NORTH CAROLINA INFANT-TODDLER PROGRAM STATE SYSTEMIC IMPROVEMENT PLAN (SSIP) PHASE I

EXECUTIVE SUMMARY

North Carolina's Infant-Toddler Program (N.C. ITP) is a system of supports and services for children ages birth to three years who have established health conditions, or developmental disabilities or delays under Part C of the Individuals with Disabilities Education Act (IDEA). Families are referred by community resources or self-referred. The Early Intervention Branch (EI Branch), as lead agency, implements the N.C. ITP through 16 regionally-based local lead agencies called Children's Developmental Services Agencies (CDSAs).

The EI Branch is in the Division of Public Health within the N.C. Department of Health and Human Services. Lead agency responsibilities are twofold:

- At the state level, the EI Branch administers, supervises, and monitors programs and activities of the N.C. ITP. The EI Branch also provides oversight for the CDSAs.
- Locally, the CDSAs implement the N.C. ITP by providing evaluation services for eligibility determination and performing child and family-directed assessments for service planning. They also provide service coordination for enrolled children and their families. CDSAs administer, supervise, and monitor services and activities provided through the N.C. ITP and ensure identified, needed services are available and provided in a timely manner, through a network of regional, qualified enrolled providers.

The N.C. Interagency Coordinating Council (ICC) is the designated planning partner for the Branch and the Division of Public Health. The ICC advises and assists in child find and public awareness activities, system needs assessment, system monitoring and evaluation, and professional development.

In Federal fiscal year 2013-2014, 18,816 infants and toddlers were enrolled in the N.C. ITP.

OVERVIEW OF STAKEHOLDER INVOLVEMENT

Each state was required to develop a State Systemic Improvement Plan (SSIP) with broad and diverse stakeholder input to begin to focus on results for infants, toddlers and their families. The purpose of meeting with these groups was to gain broad and diverse input and feedback on the N.C. ITP. The following internal and external groups included:

Internal Stakeholder Groups included:

- SSIP Planning Team
- ITP State Office staff
- ITP Statewide Leadership Team (including EI State Office leadership and CDSA Program Directors)
- CDSA staff

External Stakeholder Groups included:

- N.C. Interagency Coordinating Council

- Broad SSIP Stakeholder Group
- Core SSIP Stakeholder Group

> *"Emotions matter: making the case for the role of young children's emotional development for early school readiness."* *(Social Policy Report of the Society for Research in Child Development, 16 (3), 1-20)*

PROCESS USED FOR DEVELOPING PHASE I OF THE SSIP

The N.C. ITP used an implementation science framework for planning the SSIP process within the state. The SSIP Planning Team began with a broad data analysis of N.C. ITP data to determine if there were clear areas of low performance for any child and family outcomes. The SSIP Planning Team and stakeholders used this information to begin to examine potential areas needing improvement and to begin to identify a State Identified Measurable Result (SiMR).

DATA ANALYSIS

Data from the State Performance Plan, the Annual Performance Report and 618 data on child count, exit disposition and settings were analyzed to identify interesting trends or to note unexpected differences. Among the key datasets chosen were child outcomes and family outcomes.

The three Child Outcomes measure *the percent of infants and toddlers with IFSPs who demonstrate improved*:

- *3A. Positive social-emotional skills (including social relationships),*
- *3B. Acquisition and use of knowledge and skills (including early language/communication),*
- *3C. Use of appropriate behaviors to meet their needs.*

The two summary statements, which assess progress over time, are:

1. *Of those children who entered or exited the program below age expectations in each outcome, the percent who substantially increased their rate of growth by the time they turned 3 years of age or exited the program.*

2. *The percent of infants and toddlers who were functioning within age expectations in each outcome by the time they turned 3 years of age or exited the program.*

The three Family Outcomes measure the *percent of families participating in Part C who report through an annual survey that early intervention services have helped the family:*

- *4A. Know their rights,*
- *4B. Effectively communicate their children's needs,*
- *4C. Help their children develop and learn.*

Child outcome and family outcome data from the APR were analyzed to identify areas of low performance. Then data were analyzed by:

- Comparing to national outcomes data

- Investigating trends in state performance
- Comparing CDSAs performance

Suggestions from the Broad Stakeholder group based on this broad data analysis included:

