North Carolina Race to the Top-Early Learning Challenge Grant
Transformation Zone Evaluation
Synthesis Report

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This report presents a mid-project synthesis of the key findings of the evaluation of the *North Carolina Race to the Top – Early Learning Challenge Grant Transformation Zone (NC RTT-ELC TZ).* The overall purpose of the Transformation Zone (TZ) Evaluation is to examine the extent to which the TZ communities have enhanced their capacity to improve the quality of their early childhood systems, including policy, practice, and infrastructure changes to support successful implementation of evidence-informed practice. The evaluation has employed a developmental evaluation approach to the work and has been informed by the implementation science and systems change theory frameworks in which the NC RTT-ELC TZ project is embedded.

> *The purpose of a developmental evaluation is adaptation and advancement. Change is measured and shared as progress unfolds. Feedback may be informal but is timely and promotes continuous quality improvement.*

In this report we describe the evaluation methods; participating counties; and TZ structures and supports, including state and county teams, strategies, and technical assistance. We then summarize findings related to key successes and challenges, organized by these structural components and including their linkages to each other. We conclude with a summary and next steps for the evaluation. This report is not intended as a comprehensive summary, but rather a targeted report, designed to inform the project moving forward. Aligned with a developmental evaluation design, we highlight findings that (1) have significant implications for future regional/county specific initiatives and/or (2) represent important points for reflection and consideration in this final year of funding for the TZ.

The following questions guide the TZ Evaluation:
- Have communities been able to enhance their capacity to improve the quality of their early childhood systems? How?
- What state and local policy and practice changes in the early childhood system have occurred as the result of the work in the Transformation Zone?
- Have the participating state agencies or local communities strengthened the infrastructure to support the successful implementation of evidence-informed practice?
- What are the benefits of the work in the Transformation Zone?
- What are the unintended consequences?
- If system change has or has not occurred or has been limited, what are the factors influencing this?

METHODS

Our methodology has included creating a logic model (see Appendix) and conducting interviews, focus groups, field observations, online surveys, and document reviews. Interviews and focus groups were conducted with a variety of stakeholders, including County Leadership and Implementation Team members, Implementation Coaches, Strategy Purveyors, and administrators from state-level Funders of TZ strategies. Field observations were conducted to gather information about the processes occurring at local and state levels around practice, policy, and infrastructure change. Online surveys were distributed widely to personnel of agencies in the communities to gather information about the community context. Administrative data were used in multiple ways, including informing the development of interviews, focus groups, and field observation guides. Identified documents, such as memoranda of understanding, team meeting agendas and notes, and reports were also reviewed. Table 1 summarizes the evaluation data sources used in this report.

Table 1. Transformation Zone Evaluation Data Sources

Data Type	To Examine:	Participants/Source (number)
Online Survey	Alignment between strategies and county need Impact of selected strategies on county and state County context Collaboration networks	County stakeholders (n=30) Health care providers, Childcare providers, Parents, Law Enforcement, County Agency Staff, School Personnel
Interviews	Role in implementation Change in county before and after implementation Facilitators and barriers to change and meeting goals Impact of TZ work on county and state	Key informants (n=7) Coaches (n=9) Coach Coordinators (n=2) Funders (n=4) Purveyors/service providers (n=20)
Focus Groups	Change in county before and after implementation Facilitators and barriers to change/meeting goals Impact of TZ work on county and state	County Leadership Teams (n=4) County Implementation Teams (n=4)
Document Review	Goals of TZ County context supporting/inhibiting implementation Decision-making processes	Meeting agenda and notes MOUs/contracts Theories of change Reports
Field Observations	Independent observation of implementation, collaboration, and county impact	Cross-county meetings (n=3), County Teams (n=13), Coaches (n=16), Funders (n=5), TA (n=7), Purveyors (n=6), State Team (n=5), Planning and coordination (n=19)

We analyzed data by identifying and coding themes related to study questions, using a modified constant-comparative approach (Strauss & Corbin, 1998). In the constant-comparative approach, new data are compared with previous findings to understand emergent progress in a dynamic process. For interviews and focus groups, a quarter of the transcripts were double-coded, and at all decisions related to interpretation of findings required the agreement of at least two of four evaluation team members, and typically reflect consensus of the team. Follow-up questions to partners and stakeholders were frequent, to verify both accuracy of information received and appropriateness of interpretation.

TRANSFORMATION ZONE COUNTIES AND COMPONENTS

"The North Carolina Race to the Top Early Learning Challenge Transformation Zone (RttT-ELC TZ) is a systems change initiative that includes all components of the early childhood system, involving local service providers, county agencies, regional entities, and states agencies including critical stakeholders and partners to simultaneously establish the new practice and process of using active implementation frameworks to implement additional early childhood strategies in Beaufort, Bertie, Chowan and Hyde counties, AND to establish the capacity to support new ways of work which we would describe as an implementation infrastructure through County Leadership and Implementation Teams to assure effective use of new practice or process." (Informational Packet, National Implementation Research Network, February 2014). The initiative also was established to "Target high-intensity supports and community infrastructure-building efforts to turn around poor outcomes for young children in the highest need counties." (Informational Packet, National Implementation Research Network, February 2014).

The goals of the Transformation Zone are to:
1) demonstrate the efficacy of an intensive, comprehensive approach to providing services
2) build knowledge and infrastructure needed to scale up these efforts in other parts of the state.

The demographics of the four participating counties are summarized in Table 2. Two frameworks are being used to address the Transformation Zone work: Active Implementation and ABLe Change. The goal of implementation science is to support active implementation of evidence-based practices (Metz & Bartley, 2012). The ABLe Change Framework is an approach toward community systems change that focuses on systemic action learning teams, simple rules, and small wins (Foster-Fishman & Watson, 2011).

