Research-to-Results

Brief

Child TRENDS

USING IMPLEMENTATION SCIENCE TO SUPPORT AND ALIGN PRACTICE AND SYSTEM CHANGE: A CASE STUDY OF THE CATAWBA COUNTY CHILD WELLBEING PROJECT

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OVERVIEW

This is the second brief in a series, *Building a Post-Care Service System in Child Welfare: Lessons Learned from the Frontlines of Implementation Science in Catawba County.* This brief describes how implementation science principles informed technical assistance strategies used in Catawba County to support the full and effective use of evidence-based and evidence-informed practices (EBPs/EIPs). Topics include building the capacity of local implementation teams, conducting stage-appropriate activities, and creating an implementation infrastructure to sustain new interventions.

BACKGROUND

In 2007 North Carolina's Catawba County Department of Social Services, in partnership with The Duke Endowment, embarked on an initiative aimed at improving the transition of children and youth in foster care to adulthood by expanding child welfare services beyond the mandated service continuum. *The Child Wellbeing Project* has developed a continuum of post-care evidence-based and evidence-informed services that the Project offers to children who exit foster care to a permanent placement and to their families. Key services include: the *Success Coach intervention*, a voluntary, in-home enhanced case management system for families; an *Educational Advocate*, who coordinates services between public schools and the social service system; *Parent Child Intervention Therapy* for parents/guardians and young children who have disruptive behaviors and/or a history of abuse/neglect; voluntary *Strengthening Families' Parenting* classes; a *support group for adopted children,* and *discretionary funds,* available to families enrolled in the Success Coach services to meet needs that are critical to their children's wellbeing and to reinforce their efforts to reach goals that they have set with Success Coaches.

To ensure that evidence-based and evidence-informed practices (EBPs/EIPs) are implemented effectively over the course of this multi-year initiative, technical assistance has been provided to the project by Child Trends (from 2007 through 2009) and by the National Implementation Research Network (NIRN) at the University of North Carolina-Chapel Hill (from 2009 to the present). A technical assistance framework was developed by drawing on the research literature about implementation strategies that contribute to successful program operations (Fixsen et al., 2009).

The Child Wellbeing Project
Catawba County Social Services
in partnership with
The Duke Endowment

THE DUKE ENDOWMENT

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Research Network

These strategies include establishing Implementation Teams to guide the work of the Project, making certain that each post-care intervention proceeds through all the necessary stages of implementation, and creating an infrastructure that will sustain the interventions after project funding has ended.
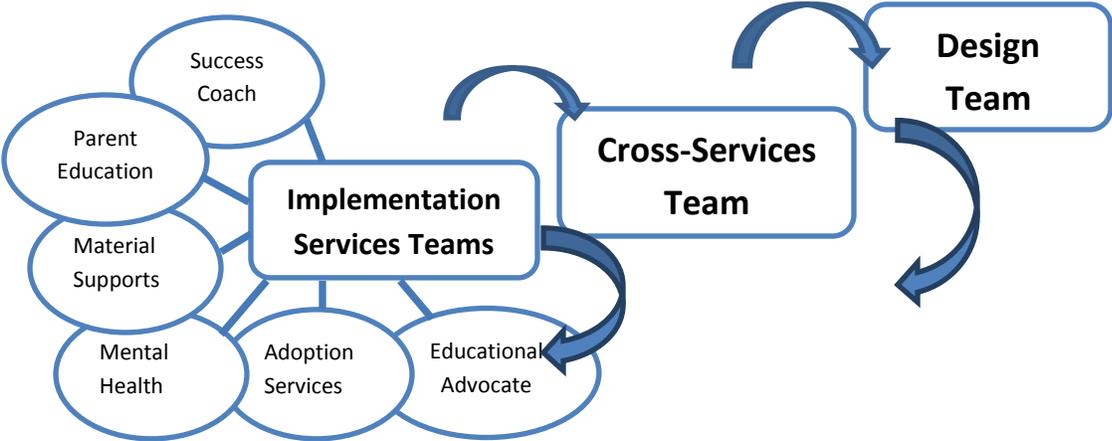
Local Implementation Teams

