

Brief 4

Successfully Implementing Evidence-based Programs for Children and Families in North Carolina

Katie Rosanbalm, Michelle Hughes, Charisse Johnson, Rhett Mabry and Lauren Akers

Selecting and funding evidence-based programs can help achieve better outcomes for children and families. However, even the best evidence-based program will not yield good outcomes if it is not implemented well. This brief outlines the key components that policymakers and agency staff members might consider in drafting policy and promoting programs to achieve optimal outcomes for North Carolina. In particular, this brief discusses program fidelity and enumerates the core drivers for successful implementation. It then describes a unique, collaborative effort of public and private funders in North Carolina to fund and implement select evidence-based programs.

Importance of High-Quality Implementation

Imagine that North Carolina had a shortage of flu vaccines. To ensure the best possible outcomes for the population, responsible medical practitioners do not water down the vaccine so that it can be distributed to more people: they know that watered-down vaccines are ineffective. Instead, they target the full-strength vaccine to groups that are most likely to benefit from being vaccinated or those most at risk.

As in the flu shot example, watered-down social programs do not result in the intended outcomes for recipients. The National Implementation

Research Network (NIRN) calls the typical orientation to social program implementation the “spray and pray” approach. Under “spray and pray,” program developers, researchers and advocates “spray” program providers (e.g., social workers, teachers, nurses, etc.) with information and training in a program or practice, and then pray that providers implement it well. Service providers are on their own to institute and maintain practice changes, often assuming that a small dose of a good program is almost as good as the full dose.¹

Considerable research indicates that the opposite is true: merely disseminating information does not produce either changes in practitioner behavior or benefits to consumers. Furthermore, full doses are required to produce positive outcomes for recipients. Without ongoing support, monitoring and reinforcement to help practitioners solidify their skills and knowledge, they will not be successful in either implementing a program well or in maintaining changes in practice.¹

As an example, NIRN highlights a meta-analysis by Joyce and Showers² that summarizes research on training public school teachers. The results of different types of training and follow-up are shown in table 1. Across studies, as training components grew to include technique demonstration, practice and feedback, teacher knowledge and skill

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Katie Rosanbalm, PhD, is a Research Scholar, Center for Child and Family Policy, Duke University. Michelle Hughes, MA, MSW, is Vice President for Programs, Prevent Child Abuse North Carolina. Charisse Johnson, MSW, is Section Chief for Child Welfare Services, NC Division of Social Services. Rhett Mabry, MHA, is Director of Child Care, The Duke Endowment. Lauren Akers is a graduate student at Duke University and the University of North Carolina School of Law.

demonstration improved substantially. However, actual classroom use of the new technique was achieved only with all of these components plus on-the-job coaching.

It is not sufficient simply to select a program model and share it with providers. Even with a

great deal of traditional training, this approach is unlikely to achieve change in actual practice. Change in an implementing organization's underlying infrastructure is often required to prevent practitioners from drifting back to old practices.

Table 1: Success Rates in Improving Teacher Practices

Training Components	Domain of Teacher Competence		
	Knowledge	Skill Demonstration	Use in Classroom
Theory and Discussion	10%	5%	0%
...+Demonstration	30%	20%	0%
...+Practice and Feedback	60%	60%	5%
...+Coaching in Classroom	95%	95%	95%

Joyce & Showers, 2002

Program Fidelity

Program fidelity refers to how well a program is implemented according to established standards. Research on implementation of evidence-based programs shows that fidelity to core program elements is critical to success.^{1,3} Core program elements (which may differ across programs) often include the following:

- Mechanism of service delivery (e.g., home versus office visits, lecture versus group discussion);
- Frequency and intensity of service delivery;
- Chronology of the service components;
- Staff education and professional credentials;
- Staff training requirements; and
- Substantive elements of the programmatic intervention.

