

A Blueprint for Embedding Evidence-Based Practices in Child Welfare



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INTRODUCTION

WHY SUSTAINABLE IMPLEMENTATION OF EVIDENCE-BASED PRACTICE MATTERS

Child welfare leaders work every day to fulfill a vitally important charge: keeping children safe and well. They seek to prevent problems instead of just solving them, and evidence-based practices and programs — interventions that research has proven to work — can be an enormous help. But the proof is not, by itself, a guarantee. Research also has shown that the way evidence-based programs are implemented in child welfare is critically important.

Programs that fail to follow the design they are intended to replicate are less effective in achieving their desired outcomes. That means integrating effective practices into the delivery of child welfare services goes beyond simply making a list of proven or promising programs. It takes structures and systems to make these program stick, including:

- **engaging**, from the start, a diverse set of stakeholders representing families, youth, practitioners, community partners and system leaders;
- assessing agency needs to inform the goals of new or enhanced programs and practices;
- **selecting** evidence-based interventions that will support families in meeting the identified goals;
- **identifying** the skills and competencies required for both the practitioners implementing the programs and those making referrals to the programs;

- **clarifying** stakeholder roles and responsibilities and ensuring communication and feedback loops;
- **aligning** policies and procedures with the new standards of practice;
- **generating** buy-in from practitioners, supervisors, managers, leaders and key partners to new roles and responsibilities through collaborative planning and training; and
- supporting data-driven decision making.

The hard and important work comes in ensuring effective implementation of programs and practices across systems and over time. This guide offers a road map for that work.

Even when agencies invest in evidence-based programs, sustaining them is challenging. Only 37 percent of the most popular evidence-based models are sustained in the long term.¹

About This Guide

This publication grew out of the work of the National Implementation Research Network (NIRN)² to help the New Jersey Department of Children and Families align its development of an integrated and quality system of care for children and families — a system that incorporated evidence-based and evidence-informed practices (EBPs/EIPs) — with best practices in implementation science. The work was funded by the Annie E. Casey Foundation. A full copy of the blueprint for New Jersey's child welfare system, including the methodology for development, can be found at www.state.nj.us/dcf/about/divisions/strategicdev/Blueprints_Sept2017.pdf.

This shorter, more general guide is for state child welfare leaders, private providers and partners interested in

integrating evidence-based and evidence-informed programming using best practices of implementation science. Leaders will learn how to apply the active implementation formula; four key implementation activities for embedding evidence-based practices within their systems; and important categories for assessing whether a particular program or practice will work for their needs.

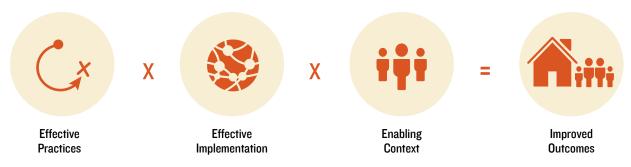
To learn more about funding and sustaining implementation of evidence-based programs, see the Casey Foundation brief, <u>Funding Effective</u> <u>Implementation of Evidence-Based Programs in Child Welfare.</u>

APPLYING THE ACTIVE IMPLEMENTATION FORMULA

The structure and service population of many child welfare systems can present challenges for implementing and sustaining evidence-based practices. For example, public child welfare agencies often rely on a network of private service providers to deliver evidence-based practices. Moreover, many treatments are delivered through the behavioral or mental health systems, requiring collaboration among complicated service systems that have different funding streams, priorities and standards of practice. These unique characteristics make a thoughtful approach to implementation even more important.

The field of implementation science can help to uncover the conditions and activities that support the successful use and sustainability of evidence-based practices in public child welfare systems. Implementation science refers to the "methods or techniques used to enhance the adoption, implementation and sustainability" of an intervention. NIRN has summarized implementation science through the following formula:

Figure I. Active Implementation Formula



The three components are as follows:

- Effective practices: Strategies or interventions that are supported by evidence, are feasible to implement, fit the needs of the community and are well defined (WHAT is implemented)
- Effective implementation: Intentional and visible infrastructure to support effective practices (HOW it's implemented)
- Enabling context: Collaboration through teaming structures, communication and feedback loops, and ongoing use of data to support effective practices (WHERE and WITH WHOM it's implemented)

This guide identifies four implementation activities for child welfare systems that represent the components of the formula:



Each section describes best practices of implementation science. The brief concludes with a summary list of tips for state-level agencies, providers and system stakeholders to support the implementation of evidence-based interventions.

Key Terms

Evidence-based practice (EBP): a manualized program, practice or intervention that is included in a national clearinghouse or registry of interventions that have documented evidence of effectiveness based on at least two rigorous, external research studies; and has demonstrated sustained effects at least one year after treatment

Evidence-informed practice (EIP): a program, practice or intervention that has demonstrated effectiveness with one rigorous research study

Implementation infrastructure: the staff skills, organizational resources and leadership necessary to implement EBPs/EIPs with fidelity and to continuously improve EBPs/EIPs based on data-informed decision making

Implementation team: a group of stakeholders that oversees and is accountable for selecting, adapting if necessary, implementing and continuously improving an intervention

Promising practices: programs or practices, guided by a well-developed theory of change or logic model, that show some evidence of effectiveness through less rigorous

research studies

State or county agency: the child welfare agency that serves young people and their families and is responsible for selecting evidence-based programs

Service provider: a private operator who delivers a service on behalf of the state or county agency; may provide direct services to beneficiaries or act as a referral agent to direct service providers

System: the collection of agencies, providers and partners that delivers and informs comprehensive child welfare services in a state; may interact with a variety of other systems, including mental health systems and family courts

Structure: connected implementation teams at different levels in a system that facilitate collaboration and support and integrate the critical infrastructure components for EBPs/EIPs; may include state agencies, university partners and researchers, service providers, training institute partners and practitioners and families and youth

ACTIVITY 1:

ASSESSING AND SELECTING INTERVENTIONS

Achieving positive child and family outcomes in child welfare starts with good intervention selection — i.e., the systematic process of choosing an evidence-based or evidence-informed practice to improve outcomes. A variety of clearinghouses⁵ rank programs by their level of evidence to help practitioners learn about and select interventions for their own use. Evidence-based practices have undergone rigorous testing and demonstrate reliable and consistently positive changes. As part of the rigorous testing, specific programs and practices are often documented, enabling other entities to replicate them in their own settings.