Child Outcome Data

- Involve parents in child outcome summary (COS) ratings during evaluations and assessments processes and while developing Individualized Family Service Plan (IFSPs)
- Determine how other states include families in the COS process
- Determine if parents know about and understand the COS process, and if so, how that would affect ratings
- Compare adverse child experiences (ACE) data in relation to COS data
- Consider the social/emotional well-being of infants and toddlers, as well as family/parent stress, parents' well-being and supportive family systems
- Investigate the reliability of Child Outcomes ratings
- Determine if child outcomes vary by diagnosis or referral source
- Disaggregate data by race/ethnicity and child's diagnosis

Family Outcomes Data

- Examine the effectiveness of the current survey instrument and determine if there are other options
- Explore other data sources for family outcomes
- Investigate why most CDSAs are not meeting targets
- Explore strategies for increasing survey response rate
- Examine the effectiveness of the current process of collecting and disseminating the survey
- Share results with families

From these suggestions, the SSIP Planning Team disaggregated the data in various ways to determine the root causes of trends identified in the data analysis. Variables used for the Child Outcomes data included: eligibility category, age at exit, race, ethnicity, gender, CDSA size, rural versus urban CDSA, setting (community, home, etc), age at referral and length of time in the N.C ITP. *(See http://www.beearly.nc.gov/data/files/pdf/NCPartCIndicator11_SSIP.pdf for complete disaggregation, Table 3, pp 20-22).*

From this disaggregation of data, the Core SSIP Stakeholder Group drew the following conclusions to guide the development of the State's SiMR:

- There appears to be variability in the relationship of age (entrance or exit) to outcomes, indicating that there may be additional differences that need to be examined beyond age.
- Time in N.C. ITP appears to have an impact on outcomes, although inconsistently by outcome.
- There are clear race and gender differences for Summary Statement 2 data.
- The ITP ranks consistently lowest in 3A: social/emotional outcomes for Summary Statement 1 regardless of the variable examined.

Family outcomes data were limited because of consistently low response rates on the annual family survey which did not allow reliable generalization of responses for our population. Therefore, data were only disaggregated by gender, race, ethnicity, language, age of child at referral and length of time the child spent in the N.C. ITP. Although some patterns emerged based on race and ethnicity, data quality issues raised the probability of drawing false conclusions.

The Core Stakeholder Group was asked to provide feedback and comments on any relationship between the data and the potential areas of focus. Based on Broad Stakeholders and Core Stakeholders analysis of the N.C. ITP data, three potential areas were identified:

- *Family Outcome 4B* – Historically, this was the lowest-performing indicator of the three family outcomes. Although the Core Stakeholder Group believed that families effectively communicating their children's needs would improve child outcomes over time, they did have concerns about the lack of additional family data and the quality of family outcomes data.
- *Child Outcome 3B* – acquisition and use of knowledge and skills (including early language/communication) - the ITP consistently performed lowest on this indicator for Summary Statement 2.
- *Child Outcome 3A* – positive social-emotional skills (including social relationships), was the lowest child outcomes indicator for Summary Statement 1. The Core Group expressed excitement about aligning social/emotional outcomes with the numerous initiatives already occurring in N.C. around social/emotional development in children. It was also noted that CDSA staff would benefit from additional training and resources in social/emotional practices.

Data indicated that the area of children's social emotional development showed the lowest level of improvement over time. As a result, improving children's social emotional outcomes arose as the priority area for the N.C. ITP.

ANALYSIS OF STATE INFRASTRUCTURE TO SUPPORT IMPROVEMENT AND BUILD CAPACITY

At the same time the data analysis took place, the SSIP Planning Team was conducting an infrastructure analysis with the Broad SSIP Stakeholder Group. Stakeholders identified strengths, weaknesses, opportunities and threats (SWOT) for each of the seven system component areas: *governance, fiscal, quality standards, professional development, data systems, technical assistance* and *accountability/monitoring*. The infrastructure analysis revealed the following issues:

- lack of community service provider accountability
- limited opportunities for training/TA for community service providers
- limited professional development opportunities for community service providers, CDSA staff, and EI Branch staff, and there was a particular concern about those providing special instruction
- resource limitations due to recent budget reductions
- engagement of families in State system components

An analysis of each component is below.

Governance

Overview

The EI Branch oversees the ITP and is located within the Department of Health and Human Service under the Division of Public Health. The EI Branch led by a Branch Head, is divided into two units that support and provide technical assistance, oversight and monitoring for the local lead agencies, the CDSAs. The CDSAs, led by a Program Manager, provide assessment and evaluation services and service coordination, but work with community-based providers who provide direct services to infants, toddlers and families based on individualized family service plans (IFSPs).