Changing any of these components can adversely affect program outcomes. Indeed, suboptimal implementation of an evidence-based program may not simply reduce intervention effectiveness, it may actually cause harm to recipients. For example, the Strengthening Families Program has been identified as a model program for reducing youth substance use and delinquency and is currently implemented statewide in several states. However, a recent randomized trial evaluating a Strengthening Families Program found that, in contrast with previous evaluations at other sites, the intervention had slightly *detrimental* effects on child reports of negative peer associations and on family supervision and bonding.⁴ In other words, while the goal of the program was to decrease child affiliation with delinquent peers and improve family relationships, the outcome at this site showed change in the opposite direction. The study identified major challenges in program implementation, including poor fidelity and high

staff turnover, which were likely key reasons that the program failed to achieve the positive effects documented by other Strengthening Families Programs. As a result of these findings, the authors stressed the critical need for sufficient infrastructure prior to program dissemination.

Challenges to delivering a program with fidelity typically include limited financial and human resources, incompatible or unrealistic community expectations, and lack of practitioner confidence in or thorough understanding of program principles. Policymakers may want to ensure that communities and program providers have considered these issues prior to program funding and implementation. If community leaders cannot deliver an evidence-based program with fidelity, they likely would be best served by focusing first on capacity building or by selecting a different program model.

Core Drivers for Successful Implementation

As summarized by NIRN,¹ successful replication of evidence-based programs requires a range of supports (or “scaffolding”) for the community-based agency implementing the program. Agencies and program providers may need assistance with some or all of these scaffolding components in the form of funding, oversight and statutory authority. Legislation that includes feedback and reporting components, such as annual reports to policymakers and other funders and stakeholders, will ensure that evidence-based programs are staying on track and will highlight opportunities for program improvement, expansion of services, or both.

Essential infrastructure and scaffolding include the following:

- *Assistance with community and agency planning:* To ensure the greatest impact possible, programs must address specific community needs and must be a good “fit” for the target population, the community at large and the agency that is implementing the program. Additionally, the implementing agency must have sufficient capacity to execute the program effectively. Capacity includes resources, staff expertise and commitment from leadership. Agency leaders and program advocates from within the agency and beyond will benefit from building both internal agency capacity and stakeholder buy-in (through collaboration and problem-solving) prior to program implementation.
- *Staff selection:* To achieve optimal program outcomes, staff members of the implementing agency must carry out program components with expertise, confidence and a solid understanding of how the program works. They should be adept at interacting with program recipients, show good judgment and a willingness to learn new skills, understand the value of evaluation and be willing to advocate for the program. Some programs require staff members to have specific credentials or experience. Others are developed so that a broader pool of providers can deliver the program.
- *Pre-service and in-service trainings:* Agencies implementing an evidence-based program likely will require instruction by a certified, quality trainer of the program to ensure that staff members are comfortable and knowledgeable about aspects of the program, such as its background, theory, philosophy, values, strategies and rationales of key practices. In addition, staff members must have the opportunity to learn new skills and practice them in a safe environment in which they can receive constructive feedback. Training for program staff members is typically provided by the program’s national office or by the original program developer, although this varies by program. Ideally, ongoing in-service trainings provide support and education for program staff throughout the life of the program.
- *Ongoing consultation and coaching:* Coaching in the context of evidence-based programs is broader than traditional supervision. It is a supportive, strengths-based strategy to help practitioners enhance their skills, improve their practice and solidify their ability to deliver a specific evidence-based model. Coaching includes skill modeling, shadowing (observing service provision), reflective supervision, collaborative discussion and immediate

feedback. Other strategies for coaching include site visits and telephone consultation from the program developers (or their staff members). New staff members implementing an evidence-based model need coaching to ensure model fidelity and high-quality services. Moreover, evidence suggests that all staff implementing evidence-based models benefit from ongoing coaching.⁵