Several agencies and teams are responsible for activities in the Transformation Zone: State Leadership Team; State Implementation Team; County Leadership Teams; County Implementation Teams; Strategy Purveyors (state) and Service Providers (local/regional) for each strategy/group of strategies; Grants Management; the National Implementation Research Network (leadership, administration, and implementation specialists/technical assistance); and the North Carolina Partnership for Children, which hires and oversees the State Implementation Coach Coordinator and County Implementation Coaches, contracts for and supports the ABLe Change work, as well as provides technical assistance related to messaging. Figure 1 displays the primary components (agencies, teams, and strategies) in the RttT-ELC TZ.

Table 2. Demographics of Transformation Zone Participating Counties

	Beaufort	Bertie	Chowan	Hyde
Population[a]	47,464	20,344	14,726	5,721
%Unemployment[b]	6.1	7.0	6.6	8.3
# Births[a]	488	186	167	58
% < age 5	8	4.5	6.5	4.3
Median family income[c]	$51,200	$41,000	$43,000	$42,000
# licensed child care facilities[a]	43	27	17	5
Enrollment child care facilities[a]	1,088	502	536	75
# Physicians[a]	13	4	23	2
Square Miles	959	741	233	1,424
% Race				
Black	25.4	61.6	34.4	30.0
Hispanic	7.6	1.7	3.2	8.0
White	71.8	36.0	63.2	67.8
# Schools	14	9	4	3

Sources: North Carolina Department of Health and Human Services; Public School Review; US Census;
[a] 2013, [b] 2015, [c] 2011

Figure 1. Race to the Top Early Learning Challenge - Transformation Zone Components
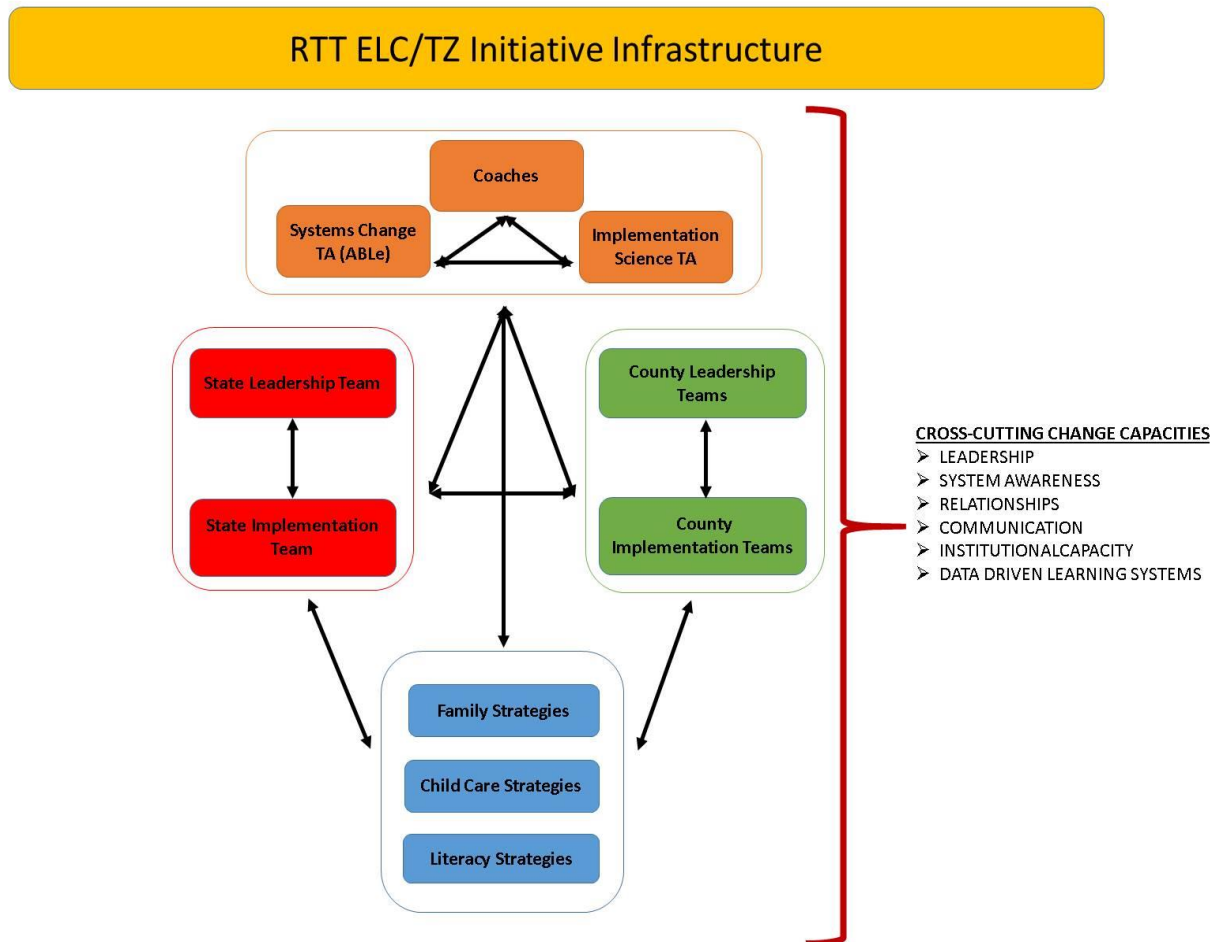
State Teams

The original intent for the TZ State Leadership Team is stated as follows:

> The Early Learning Challenge System Transformation Leadership Team is one of the teams formed to support activities within the TZ and to extend those activities and outcomes through the state as described in the grant. The lead agency for the grant is the North Carolina Early Childhood Advisory Council (ECAC). This Leadership Team provides collaborative leadership in the design and implementation of the TZ strategy and system transformation. The purpose is to serve as a focused, accountable structure for developing, sustaining, and assessing the coordinated efforts in the TZ and make recommendations that will increase the likelihood of consistent, high-fidelity implementation and coordination of early childhood strategies in all TZ counties. The Transformation Leadership Team will work collaboratively to align systems to support effective implementation and will inform the ECAC of all progress. It will support and attempt to facilitate the work of the state-level TZ Implementation Team to develop implementation capacity at the state and county levels, using the same approach and lessons learned to extend benefits of this transformative process throughout North

Carolina. (Informational Packet, National Implementation Research Network, February 2014).

