties involved in planning and implementing change, you must confirm that the agency is ready. Several factors contribute to an organization's overall ability to change, prepare for specific interventions, and motivate people involved with the change.

CQI teams have an important role in moving agency culture to actively support CQI by ensuring that continuous learning concepts are woven into and carried out in plans. Use online tools and invest time in initial and ongoing assessments of agency culture to prioritize areas that need attention.

Factors Contributing to Readiness for Change

Any organization intending to change must be both willing and able to implement and sustain a selected intervention. High organizational readiness is a critical element in effective and sustained implementation of new programs and practices. Readiness can be defined as follows:

- ◆ Readiness for change – is the agency prepared to pursue a change effort directed at improving outcomes, regardless of the specific intervention?
- ◆ Readiness for implementation – is the agency prepared to put in place a specific program, practice, or other intervention to improve outcomes?

Table 5 lists components of readiness and their contributing factors.

Table 5. Readiness Components and Contributing Factors*

Motivation	General Capacity	Intervention-Specific Capacity
<ul style="list-style-type: none"> ◆ Belief that change is needed/valuable** ◆ Belief that the selected intervention is: <ul style="list-style-type: none"> ◆ Compatible ◆ Doable/manageable ◆ Important (a priority) ◆ Recognition that the intervention has: <ul style="list-style-type: none"> ◆ A relative advantage ◆ Visible outcomes 	<ul style="list-style-type: none"> ◆ Leadership ◆ Organizational innovativeness/receptivity to change ◆ Culture (shared behaviors and norms) ◆ Climate (staff perceptions of work environment) ◆ Resource availability/use ◆ Supportive structures ◆ Staff capacity 	<ul style="list-style-type: none"> ◆ Leadership buy-in and support** ◆ Program champions ◆ Intervention-specific knowledge, skills, and abilities ◆ Implementation supports and structures ◆ Relationships and networks

* This list was adapted from the work of Scaccia et al. (2015) on readiness for implementation. It presents commonly identified factors but is not exhaustive of all factors that may affect readiness.

** Item was added to the original conceptualization.

Source: Capacity Building Center for States. (2018). *Change and implementation in practice: Readiness*. Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services.

Agency Culture and Promoting CQI

Agency culture is the “personality” of an organization—it’s made up of the attitudes, values, assumptions, and beliefs that determine how employees behave in organizations. It’s a constant, powerful force in any organization and guides decisions and actions much like an underlying compass. The culture of an organization is very difficult to change.

Agency climate is the “mood” of an organization; the atmosphere created by an organization’s unique culture. It’s how employees experience their organization’s culture. Climate can be shaped by leadership and is much easier to change than culture.

A learning culture that helps to promote and sustain the CQI and implementation process can be characterized in several ways:

- ◆ Information is shared and accessible.
- ◆ Learning is emphasized and valued.
- ◆ Mistakes or failures are not punished.
- ◆ People are expected to learn constantly.

These aspects of culture are perpetuated and reinforced by leadership but also by practitioners, supervisors, and workers at all levels of the organization. Employees experience the climate as one where learning is expected. No one is reprimanded for having an idea; information is available to all, not just the highest-level staff, and mistakes are opportunities to improve understanding and skills, not something to fear.

Learning Organizations

In learning organizations, the people involved constantly expand their ways of thinking, share a vision, and move individually and collectively to transform themselves and their practice to achieve better results. As succinctly put by Peter Senge, noted author and lecturer on organizational learning, “A learning organization is a place where people are continually discovering how they create their reality and how they can change it.”¹ In a true learning culture, those involved search for new ideas and are eager to embrace new promising or evidence-supported practices and develop new skills to support those practices. In a learning organization:

- ◆ There is openness and transparency not only internally, but with partners and community as well about activities, goals, and performance
- ◆ Input and recommendations from all levels of staff are sought on an ongoing basis and leadership freely gives and receives feedback
- ◆ Ownership and involvement in new processes by staff and partners are promoted
- ◆ Organizations provide opportunities for everyone's voice to be heard and responded to, regardless of the individual's background
- ◆ Constant questioning of the status quo is encouraged, and decisions are driven by data

As understanding of the learning organization deepens, pride in the culture is instilled. As a result, there is more trust in leadership, and leadership in turn feels more comfortable releasing some control and allowing more employee autonomy. In a true learning organization:

- ◆ Employees are encouraged to analyze and learn from mistakes and failures, along with understanding the reasons for their successes
- ◆ Bureaucratic processes that hinder creativity and openness are minimized
- ◆ Curiosity and creative thinking are rewarded, and power is shared with all involved

Particularly important in child welfare are energizing and empowering frontline staff to continually examine their own behavior and practice and think, for example, “How can I, as an individual, improve and do my job better, separate and apart from what others in my agency are or aren't doing?” and, “What is my role in helping others to learn and improve?”