- *Program evaluation technical assistance:* Evaluation drives the quality of implementation. Evaluations of model fidelity, consumer and staff satisfaction, and child/family outcomes are critical components of an agency evaluation system when delivering evidence-based programs.
- *Technical assistance for quality assurance:* Although collecting data is important, what one does with the data is also critical. Agencies implementing evidence-based programs will benefit from using program evaluation information to improve the quality of program delivery and outcomes for children and families. Agencies can enhance services through the establishment of feedback loops in which data are used by staff members and agency leadership to ensure high-quality programs. For example, classroom data may show that a new literacy program produces larger gains in reading skills when implemented in the morning rather than in the afternoon, or that improvements diminish when the program is administered to more than 10 students at a time. With a feedback loop, these concrete data would be used to alter program administration to optimize gains.

With all of these scaffolding components in place, proven programs stand the greatest chance of performing optimally and achieving expected outcomes on a large scale.

A Model from North Carolina: The Alliance for Evidence-Based Family Strengthening Programs

One model for implementing programs with fidelity has been developed by the Alliance for Evidence-Based Family Strengthening Programs

(the Alliance). This group is a unique, collaborative effort of public and private funders in North Carolina created to fund and implement select evidence-based programs for children and families. The Alliance adheres to several guiding principles:

- When communities invest wisely in proven programs that promote optimal child development, the next generation will pay back the investment as productive and responsible citizens.
- Communities and agencies implementing proven programs need access to ongoing training, technical assistance and program evaluation to deliver these programs successfully.
- The Alliance members can best advance the replication of proven programs by working together, across funding streams, to support and sustain programs that evidence shows produce the best outcomes for children and their families.

With scaffolding components in place, proven programs stand the greatest chance of performing optimally and achieving expected outcomes on a large scale.

The Alliance is committed to increasing the number of evidence-based programs available to all North Carolina communities and to supporting the infrastructure necessary to ensure quality services for children and families. Programs collaboratively supported by Alliance members must:

- Meet documented needs demonstrated by North Carolina’s children and families,
- Have evidence of effectiveness through randomized trials, and
- Have the existing infrastructure (or the willingness to create that infrastructure) necessary for successful replication in North Carolina.

The Alliance is staffed by the statewide nonprofit organization Prevent Child Abuse North Carolina and Duke University's Center for Child and Family Policy. Alliance members include private philanthropic funders (The Duke Endowment and the Kate B. Reynolds Charitable Trust); government entities (NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, NC Division of Public Health, NC Division of Social Services, NC Children's Trust Fund, and the Governor's Crime Commission); and the quasi-governmental NC Partnership for Children. The Alliance's work is a mechanism to leverage resources for proven programs among multiple funders to ensure the best outcomes for children and families.

How the Alliance Works

Individual members of the Alliance continue to fund a broad range of social programs outside of their work in the Alliance. However, within the Alliance they have agreed to support a select few programs with the goal of ensuring a high degree of quality in program implementation and thus better outcomes for the children and families participating in the select programs.

The collaborative work of the Alliance is based on several key premises adopted by all members:

Alliance members support common intermediate outcomes across many different programs.

Researchers, practitioners and advocates have long "siloed" programs into narrow subtypes of prevention: substance abuse prevention, child abuse prevention, adolescent pregnancy prevention, juvenile delinquency prevention and so forth. Nevertheless, many of the evidence-based programs designed to strengthen families result in positive intermediate outcomes (e.g., improved parent/child relationship) that have long-term impacts across multiple domains (e.g., reduced use of substances by youth, reduced child maltreatment, improved school readiness). Thus, a program such as the Incredible Years (IY) that focuses on preventing and treating conduct disorders is also effective in reducing families' risk for child maltreatment and promoting school readiness among preschoolers. IY meets the goals of multiple public and private agencies and can be

supported collaboratively to maximize its impact in communities.