Using practices or interventions with a base of evidence is important. However, simply choosing a model with a strong evidence base is not enough to ensure a good fit for population needs, quality of implementation, program impact or sustainability. Research indicates that the selected intervention must also meet the needs of children and families and align well with the organization, the community and the systems in which it is situated: the local implementation context.

With that in mind, NIRN developed a simple tool, called the <u>Hexagon</u>, to help states, cities and communities systematically evaluate interventions through six broad factors. The Casey Foundation is working with NIRN to adapt this tool. The six broad factors are divided into two categories: program indicators and implementing-site indicators.

- **Program indicators** assess new or existing programs or practices that will be implemented along the following domains: evidence, support and usability. These indicators specify the extent to which the identified program or practice demonstrates evidence of effectiveness, support for implementation and usability across a range of contexts.
- **Implementing-site indicators** assess the extent to which a new or existing program or practice matches the place where it is being implemented (the implementing site) along the following domains: population need, fit and capacity. The assessment specifies suggested conditions and requirements for a strong match to need, fit and capacity for the identified program or practice.

PROGRAM INDICATORS:

Evidence, Support and Usability

EVIDENCE

Organizations should assess the research data available to demonstrate effectiveness (e.g., randomized trials and quasi-experimental designs). If research data are not available, organizations can look for program evaluation data to indicate effectiveness (e.g., pre-/post-test data, testing results, action research).

Organizations are also encouraged to understand the emerging practice evidence for an EBP. For example, have communities, families and practitioners indicated that the program is useful and beneficial? Finally, organizations should identify if there is a well-developed theory of change or logic model that demonstrates how the program or practice is expected to contribute to short-term and long-term outcomes.

SUPPORT

Assess who will provide support

Organizations should assess whether there is a qualified "expert" who can support program implementation. Experts may include program developers, consultants, intermediaries or technical assistance providers.

Assess the types of support available

Once an organization identifies the availability of expert support, it should seek to understand what type of support is available, and for how long and at what cost. When organizations select EBPs, resources and tools such as training, coaching and fidelity assessment often are available to build staff competency. If only training is offered, agencies should consider how they will assess staff performance and how practitioners will receive additional coaching. Organizations should also assess whether training and professional development related to the program or practice are culturally sensitive and address issues of race equity, cultural responsiveness and/or implicit bias.

Administrative and systems resources often are less available. Organizations should seek guidance and support on administrative policies and procedures that need to be altered or developed to implement the EBP effectively. It is also important to assess resources for data management, including data systems and monitoring tools. Finally, systems issues such as stakeholder buy-in should be considered. Organizations should assess whether resources are available to communicate with key stakeholders such as referral sources, service providers and family courts.

Assess cost

Organizations should seek available information about both start-up costs and ongoing costs. Is cost information available for the program or practice (e.g., fees to the program developer)? The organization should assess what support it gets in return for specific costs. For example, does the cost of training include follow-up training or coaching? Does the cost of fidelity assessments include the technology costs associated with collecting, analyzing and reporting the fidelity data? The clearer organizations can be on what they get in return for purchasing an EBP, the more prepared they will be to sustain programs and achieve outcomes.

USABILITY

Assess program definition

For EBPs to be sustained, the programs must be clearly defined, with core practice components, guiding principles and values that undergird service delivery and day-to-day activities for practitioners. Is the program defined in a way that staff will know what to do, what to say, and how to prepare and assess progress? Is there a fidelity assessment that measures whether core practices are implemented as intended?

Assess adaptability of programs

EBPs are more often adapted for local contexts than replicated. Organizations should seek information from program developers and other organizations that have used the program about the practice components that can be modified or adapted to increase contextual fit. When selecting an EBP, it helps to understand the key reasons for successful replications and adaptations, and the key problems that lead to unsuccessful ones. Finally, organizations should consider their unique context and assess whether the program or practice has been adapted for use within culturally and linguistically specific populations.

IMPLEMENTING-SITE INDICATORS:

Need, Fit and Capacity

NEED

Collect and analyze data on the needs of the population

Assessing need involves collecting and analyzing a variety of data on key stakeholders and systems. To begin, collect data on the scope, demographic characteristics, relevant risk factors and outcomes of the at-risk child population through state administrative data, local child welfare data and agency case data. Use multiyear data when possible to spot trends and outliers, and disaggregate data to identify needs of specific populations and to avoid generalizing needs among all children and families.

The needs assessment should also include steps to identify the current barriers in the system. For example, are needs not being met due to low availability or accessibility of services? Are services of low quality? Are there other barriers related to incentives or compliance? Or are there systemic issues — for example, economic inequality or lack of community-based resources — that need to be addressed?

Finally, collect and analyze data on relevant system barriers, such as staffing capacity and turnover, siloed child- and parent-service systems, or barriers with the legal system. Local jurisdictions will need support and guidance on conducting comprehensive needs assessments that include collecting data from multiple sources and using findings from one data source to inform the next round of data collection. Gathering information from affected stakeholder groups, including families, is important for accurately assessing the problem and identifying potential service solutions. For example, agencies may conduct focus groups with families first, then use findings from the focus groups to guide their administrative data analysis.

Barriers to access are often more closely related to incentives built into the system than they are to the actual availability of services. For example, imagine a private provider foster care system that has prioritized reducing paperwork and speeding up the payment process. One of the provider's strategies is to refer children in need of mental health services to the in-house clinician because it meets the goals of reduced documentation and improved payment speed. This narrow referral process may leave children and families feeling like there is a shortage of mental health services, when the mismatch in referrals is actually a result of the system's structure and incentives.

Gather community and beneficiary input on perception of need

In addition to using administrative data, solicit direct input from communities and service beneficiaries on their perception of need as well as their values, culture and history. This input provides critical information that can help build equity into the system for groups that have been marginalized and help avoid the creation of structural inequities. Use these more indepth conversations to deepen understanding of the barriers communities and families face and select the interventions that may be most effective.

Assess how intervention outcomes align with identified needs

Once needs have been verified using both formal data sources and direct stakeholder engagement, compare those needs with the outcomes the intervention is designed to improve to ensure they match.

Map existing services to identify gaps

Selecting entities should map the landscape of services available to the population. This includes identifying interventions that are already being administered by organizations in the community to ensure the proposed intervention addresses an unmet need.

Assess racial and ethnic disparities

Finally, engage affected populations and stakeholders to gather and analyze disaggregated data to identify any racial and ethnic disparities in the existing landscape of services. Then, conduct a systems analysis to understand and address the root causes of such inequities, allowing the development of corrections that build greater equity.