Dive Deeper

- ◆ What does becoming a learning organization mean for you and your work?
- ◆ In what ways can you contribute to becoming more of a learning organization?
- ◆ How can those changes improve your work?

¹ Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. Broadway Business.

Moving toward a learning culture is a vital component in setting the stage for and putting into motion a strong, agencywide CQI system. A learning environment will wrap around and nurture CQI and implementation processes, so that a CQI-rich environment will emerge. This is an environment where not only are the technical aspects of CQI in place, like data collection, data analysis, and problem-solving mechanisms, but the adaptive, cultural aspects are in place as well. Cultural aspects like staff who embrace data-driven decision-making, are excited about learning, and want to constantly improve add to this learning culture.

Most organizations, including child welfare agencies, vary in the degree to which they have learning cultures that promote and sustain CQI. Child welfare agencies will continue to be bureaucracies to some extent. Regardless of the degree to which an agency culture embodies the learning model, CQI can still pervade the organizational climate and be effective. But you should always be pursuing efforts toward becoming more of a learning organization.

When an agency moves toward becoming a learning organization, it benefits because:

- ◆ Its services and practices more accurately reflect its missions and visions
- ◆ It operates more efficiently, with strong partner and community support that bolsters staff
- ◆ Employees grow professionally and feel more valued, thus reducing staff turnover
- ◆ Practices and services improve, and families, youth, and children served by the agency have better outcomes

Traditional Model Versus Learning Model

To understand how a learning organization should work, consider the differences between the traditional model and the learning model in figure 24.

Figure 24. Traditional Model Versus Learning Model

Traditional Model	Learning Model
<ul style="list-style-type: none"> ◆ Change is pushed from the top down, often in reaction to crises. ◆ Behavior is changed through shifting requirements and reward and penalty systems. ◆ Staff roles and responsibilities are well-defined with clear boundaries. 	<ul style="list-style-type: none"> ◆ Leadership uses the wisdom and input of staff and partners so change emanates from all levels. ◆ New awareness and critical thinking are developed, and new behaviors are shaped as a result. ◆ Job boundaries are flexible, with adaptations allowed as staff gain new skills. ◆ With broadened knowledge and skills and more input into decision-making, many staff have the big picture of what their agency as a whole should be accomplishing.

Many traditional organizations are challenged to meet demands for improved efficiency, transparency, and outcomes. In this age of rapid communication, agencies have much less control over information that flows to the community, the families served, and the public at large. Agencies must become nimbler in their responses and strategic in their operations to keep up with increasing demands. There are ample talent and energy at the grassroots level of most agencies to make significant improvement if staff feel empowered and buy in to the change and that change and empowerment can best occur in the learning model.

Assessing an Agency's Culture

An organization can be assessed to determine the degree to which it possesses (or does not possess) the characteristics of a learning organization or culture. Various online guides, surveys, and questionnaires exist to facilitate this type of assessment. Agencies can also create their own tools to assess their culture. It's important that you have a concrete understanding of your agency's culture and readiness for CQI so areas of need can be identified and addressed.

When assessing your agency's culture, you might also ask for employee feedback about whether they:

- ◆ Feel continually challenged in their work and believe that their work is valued, whatever their positions
- ◆ Believe in the agency mission and vision and strategic plan
- ◆ Feel that agency practice reflects the mission and vision
- ◆ Respect their coworkers, perceive that their opinions are considered
- ◆ Feel that they can speak their minds without retaliation
- ◆ Receive coaching and mentoring from supervisors and peers
- ◆ Have opportunities to use their skills and talents and grow professionally
- ◆ Are encouraged to be creative and try new ways of doing things
- ◆ Perceive that workplace expectations and values are clear
- ◆ See the agency as receptive and responsive to operate more effectively
- ◆ Perceive that the agency is using best practice in its work with families and children
- ◆ See that the agency creates true partnerships with external community and system partners and families and youth served

Tribes, courts, and other external community and system partners, resource parents, and families and youth served might be asked about whether they:

- ◆ Perceive that their voices are heard
- ◆ Have been actively involved in agency planning and activities
- ◆ Receive follow-up when they ask questions or offer recommendations
- ◆ View the agency as responsive to their and the community's need
- ◆ Support the agency's mission and vision and view agency practice as family centered
- ◆ Perceive the agency as transparent in sharing both positive and negative information

Tools for Assessing Agency Culture

Many agencies already administer satisfaction questionnaires or request feedback from staff to determine their culture and readiness for CQI. Some tools can be accessed online to informally assess or rate agency culture.