The TZ State Leadership Team (SLT) originally consisted of leaders from each state agency funder (Division of Child Development and Early Education [DCDEE], Division of Public Health [DPH], North Carolina Partnership for Children [NCPC]), and other state-level agencies in the North Carolina early childhood system. The role of the SLT was intended to: (1) provide vision and guidance to counties, (2) serve as the forum through which county concerns could be raised and addressed by leadership, and (3) be a voice at the state table for supporting lasting change and breaking down "barriers."

The role of the TZ State Implementation Team (SIT) is intended to assist with installation and implementation of strategies; communicate state priorities and policies with County Leadership Teams; and bring county perspectives and needs to the SLT, particularly policy-level challenges that might be addressed by the SLT. The SIT consists of strategy content experts (Purveyors), state agency administrators from each of the TZ Funders (NCPC, DPH, DCDEE), National Implementation Research Network (NIRN) representatives, and State and County Implementation Coaches. Grants Management representatives participate in State Leadership and Implementation Teams in an advisory role.

County Teams
County Leadership and Implementation Teams provide an important forum for implementation science and systems change work. Each County Leadership Team (CLT) consists of "key early childhood leaders and stakeholders within each county that work together across service sectors to enhance, implement, and integrate effective early care and education strategies" (Informational Packet, NIRN, February 2014). The intended role of the CLT is to provide vision and direction for the county teams, make decisions, and direct resources to support implementation efforts. Agencies on the CLTs are generally represented by executives with decision-making authority in their organizations. In the TZ, local health departments, county/regional social services, school districts, and Smart Start/Partnerships are most commonly represented.

The County Implementation Team (CIT) consists of the County Implementation Coach, the Literacy Coordinator, and community based agency staff. CITs in the TZ vary in their makeup but generally have representation from the local health departments, school districts, and the local Smart Start/Partnerships. CITs also vary in the degree to which they have representation from other early childhood organizations (e.g., Head Start), community organizations (e.g., faith-based), and specialists (e.g., Strategy Purveyors and Service Providers). The role of the CIT is to provide structure to support system and capacity development to achieve sustainable, high quality, integrated services. The CITs communicate with the CLTs about challenges and successes in this regard.

Strategies
Eight strategies were selected by the state for TZ implementation: two family strengthening strategies, four child care quality strategies, and two literacy strategies. Each has clear aims and was intentionally chosen for this project to address a level of the early childhood system.

Strategy content and delivery are supported by state/regional Purveyors and local Service Providers. Some strategies are evidence-based programs or approaches that have previously been shown effective in improving outcomes for young children and families. Others were designed to increase access to services but not considered evidence-based programs.

The lack of adequately defined programs is an impediment to implementation with good outcomes (e.g., Michie and colleagues, 2005; 2009). An intervention that is considered "usable" has the following characteristics (Fixsen, Blasé, Metz, & Van Dyke, 2013): (1) a clear *description* of the program, including a philosophy, vision, and principles and clearly defined criteria for the population for which the intervention is intended; (2) a clear description of the *essential functions* that define the program (essential functions sometimes are called core intervention components, active ingredients, or practice elements); (3) *operational definitions* of the essential functions that describe the core activities to enable a program to be teachable, learnable, and doable in practice and to promote consistency across practitioners; and (4) a practical *assessment of the performance of practitioners* who are using the program (often referred to as "fidelity") that provides evidence that the program is effective when used as intended (Innovations Defined, n.d).

It is important to note that the TZ evaluation team was charged with evaluating the effectiveness of the project overall in promoting local and state systems change and not the individual strategies' implementation effectiveness.

Family Strengthening Strategies
- Triple P is a coordinated multilevel system of parenting education and supports that focus on all development periods of childhood.
- Family Connects is a home visiting program based on the Durham Connects model that supports parents by linking them with health providers and other community resources.

Child Care Quality Strategies
- North Carolina Babies First is a full-time program that offers high quality early learning experiences to at risk infants and one year olds in the TZ.
- Infant-Toddler Expansion Grants assist child care teachers in the TZ to implement best practices in infant and toddler classrooms with the goal of improving the program's star rated license.
- Healthy Social Behaviors promotes social-emotional health in child care settings through on-site technical assistance.
- Child Care Health Consultation promotes health and safety in early childhood programs using a coaching model by registered nurses.

Literacy Strategies
- Motheread®, Fatheread, B.A.B.Y, and Story Exploring are components of Motheread and considered literacy skills-building programs for parents, expectant parents, children, and teachers.
- Reach Out and Read® partners with primary care providers to prescribe books to children and encourage children and families to read with the goal of helping children succeed in school.

Technical Assistance
Technical assistance for TZ activities has employed two distinct Frameworks: Active Implementation and ABLe Change. Both models address preparedness for implementation and infrastructure and processes to support systems change, using different models for community organizing and action. The NCPC is actively involved in both aspects of technical assistance (TA). They employ and oversee the County Implementation Coaches and contract services to support ABLe Change efforts.