FIT

Ensure intervention aligns with community, regional, state and federal priorities and initiatives

Interventions are more successful when they align with the local context, policy priorities and community perceptions of need. These factors can determine whether a community supports an intervention. In addition to local priorities, the U.S. Department of Health and Human Services (HHS) Program Improvement Plans and targeted state and federal grant making on high-interest topics may provide the impetus for implementing evidence-based practices. ²

Assess the intervention's alignment with organizational structure and culture

Several factors support implementation success, including stable teams with longevity in their roles, strong administrative support (ratio of managers to staff) and leadership engagement. Relationships among individuals and units can positively influence implementation by building a sense of community. High-quality formal and informal communication processes can strengthen these relationships and contribute to effective implementation. Agencies should assess existing connections among individuals, units, services and hierarchies in their system and work to address any weaknesses.

It is also important to assess how the intervention aligns with community values, culture and history, including those of communities of color. Participants and staff will not take full advantage of the program if the intervention and intended outcomes are not considered legitimate and culturally resonant for both beneficiaries and service providers and managers. Attention to feedback on contextual fit can greatly improve participation and outcomes. In one case, initiative leaders acted on feedback to launch the program from within the community (engaging local leaders), rather than as an external initiative. They recast their materials to fit local language and cultural norms and emphasized training by local community members, rather than external experts, to enhance the contextual fit of the intervention for a specific location. These efforts led to higher implementation fidelity and improvement in reported rates of substance abuse by youth. 12

CAPACITY

Assess initial capacity to deliver the EBP

The organization implementing the EBP needs to have resources and processes in place to support the intervention. These include the financial resources to cover the cost of the intervention; sufficient numbers of staff with cultural competence for the community using the intervention and with the skills to use the intervention as intended; leadership buy-in; administrative processes and policies aligned with and supportive of the intervention; and staff capacity to collect and use data for continuous improvement. Frequently, organizations invest in training and coaching staff to use an EBP but do not make equal investments in the organizational structures — such as by aligning job descriptions or administrative policies, creating communication channels that facilitate regular conversations about the intervention's implementation or installing software — that are equally important to successful implementation. Making the decision to introduce an EBP into an organization's services requires full commitment of resources — at all levels and across all functions of the organization.

Assess ongoing capacity to deliver the EBP

EBPs are often accompanied by services such as training, coaching and fidelity assessments that may diminish over time as program developers seek to build local capacity to sustain the programs. Organizations should consider their capacity to continue to support training required by staff turnover and to take on implementation support such as coaching, fidelity assessments and continuous quality improvement. When assessing capacity, organizations are encouraged to identify both short-term and long-term capacity to ensure that EBPs will be sustained long enough to produce population-level outcomes.

ACTIVITY 2:

ESTABLISHING AND SUSTAINING IMPLEMENTATION TEAMS

An implementation team is a group of stakeholders that oversees and is accountable for selecting, implementing and continuously improving an intervention. As the backbone for implementation, teams:

- make sure families and community members are included in decision making;
- define practice clearly and align it to the context;
- establish implementation support;
- create mechanisms for measuring and improving fidelity;
- · set goals and create strategies for achieving greater equity; and
- ensure the intervention achieves and sustains outcomes.

Without teams, an implementation effort ends up relying on individual leaders. This "solo hero" model of implementation has been shown to fall short on key issues related to successful implementation such as stakeholder buy-in, integration and alignment of the new practice within the system and sustainability to achieve population outcomes. In child welfare, structured collaboration between public and private partners has been shown to significantly increase the sustainability of EBPs in child welfare service systems.¹³

Best practices for establishing and sustaining implementation teams include creating a sustainable teaming structure, promoting the right team capacity and ensuring effective team coordination and communication.

CREATING A SUSTAINABLE TEAMING STRUCTURE

Build a small and skilled implementation team

A typical implementation team includes between six and 10 members who may report to a larger advisory team. Members should collectively bring expertise in the intervention or practice; implementation support, such as training, supervision, coaching and continuous quality improvement; and collaboration and systems change priorities, such as regulatory, policy and funding environments. Members should have time allocated to participate in teams and have defined regular duties. 15

Support diverse perspectives

Making change in complex systems requires buy-in from diverse stakeholders. Without diverse team membership, gaining buy-in will be an ongoing challenge. The team should include members from all organizational levels, such as administrative, fiscal, programmatic and policy staff and supervisors, as well as community members. Including diverse staff roles has been found to strengthen learning among team members — a critical characteristic for engaging staff and ensuring their sustainable participation in rapidly changing systems environments.

Outline the purpose of the group and the scope of work and deliverables for which the group will be held accountable

A memorandum of understanding should carefully outline the vision and purpose of the group, the scope of work and deliverables for which the group will be held accountable, roles and responsibilities for all members, communication protocols, operational processes and decision-making authority. This memo will create basic norms and clarity on how the team relates to other groups supporting implementation. 18

Develop internal and external leadership structures

Implementation teams also need access to departmental or organizational leaders who have the formal authority to make resource and policy decisions. In the context of complex systems change efforts, scholars and practitioners recommend coleadership of a team to drive organizational and systems change.¹⁹

Assess the need for multiple linked implementation teams in large systems

For large-scale, complex initiatives — for example., a state's child welfare services purchasing — implementation teams should be built at every level of the system. State implementation teams should link to the local provider teams and ensure ongoing communication. Linking across systems levels helps to reduce silos and encourages integration and coherence.



Note: Adapted from An Implementation Science and Service Provider-Informed Blueprint for Integration of Evidence-Based/ Evidence-Informed Practices Into New Jersey's Child Welfare System.

ENSURE EFFECTIVE TEAM COORDINATION AND COMMUNICATION

Establish consistent meeting times and protocols

Implementation teams should have regular, consistent meeting times and follow procedures they have developed together to use meetings effectively and achieve planned objectives.²⁰

Establish protocols for stakeholder communications

Implementation teams should have in place clear protocols for stakeholder communications that specify the various stakeholders with whom the team should communicate (including other linked teams), in what circumstances the team should communicate, the type of information being shared and the specific method of communication (see Figure 2). Protocols should consider how to build feedback loops so the team is not simply "reporting out." Teams should communicate at every phase of implementation about what is working, what is not working and how those conclusions were drawn.