Analysis

- The ITP faced challenges due to the small number of EI Branch staff. Staff size impacted the N.C. ITP's ability to achieve a balance between compliance and quality. Multiple retirements within the governance structure (Branch Head, Section Chief, and vacant CDSA Directors) are potential threats due to uncertainty.
- Opportunities exist for N.C. ITP to work with families on advocacy and to increase the role of local interagency coordinating councils (LICCs).

Fiscal

Overview

The N.C. ITP is funded by Federal Part C, state government appropriations, family fees and Medicaid/other third party payor reimbursements. Fiscal system components include:

- Staff - Each CDSA has a financial officer to ensure billing practices are efficient, comprehensive and compliant with state and federal regulations.
- Procurement (contracts/purchasing) – All state services and goods are procured through the State Contract Office and the Purchasing Office. Contractors submit monthly reports to ensure expenditures are correctly reimbursed. The N.C. ITP follows state procurement guidelines for goods and services through a competitive bid process.

Analysis

- The recent loss of 160 positions in the state CDSAs and concerns for future state budget cuts are threats to the system.
- Current funding/allocation formulas do not support additional costs incurred by community service providers and CDSAs for travel and other expenses, which impact service provider participation in CDSA provider networks.
- There is uncertainty about continued third-party funding due to Medicaid reform and of the implementation throughout the State of the Affordable Care Act.

Quality Standards

Overview

The N.C. ITP bases its practices on evidence-based early intervention principles and practices for infants and toddlers with disabilities. The N.C. ITP strives to consistently use the process standards for eligibility evaluation, assessment, service planning and service delivery consistently across the state. Systems and standards such as policies, procedures, staff designated for quality assurance, provider agreements, technical assistance (TA), self-assessment tools and focused monitoring help ensure high-quality early intervention services.

Analysis

- The N.C. ITP has recently released additional procedural guidance documents and policies that provide more direction to and create uniformity across the CDSAs.
- There are concerns about standards for family outcomes and the effect of the reduction in staff on the quality of service coordination.
- There are concerns about provider quality particularly for those providing special instruction commonly known as community based rehabilitative services (CBRS) and a lack of standard training for CBRS providers. There is also a lack of knowledge of evidence-based practices at the provider level, particularly as they relate to special instruction.

Professional Development

Overview

Components of the N.C. ITP's professional development system include:

- **Recruitment and retention** is handled for the 12 state CDSAs by State Human Resources, where career opportunities with the N.C. ITP are listed on the DHHS website. The four contract agencies follow the recruitment and retention policies of their respective agencies and human resource departments.
- **Personnel standards and competencies,** as outlined in the *Guidance for Personnel Certification* document, by **N.C.** ITP staff are required to obtain Infant-Toddler Family Services (ITFS) certification. Clinical specialists, such as speech-language pathologists, occupational therapists, physical therapists, social workers, psychologists, nurses, pediatricians and nutritionists are required to follow the certification and/or licensure requirements of their professional boards or organizations.
- **Professional development strategies** require all ITFS certificate holders to earn 10 contact hours (1.0 CEU) each calendar year. The credits must focus on infant and toddlers, with or without disabilities, and be obtained from a designated list of continuing education providers. Certification is verified through annual monitoring activities.
- **Needs assessments** are conducted on an on-going basis, statewide by EI Branch Office staff on training topics. EI Branch staff also identify resources and develop materials to support professional development. Materials are posted on the EI website and disseminated to the CDSAs.

Analysis

- Lack of funds for professional development is a challenge, particularly when service providers cannot be reimbursed.
- External resources are available for training, but need to be well-organized and accessible to CDSA staff and community service providers.

Data Systems

Overview

The N.C. ITP currently uses the statewide Health Information System (HIS) to collect child-specific data that staff at the CDSAs have entered. EI Branch staff use the data to generate federal reports such as federal child count reports, saturation rates, dispute resolution, settings for services and exit data. Information is also extracted from HIS for the Annual Performance Report (APR), statewide reports and CDSA-specific reports. Using a three-year cycle, EI Branch staff conduct on-site data verification monitoring visits to all of the 16 CDSAs. These on-site monitoring visits take place at six (6) CDSAs per year.

Analysis

- Several staff at the N.C. ITP and within N.C. State Government understand and can work with and analyze data.
- The HIS is comprehensive and allows for data reporting, however additional work is needed to enable access and use all components of the system.
- The CDSAs would benefit from additional access to data reports (local and State-level).
- Little to no provider data are centralized for N.C. ITP.