Implementation Science/Active Implementation Framework. The NIRN Implementation Specialists have worked with the TZ since the grant's inception to support science-based implementation processes within TZ counties around eight strategies. This framework focuses on tools for ensuring an appropriate infrastructure for implementing evidence-based practices. NIRN provided guidance in the structuring of the TZ project and selection of the counties. They provide ongoing training and support to TZ structures: State Implementation Team, County Leadership and Implementation Teams, Strategy Purveyors, and Coaches. The NIRN Implementation Specialists have served as ex-oficio members on state-level TZ teams; however, by virtue of their extensive involvement in all levels of the work, they have supported decision-making on a regular basis, primarily acting as a communication loop among county and state teams. NIRN uses County Capacity Assessments as a tool for examining how infrastructure is developing to support implementation of evidence-based practices.

Systems Change/ABLe Change Framework. ABLe Change Framework developers from Michigan State University have provided technical assistance to county teams related to garnering community support, engaging families, assessing community systems, and enhancing community capacity for change. The consultants provided retreats in each county in the spring of 2014 to jump-start the initiative, and have met remotely with Coaches on a regular basis since fall of 2014 to train and support their systems change efforts. ABLe Change consultants have also presented at SIT and Cross-County meetings. County retreats – designed to widen the base of community support – were conducted in fall of 2015. A tool used by ABLe Change specialists is the system scan – a survey designed to be used by communities to build system awareness and establish shared understanding of needs related to building a strong system of services.

Coaches. As the person responsible for interacting with leadership, stakeholders, and providers (Blasé & Fixsen, 2012), the coaching role is one of the most essential to the TZ infrastructure and processes. Their influence has been at the practice and administration levels, policy levels, and system level in their counties. The coaching structure consists of a Coach Coordinator and four county-level Implementation Coaches, all hired and supervised by NCPC. The Coach Coordinator coaches, guides, and supports the administration efforts of County Implementation Coaches. Each TZ county has a convener, either a Smart Start or school district administrator, who is responsible for bringing together the county teams and helping set the agenda. However, each County Implementation Coach does much of the administrative work to support the Leadership and Implementation Teams and is the primary figure in the feedback loops between county teams, and with Purveyors, Funders, NIRN, NCPC, and other providers.

The findings below are a synthesis of data gathered by the TZ evaluation team from April 2014 when data collection began to September 2015. The findings are organized by the four key TZ components: state teams, county teams, strategies, and technical assistance. Each section underscores ways in which early childhood system and implementation of evidence-based practices are being transformed (successes) and ongoing barriers to transformation (challenges).

State Teams
According to administrative data records and previous meeting notes, the TZ SLT has not met formally since June 2013, but many state agency leaders and staff have attended SIT and Cross-County meetings. Changes in state administration, turnover in state early childhood leadership, and ambiguity regarding the role of the SLT led to dormancy in the work of this structural component. However, a subset of the SLT consisting of state funding agency administrators formed to resolve issues in the TZ. This group of funders, which met five times in 2014 and twice in 2015, supported planning for sustainability, helped facilitate a no-cost extension, and assisted with problem-solving related to counties' requests. In pursuing next steps to strengthen state support around the TZ efforts, plans to reconvene the TZ State Leadership Team are underway for early 2016. Plans are to meet every other month and include leadership representation from TZ funding agencies and the Department of Public Instruction, the State Head Start Collaboration Office, and the Department of Social Services.

The TZ SIT did not meet formally as a group between December 2013 and June 2014; however, some individual team members met with purveyor groups to prepare for installation of strategies. The SIT met four times between December 2014 and July 2015. County Implementation Coaches, Strategy Purveyors and some Service Providers attend SIT meetings which are intended to serve as one communication vehicle between the state and the counties.

Successes
- *Sustainable leadership transformation in the North Carolina Partnership for Children.* State level transformation is manifest in the engagement of the North Carolina Partnership for Children (NCPC) in TZ processes. NCPC has provided ongoing leadership and implementation guidance and support for TZ functions on a regular basis since the inception of the project. They have contracted technical assistance to support systems change (ABLe Change Framework), been responsive to TZ county requests and needs, directly and indirectly offered technical assistance to counties and Strategy Purveyors, and provided ongoing leadership and project coordination. As a coalition for change, NCPC introduced systems change work and contracted with ABLe Change developers from Michigan State University to help counties garner community support and family engagement and early childhood systems change. Additionally, in response to counties' expressed difficulties with communicating TZ goals, NCPC dedicated resources to developing a communication and messaging strategy targeted for each county's needs. NCPC funds and manages the Coaches, maintains consistent support for their activities, and takes direct responsibility for their growth and progress. When systems change activities were added to the implementation science work, NCPC took the lead in coordinating conversations and activities designed to integrate the two models' use in the counties. NCPC has provided the

most consistent state leadership and state implementation support in the project, coordinating technical assistance while leading several strategy efforts. Furthermore, NCPC has fully embraced implementation science, and is applying it to its work in other regions and projects. These changes in their capacity related to the TZ counties have potential to be sustainable and applicable to future work with rural, low-resourced communities.

- *State leadership engagement for specific issues.* Individual TZ leaders have met with Strategy Purveyors and Service Providers to coordinate problem-solving related to implementation issues. One notable outcome of the past year was the successful negotiation of funding for specific strategies during the no-cost extension process. Teams collaborated within county to review data and then identify, prioritize, and select strategies within a request for a no-cost extension. Each county saw their strategy priorities funded for the following year. During the installation phase of the TZ project, some counties were able to manage up to state Funders and realize policy and practice changes to better meet county needs. Implementation of one strategy was not entirely feasible because of transportation issues, and this was addressed. Also, half day child care slots were expanded to full day to meet a challenge. This was seen as a small win and has been a benefit to the community.