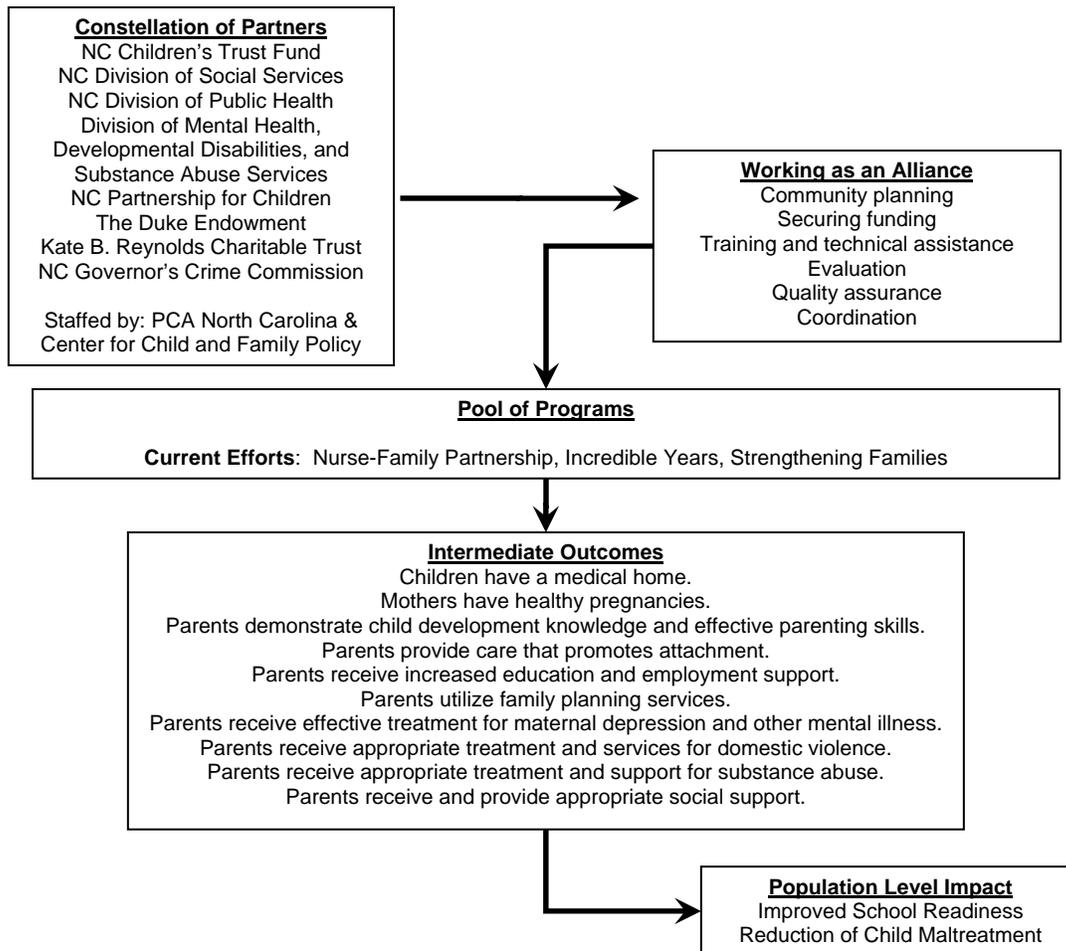
Figure 1 illustrates the Alliance's logic model, including the tasks of the Alliance, the funded programs, the intermediate outcomes and the targeted population-level outcomes.

Family strengthening programs selected for collaborative support by the Alliance receive scaffolding to ensure the most successful implementation of the programs in community-based settings. Key to the work of the Alliance is that selected programs include essential infrastructure that is consistent with the core drivers of successful implementation established in research. For program models that include infrastructure support from the "home" or national office of the program, Alliance funders provide support for communities to purchase these program services. Where national or "home" level infrastructure support does not exist, Alliance members are committed to creating that infrastructure at the state level in a unique collaborative model (described below) to provide coordinated scaffolding to local programs.