Technical Assistance (TA)

Overview

The EI Branch Office provides CDSAs and their community-based providers with a range of assistance for performance improvement and compliance.

- **Regional Consultants** provide guidance on interpreting policies and procedures, developing effective corrective action or improvement plans, and providing technical assistance to implement strategies to ensure program compliance and performance improvement.
- **Statewide Planning and TA Team** clarifies program goals and priorities, facilitates pilot program implementation and develops/disseminates up-dates on federal and state EI requirements.
- **Program Evaluation Team** provides TA on the billing system and data entry processes and reports.
- **Quality Improvement Unit** reviews, revises and provides implementation guidance on ITP policies and procedures.

Analysis

- The EI Branch Office QI Unit employs Regional Consultants and other TA experts who are geographically located in CDSA offices. However, concerns exist about the adequacy of the number of staff (six) who provide support to the 16 CDSAs.
- Opportunities exist for more targeted TA to CDSAs, particularly those with existing TA resources (Family Resource Information, Education and Network Development Services (FRIENDS) Resource Center, National Implementation Research Network (NIRN), and opportunities for CDSAs to provide TA to one another.
- North Carolina is fortunate to have federal TA resources and personnel from Early Childhood Technical Assistance Center (ECTA) and Center for IDEA Early Childhood Data Systems (DaSY) in close proximity.

Accountability/Monitoring

Overview

The EI Branch uses several processes and procedures to monitor CDSA compliance and ensure maintenance of quality data. The self-assessment process, desk audits, on-site visits, complaint processes, and other monitoring methods inform compliance, performance, and areas that need correction or improvement. The EI Branch also uses its database and other data reports to identify instances of low CDSA performance on performance indicators (e.g. natural environment, number served birth-to-one and birth-to-three, child outcomes, family outcomes). Low-performing CDSAs may be required to develop an improvement plan. When local findings are made during data verification site or through verification of the self-assessment process visits, both the Program Evaluation Team and the Regional Consultants provide TA to ensure timely correction of non-compliance and modification to any local practices that might have led to data anomalies, non-compliance or poor performance.

Analysis

- A strong focused monitoring system exists for ITP to work with CDSAs on quality and compliance.
- There is inconsistency in monitoring community providers in the State, leading to reduced understanding of evidence-based programs.
- Increased data collection has led to increased accountability for CDSAs. Often CDSAs have too much data and do not know how to prioritize.

Realizing that all resources of the early childhood system in N.C. must be leveraged to improve statewide outcomes for children with disabilities and their families, the N.C. ITP identified key partners and organizations with which it is currently aligned or seeks to align with to better address the early intervention needs of children and families in N.C. and achieve the goals of the SSIP.

Some of those organizations are: *The North Carolina Infant Mental Health Association* (NCIMHA), *Race to the Top/ Early Childhood Integrated Data System (ECIDS,) Child First, The Center on the Social and Emotional Foundations for Early Learning (CSEFEL) and The North Carolina Institute of Medicine: "Growing Up Well: Supporting Young Children's Social Emotional Development and Mental Health in N.C."* (For a complete listing http://www.beearly.nc.gov/data/files/pdf/NCPartCIndicator11_SSIP.pdf., pp 40-43).

STATE-IDENTIFIED MEASURABLE RESULT (SiMR)

"Sixty percent of children enter school with the cognitive skills needed to be successful, but only 40% have the social/emotional skills needed to succeed in kindergarten.

(Raver, C., 2002)

N.C. SiMR: *North Carolina will increase the percentage of children who demonstrate progress in positive social-emotional skills (including social relationships) while receiving early intervention (EI) services. A subset of six local lead agencies (CDSAs) who are representative of the State will be targeted to begin implementing improvement activities with the goal of expanding to all sixteen local lead agencies (CDSAs) for maximum impact.*

Based on the data analysis, stakeholders and staff found no clear areas of low performance in the N.C ITP but there were three primary areas of concern:

- Quality and quantity of data concerning families' ability to effectively communicate their children's needs.
- Consistent low percentage of infants and toddlers who show improvement in acquiring and using knowledge and skills.
- Low percentage of infants and toddlers who show improvement in positive social/emotional skills.

The basis for the selection of N.C.'s SiMR was:

- its alignment with many early childhood initiatives in N.C. that focused on social emotional skills and social emotional development,
- the high cost of early childhood mental health services and
- the criticality of positive social emotional skills to overall child development.