Challenges

State Leadership and Implementation Teams have had periods of inactivity. In fact, the SLT has not met since June 2013. Consequences of this lack of state leadership are elaborated below.

- *Lack of integration/accountability of strategies to county and state leadership.* There is no systematic protocol for feedback between Strategy Purveyors and Service Providers and either state or county teams. Purveyors typically report directly to their funding administrator (DPH, DCDEE, or NCPC), particularly related to contract agreements and issues including expected deliverables and numbers served. The NIRN staff work with Purveyors and teams to facilitate communication and feedback loops.

- *Limited opportunity for feedback and learning between state and county teams.* There have been few instances of counties managing up to state leadership for needs related to strategy implementation. However, with minimal state leadership presence in the TZ activities, little state-county communication has occurred. County teams have participated in events designed to connect them with state partners (Cross-County and SIT meetings). Most communication between

> **"There is a need for a point of entry for feedback, one place where concerns could be triaged-out."**

county and state teams occurs in this context. Some county-state communication is ushered via NIRN and NCPC through Coaches, which are the only structural linkages between county and state teams.

- *Limited systems change capacity developed at the state level.* With the exception of NCPC, state level agencies and structures have not demonstrated changes in system capacity. As needed, agencies have responded to county requests related to funding and problem-solving about implementation of strategies. Implementation requests have been facilitated by NIRN. For example, DCDEE made modifications to the infant-toddler strategies in response to county requests for full day care and transportation needs. However, there has been limited cross-agency collaboration, and no evidence of increases in capacity to respond to rural early childhood systems' needs.

County Teams

All four counties have engaged in efforts to act as coalitions for change in their communities. In three of four counties, the CITs and CLTs have met regularly as separate teams, usually monthly throughout the year. Meetings have consisted primarily of updates, technical assistance related to implementation science and systems change, and planning.

Successes

- *Enhanced system awareness.* Teams have engaged in efforts to identify community needs, involve families in the projects, and collect data to learn more about how they can help their communities realize goals for children and families. Each of the counties has pursued these efforts in different ways. Two have used system scans; others have used surveys and community meetings. For example, one county established Saturday access to the local library based on data collected from families. Another county has developed a task force focused on behavioral health as a result of community surveys. Another county identified the importance of engaging faith-based communities in their initiatives. Counties have also uncovered a variety of provider perspectives on serving families. These were evaluated against what families noted about accessing local services. Some misconceptions about community perspectives were exposed. For example, all Coaches and teams experienced initial concerns and resistance to including questions about racial and ethnic demographics in their community surveys. However, in counties that included these questions, they were surprised to learn of community members' willingness to provide demographic information, and of the disparities in their communities based on these demographics.

- *Enhanced institutional capacity and data-driven decision-making.* One hallmark component of implementation science in the TZ project is to build capacity among Coaches and CITs for working with data to identify patterns and needs and inform decision-making. All counties have learned about implementation science and systems change as tools for improving community capacity. Communication feedback loops between CLTs and CITs are emerging. In one county, the CIT provides data-based updates on progress using a data dashboard (an Active Implementation Framework tool), and has used these data to make requests of the CLT. Working with NIRN Implementation Specialists, counties have recently focused on developing specific skills and tools for data-driven decision-making. County teams are learning how to use data from County Capacity Assessments and strategy implementation to examine effectiveness of interventions, report information to other stakeholders, and develop plans of action. A primary tool for this work is the PDSA model (Plan, Do, Study, Act). In spring and summer of 2014, Implementation Coaches began the practice of integrating data discussions at team meetings to teach and mentor team members around using data. This work has been somewhat delayed by the introduction and continuation of system scan work and the inability to obtain strategy data from some strategy Purveyors and Service Providers. The Coaches' work has been central to assessment efforts in the counties, as they coordinate data collection, analysis, and reporting of strategy data and system scan work. In particular, the system scan work has enhanced the Coaches' capacity to collect, analyze, and use raw data. Coaches have helped prepare team members to use data. These different forms of data collection and use—assessments, strategy implementation data, and system scans—offer complementary processes for county leaders and teams to use in their work.

- *Identification of and enhanced vision for leadership.* Two counties have made remarkable progress in developing a strong leadership presence, identity, and vision for their

communities that was not present before the TZ project began. These same two counties are experiencing success with engaging the broader community. For example, in one county, a task force of interested stakeholders was developed to pursue solutions to a long-standing problem identified by the teams and subsequently integrated into a county strategic plan focused on behavioral health. In another county, the leadership team met with another community development committee to engage additional stakeholders and jointly prioritize areas for long-term planning.

- *Enhanced communication facilitated by coaching role.* The current Coach Coordinator has provided regular support and reflective supervision of each Couty Implementation Coach regarding goal setting and planning. The Implementation Coaches have been central to all communication, planning, convening, and educating for their respective teams' work. Their efforts are the linchpin for the TZ processes. In fact, the Implementation Coaches are largely responsible for being the local person who sustains the team infrastructure and implementation processes. Furthermore, the Coaches' role has emerged to include that of leader in the ABLe Change efforts.

- *Enhanced county and cross-county relationships.* County level relationships across child and family serving organizations have improved as a result of TZ-related efforts, due largely to more cross-sector communication within each county. This is evidenced in membership on county teams and county-wide activities that engage multiple sectors, such as education and public health. Use of implementation science provided an opportunity for counties to form local teams with similar interests that could work together using best practices to implement strategies. Counties reported having stronger relationships with organizations and agencies in their communities and over the course of the grant have worked to reduce local institutional barriers. While county teams have had opportunities to work in *within* county groups to problem solve, recent opportunities to collaborate *across counties* have allowed for discussion of successes and overcoming barriers. Feedback from Cross-County meetings has been used to plan ongoing technical assistance and future Cross-County meetings.