Collaboratively building implementation support for several select programs maximizes public and private dollars and will create efficiencies in program operations. Many evidence-based programs are already being funded by different public and private agencies across North Carolina. Although many of these programs have evidence of long-term cost-benefits to the public, they are often complex, more expensive to run and require greater expertise and capacity among staff members and agencies who are implementing the program.

Currently, individual funding agencies and/or local community-based agencies are negotiating and coordinating with national program developers for training, consultation and support of several evidence-based programs in North Carolina. Rather than having multiple North Carolina agencies working with national program developers to start and sustain a specific program (e.g., the Incredible Years), it is more efficient and effective to create a *collaborative portal of entry*

Figure 1: Alliance for Evidence-Based Family Strengthening Programs Logic Model



for select programs that have strong evidence and are (or will be) used widely across the state. A collaborative portal of entry is beneficial for everyone: funders, community-based agencies, children and families served by the programs, and North Carolina taxpayers.

- A collaborative portal provides one point of access for all scaffolding, including information, training, coaching, program evaluation, quality assurance and technical assistance.
- Centralized staff provide this scaffolding to programs across the state, reducing replication

across systems. Instead of each agency creating fidelity tools, evaluation systems and coaching processes for their grantees, there is one set of these supports across all agencies.

- Centralization improves efficiency and allows for consistent, coordinated services and program monitoring.
- Local communities require fewer resources to successfully implement programs. Infrastructure necessary for quality program implementation (e.g., staff training, data collection and evaluation systems) is both more accessible and more affordable.

This collaboration and joint decision making regarding program implementation is a time-consuming and complex process. Partners must work within funding and policy mandates to create a shared set of implementation tools. Nevertheless, a collaborative portal of entry for specific evidence-based programs has the potential to save money and resources for the state and private funders alike, while improving program implementation. The cost savings will allow more agencies to provide quality, evidence-based services to ensure better program outcomes and, ultimately, improved well-being for children and families.

The Current Work of the Alliance

The Alliance is currently supporting two evidence-based programs that it hopes to bring to scale statewide and one program that has shown substantial promise:

- *Nurse-Family Partnership*, supporting highly trained nurses in visiting first-time, low-income mothers starting in pregnancy and continuing through their children's second birthdays;
- *Incredible Years Parent Training Programs*, providing group-based support to strengthen parenting competencies and foster parents' involvement in children's school experiences; and
- *Strengthening Families Program* (for which the Alliance offers limited implementation support), a parenting and family-building program for high-risk families that has been shown to reduce youth substance use and delinquency.

Extensive support for implementation of the Nurse-Family Partnership is provided by the program's national office to every implementing agency across the country (indeed, all local programs are required to participate in implementation support). Such extensive infrastructure is not available from the national Incredible Years office for local communities implementing the Incredible Years Basic Parent Training Program (IY). Thus, the Alliance has committed its resources to collaboratively supporting the development of such an infrastructure in North Carolina.

Building the Infrastructure for the Incredible Years

Two staff members, an IY statewide coordinator and an IY coach, are jointly funded by Alliance members and are housed at Prevent Child Abuse North Carolina. The statewide coordinator provides readiness assessment and support for local communities, marketing for the program and coordination of the program overall. The IY coach provides intensive clinical assistance to group facilitators to help them implement the program with quality and fidelity to program standards. Alliance funders contribute to the infrastructure of the Incredible Years by directly funding the staff positions at Prevent Child Abuse North Carolina, providing other supports (e.g., evaluation, trainings), and providing funding to local community-based agencies that are implementing IY and requiring that a "training and consultation fee" be paid back to the state IY office for these services.