Traditional approaches to disseminating and implementing EBPs/EIPs for children and families, which leave it up to agencies to make sense of research findings on their own, have not succeeded in closing the research-to-practice gap (Greenhalgh et al., 2004). Implementation Teams, which consist of four to eight agency staff members who provide an accountable structure for implementing a new intervention, are a promising approach to closing this gap: studies have shown that these Teams can improve success rates for effective implementation of innovations and reduce the time that it takes for a project to move to a stage of full implementation (Balas and Boren, 2000; Fixsen et al., 2001). In Catawba County, it was decided to develop multiple Implementation Teams at each level of the system (leadership, management, and practice). The two key reasons for deploying multiple Teams are the breadth of the post-care services in the project and the need for buy-in and expertise for the project throughout the Catawba Department of Social Services.

In order to form Teams, individuals who had certain expertise and leadership skills were encouraged to volunteer, but not required to participate. In fact, everyone who was encouraged to volunteer agreed to do so because prospective volunteers viewed the Teams as a unique opportunity to participate in decision-making and systems change. Each Team has an internal memorandum of understanding that describes how it functions, communicates, makes decisions, and moves forward with its mission and objectives. The roles of the different Teams are described next. (Also see Figure 1 for a depiction of how the Teams were structured.)

- **Implementation Service Teams** – Six Implementation Teams, mirroring six main focal areas of concern for post-care services, were created. Each Team reviewed potential interventions for the specific post-care service area that it was focusing on, selected the approaches and interventions that the service area would cover, and planned for implementation. Areas of work for the Teams included the development of training, coaching, and guidelines for assessing caseworkers' performance. Initially the Teams met at least biweekly to review data that helped them understand the needs of potential clients, to select the intervention, and to plan. Once interventions were implemented, the membership on these Teams shifted and their primary responsibility also shifted to assessing data generated by operating programs and using that data to help the Teams recommend how services could be improved. Reflecting this shift, these Implementation Service Teams are now called Program Review Teams.

- **Cross- Services Team** – Co-leaders of each of the Implementation Service Teams convened monthly to ensure that the different sets of post-care services were aligned, continuous, and coordinated. Now that interventions have been implemented, this Team meets less often (two to four times per year).

- **Design Team** -- This leadership Team was primarily responsible for decision-making and funding choices regarding the interventions that the Implementation Service Teams recommended. The Team's membership consisted of agency leaders and project funders.

While the composition and functions of various Teams shifted as intervention decisions were made and implementation forged ahead, an accountable structure for implementation still remains in Catawba County. As noted, the Program Review Teams are responsible for using data for continuous improvement of the Project. And, in lieu of the Design Team, which has finished its work, a smaller group of leaders, researchers, technical assistance partners, and the funder now make-up a Core Team, which has general oversight responsibility for the Project. This consistency in accountability has allowed Catawba County to avoid many pitfalls of implementation including a lack of buy-in and readiness for the Project, inadequate use of data to make choices, and drift in key activities – for example, training, coaching, and performance assessment – that support high-fidelity implementation.
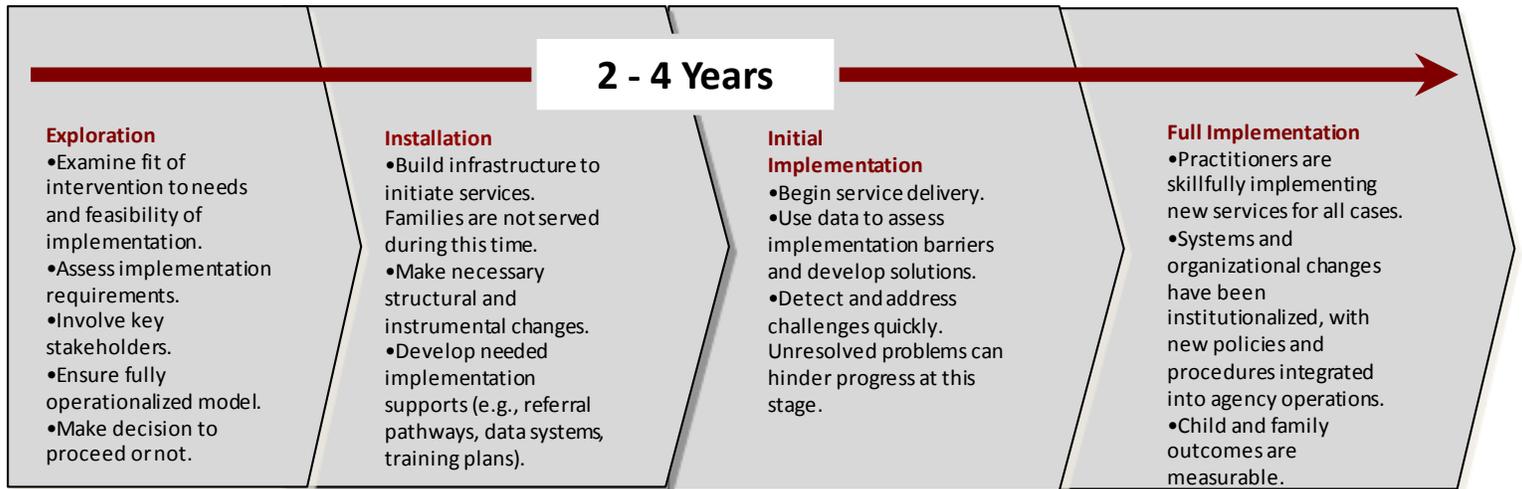
Figure 1: Implementation Teams