- *Successful literacy strategy implementation.* A Literacy Coordinator, funded through NCPC, is embedded in each CIT and regularly attends meetings, engages in problem-solving with Coaches and team members, and collects and shares data with Implementation and Leadership Teams. Literacy Coordinators are committed to implementation science principles and provide data for strategy problem-solving and decision making. They also receive coaching and support from NCPC via regular meetings. Possibly as a result, more community reach has been observed with literacy strategies than with other strategies.

Challenges

- *Continued barriers to effective within county communication.* County Implementation Coaches serve as a primary linkage between the CIT and CLT, with Coaches providing regular verbal updates to CLTs concerning CIT activities. Communication between CITs and CLTs, particularly related to data sharing to make

> **"(Coach) is giving oral presentations. Some is anecdotal. That is hard because it is a lot. I'd love to shift the balance from anecdotes to data. That's hard when not all strategies are there. It is critical for (Coach) to give the Leadership Team something to decide. It's good to report numbers of parents trained or reached, but they don't know how well the program is doing."**

decisions, remains a challenge for two counties. One CLT has met infrequently, and they have also made limited progress with implementation of strategies.

- *Engaging the "right" leadership.* CLTs have had transitions in membership. Some transitions have been highly positive, with the engagement of influential community members for the teams. In other circumstances, counties have struggled to recruit and retain influential leaders. Inconsistent attendance among some key leaders has affected the rate and quality of progress in each of the counties. Based on these challenges, some leadership teams are having difficulty with establishing direction for their communities and enhancing capacity. Further, all county teams have expressed concerns regarding engaging community families and sustaining their engagement in the work.

> **"(Coach) informed the leadership that the Implementation Team needed guidance on next steps, but the guidance was not applicable which was disappointing."**

> **"I want to meet with parents to get them interested to participate. We have no parent voice."**

- *Difficulty learning two discrete models for systems change.* Teams have been learning and trying to apply principles of implementation science and ABLe Change. While both frameworks offer valuable and sometimes complementary tools for change, they differ significantly in their goals, intent, and focus. Learning both simultaneously has been described by county stakeholders as confusing and challenging. It remains clear that the workload burden on County Implementation Coaches is high, and the "integration" of the models in the time left in the grant period is unlikely.

> **"No matter how hard we try to integrate them both, it seems like they're still very, very, very different, and separate, and apart."**

- *Disconnection from strategy implementation.* County teams' work has been somewhat disconnected from direct strategy implementation. Purveyors and Service Providers do not routinely attend county meetings or proactively communicate with Coaches and teams, and they have sometimes experienced difficulty connecting with county partners. The disconnect has been particularly problematic as teams seek to master the tools of implementation science while having a limited role in the actual implementation of some of the strategies. Coaches and teams have consistently asked for strategy information and received less data than needed to answer the question, "Is this strategy being implemented and working as intended in our community?" This sometimes leaves teams without needed data to identify gaps, answer important questions, problem solve, and establish program effectiveness. Coaches spend considerable amounts of time contacting Purveyors and Service Providers for information. One potential root cause underlying this disconnect is the fact that from the beginning Strategy Purveyors have been accountable only to the Funders. It is not clear to what extent Strategy Purveyors understood or were held accountable to having active feedback loops with county teams as an expectation of their contracts. There are a few exceptions in which relationships among Strategy Purveyors, Service Providers, and county teams have been established.

Strategies
In September 2014 all eight strategies were at the initial implementation stage, attempting to manage transitions, start data systems, and apply improvement cycles.

Successes
- *Increased understanding of implementation science.* Strategy Purveyors and Service Providers cite examples of strategies being implemented in the local communities as evidence of success, though not all strategies are in place in every county. Purveyors of two strategies have incorporated implementation science principles into their practices outside of the TZ. NIRN has worked with three Strategy Purveyors (Healthy Social Behaviors, Child Care Health Consultation, and North Carolina Babies First) to further articulate their respective service models.
- *Successful literacy strategy implementation.* Literacy strategies, namely Reach Out and Read® and Motheread®, administrated through local Smart Start Partnerships or school districts, have facilitated community engagement to some degree and been the most successful in reaching children and families.

Challenges
- *Difficulties related to lack of county opportunities for engagement in exploration phase of implementation.* The TZ project strategies are being implemented without having involved counties in the exploration phase of implementation. Local teams, Strategy Purveyors and Service Providers are learning about the many challenges related to implementing programs in rural, underserved communities. Some strategies were not an easy or appropriate fit for county needs and capacities. As examples, transportation challenges, access to clinics, and access to high quality child care presented implementation challenges.
- *System capacity overloaded with simultaneous implementation of eight strategies.* In addition to training Coaches and county teams on use of implementation science, NIRN is also responsible for providing technical assistance to Strategy Purveyors. Implementing multiple strategies simultaneously has proven difficult, particularly when some strategies were less articulated and ready for implementation than anticipated. In recent months, Coaches and teams have shifted their attention and efforts away from strategy implementation toward system work with ABLe Change. One clear lesson learned related to the TZ strategies is that implementing eight strategies simultaneously, without preliminary exploration, clear model articulation, and implementation science preparation, has slowed or stunted successful implementation. The sheer volume of work for all parties has been daunting. As an experiment, the TZ project embarked on an unprecedented excursion involving eight strategies, four counties with varying levels of readiness, three state Funders, and two frameworks for change. At the evaluation mid-point, it is clear that eight strategies implemented simultaneously was ambitious, yet undermined successful implementation of any one strategy.