Using Assessment Results

Once feedback is obtained, use the results to determine your greatest challenges, prioritize efforts, and work to adjust culture. You should also use your initial feedback (obtained through surveys, questionnaires, focus groups, or otherwise) as a baseline. To determine your agency's progress, periodically administer assessments and reprioritize efforts if needed. After obtaining feedback from staff and partners, it's critical that your agency show a true commitment to addressing areas of concern since it can be demoralizing to employees and partners if culture is assessed, areas of need are identified, and little is done in response.

Challenges to Moving Forward

Cultural change can be a lengthy and challenging process, but it's also exciting and invigorating to create positive changes. Prior to implementing CQI activities, agencies may face the following challenges:

- ◆ Finding deficits in processes and systems
- ◆ Determining where to begin the change process
- ◆ Expecting only a few staff to "fix things," rather than expecting all staff to share responsibility for improvement
- ◆ Getting leadership or direct delivery staff to buy into implementing new practices and systems

After culture is assessed, agencies may face the following problems when implementing CQI activities:

- ◆ Using time-limited projects to address immediate problems rather than using a whole agency systems approach
- ◆ Lacking staff with skills to analyze and use data and to develop strategies for quality improvement
- ◆ Failing to follow through with learning approaches that support CQI policies and procedures

- ◆ Failing to address individual management styles that are dictatorial and punitive and discourage a learning environment

Agencies should be prepared to brainstorm about, develop strategies for, and address these challenges through collaborative efforts and collective wisdom of leadership, differing levels of staff, external community and system partners, and family and youth with lived experience. Most of these issues are adaptive, or involve people's values and behavior, and will require creativity and strategic, sustained efforts to overcome. Many agencies are tenaciously and successfully addressing just these kinds of challenges in their quest to become participatory, learning organizations.

Taking Action to Drive Improvement

Institutionalizing a CQI-rich environment is a gradual process that requires many adaptive changes. There are various strategies that you can employ to promote a learning environment in your agency. These strategies reinforce and strengthen core CQI principles:

- ◆ Including all community and system partners
- ◆ Being transparent
- ◆ Using systematic processes
- ◆ Listening to all voices
- ◆ Using feedback loops
- ◆ Using data to make decisions
- ◆ Questioning the status quo
- ◆ Empowering all levels of staff

Putting Knowledge Into Action

As a CQI champion, move outside of your traditional role to promote continuous learning and CQI in your organization. As you learn more about CQI principles and practices, ask yourself:

- ◆ How can I stretch myself and make CQI concepts and activities applicable to my job and my own professional growth?
- ◆ How can I help others understand that CQI is relevant to their jobs as well?
- ◆ What kinds of systemic, structural, or philosophical things can I be doing to integrate and sustain learning and CQI in my agency?

Some things you can do to support CQI in your agency include:

- ◆ Thinking creatively and becoming a "continuous voice" for incorporating core CQI principles and elements of a learning culture into daily agency activities
- ◆ Looking for opportunities to encourage learning and improvement
- ◆ Becoming a "CQI messenger" to help ensure that continuous learning and CQI remain in the forefront and become institutionalized within your agency
- ◆ Being visible, passionate, and steadfast in your messaging
- ◆ Being the "keeper" of the learning culture by reinforcing that staff should be asking questions, brainstorming solutions, and trying new ways of doing things
- ◆ Helping make creativity and sharing of knowledge organizational habits, realizing that there may be many challenges

Deliver CQI messaging in the spirit of problem-solving and improvement, rather than punitive monitoring to catch errors. CQI is a partnership between the child welfare practitioner and other agency staff. Everyone can elevate skills and agency systems to improve outcomes for families. Aim to strike a balance between focusing on agencywide systemic and practice improvement while still holding individuals accountable.

Guide Staff Through the Systematic Problem-Solving Process

Foster learning and improvement by guiding staff. When seeking solutions, consider discussing these questions with staff:

- ◆ Have we defined our problem clearly, and have we asked “why” questions to get to the root cause?
- ◆ Have we systematically thought through what is needed to bring about change, and do we have data to support that?
- ◆ Did we do what we need to do to select an intervention or solution?
- ◆ Can we support effective implementation?
- ◆ Do we know what fidelity looks like?

By guiding staff systematically through the problem-solving cycle, CQI teams can help transform agency thinking about problem-solving and ensure that solutions are more effective.

Foster Increased Learning Opportunities

In addition to encouraging traditional classroom training opportunities in local and regional offices, champion peer-to-peer learning, coaching, mentoring, online learning, higher performing units informing practice of lower-performing ones, and cross-training. By understanding how adults can best learn and apply new behaviors, you can continuously support the adoption of new approaches and skill development.

Identify Allies and Partners

Encourage staff to ask themselves, “Who else should be at the table?” This will help your agency ensure that frontline staff, families, youth, and other community and system partners are included and can contribute. External participants should be selected based on what is being examined. If roles and objectives are clear and participants are prepared, their perspectives can greatly enrich the process and bring better outcomes.