Figure 2: Communication Processes

WHO should be communicating?

Regional Cross-Provider Teams Local Level/Provider Teams

ABOUT WHAT should we be communicating?



- · What is working
- · What is not working
- What we know, what we don't and how we know that

HOW OFTEN should we communicate?



- Regularly
- Using formal process
- · During opportunities for change

Decide who should be communicating about what issues

Launching and sustaining an EBP or multiple EBPs in a child welfare system often requires multiple implementation teams. For example, a preventive services initiative may involve the launch of multiple EBPs. In this case, there may be more than one team responsible for implementing different programs. The implementation teams may report to a leadership team responsible for overseeing the preventive services initiative in which these discrete interventions are one part of the overall effort, and the leadership team may ultimately be responsible for communicating progress to a governance team that has final decision-making authority. Finally, the discrete implementation teams may be responsible for ensuring feedback loops with service providers and other key partners in the systems. In cases like this, which are fairly typical in changing public systems where EBPs are just one piece of the puzzle, implementation teams will need to figure out with whom (what other teams) they need to communicate, about what and how often. This type of structured communication protocol can facilitate decision making and ongoing improvement in EBP implementation in different parts of the service system.

Define the team's continuous quality improvement process

Because a core function of the team is using data to make decisions and improvements, teams should have clearly defined continuous quality improvement processes, explored in detail in Activity 4.

Provide opportunities for team members to grow and learn

Research suggests that team members are more likely to stay committed to team participation if they have opportunities to grow and learn. These findings suggest that co-leadership and peer-to-peer coaching, as well as task-related learning, produce the greatest learning and growth for members.²¹

ESTABLISH AND PROMOTE TEAM CAPACITY TO SUPPORT AND IMPROVE THE EVIDENCE-BASED PRACTICES

Lead an inclusive EBP selection and adaptation process

Implementation teams have many responsibilities when it comes to selecting, implementing, evaluating, improving and sustaining an EBP, but they can't do it alone. They require the support of agency divisions, community partners and service providers to successfully meet the demands of their roles.

Implementation teams are responsible for supporting and coordinating all aspects of intervention selection, implementation, adaptation and sustainability. This includes collecting data on specific interventions (e.g., expected outcomes, training requirements, staffing needs) and engaging stakeholders in the learning and selection process. Once interventions have been selected, this process also includes preparing relevant stakeholders by building their capacity in related areas and continuously assessing fidelity to improve the intervention and its support. Implementation teams also make decisions, informed by data, about productive adaptations to EBPs/EIPs, including culturally specific adaptations. The original developers of the intervention may be a source of support in using data for continuous improvement.

Identify and resolve gaps in organizational infrastructure

Implementation teams are responsible for assessing, coordinating, improving and securing resources for the support needed to successfully implement the intervention. For example, implementation teams build the competency of staff to refine their practice through coaching and training. As team members support implementation of a new or refined practice, they are responsible for identifying gaps in the infrastructure necessary to support the change at the program, organizational and systems levels and for resolving those gaps by marshalling necessary resources for capacity building.²⁵

Use data for decision making and continuous improvement

Implementation teams are responsible for supporting the design and execution of the regular use of data for decision making and continuous improvement. This includes making the ongoing use of program, fidelity and outcome data systematic (see Figure 3) to inform improvement. Program data provide information on administrative and fiscal details (e.g., enrollment, referrals, service costs); fidelity data provide information on whether the agency is implementing the intervention as intended (e.g., dosage, content); and outcome data provide information on short-term and interim family outcomes (e.g., engagement, cohesion, functioning) and long-term impact (e.g., permanency, recidivism). Dedicating time for reflecting or debriefing before, during and after implementation is one way to promote shared learning and improvements.²⁶

Figure 3. Types of Data for Continuous Quality Improvement Process

Programs Fidelity Outcome Data that are relevant to Data that measure the extent Results data measure administration of the EBP/EIP to which the EBP/EIP has been the impact of the EBP/EIP implemented as intended **EXAMPLES EXAMPLES EXAMPLES** Referrals Increased knowledge Enrollment • Context: Structural aspects · Improved skills or behavior Retention · Changes in beliefs such as the ratio of supervisor to Reason for enrollment staff and client; place of service · Changes in attitudes or · Cost of participation delivery; and inclusion/exclusion perceptions Staffing • Compliance: Core components such as frequency of service, intensity of service, service duration and delivery of content • Competence: Skills such as engagement practice; relational work and participation responsiveness

Establish policy-practice communication loops within and across systems

Implementation teams help to build the connections across the system with multiple relevant stakeholder groups, including government agencies, model developers, community partners, beneficiaries and, potentially, other systems. By serving as systems liaisons, teams can connect to improve referral systems, coordinate use of resources (particularly model-specific resources such as training) and promote learning across service providers. They can also liaise with communities, beneficiaries and policymakers to communicate important information to system leaders to strengthen systems alignment and remove barriers. These policy-practice communication loops are a key aspect of successful efforts to implement EBPs and innovations on a scale significant enough to improve child outcomes.

ACTIVITY 3:

DEVELOPING AND ALIGNING IMPLEMENTATION INFRASTRUCTURE

Implementation infrastructure²⁸ includes the staff skills, organizational support and leadership necessary to implement EBPs/EIPs with fidelity.

In a review of EBPs/EIPs in child and adolescent mental health, fidelity monitoring, supervision, training and the use of specific technologies were most associated with successful implementation.²² Other studies have found that the development of these infrastructure components in child welfare increased the number of families who completed treatment and improved child and family outcomes.^{30,31}

Best practices for developing and aligning implementation infrastructure include building practitioner competency with the EBP/EIP, fostering mutual accountability among stakeholders and aligning system support to create a favorable environment for successful implementation.

BUILD PRACTITIONER COMPETENCY

"Competency drivers" are mechanisms used to develop, improve and sustain practitioner and supervisor ability to implement an EBP/EIP. These include:

- selecting staff with the required skills, abilities and other EBP-/EIP-specific prerequisite characteristics;
- providing skill-based training for staff and others involved at the agency that includes the theory and underlying values of the EBP/EIP as well as specific competencies for practice;
- providing feedback in a safe and supportive training environment;
- providing opportunities to practice new skills to meet fidelity criteria;
- offering on-the-job coaching to support staff in practicing and mastering newly learned skills; and
- using data to assess practice and improve fidelity.