Technical Assistance
NIRN provides technical assistance to the TZ effort. Its role was specified in the RttT-ELC grant, and staff have been involved in the TZ from the project's inception. Implementation Specialists facilitate SIT and Cross-County meetings, attend most county-specific team meetings, provide weekly in-person and remote coaching to the state and county Coaches, and have worked with some Strategy Purveyors and Service Providers to troubleshoot problems and

articulate strategy models. Since January 2014, faculty from Michigan State University has provided technical assistance around the ABLe Change Framework. They provide regular remote assistance to County Implementation Coaches and have attended retreats in each of the counties.

Successes

- *Enhanced institutional capacity/implementation infrastructure*. Implementation science provides a framework for building state and local capacity to influence change. For it to work effectively there

> **"We have a common vision."**

needs to be investment at all levels of the system. The strongest evidence in this project for lasting change and improved capacity to implement evidence-based programs is seen in the county team structure and processes, including the Coaches. Local team members have learned implementation science principles and have been practicing these over the course of the grant. The next step is for CITs to use data to inform decision-making and communicate this information to CLTs. This activity will enhance capacity. It is unclear at this point in time whether institutional capacity of the local agencies participating in team efforts will be enhanced as a result of this work. Furthermore, with the exception of the intensive involvement of NCPC at all levels, there is little evidence of any enhanced capacity to utilize implementation science at the state level.

- *Enhanced system awareness/change*. Since January 2014 when the ABLe Change Framework was introduced to the TZ project, state Funders, technical assistance providers, Strategy Purveyors, Service Providers, and local teams have become aware of how these tools can be used to engage communities in systems change work. Some

> **"Everyone seemed to get a lot out of it. We talked about how important data is."**

counties have fully embraced the ABLe Change Framework to engage in identifying local needs and gaps in services as a way to help direct their visions, goals, and objectives. This work is underway as a priority, and was addressed in county-wide retreats in the fall of 2015. Training on ABLe Change is currently supporting teams' efforts to engage wider community participation. One county has developed a strategic plan. Another has successfully embarked on a system scan to identify community needs, gaps in services, and solutions. All county teams are learning the importance of collecting data from their communities and using the information to answer important questions.

Challenges

- *Difficulty coordinating discrete models of technical assistance.* While both the Active Implementation and ABLe Change Frameworks offer valuable tools relevant to the work of the TZ, their simultaneous implementation without strategic planning for their theoretical or practical integration has been the source of confusion and frustration with counties and technical assistance providers alike. County Implementation Coaches bear much of the responsibility and burden for bringing implementation science and systems change information to their teams. Because these two models were presented independently of one another, counties were challenged to continue supporting implementation science and systems change work, in part due to their different languages and processes of engagement. Early TZ work focused on facilitating counties' learning of the Active Implementation Framework and supporting implementation of strategies. Later, the ABLe Change Framework was introduced as county teams sought to engage families and communities in

the TZ work. Project leaders have discussed that it may have been beneficial to introduce the systems change work first to create a context for implementation science. The ABLe Change model focuses on needs assessment, problem diagnosis, and identification of interventions for improving systems within local communities. It is driven by a social justice orientation and prioritizes engaging diverse voices to gain a holistic system-level perspective about a given goal or problem. The Active Implementation Framework focuses on system enhancement via effective implementation of evidence-based strategies, has roots in public health, and prioritizes adoption and use of evidence-based practices, programs, or policies in settings external to where the innovation was originally developed (Dearing and Kee, 2012). While there is some overlap between the two models, they diverge considerably in their priorities and scale. ABLe Change centers its efforts on community engagement to enhance systems change and Active Implementation centers on program-led system and service delivery enhancement.

Training tools used by the two models are quite complementary in many ways. However, effective integration of these two models would likely entail implementation science viewed as a component of a broader community systems change model. Therefore, the timing of the implementation of these two models created additional challenges for county teams in managing their integration. Early on, the bulk of the technical assistance emphasis was focused on engaging counties in learning implementation science. With recently elevated efforts surrounding systems change, counties have focused more heavily on a system scan, an activity that would be aligned with an initial exploration phase in the implementation science model. At the same time, NIRN Implementation Specialists have continued to provide support to the TZ counties, with a focus on using data to inform decision-making. This emphasis began in fall 2014 and has continued through the spring and summer of 2015. During the course of the last year, NIRN's TZ team has been reduced from four to two staff while ABLe Change efforts have been increased, such that county teams have dedicated more time to it. ABLe Change consultants have provided training and technical assistance to county teams, including monthly peer-to-peer coaching sessions to support Coaches' efforts. Recently, NCPC has facilitated meetings with staff from NIRN, ABLe Change and Grants Management, to coordinate the workload and processes, integrate the two frameworks as much as possible, and discuss issues that arise. Plans are underway to provide data-informed technical assistance with the goal of individualizing support for each county's needs.

SUMMARY AND NEXT STEPS

At the mid-point of the evaluation, our accumulated data highlight the progress made in building system capacities in the TZ. At the state level, NCPC has provided leadership and implementation support to counties and has initiated their own change processes in ways of work that may apply to future efforts with rural, low-resourced communities. County teams have (1) realized enhanced system awareness by identifying community needs through data collection, (2) improved cross-agency communication and coordination, and (3) developed early childhood leadership capacities in some counties. Notably, the literacy strategies have reached volunteers, pediatricians, caregivers, and children in each of the counties.