Maximize Involvement With Field Staff

Try to collaborate with field managers in as many activities as possible by making efforts to integrate yourself into local offices. To maximize involvement with field staff, you can also:

- ◆ Meet with groups of field staff frequently
- ◆ Ask field staff what’s working and what isn’t
- ◆ Brainstorm solutions with field staff
- ◆ Ensure that the information flows to leadership and CQI teams and workgroups

Ongoing efforts should be made to obtain feedback from teams and leadership to provide back to the groups, ensuring that the information continues to flow both ways.

Have Data in Your Hip Pocket

Help ensure that priority goals of an office or a unit (such as monthly home visits or timely investigations) are established based on data. This can be accomplished by:

- ◆ Helping staff and managers learn to drill down into the data for greater insights
- ◆ Feeding relevant data back to the local offices
- ◆ Setting up data dashboards to provide staff an easy way of viewing and understanding agency benchmarks and performance
- ◆ Aiding staff in using data to problem-solve and resolve local and regional issues in a systematic way
- ◆ Fostering greater use of data by field staff by encouraging those who are more comfortable using data, particularly on the supervisory level, to provide peer-to-peer coaching and mentoring with their less skilled colleagues
- ◆ Establishing baselines and setting up standard and recurring data review schedules to ensure data are examined on a regular basis

Agencies can find creative ways to train and coach staff about using data. When you find issues with how data are accessed, you can:

- ◆ Interview staff to find out why
- ◆ Brainstorm with staff about ways to make data more understandable and meaningful to them
- ◆ Help staff better understand the need for data accuracy
- ◆ Help others in the agency understand the importance of applying CQI principles and feedback loops to training and administrative activities

Promote Reporting

You can promote reporting by:

- ◆ Ensuring that reports are regularly shared with local and regional offices
- ◆ Running special reports as needed or when requested
- ◆ Helping staff see data in reports as measures and activities of people rather than as cold and irrelevant
- ◆ Interpreting reports for staff and helping them learn to read and interpret reports for themselves
- ◆ Identifying how gaps in reporting might be bridged, such as through targeted case reviews and surveys when the availability of reports is limited

Help Leaders Use Data and CQI Processes

CQI team members can help engage leadership by gathering information, analyzing data, presenting information, and helping leaders craft solutions through the CQI systematic problem-solving process. Managers can then serve in an advisory capacity after solutions are in place to reinforce implementation concepts, use of data, and CQI processes.

Be a Resource for Direct Delivery Staff

You can be a resource for direct delivery staff by taking these steps:

- ◆ Helping caseworkers identify practices that could be improved through coaching and mentoring
- ◆ Helping link caseworkers with appropriate mentors and coaches
- ◆ Coaching and mentoring caseworkers yourself
- ◆ Helping direct delivery staff break down issues and barriers into “solvable steps” and brainstorming ways to overcome challenges with them
- ◆ Finding opportunities for efficiency and reducing the burden on staff

Encourage Bidirectional Communication and Action Steps

You can encourage bidirectional communication and action steps by:

- ◆ Integrating feedback loops into routine meetings and conferences
- ◆ Helping participants develop action steps to begin addressing identified issues and asking for feedback on progress
- ◆ Passing information along and encouraging leadership to periodically attend the meetings to solicit and provide feedback
- ◆ Fostering a culture where data are presented and used at every meeting and forge relationships, such as with schools or juvenile justice, to gather data to support continuous learning

Developing and Sustaining a CQI System

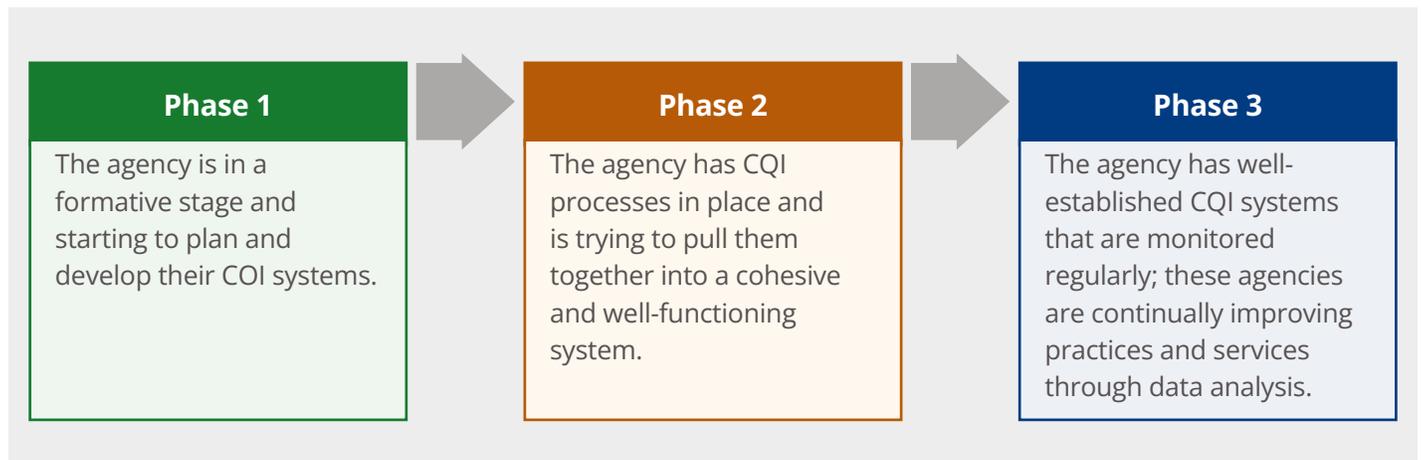
CQI plans and guidance help to support consistent messaging about how CQI systems function or should be functioning across the agency or in specific areas and help ensure that the systems are robust and effective.