Stages of Implementation

The literature on successful program implementation suggests that it happens in four discernible stages: exploration, installation, initial implementation, and full implementation (see Figure 2). Implementing a well-constructed, well-defined, well-researched program that proceeds through these stages can be expected to take two to four years (see, for example, Bierman et al., 2002; Fixsen et al., 2001; Panzano and Roth, 2006; Prochaska and DiClemente, 1982; Solberg et al., 2004). The technical assistance provided to Catawba County operated under the premise that work in stages was necessary for successful service and system change. Below are examples of some of the activities for each of the four stages that have occurred or that are expected to occur in the Catawba County Project.

Figure 2. Completed and Expected Activities by Stage of Implementation for the Catawba County Project

2 - 4 Years

Exploration
- Examine fit of intervention to needs and feasibility of implementation.
- Assess implementation requirements.
- Involve key stakeholders.
- Ensure fully operationalized model.
- Make decision to proceed or not.

Installation
- Build infrastructure to initiate services. Families are not served during this time.
- Make necessary structural and instrumental changes.
- Develop needed implementation supports (e.g., referral pathways, data systems, training plans).

Initial Implementation
- Begin service delivery.
- Use data to assess implementation barriers and develop solutions.
- Detect and address challenges quickly. Unresolved problems can hinder progress at this stage.

Full Implementation
- Practitioners are skillfully implementing new services for all cases.
- Systems and organizational changes have been institutionalized, with new policies and procedures integrated into agency operations.
- Child and family outcomes are measurable.

Exploration Stage – Critical activities during the Exploration Stage included assessing potential service models that would meet the needs of the target population, researching the implementation requirements of these models, and assessing Catawba County's capacity to implement the models with fidelity. Once those assessments had been made, the Implementation Service Teams considered possible interventions within their service areas. Teams then completed a "fit and feasibility assessment" (see National Implementation Research Network, 2001 for more detail) for each intervention. Findings from this assessment helped the agency avoid the common mistake of choosing an intervention that would not be feasible to implement in the setting for which it was intended. Key questions that were addressed during this assessment included: [1]

- Does an effective intervention or approach exist to meet the identified needs of the population of concern?
- Is this intervention a good fit with our agency and community?
- Is there a sufficient level of evidence for this intervention?
- How ready is this intervention for replication?
- Are there sufficient resources available to support implementation of this intervention in our agency or community?
- Do we have the capacity to implement this intervention well?