The TZ evaluation data also highlight barriers that have limited success of the project to date. First, the lack of a SLT engaged in the work was raised by multiple stakeholders. Our data revealed that in the absence of the SLT as proposed at the outset, other structures have arisen as proxies, including the Funders group and technical assistance providers, that have worked to coordinate and integrate two systems change models. However, state agencies and structures have not demonstrated changes in cross-agency collaboration and system capacity in ways that were posited as part of the TZ proposal. Additionally, implementing eight strategies simultaneously has posed a barrier to project success. Finally, imposing two models of change and the order of their application (implementation science followed by systems change) may have hindered counties' efforts to implement strategies and effect permanent systems change.

In the final 16 months of the TZ project, the evaluation team plans to conduct focus groups, interviews, and surveys to continue to answer questions about early childhood system capacity, policy, and practice changes in the TZ and to highlight successes, barriers, and unintended consequences of the work. We also plan to conduct a case study of the literacy strategies to showcase structures and processes that have enabled these strategies to achieve relative success in initial implementation stages.

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Appendix: TRANSFORMATION ZONE LOGIC MODEL

BACKGROUND

RATIONALE
County rurality –
Strong sense of community identity, loyalty and concern for welfare of citizens

Challenges associated with poverty and under-resourced systems

Fragmented EC system –
At state and local levels

Low levels of education/ academic performance in community

State systems capacity –
Current state system bounded by separately managed, funded entities:
DCDEE
DPH
DPI/OEL
NCPC
DSS

INPUTS

Grants management:
Facilitate negotiation of contracts

Oversee grant activities

State and county teams:
Leadership

Implementation

Coaches:
State level

County level

Purveyors:
Model development

Strategy facilitation/ delivery

ACTIVITIES/OUTPUTS: CAPACITY BUILDING

GRANTS MANAGEMENT
Convene state-level early childhood teams
Respond to county and purveyor requests

COUNTY TEAMS
Identify membership and leadership to accomplish goals
Identify member connections to community
Meet regularly to assess, identify needs, advocate
Articulate asks to appropriate source
Develop strategic plans
Negotiate transitions in personnel, programs
Develop county feedback loops among service providers, agencies, community
County Leadership Team:
Provide vision and direction to implementation team
Provide visibility to effort and political support
Provide funding/Allocation of resources
Assist with barrier removal and problem-solving
Facilitate the work of the implementation teams
County Implementation Team:
Carry out implementation and system-building activities
Support collaborative relationships
Know strategies, implementation science, systems change

COACHES
Support implementation science use in county activities
Team development
Process improvement
Usable intervention development
Lead assessment efforts
Educate teams regarding implementation science and systems change
Provide behavioral coaching
Team-based project management

PURVEYORS
Articulate models for community implementation
Provide support for strategy use and tools

OUTCOMES

STATE/COUNTY COLLABORATION
State and county entities:

Meet regularly to discuss county needs related to early childhood programs and services

Collaborate to establish programs and funding to meeting county needs for early childhood services

Use monitoring evaluation and feedback to share information, and articulate needs and expectations

INCREASED SYSTEMS AWARENESS
Early childhood infrastructure includes community engagement plans

Key indicators of school readiness, effective early childhood system, implementation

INCREASED INFRA-STRUCTURE CAPACITY AT STATE AND LOCAL LEVELS

EC leadership at state and local levels listen and respond (communicate and collaborate) to identify needs, resources and support

Effective policy-practice feedback loops

Aligned county ECE systems

Cross-TZ team alignment

Programs are aligned with and critical to prioritized outcomes

Shared EC vision and unified, coordinated system at state and local levels

Aligned state early childhood systems

Fully funded EC programs for families experiencing poverty

TRANSFORMATION ZONE LOGIC MODEL

BACKGROUND

GOALS
Implementation Science
Support the practice

Support use of evidence-based practices

Systems Change
Expand and embed community engagement efforts

Promote shared understanding of school readiness, sustainability, and inequities

Develop local capacity to understand and assess system conditions affecting school readiness and sustainability

Develop an effective sustainability plan

INPUTS

Funders
Negotiate contracts

Respond to county requests and needs

Implementation Science TA
PDSA cycle

Model development

Capacity assessments

Data use

Systems Change TA
Sustainability retreat

Peer to peer meetings

Messaging

ACTIVITIES/OUTPUTS: CAPACITY BUILDING

FUNDERS
Support negotiating contracts (counties)

Strategy installation support

IMPLEMENTATION PROCESSES
Counties and state use of implementation science tools for exploration, installation, initial and full implementation of TZ strategies

Prepare to implement strategies: resources, organizations, drivers, and staff
Use PDSA cycle
Collect and use data to adjust drivers, manage change/transitions, and initiate improvement cycles
Use data to identify effort, fidelity, and outcomes
Monitor and manage drivers, achieve fidelity and outcome benchmarks, continued improvement

SYSTEMS CHANGE PROCESSES
Counties use of system scan tools, data collection and sense-making in service of systems change goals:

System scan
Engaging families
Developmental framework/pathway
Provider focus groups/surveys
Motivation to change internal systems
Evaluate systems alignment
Survey design and use
Family Engagement Workgroups
Systems Change Workgroup

OUTCOMES

STATE AND LOCAL EC SERVICE SYSTEMS ARE DATA-DRIVEN LEARNING SYSTEM
Problem solving – process established for seeking information and using it to improve system

Decision-making

Advocacy

Full strategy implementation to scale and with fidelity

Families exhibit increased interest in and awareness of benefits of EC services and systems and are engaged in local services meeting their needs

INCREASED PROCESS CAPACITY AT STATE AND LOCAL LEVELS
Increased state and local support for quality EC systems using implementation informed practices and processes

Identification of high-leverage strategies for use with children, families and EC programs

Families demonstrate increased involvement in early childhood care and education

Families empowered to support children

Children ready for school