Fidelity assessments should be used to evaluate whether the agency is implementing practices as intended and whether it needs to add staff or organizational support. Agencies should identify, develop and implement transparent fidelity assessments that promote positive recognition of staff and use multiple sources of data to assess implementation and improve performance.

SECURE AND ALIGN ADMINISTRATIVE, SYSTEM AND DATA SUPPORT

To provide a favorable environment for staff to successfully implement EBPs/EIPs, implementation teams should establish data systems to drive decision making, which includes the collection and uses of program, fidelity and outcome data. The organization's leadership and administration should develop strategies to support the new practice. Examples of these "organization drivers" include:

- providing the necessary leadership to address challenges and create solutions;
- developing clear communication and feedback loops within the organization and within the system;
- adjusting and developing policies and procedures to align with practice expectations of the EBP/EIP;
- ensuring appropriate financial, organizational and human resources;

- conducting bidirectional feedback loops with families, practitioners, supervisors, managers, leaders and community partners and stakeholders;
- · building collaborative partnerships and data and resource sharing; and
- reducing administrative barriers at the institutional level.

In child welfare systems that require coordination between public and private agencies to ensure positive outcomes for children and families, it is particularly important to clarify who is accountable for developing and strengthening the infrastructure needed to deliver EBPs/EIPs with integrity. Specifically, public child welfare agencies often collaborate with private community-based organizations³² or other partners³⁴ to deliver EBPs/EIPs to families in need. Collaboration is critical to the success and sustainability of the infrastructure to support EBPs/EIPs among these systems stakeholders.

Misalignment between existing policy, capacity or standards of practice and fidelity criteria for a new intervention is common. For example, an agency's policy may call for four home visits while a new intervention calls for at least six. In this case, the policy must be adjusted to align with the expectations of the EBP/EIP. Alternatively, agencies may want to negotiate with the developers of the EBP/EIP about whether the model can be adapted to fit the agency's standard of practice and capacity.

DESIGN AND FOSTER MUTUAL ACCOUNTABILITY AMONG SYSTEMS STAKEHOLDERS

In child welfare, agencies that had sustained high-integrity implementation of EBPs/EIPs beyond initial start-up phases reported significantly greater levels of effective collaboration compared to sites that did not sustain implementation with high integrity. Well-defined and functioning teaming structures (with connected implementation teams at different levels in a system) facilitate these collaborations and support and integrate the critical infrastructure components for EBPs/EIPs. Such teams may include university partners and researchers, policymakers, service providers, training institute partners and practitioners. Cucles Successful collaboration includes developing a shared vision and mutual accountability, building on existing relationships, developing practice-research partnerships, promoting joint problem solving and resource sharing, and maintaining collaboration over time.

ACTIVITY 4:

SUPPORTING DATA USE AND COMMUNICATIONS FOR CONTINUOUS QUALITY IMPROVEMENT

Data can be used for a variety of reasons in child welfare — for example, to inform needs assessments and select interventions, or to target geographic regions or catchment areas for specific service delivery models. Data can also inform resource allocation for families, support professional development and facilitate the celebration of success in implementation or outcomes. Carefully analyzing child welfare data helps teams understand how well services are being delivered, whether services are meeting the needs of children and families and whether services are producing desired outcomes for children and families. ³⁸ One of the most important uses of data is to support the continuous improvement of services and outcomes.

CREATE A SUSTAINABLE CONTINUOUS QUALITY IMPROVEMENT (CQI) PROCESS

Develop, vet and share a transparent CQI process

One of the primary benefits of an implementation team is its commitment to conducting improvement cycles and CQI processes. Effective CQI, however, requires the transparent and organized capacity of an entire child welfare agency. Most importantly, it requires the representation of diverse perspectives in an organization or a system, not just leaders or experts. A CQI plan details who is responsible for the CQI process, as well as how information is gathered, used and shared within the organization to facilitate improvement. The plan should be developed, vetted and shared across the organization, as well as among staff and families served by the organization.

Provide the CQI team with direct and consistent support from organizational leadership

Those responsible for CQI, ideally the implementation team, need direct and consistent support from organizational leadership to lead CQI efforts — along with the authority and resources, through clear and consistent policies, to implement those efforts. They also need access to reliable and accurate data and the support of an organizational culture built on learning and improvement. When leadership empowers an implementation team, as compared with providing directives without supporting ongoing learning and capacity development, teams experience higher levels of learning, coordination and development of mental models over time. As a compared with providing directives without supporting ongoing learning and capacity development, teams experience higher levels of learning, coordination and development of mental models over time.

Build CQI into the agency's routine organizational practices and culture

Once staff understand and support the CQI process, it must become part of an agency's routine organizational practices and culture. Weekly or biweekly meetings should include a scheduled process for the implementation team to review key CQI questions and data points and communicate information to staff and stakeholders within and across the service system to support ongoing improvement efforts. Although it may lead the CQI efforts, the implementation team should not carry out CQI processes in isolation. The team should have formalized connections with agency staff, supervisors and leadership to ensure that staff have access to and support for using data and information for improvement.

CARRY OUT MEANINGFUL CQI EFFORTS

Using information and data systematically for ongoing improvement requires a well-defined process.⁴⁴ For example, teams may use a multistep process that includes identifying the problem or questions to answer; selecting the data to answer the question and the simplest way to gather these data; ensuring systems and structures are in place to collect the data; analyzing the data to answer the questions; and supporting ongoing improvement based on the findings.

The following section describes the five steps involved in a well-defined CQI process.

Start the CQI process with well-developed questions

Questions should be guided by a theory of change or logic model that begins with the intended outcomes or improvements and directly links programmatic components (inputs, resources, activities) to those outcomes. Questions should be meaningful and relevant to a range of affected stakeholders, including families. CQI questions should then seek to understand whether the programmatic components are having their intended benefit. Teams should resist the urge to allow their existing or readily available data alone to drive the CQI process. Instead, they should start the CQI process with well-developed questions they have formulated with stakeholders to enable a proactive process that matches data sources with the questions. Teams should include diverse stakeholders, particularly families and community members.

Identify data indicators and sources that will assist in answering the questions

Multiple sources and types of data can be useful in the analysis and interpretation of CQI questions. These may include quantitative data from the program or qualitative feedback from staff, stakeholders, children and families on relevant CQI questions. Using multiple sources and perspectives to interpret data and drive decision making for improvement enriches the interpretation of data and creates an opportunity for shared decision making in the CQI process. In addition to program and administrative data, teams should consider using fidelity and outcome data (see Figure 3) in their CQI process.