Advantages of Working Collaboratively

Collaborative work among funders can be complex and requires considerable planning and consensus-building. Funders must build relationships with one another, develop a shared vision and goals, and pledge commitment to seeing the work through. Furthermore, staffing the infrastructure of the collaborative work requires resources. With these key ingredients, however, collaborative funding brings several significant advantages:

- There is an intentional planning process to identify priorities;
- Funders are focused on common outcomes.
- Development of a uniform vision strengthens the case for long-term sustainability;
- Funding and impact are maximized, not duplicated;
- Funders can compensate for one another's funding limitations and constraints;
- The public and private sectors are connected to fund the best interventions possible for children and families; and
- The implementation process is easier for communities (e.g., shared protocols, tools,

responding to announcements of funding availability).

Alliance Member Highlights and Achievements

This section highlights three Alliance members: a private foundation, a state agency and a statewide nonprofit.

The Duke Endowment

The Duke Endowment is one of the nation's largest private foundations. Its mission is to serve the people of North and South Carolina by supporting proven programs and strategies for higher education, health care, children's welfare and spiritual life. The Duke Endowment's Child Care Division provides funding to accredited organizations and other select nonprofit agencies that help children who do not have family support or who are at risk for losing such support. Funds go toward helping these children reach developmental milestones and prepare for successful transitions to adulthood. Since 1925, The Duke Endowment has provided approximately \$2.4 billion in grants in North and South Carolina.

Within the past few years, the Child Care Division completed a strategic planning process to redefine its funding goals. This process resulted in a shift from funding services to funding outcomes. In other words, instead of simply funding programs that serve children in need, The Duke Endowment has moved to funding only programs with proven evidence that they change the lives of children. A key strategy is to support the replication, expansion or application of proven programs, defined as those with an established history and documented, positive results. "Proven programs" include the following:

- Effective practices, with evidence of multiple randomized controlled trials and replication in a real-world setting, as well as a sustained positive outcomes at least one year beyond the end of treatment; and
- Promising practices, with at least one control or comparison study that shows a greater likelihood of benefit than risk. (The Endowment funds these only if the program plans to include rigorous evaluation.)

The Endowment makes funding decisions by weighing the true costs and anticipated benefits of potential investments. Currently, the Child Care Division is funding seven proven programs, including Nurse-Family Partnership and Incredible Years.

When successful program models are lacking, The Duke Endowment invests in the development and testing of new approaches that may outperform existing practices. Typically, these begin with small-scale pilot studies to test key assumptions without major cost. If promising, larger evaluations may be funded.

With its shift in funding approach, The Duke Endowment has become committed to working collaboratively as part of the Alliance to disseminate evidence-based practices along with the necessary infrastructure to ensure optimal implementation.

The North Carolina Division of Social Services

The North Carolina Division of Social Services (NCDSS) provides oversight and support to the state's 100 county Departments of Social Services. Within the Division of Social Services, the Child Welfare Section oversees services to children and families with the goal of protecting children from child maltreatment. The Community-Based Team within the Child Welfare Section has the following mission: To provide children with safe, nurturing environments that promote their physical and emotional well-being by promoting protective factors and decreasing risk factors in families and communities. The Community-Based Team oversees several federal and state funding streams aimed at preventing maltreatment through the provision of family support/family strengthening programs. These funding streams include the federal Community-Based Child Abuse Prevention program and Promoting Safe and Stable Families program, as well as the state Family Resource Center program. Together, these funding streams represent approximately \$2.2 million dollars that is distributed to local community-based agencies across North Carolina through a funding process that occurs every two years.

In a report released in 2005, the North Carolina Institute of Medicine Task Force on Child Abuse Prevention issued a set of recommendations for developing a statewide child maltreatment prevention system with the capacity to reduce the incidence of child abuse and neglect in North Carolina. These recommendations emphasized the importance of evidence-based practice to promote protective factors and decrease risk factors in families and communities.

In response to task force recommendations, NCDSS has made a fundamental shift to supporting the replication of proven programs in local communities. To facilitate that shift, NCDSS has changed policies and funding to support quality implementation of evidence-based programs. For example:

- For Family Support/Family Resource Program funding, 80 percent is required to go to evidence-based and promising programs and 20 percent to emerging practices;
- Regional training was provided to previously funded family resource centers to support a shift to evidence-based programming;
- NCDSS is investing in scaffolding for two evidence-based interventions for children and families, the Incredible Years and Strengthening Families, and provides funding for both of these programs at the local level; and
- NCDSS has invested in statewide training that provided community-based agencies with education on identifying and choosing evidence-based practices.