Installation Stage – Installation is the most commonly overlooked stage of implementation. Many human services agencies dive into service delivery after making a decision to implement a program or practice without taking the time to build the infrastructure needed to support implementation (for example, the infrastructure that is created by developing training plans, building data systems, buying equipment, creating new assessment forms, and developing referral pathways). During the Installation stage in Catawba County, Implementation Teams identified the structural and instrumental changes

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[1] Please contact the lead author for more information on the complete Fit and Feasibility Assessment.

needed to support the new interventions. For example, plans were made for selecting, training, and coaching new staff, and for developing and testing data systems. In another example of the changes that were made during this stage, the agency restructured its divisions so that the post-care unit was paired with another unit providing voluntary services within the child services division to create a "Wellbeing Unit" and so that staff of post-care services were co-located with adoption and mental health staff. Spending time on these tasks helped to ensure that new services were implemented by well-trained staff and that administrative supports were in place to support staff in their new roles.

Initial and Full Implementation Stages - Currently, most of the interventions in Catawba County are in the Initial Implementation Stage, with one service on the brink of full implementation. Initial implementation which marks the delivery of new services to families, has taken approximately 24 months, which is in line with findings from the literature that has been cited. A major Catawba County activity during these stages is using data for continuous improvement of the Project. Implementation Teams meet monthly with Catawba County leaders to conduct program reviews,[2] during which they review data and decide how to address barriers to implementation and strengthen service delivery. (A more complete description of program reviews is included in the following section.)

Implementation Infrastructure: Drivers of Successful Implementation
The Implementation Drivers are the core implementation components[3] or building blocks of the infrastructure needed to support practice, organizational, and systems change. They are called Drivers because they "drive" effective implementation of interventions (see Figure below). To identify these building blocks, planners examined common elements or features of programs and practices that had been successfully implemented. They also consulted findings from the literature on program implementation evaluation and research (Fixsen et al., 2005).

When used together, three categories of implementation drivers – *competency drivers*, *organization drivers*, and *leadership drivers* – help to ensure high-fidelity and sustainable implementation of programs. Following are definitions of each of the three drivers and discussions of best practices that are associated with each of them and that Catawba County used in the project.

Competency drivers develop, improve, and sustain practitioners' and supervisors' ability to implement a program or innovation. Catawba County best practices associated with these drivers:

- *Staff Selection* – Implementation Teams identified and defined the staff skills and qualifications needed for the delivery of the Project's new services, and Catawba County leaders instituted new n protocols for selecting staff that reflected these prerequisites. The protocols included behavioral rehearsals – role plays – that were designed to help managers better assess applicants' skills and

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[2] Please contact the lead author for information on Program Review Templates.

[3] NIRN makes a distinction between *core intervention components* and *core implementation components*. Core intervention components refer to the most essential and indispensable components of an intervention practice for achieving desired *outcomes* (for example, caseworker activities, the dosage of services a client receives, or the staff/client ratio). Core implementation components refer to the most essential or indispensable components for *implementing* the practice or program (for example, strategies for recruiting staff, training and coaching plans, data collection requirements, supervision models, management strategies, and systems interventions). Defining core implementation components depends on having core intervention components – in other words, a fully operationalized program model – in place. For this reason Catawba County project planners spent a great deal of time operationalizing key components of the intervention to prepare for setting its core implementation components.

receptivity to coaching. In comparison to traditional staff selection measures, the new hiring procedures yielded a better fit between staff skills and what was required for the work that was to be accomplished.

- *Training* – Catawba County ensured that all staff was trained using best practices. These practices included opportunities to try out new skills to mastery and to receive feedback in a safe and supportive training environment. When trainers who were hired to prepare staff did not provide skill-based training – training that goes beyond providing information to help staff practice and use skills – Catawba County sought out additional support from local experts.
- *Coaching* – Most new skills can be introduced to staff in training sessions but must be practiced and mastered on the job with the help of a coach (Joyce and Showers, 2002). Catawba County developed coaching plans that involved direct observation and feedback for all new practitioners and that, over time, increased practitioners' ability to deliver the service competently.
- *Performance Assessment* - To ensure that staff for the project was assessed using criteria that reflected their acquisition and use of skills and abilities that were specific to the intervention and that were emphasized in training and coaching, Catawba County developed criteria for assessing performance that were separate from generic templates that the county uses. The county has reported that it has had great success with this enhanced process for assessing staff performance.