Determine the simplest way to gather the data

Public and private child welfare organizations are often understaffed and under a large amount of pressure; they can experience challenges in consistently using data to drive improvement. ⁴⁹ Teams should consider and prioritize data sources that are available and feasible to collect.

Put systems and structures in place to collect and learn from data

Structured CQI processes make clear who is responsible for gathering, synthesizing and sharing data, and with whom the data should be shared. Using those data to develop a learning culture is essential for an effective CQI process. The more a CQI process includes diverse perspectives, the more it will create a learning culture.⁵⁰

Analyze data to answer questions

Trends and variations in the data can indicate areas to further explore or focus on for the improvement strategy. Improvement efforts can focus on a variety of relevant aspects of child welfare, including clinical interventions, casework practice enhancements, fiscal refinements or administrative adaptations. It is important to note that improvements are not always focused on the intervention itself. The competency, organizational or systems support necessary to ensure effective practice and improved outcomes for children and families should also be considered.

Structure your data analysis around the three key types of data to collect for CQI: program, fidelity and outcome (see Figure 3 on p. 13). Sample guiding questions include the following:



Program data

Are families who could benefit from services receiving services? Are we increasing service utilization over time?



Fidelity data

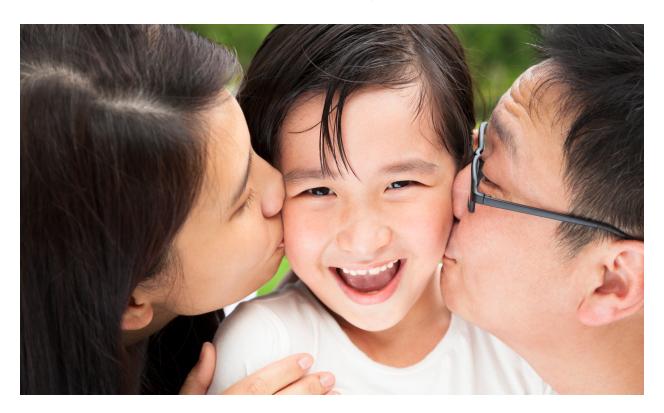
Is the intervention being delivered as intended? How do we know?



Outcome data

Are we increasing protective factors and decreasing risk factors? Are we reducing the average length of stay in foster care?

It is important at this stage to ensure that the data collected reflect an accurate picture of the child welfare system or program. The implementation team should ask, Are these the data we need to answer our key questions? For example, if a goal is to decrease the average length of stay in foster care, the implementation team must ensure that its data go beyond baseline observations to accurately reflect how long children are staying in the foster care system.⁵²



Five-Step Process for Continuous Quality Improvement

Guiding questions and examples

	STEP	GUIDING QUESTIONS	EXAMPLE		
1	Start the CQI process with well-developed questions.	 What are your desired improvements? What will success look like related to the improvement? 	The implementation team notices that retention in its fatherhood program has decreased over the past three months. The team wants to understand how they can ensure ongoing retention of fathers in the program. The team decides that retaining 85 percent of fathers for the duration of the three-month program would be a feasible goal.		
2	Identify data indicators and sources that will assist in answering the questions.	 Will program, outcome and/or fidelity data provide information on the desired improvements? What data exist and are available? What additional data or information might you need? How can you prioritize the key data points needed to inform your assessment of desired improvements? What is most important? 	The implementation team decides they can use their query tool to look at real-time recruitment numbers, participation summaries and reports. The quality assurance staff on the team agrees to gather the data for the next meeting. Additionally, the team wants to gather feedback from staff on fathers enrolled in the program.		
3	Determine the simplest way to gather the data.	 If additional data and information are needed, what's the simplest way to gather this information? How can you ensure it is easy for staff or others supporting the collection of additional information? 	The implementation team decides that the easiest way to gather staff feedback is to designate time during the regular staff meeting to ask staff for input on retention. Two supervisors and the program director who are part of the implementation team volunteer to collect staff feedback at the meeting. Leadership agrees that this is a priority and designates time in the staff meeting to receive feedback.		
4	Put systems and structures in place to collect and learn from data.	 Who will be responsible for gathering the data? With whom will the data be shared? 	The supervisors and the program director share information on the current decline in retention for fathers enrolled in the fatherhood program with staff and ask for feedback. Staff report that some of the fathers have gained employment and reported that it's difficult to attend the parenting class when it is scheduled. Staff also share that some fathers are primarily focused on employment and may benefit from coordinated efforts between the parenting class and employment assistance. The supervisors and the program director explain to the staff that they will share this with the implementation team and report back at the next staff meeting regarding improvement efforts.		
5	Analyze data to answer questions.	 Who will be responsible for synthesizing and analyzing the data? Who will make decisions regarding the results of the data? How will information about decisions be communicated? To whom? 	The supervisors, program director and quality assurance staff meet ahead of time to review the data and prepare a report for the implementation team meeting. They notice that the query data show that most of the fathers reported their primary reason for enrolling was employment. The implementation team discusses the query data and staff feedback and decides to change the parenting program to an hour later in the evening to accommodate the working fathers and to ensure the employment specialist is available to meet with fathers in the hour prior to the parenting class. The supervisors and program director from the implementation team report these decisions at the next staff meeting and tell staff they will continue to monitor retention data to see if these improvements increase retention over the next month.		

SHARE AND LEARN FOR IMPROVEMENT

As previously discussed, strong communication pathways help CQI efforts to resonate with agency staff and systems stakeholders. Ideally, these pathways connect localized CQI teams within provider units, agencies, regions and counties. Learning should be shared through clearly identified, two-way feedback loops that promote alignment and improvement among policymakers, program administrators, leaders and practitioners.

For example, if a public agency wants to ensure the number of referrals to a particular program increases, the agency would collect and analyze data both at the individual provider level and for the system as a whole. The public agency would then give service providers their own referral data in addition to the referral data from the system as a whole. The public agency and service provider implementation teams would meet quarterly to go through the data and determine any needed changes in approach.

TIPS FOR LEADERS

State agencies, service providers and their implementation teams all play critical roles in sustaining evidence-based practices in child welfare. Use the following tips as a quick reference guide when determining key roles and responsibilities.