Many agencies are already developing standalone CQI plans. These plans define agencies' current CQI systems or give structure and focus to developing systems. Plans may spring partially from response to statutory requirements. Other agencies have incorporated or are incorporating written guidance about CQI requirements and procedures into their policy and procedures manuals, under separate sections for CQI, to reflect or give substance and

framework to their systems. Regions, counties, and private agencies may also have CQI plans or policies and procedures that reflect CQI.

Most agencies are in one of three phases of CQI illustrated in figure 25.

Figure 25. CQI Phases



Regardless of the phase an agency is in, it should have clear, detailed processes and procedures reflecting how the state CQI system is operating or will operate. Consistent policies and procedures for CQI across the state child welfare agency, regardless of its structure or its progress in developing its system, should help guide the entire state in developing, implementing, and strengthening CQI processes and systems so that desired outcomes are achieved.

For CQI to be effective and integrated into the staff's day-to-day work, it must not only be strong from a state perspective but on the local level as well. Local CQI processes of implementing, monitoring, assessing, and adjusting will institutionalize the process of continual improvement into a specific office, area, or private agency. Many areas develop CQI plans to support and guide these local efforts.

Regional, County, or Private Agency CQI Plans

A regional or local CQI plan may differ from a statewide plan in that it focuses on issues specific to the region or office. These plans include goals; benchmarks of progress; processes for monitoring and gathering data; procedures for bringing CQI-related information to the local CQI teams; use of regional, county, or private agency case reviews to identify specific practice issues for the area; and other local processes.

What Is CQI's Fit Within the Agency?

A well-functioning CQI system is a permanent, core component of an agency's or area's divisions and ongoing functioning. CQI's decades-long history in a variety of businesses and industries has proven its worth as a system that ensures that organizations will improve services and outcomes. The CQI plan helps reinforce that CQI is valued, integral to the agency, and here to stay.

Input Into the CQI Plan

State, regional, county, or private agency CQI policies and plans should be developed and revised with input and involvement of:

- ◆ Differing levels of staff with varying responsibilities
- ◆ External community and system partners
- ◆ Families and youth served

Like other significant plans, the CQI plan will be fluid and refined as needed as progress is made, processes are adjusted, and new needs become apparent.

Components of the CQI Plan

Good practice calls for certain elements to be included in the plan. In addition to any statutory requirements, an agency will want to include:

- ◆ Its visions and goals in providing its CQI program
- ◆ The functioning of current CQI processes and systems
- ◆ Where strengths, opportunities for improvement, and resources available and needed for CQI will be described
- ◆ Designation of priority areas of CQI that need attention
- ◆ The integration of the implementation processes of other major initiatives that the agency or area may be undertaking
- ◆ A description of CQI processes, including the training plan for participants of the CQI activities
- ◆ A detailed description of requirements for the case record review system and data collection processes and analysis
- ◆ A description of processes and activities from which data are to be regularly gathered
- ◆ Follow-up steps or action plans to change or improve current processes and systems
- ◆ A description of how staff and partners will be involved in the CQI program
- ◆ An explanation of how continued buy-in from staff will be obtained and sustained
- ◆ A plan for including all leadership, staff, courts, tribes, families, youth, and other community and system partners to build trust

The CQI Plan and the Practice Environment

Develop the CQI plan and strategies in the context of the practice environment that it supports by:

- ◆ Ensuring that CQI activities and processes in all plans have a clear link to the state's practice model or standards of practice and that link is described in the CQI plan
- ◆ Connecting what is monitored in CQI and what is being taught, trained, and coached in practice so that there is a mutually supportive and reinforcing process between CQI and practice
- ◆ Describing CQI procedures in the plan so they show a clear link between processes, practices, and desired outcomes for families and children