Organization drivers develop the organizational supports and systems, including the use of data to make decisions, that are needed to create a hospitable environment for new programs and other innovations. Catawba County best practices associated with these drivers:
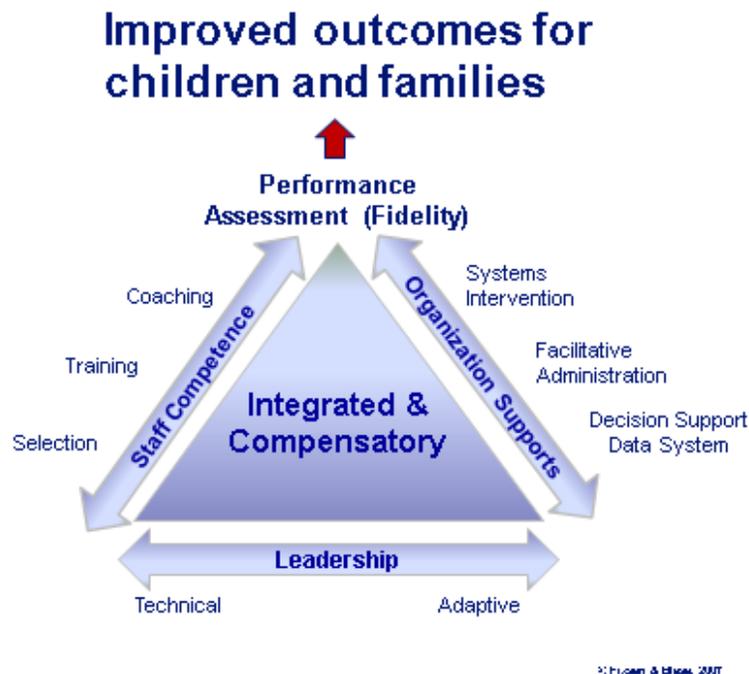
- *Decision-Support Data Systems* – Many initiatives fail due to lack of attention to what is actually implemented and the results from those actions (U.S. Department of Health and Human Services,

1999 and 2001; U.S. Department of Education, 2011; National Association of Public Child Welfare Administrators, 2005). To avoid this pitfall, Catawba County uses data for all of the Project's interventions to support decision-making and guide efforts to improve the Project. As part of the Program Review Process, Implementation Teams review a range of data (administrative, service delivery, fidelity, and outcome data) on a monthly basis and then respond to a series of questions in the program review protocol to help determine whether changes are needed to improve services. For example, when Team members reviewed program data, they found that findings on family needs that were generated by the assessments of those needs were not fully aligned with goals for the families that had been articulated in their case plans. Based on this information, Implementation Team leaders decided that further training on assessments should be provided for new staff.

- *Systems Interventions* – Program reviews have provided the Project with a process for detecting barriers to good services that are related to the Project's systems. After reviewing data each month, the Implementation Team asked a series of questions such as: What barriers have we encountered in implementing this intervention or new service? What systems supports are working well? How we can ensure that they continue to work well?

Leadership drivers ensure that appropriate leadership strategies are used to address different types of challenges (Heifetz and Laurie, 1997). Leaders need to address barriers to good services as quickly as possible in order to improve and stabilize the services. A Catawba County best practice associated with these drivers:

- *Facilitative Administration* – Project leaders joined the Implementation Teams to complete the program reviews. With leaders present in the room, Team members had real-time access to those individuals who need to take action to address barriers to good services that have been identified. Leaders were part of the process of asking such questions as: Does the practitioner need support with any particular skill to improve practice? Would improving the usefulness or quality of one or more of the Implementation Drivers help to improve implementation of the program?

SUMMARY

The use of science-based implementation strategies in the Catawba County Child Wellbeing Project has promoted the full and effective use of EBPs/EIPs and innovations with the goal of improving child and family outcomes over time. In Catawba County, technical assistance providers, working with project managers and staff, have helped to:

- Develop and build the capacity of expert Implementations Teams that work in tandem with one another.
- Ensure that the Project proceeded through all the necessary stages of planning and implementation that promote successful system and service change.
- Define and install Implementation Drivers to promote a sustainable infrastructure for service delivery.
- Institute continuous improvement processes through monthly program reviews.

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