ASSESSING AND SELECTING INTERVENTIONS

- 1. The state agency can use the procurement process to improve the fit between potential interventions and the local service delivery context. For example, when developing an RFP for implementation of a new intervention, state agencies can require that applicants plan for and conduct a robust needs assessment. In this way, state agencies can mandate the assessment of need, fit and capacity by service providers to ensure the system is set up for improved processes to select appropriate interventions.
- 2. Service providers can consider strategies to conduct internal fit and feasibility assessments, using data to inform how they select interventions, even if it is not mandated.
- 3. The state agency can work with staff from the state level and/or systems partners (e.g., university partners, a state-level training center, consultants) to provide guidance and tools to service providers on how to make informed choices related to interventions.

ESTABLISHING AND SUSTAINING IMPLEMENTATION TEAMS

- 1. The state agency can form an implementation team to oversee, build infrastructure for and support providers in ensuring high-quality implementation, developing staff and organizational capacity and cultivating sustainability of the evidence-based and evidence-informed child welfare services it funds.
- 2. The state implementation team might consider how state-level infrastructure (such as contracts, training and program leads) could strengthen provider implementation. For example, if several service providers are implementing the same EBP, the state agency could organize centralized training so each provider isn't seeking it out separately. Similarly, state teams can bring together representatives with similar roles from provider groups for resource sharing and support.
- 3. Service providers can work to formalize their use of implementation teams within their respective organizations. Instead of incubating a new policy or innovation in one office or department, service providers can ensure that all initiatives have visibility, staff support and accountability across departments from the beginning of implementation.

DEVELOPING AND ALIGNING IMPLEMENTATION INFRASTRUCTURE

- 1. The state agency and provider agencies can explore ways to assess infrastructure strengths and gaps (such as competency drivers and organization drivers) and prioritize areas for infrastructure development. Competency drivers include: ensuring systems are in place to hire qualified staff; providing additional training and coaching as needed; and offering feedback in a safe and supportive environment. Organization drivers include: ensuring necessary leadership and financial resources; developing clear feedback loops with internal staff, partners and stakeholders; and adjusting policies and procedures to align with expectations of the EBP/EIP.
- 2. The state agency, service providers and systems stakeholders can use collaborative teaming structures to develop and refine their respective infrastructure. Collaborative teaming structures bring people together from different levels in a system for a common purpose to which they share accountability. Such collaborative teams meet regularly to discuss what it will take for an intervention to stick and jointly assign roles and responsibilities for essential tasks like training and data sharing. Without these intentional teaming structures, it is unlikely state and local stakeholders would meet.
- 3. Service providers can capitalize on state-level resources for agency infrastructure development and embed implementation best practices into their own agency teams.

SUPPORTING DATA USE AND COMMUNICATIONS FOR CONTINUOUS QUALITY IMPROVEMENT

- 1. The state agency can identify strategies to support provider data use and effective communication.
- 2. The state agency can use data to identify patterns and trends across the system and within individual service providers and use this information to target systemwide and individual agency improvement strategies.
- 3. Service providers can ensure that organizational implementation teams have timely access to relevant data to support effective CQI processes.
- 4. State agencies can consider strategies for building service providers' CQI capacity.

CONCLUSION

Child welfare leaders need programs and practices that work consistently and reliably to ensure the health and safety of children and families. While many promising evidence-based models exist, government agencies often are not equipped with the processes, structure and culture to use these interventions with fidelity. Fortunately, implementation science offers a road map for child welfare leaders to use in creating the conditions necessary for evidence-based practices to thrive. By engaging diverse stakeholders from the start, selecting interventions based on local need and context, building the competency and capacity of staff and partners to lead efforts and incorporating data-driven decision making as a regular practice, child welfare systems can ensure affordable, sustainable, effective implementation of programs and practices across complex systems.

ENDNOTES

- 1. Saldana, L. (2015, May). Guiding organizations towards successful implementation: Building an evidence-based strategy for implementation assessment and feedback. Paper presented to the Biennial Global Implementation Conference, Dublin, Ireland. Retrieved from http://gic.globalimplementation.org/wp-content/uploads/2015-presentation-slides/ GIC_Saldana_keynote_v02.pdf
- 2. NIRN is based at the University of North Carolina at Chapel Hill. For more information, visit http://nirn.fpg.unc.edu.
- 3. Aarons, G. A. & Palinkas, L. A. (2007). Implementation of evidence-based practice in child welfare: Service provider perspectives. *Administration and Policy in Mental Health and Mental Health Services Research*, 34, 411–419.
- 4. Powell, B. J., Waltz, T. J., Chinman, M., Damschroder, L. J., Smith, J. L., Matthieu, M. M.,...Kirchner, J. (2015). A refined compilation of implementation strategies: Results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation Science*, 10(1), 21. Retrieved from https://implementationscience.biomedcentral.com/articles/10.1186/s13012-015-0209-1
- 5. For a discussion of clearinghouses, please see The Annie E. Casey Foundation. (2018). Funding effective implementation of evidence-based programs in child welfare. Baltimore, MD: Author. Retrieved from http://www.aecf.org/m/resourcedoc/aecf-fundingeffectiveimplementationofebps-2017.pdf
- 6. Metz, A. & Louison, L. (2018). The Hexagon Tool: Exploring Context. Chapel Hill, NC: National Implementation Research Network, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill. Based on Kiser, Zabel, Zachik, & Smith (2007) and Blase, Kiser & Van Dyke (2013).
- 7. Supplee, L., & Metz, A. (2015). Opportunities and challenges in evidence-based social policy. Social Policy Report, 28(4), 1–16.
- 8. Racine, D. P. (2006). Reliable effectiveness: A theory on sustaining and replicating worthwhile innovations. *Administrative Policy in Mental Health*, 33(3), 356–387.
- 9. Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration, Policy and Mental Health*, 38(1), 4–23.
- 10. Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science. *Implementation Science*, 4(1), 50. Retrieved from www.implementationscience.com/content/4/1/50
- 11. Racine, D. P. (2006).
- 12. Horner, R. H., Blitz, C., & Ross, S. W. (2014). *The importance of contextual fit when implementing evidence-based interventions* (ASPE issue brief). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, Office of Human Services Policy, U.S. Department of Health and Human Services.
- 13. Green, A. E., Trott, E., Willging, C. E., Finn, N. K., Ehrhart, M. G., & Aarons, G. A. (2016). The role of collaborations in sustaining an evidence-based intervention to reduce child neglect. *Child Abuse and Neglect*, 53, 4–16.
- 14. Metz, A., Naoom, S., Halle, T., & Bartley, L. (2015). An integrated stage-based framework for implementation of early childhood programs and systems. Washington, DC: Office of Planning, Research, and Evaluation, U.S. Department of Health and Human Services.
- 15. National Implementation Research Network's Active Implementation Hub. (n.d.). Topic 4: *Establishing implementation teams*. Retrieved from https://implementation.fpg.unc.edu/module-3/topic-4
- 16. Metz, A., Naoom, S., Halle, T., & Bartley, L. (2015).
- 17. Metz, A., Naoom, S., Halle, T., & Bartley, L. (2015).