CQI Practitioners' Roles in CQI Plans

There are numerous ways that you, with your knowledge of CQI tenets and principles, can help ensure that CQI and continuous learning and improvement concepts are reflected in state, regional, county, and private agency plans that thus carried out in the activities. Some activities you can monitor include:

- ◆ Helping leadership and field management to understand that CQI can encompass any agency activity where case practice is reviewed, recommendations are made and carried out with the goal of achieving better outcomes for families and children, and data are, or could be, generated
- ◆ Aiding field managers by looking at processes that are already taking place in their areas that meet the described CQI criteria
- ◆ Assisting field staff in understanding how they can incorporate these activities into their CQI plans and systems to help promote a CQI-rich environment
- ◆ Ensuring that progress toward established goals and standards of practice is appropriately monitored
- ◆ Establishing baselines for specific activities, setting interim and ultimate goals, and ensuring that both quantitative and qualitative monitoring takes place

You can also promote participation by:

- ◆ Helping ensure that a commitment is followed to include all levels of staff, courts, tribes, other partners, foster or adoptive parents, parents, and youth in the development, review, and updating of policies, procedures, and processes for the state and local CQI plans
- ◆ Preparing participants for the task, with a clear explanation of objectives and their roles

- ◆ Reminding leadership and management that involvement of and buy-in from caseworkers and supervisors are especially critical

You can assist with agency mission and vision by:

- ◆ Being diligent in helping to ensure that CQI policies, procedures, and goals, as stated in the CQI plan, reflect the values and tenets of the agency's mission and vision
- ◆ Pointing out ways the plan can focus on improving practices that need to be more family centered
- ◆ Crafting strategies to correct the course when the agency is veering from its stated mission and vision

You can improve access to data by helping to incorporate into regional or county plans ways to access data that are mission-specific or strategic for the area, like time to reunification or reentry into care, down to the unit level. You can also help ensure that methods for evaluating critical components of practice, both qualitatively, as through case record reviews, and quantitatively, as through the MIS, are clearly stated.

Summary

The demands of lawmakers, communities, and the public—along with states' own desires to improve services and practices—compel agencies to shift toward becoming more participatory learning organizations. Readiness to become this kind of organization can be assessed through surveys and questionnaires that help determine where efforts should be prioritized. Learning requires a commitment from both leadership and the community of employees to share responsibility for continually seeking new knowledge, new skills, and new applications of knowledge and skills gained. Challenges to becoming a learning organization may take sustained efforts to overcome, but the rewards of doing so are immense.

CQI champions should be enthusiastic, constant messengers in promoting learning and CQI in your agencies and should help teams and agency planners use a systematic problem-solving approach. You can promote the understanding and use of data by staff at all levels. You can go beyond traditional roles in a variety of creative ways to foster and help maintain continuous learning and an environment rich with CQI activities.

CQI plans serve as a template to reflect how agencies' or local areas' CQI systems are functioning or should function. State, local, and private agency CQI plans should be developed by a team of staff and partners and reflect the structure for achieving a robust CQI system. Several already occurring processes that generate data can be considered for incorporation into regional, county, and private agency plans for a more CQI-rich environment. You can help in several ways to ensure that continuous learning activities and concepts are incorporated into the CQI plans.

To learn more about the topics associated with this chapter, you can refer to these additional resources:

- ◆ **Continuous Improvement Requires a Quality Culture**
<https://www.scribd.com/doc/10203505/Continuous-Improvement-Requires-a-Quality-Culture> (link is external)
Dedhia, N. (2008, June 8)
- ◆ **Organizational Climate: Definition, Factors & Impacts on Culture**
<https://study.com/academy/lesson/organizational-climate-definition-factors-impacts-on-culture.html#lesson>
McLaughlin, J., Education Portal (n.d.)
- ◆ **Roadmap to a Culture of Quality Improvement**
<https://virtualcommunities.naccho.org/qi-roadmap/qi-home>
The National Association of County and City Health Officials (2012)

Dive Deeper

- ◆ If your agency had a book club meeting about this handbook, what would you want to discuss?
- ◆ Who from within your agency would you want to be a part of the discussion?
- ◆ Who from outside of your agency would you want to include?

◆ **Lessons From the field: Assessing and Improving CQI Systems in Child Welfare**

<http://muskie.usm.maine.edu/helpkids/rcpdfs/cwmatters14.pdf>

National Child Welfare Resource Center for Organizational Improvement (2014)

Child Welfare Matters, Winter/Spring

◆ **A Learning-Based Approach to Leading Change**

<http://www.public-sector.org/file/A-Learning-Based-Approach.pdf>

Sugarman, B., and Society for Organizational Learning (2000, December)

CQI Training Academy Summary

This handbook was designed to be used alongside the online modules of the CQI Training Academy. It details how the CQI and implementation process can support your agency's abilities to identify problems that prevent desired outcomes and to enhance your skills in identifying and testing potential solutions.