Communities and agencies implementing proven programs need access to ongoing training, technical assistance and program evaluation to deliver these programs successfully.

Prevent Child Abuse North Carolina

Prevent Child Abuse North Carolina (PCANC) is a statewide nonprofit dedicated to the prevention of child abuse and neglect in all its forms. PCANC provides implementation support for several evidence-based and promising family strengthening programs, conducts professional education and training activities, spearheads child abuse prevention public awareness efforts in the state, and serves as a leader for practice improvement efforts at the state and local levels.

While PCANC has long been interested in supporting best practices in local communities, its work to increase replication of evidence-based programs began in earnest when PCANC co-convened the statewide Task Force on Child Abuse Prevention with the North Carolina Institute of Medicine in 2005. That task force reviewed a number of evidence-based and promising family-strengthening programs and made specific recommendations to increase replication of those effective practices in the state.

To ensure implementation of the recommendations on evidence-based programs, PCANC and Duke University's Center for Child and Family Policy co-convened the Expert Workgroup on Evidence-Based Practice to explore strategies for increasing the replication of evidence-based family-strengthening programs. That Expert Work Group eventually became the Alliance for Evidence-Based Family Strengthening Programs. PCANC has helped to staff the collaborative meetings and work of the Alliance and has provided implementation support for a number of evidence-based and promising programs, including the Nurse-Family Partnership, the Incredible Years Parent Training Program, and the Circle of Parents Program. It also provides limited assistance for the Strengthening Families program.

The Alliance's Recommendations for Policymakers

The following recommendations stem from what the Alliance has learned from research on program implementation and from experience in implementing evidence-based programs.

1. Invest heavily in programs that have strong evidence of impact. Widespread use of evidence-based social programs will require changes in legislative and administrative policies.
2. A capacity-building approach is needed to shift policy and funding to evidence-based programs. Rather than putting out long lists of possible programs, pick a few programs that best fit the multiple needs of North Carolina. Fund them collaboratively and fully, with sufficient infrastructure support. Scant funding here and there for under-funded programs does not produce positive outcomes and in fact may harm families. (As the vaccine example at the beginning of the brief highlighted, watered-down programs are not effective.)
3. Shifting to evidence-based practices is a process that requires sustained attention and resources. It is critical to allow time for capacity building, careful program implementation and collection of quality outcome data. Implementing an evidence-based program likely takes at least two to four years before outcomes are evident.
4. Most successful programs will need skilled implementation support in an ongoing way. Both services and infrastructure are required in order for the programs to be successful. Implementation support ("scaffolding") will require additional resources, but the resulting improved outcomes translate into long-term cost savings. Policymakers are encouraged to provide funding and regulatory guidance, as needed, for the following implementation supports:
 - a. Start-up costs associated with the program (e.g., community and agency assessment and planning, equipment, training);
 - b. Support of the ongoing infrastructure for continued fidelity and sustainability (e.g., in-service training, ongoing consultation and coaching, fidelity measures); and
 - c. Ongoing evaluation of program process and outcomes, along with quality assurance feedback loops to promote continual improvement of service quality and fit with community needs (evaluation is not an add-on but a fundamental piece of getting better outcomes and implementing evidence-based programs).
5. Success will best occur through collaborative efforts across multiple funding streams.

Many of these lessons can be applied across a broad range of policy domains, such as transportation, housing and economic development, in addition to social programs for children and families. With policy and programming built on the above recommendations, program recipients will benefit from improved services and greater well-being. Likewise, North Carolina citizens will benefit from efficient and effective use of resources, with long-term fiscal benefits surpassing costs.

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