- 18. National Implementation Research Network's Active Implementation Hub. (n.d.). Topic 5: *Terms of reference (ToR)*. Retrieved from https://implementation.fpg.unc.edu/module-3/topic-5
- 19. Higgins, M., Young, L., Weiner, J., & Wlodarczyk, S. (2009). Leading teams of leaders: What helps team member learning? *Phi Delta Kappan*, 91(4), 41–45.
- 20. Permanency Innovations Initiative Training and Technical Assistance Project. (2016). *Providing technical assistance to build implementation capacity in child welfare: A manual based on the development, implementation, and assessment approach.* Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau.
- 21. Higgins, M., Young, L., Weiner, J., & Wlodarczyk, S. (2009).
- 22. Hurlburt, M., Aarons, G.A., Fettes, D., Willging, C., Gunderson, L., & Chaffin, M. (2014). Interagency collaborative team model for capacity building to scale up evidence-based practice. *Children and Youth Services Review*, 39, 160–168.
- 23. Saldana, L., & Chamberlain, P. (2012). Supporting implementation: The role of community development teams to develop infrastructure. *American Journal of Community Psychology*, 50(3–4), 334–346.
- 24. Saldana, L., & Chamberlain, P. (2012).
- 25. Hurlburt, M., Aarons, G.A., Fettes, D., Willging, C., Gunderson, L., & Chaffin, M. (2014).
- 26. Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009).
- 27. Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009).
- 28. National Implementation Research Network. (n.d.). *Implementation drivers*. Retrieved from http://nirn.fpg.unc.edu/learn-implementation/implementation-drivers
- 29. Novins, D. K., Green, A. E., Legha, R. K. & Aarons, G. A. (2013). Dissemination and implementation of evidence-based practices for child and adolescent mental health: A systematic review. *Journal of the Academy of Child & Adolescent Psychiatry*, 52(10), 1009–1025.
- 30. Metz, A., Bartley, L., Ball, H., Wilson, D., Naoom, S., & Redmond, P. (2015). Active implementation frameworks for successful service delivery: Catawba County child wellbeing project. *Research on Social Work Practice*, 25(4), 415–422.
- 31. Ogden, T., Bjornebekk, G., Kjobli, J., Patras, J., Christiansen, T., Taraldsen, K., & Tollefsen, N. (2012). Measurement of implementation components ten years after a nationwide introduction of empirically supported programs a pilot study. *Implementation Science*, 7(1), 49. Retrieved from https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-7-49
- 32. Fixsen, D. L., Naoom, S. F., Blase, K. A., & Friedman, R. M. (2005). Implementation research: a synthesis of the literature.
- 33. Collins-Camargo, C., McBeath, B., & Ensign, K. (2011). Privatization and performance-based contracting in child welfare: Recent trends and implications for social service administrators. *Administration in Social Work*, 35(5), 494–516.
- 34. Hoagwood, K. E., Olin, S. S., Horwitz, S., McKay, M., Cleek, A., Geacher, A.,...Hogan, M. (2014). Scaling up evidence-based practices for children and families in New York state: Toward evidence-based policies on implementation for state mental health system. *Journal of Clinical Child and Adolescent Psychology*, 43(2), 145–157.
- 35. Green, A. E., Trott, E., Willging, C. E., Finn, N. K., Ehrhart, M. G., & Aarons, G. A. (2016).
- 36. Hoagwood, K. E., Olin, S. S., Horwitz, S., McKay, M., Cleek, A., Geacher, A., Hogan, M. (2014).
- 37. Green, A. E., Trott, E., Willging, C. E., Finn, N. K., Ehrhart, M. G., & Aarons, G. A. (2016).
- 38. Chovil, N. (2010). One small step at a time: Implementing continuous quality improvement in child and youth mental health services. *Child and Youth Services*, 31(1–2), 21–34.
- 39. Higgins, M., Young, L., Weiner, J., & Wlodarczyk, S. (2009).

- 40. Lees, R. (2005). Process for the development of CQI Model: Fraser Region CYMH. British Columbia, Canada: Ministry of Children and Family Development.
- 41. Petr, C. G. (Ed.). (2009). Multidimensional evidence-based practice: Synthesizing knowledge, research and values. New York: Routledge.
- 42. U.S. Department of Health and Human Services (2012). *Continuous quality improvement in Title IV-B and IV-E programs, 8/27/12 (Information memorandum, ACYF-CB-IM-12-07).* Washington, DC: U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, Administration for Children and Families, Children's Bureau. Retrieved from http://www.acf.hhs.gov/sites/default/files/cb/im1207.pdf
- 43. Lorinkova, N. M., Pearsall, M. J., & Sims Jr., H. P. (2013). Examining the differential longitudinal performance of directive versus empowering leadership in teams. *The Academy of Management Journal*, 56(2), 573–396.
- 44. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014). *Principles, language, and shared meaning: Toward a common understanding of CQI in child welfare.* Chicago, IL: The Center for State Child Welfare Data, Chapin Hall at the University of Chicago.
- 45. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014).
- 46. Center for State Foster Care and Adoption Data. (2012). Framing analytic questions in the context of continuous quality improvement. Chicago, IL: Chapin Hall at the University of Chicago.
- 47. Chovil, N. (2010).
- 48. National Child Welfare Resource Center for Organizational Improvement. (2002). *A framework for quality assurance in child welfare*. Retrieved July 18, 2018, from https://muskie.usm.maine.edu/helpkids/rcpdfs/QA.pdf
- 49. Carrilio, T. E., Packard, T., & Clapp, J. D. (2004). Nothing in–nothing out: Barriers to the use of performance data in social service programs. *Administration in Social Work*, 27(4), 61–75.
- 50. Chovil, N. (2010).
- 51. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014).
- 52. Wulczyn, F., Alpert, L., Orlebeke, B., & Haight, J. (2014).