The handbook begins with outlining the steps of a systematic problem-solving approach and the various roles and functions in a CQI and implementation process. Next, the handbook describes how to implement a systematic CQI process that is designed to solve child welfare-related problems by using data-driven decision-making, developing a change management process, prioritizing collaboration and teamwork, and ensuring effective communication.

Users are then walked through the steps of the CQI process, including identifying and understanding the problem, researching solutions, developing the theory of change, adapting or developing an intervention, implementing the intervention, and finally monitoring and assessing the intervention.

Use this handbook as a reference to help enhance your agency's CQI and implementation process and improve outcomes for children, youth, and families.

CQI Training Academy Glossary

Actions – Specific steps or tasks that should be taken to meet short- and long-term outcomes.

Adapt – Make changes to an intervention from its original form to respond to the needs of the population being served or the agency's context.

Assumptions – Accepted beliefs or expectations that help explain the connections between the causal links and the selected pathway of change.

Capacity building – An ongoing, evidence-informed process used to develop a system's potential to be productive and effective.

Causality – Causality occurs when a change in one variable causes a change in another variable.

Causal link – A condition or change that leads to an improved state and the long-term outcome. May include short-term and intermediate outcomes.

Confidence interval – Used in sampling, this term refers to the range of values within which our actual percentage may lie. When you have a sample, the findings for a measure may differ somewhat from that measure if the whole population was used. The confidence interval, also called the margin of error, is the amount of difference from the "true" value (or error) that you are willing to tolerate. It is usually expressed as a percentage in both directions, such as plus or minus 5 percent.

Confidence level – Used in sampling, this term refers to the confidence you feel that your findings are similar to the findings you would obtain if you did not sample but used the whole population. For example, if your sample meets the requirements for a confidence level of 95 percent, then it means that, if you drew a sample repeatedly from the same population, you would get the same findings 95 percent of the time.

Contributing factors – The elements that affect the problem or outcome but are not the root cause. (Some literature refers to these as "causal factors.")

Core components – The essential building blocks and related activities of an intervention believed to lead to positive outcomes (sometimes referred to as "essential functions").

Core steering team – The decision-making body that leads the CQI and implementation process.

Correlation coefficient – This statistic reflects the extent of the relationship between two variables. A positive correlation coefficient means that a change in direction of one variable coincides with a change in the same direction of another variable. A negative correlation coefficient means that a change in direction of one variable coincides with a change in the opposite direction of another variable.

Denominator – A denominator is the part of a fraction that is under the line. It represents the group from which the numerator is derived. Example: Of all children entering foster care in 2012 (denominator), how many were reunified within 12 months or less (numerator)? This fraction yields a percentage.

Design – To develop a new intervention and specify its core components and necessary features to achieve desired outcomes.

Dimension of capacity – Aspects or categories of organizational capacity.

Disaggregation – The process of breaking data into parts to examine by subgroup or components.

Entry cohort measures in child welfare – Performance measures based on an assessment of a group of children who enter foster care in a given timeframe. Example: An assessment of the percentage of children who entered foster care in 2012 who were reunified in 12 months or less from the time of entry.

Evidence-supported intervention (ESI) – A well-defined program, practice, policy, or other strategy that has shown the potential, through rigorous evaluation, to improve outcomes for children, youth, and families.

Evidence-based practice (EBP) – Integration of the best available research evidence with clinical and child welfare expertise in a manner consistent with the child's, family's, and community's values.

Executive leadership committee – A group made up of agency leadership and other high-level personnel that creates the core steering team and has the final decision-making authority in the CQI and implementation process.

Exit cohort measures in child welfare – These performance measures are based on an assessment of a group of children who exited foster care in a given timeframe. Example: An assessment of the percentage of children who exited foster care in 2012 to reunification who were in care for 12 months or less.

Experimental design – A study that assesses the impact of an intervention by randomly assigning participants to receive either the intervention or an alternative.

External partners committee – A group that includes representatives from community organizations and institutions, partner agencies, service providers, and other key interested parties that may serve as consultants on the implementation team or subteams and promotes the community's participation in and acceptance of the planned intervention.

Factor analysis – A statistical method in which values of observed, correlated data are expressed as functions of a number of possible causes.

Fidelity – The degree to which programs are implemented as intended by program developers and core components are maintained.

Fidelity assessment – The process used to measure whether an intervention is delivered as intended by developers.

Formative evaluation – Systematic collection, analysis, and use of data and information with the purpose of guiding improvements to an intervention.

General capacity (foundational capacity) – Aspects or attributes required to maintain a well-functioning organization and to adapt to achieve its goals.

Hierarchical modeling – A data model that presents information in a tree-like structure to show relationships between one topic and many offshoots.

Input – The resources needed to implement and operate the intervention.

Implementation – A specified set of activities designed to put into practice an activity, program, or intervention.

Implementation plan – A document that describes key steps and activities for putting an intervention in place.

Implementation supports – Key aspects of capacity and organizational infrastructure associated with successful implementation (also referred to as “implementation drivers” or “organization and competency drivers”).

Interested parties – Individuals who have an interest in the outcome of the change initiative but may or may not have a direct role in the CQI and implementation process; stakeholders.

Intervention – Any specific practice, service, policy, strategy, program, practice model, or combination that is clearly defined, operationalized, and distinguishable.

Intervention-specific capacity – Human, technical, and physical conditions needed to effectively implement a particular program or practice (also referred to as “innovation-specific capacity”).

Logic model – A visual representation showing how an intervention’s inputs and activities lead to outputs and outcomes.

Long-term outcome – The desired change in conditions among people, organizations, or systems.

Mean – This number represents the average of a group of numbers. The mean is calculated by summing the values of the group and then dividing by the number of observations.

Measure – Information or data that can be used to assess whether progress was made toward desired change.

Median – This number represents the midpoint of a group of numbers so that 50 percent of the numbers are lower than this number and 50 percent are higher.

Mission statement – A short paragraph that articulates the core purpose of the initiative for which the implementation team and any subteams are being formed.

Monitoring – An ongoing task of tracking and reporting on progress toward goals to support oversight and decision-making.

Narrative – A brief explanation of the hypothesis and rationale illustrated by the theory of change.

Numerator – The numerator represents a segment of that group. Every instance in the numerator must also be in the denominator.

Pathway of change – A connected series of causal links from the root cause(s) of the problem to a long-term outcome.

Point-in-time measures in child welfare – These measures capture the experiences of a group of children in foster care at any given time.

Practice Profile – A description of how an intervention works in daily practice.

Principal components analysis – A process that summarizes content from large data tables into smaller sets that can be more easily visualized and analyzed.

Problem – What needs to change to meet agency priorities. Problems may reflect identified needs or opportunities for building on successes to improve agency functioning or outcomes.

Operationalize – To define an intervention or component so that it can be observed, measured, and/or assessed.

Output – The direct results of activities or services, typically quantifiable (e.g., number of program participants).

Outcome – A measurable change resulting from intervention activities, including system changes as well as changes in knowledge, skills, or behaviors of the target population.

Organizational capacity – A system’s potential to be productive and effective.

Quantitative data – Numerical data that measure and quantify.

Qualitative data – Narrative or nonnumerical data that explore how and why and provide context.

Random sampling process – A process of selecting a subset of individuals from a population in such a manner that each individual has an equal probability of being selected.

Readiness for implementation – The extent to which an organization is willing and able to put in place and sustain a selected intervention.

Reliability of a data collection instrument – This term refers to the degree to which the data collection instrument produces stable and consistent results.

Replicate – To copy or reproduce an intervention in the same way as the original.

Representative sample – A sample may be said to be representative when it meets the criteria necessary to be able to generalize findings from the sample to the population from which it was drawn within a specified confidence interval.

Research question – Key questions that, when answered, will help the team understand and address the problem.

Root cause analysis (RCA) – A structured process for identifying why a problem occurs and what to address so that the problem does not continue or happen again.

Root cause – The origin or source underlying a problem and its symptoms. If the root causes are addressed, then the problem is less likely to continue or happen again.

Short-term outcome – Changes (particularly in knowledge, attitudes, and skills) that need to occur before reaching a long-term outcome.

Statistic – A numerical representation of a piece of information.

Statistically significant – Something is “statistically significant” when differences or associations found between or among variables are not likely to have occurred by chance, with the precise likelihood specified. Example: The difference between boys and girls with regard to time in foster care was found to be significantly different at the $p < .05$ level. This means that the probability of this difference happening by chance is less than or equal to .05. Although a probability level of .05 is a generally accepted level of significance, it is possible for a researcher to set statistical significance at a higher or lower probability level.

Stratified random sampling process – A process of grouping a population into subgroups based on known characteristics and then randomly selecting members from each subgroup to be included in the population sample.

Summative evaluation – Systematic collection, analysis, and use of data and information with the purpose of making a judgment about an intervention’s effectiveness.

Survival analysis – A statistical analysis that analyzes the occurrence and timing of events.

Target population – The specific group of people affected by the problem who would be helped by achieving the desired long-term outcome.

Team – The group reflecting diverse expertise and perspectives that guides the CQI and implementation process.

Team charter – A formal document that describes the work and processes of the implementation team and any subteams, as well as how the work will be completed.

Validity of a measurement instrument – This refers to whether the instrument measures what it is intended to measure.

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