Given the resource challenges and limited staff in the EI Branch, internal and external stakeholders agreed that implementation of the SiMR would begin with a subset of CDSAs with diverse, representative characteristics. Six CDSAs were selected based on:

Geographic diversity – CDSAs chosen are in the Eastern, Western, and Central parts of N.C., There is a regional consultant in each and these CDSAs provide a mix of urban and rural counties.

Performance diversity – CDSAs chosen have a mix of low and high performance on Child Outcome 3A, Summary Statement 1 (SS1), the SiMR focus. It will be important to look at root causes of success in high-performing CDSAs to determine if there are practices already in place that have proven to be effective in impacting the social/emotional development of children with disabilities.

The data team calculated the percentage of needed improvement in Outcome 3A, Summary Statement 1 (SS1) for N.C. to meet its State Performance Plan targets for **3A, SS1** and if initially targeting these six CDSAs would have an impact on statewide data.

Table 6: Impact of Six CDSAs on Statewide Data for Child Outcome 3A, SSI

CDSA	2012 Performance 3A:SS1	2013 Performance 3A:SS1	Number of Children with Exit Ratings	2018 Target %	Number of Additional Children Showing Progress to Achieve Target %	% increase of Children Showing Progress Needed to Achieve Target
1	63.60%	60.70%	141	65.70%	7	5%
2	58.70%	56.20%	533	61.20%	27	5%
3	65.20%	53.30%	131	58.30%	7	5%
4	61.70%	56.00%	297	61.00%	15	5%
5	83.70%	86.40%	535	N/A	0	0%
6	75.10%	81.40%	498	N/A	0	0%
Subgroup Totals	68.00%	65.67%	2135	68.29%	56	2.62%
State Totals	**71.90%**	73.10%	6250	74.00%	56	0.9%

As only four of the six CDSAs are currently below the State mean, these four programs will have to increase on average 5% each to increase the State average by 0.9%. To achieve a 5% increase in the four lower-performing CDSAs by 2018, intermediate targets must be set for all years from 2014 through 2017. The proposed targets for the SSIP are fairly aggressive for the subset of six CDSAs that will pilot strategies to have an impact on the SiMR:

Baseline Data

FFY	2013
Data	65.67%

FFY 2013 – FFY 2018 Targets for Six CDSAs

FFY	2014	2015	2016	2017	2018
Target	65.67%	66.84%	66.84%	66.84%	68.29%

SELECTION OF COHERENT IMPROVEMENT STRATEGIES

After the SiMR or focus area was selected, data and infrastructure analyses were mined for hypotheses-generating activities. Six root causes were identified in two areas: *practice issues* and *infrastructure issues*. A hypothesis was generated for each root cause. Staff at the subset of six CDSAs slated to pilot new practices, consistent with improving the SiMR, responded to a survey to determine the accuracy of our hypotheses.

1. There is inconsistency in assessment processes across the state that contribute to the types and quality of information that is used for the COS rating process and the development of IFSPs.

   Hypothesis: ***If there is consistency in assessment practices across the state, ratings will be more accurate and overall COS data will improve.***

2. The COS rating process is seen as a tag on, not an integral part of the IFSP process, which impacts data quality.

   Hypothesis***: If the COS process is an integral part of the IFSP process, ratings will become more accurate and overall COS data will improve***.

3. There is a lack of understanding about what the data mean or how it is used after the ratings are completed.

   Hypothesis: ***If staff has improved understanding of the purpose and use of the COS data, ratings will be more accurate and overall COS data will improve***.

4. Staff don't have the expertise in assessment or intervention needed to adequately address social-emotional needs of children in enrolled in the N.C. ITP.

   Hypothesis: ***If staff has training in assessment and intervention, ratings will be more accurate, and children will have appropriate strategies for addressing social/emotional development on their IFSP.***

5. Staff and provider comfort in talking with families during assessment, IFSP creation, and intervention about children's social/emotional skills is low and impacts the assessment of social/emotional needs, the writing of the IFSP itself, and securing appropriate intervention services for children with social/emotional needs.

   Hypothesis: ***If community service providers and CDSA staff have more confidence/competence in talking with families throughout the IFSP process, parents will develop better skills at communicating their child's needs***.

6. Reduced resources (less staff, more families) contribute to fewer conversations that promote family understanding of N.C. ITP, outcomes, and the IFSP in ways that are meaningful to families.

   Hypothesis: ***If community service providers and CDSA staff improve their skills engaging families in the EI process, families will develop better skills communicating their child's needs***.

Based on these survey results, the SSIP Planning Team began developing improvement activities based on the root causes. The following six broad improvement activities with practical implementation methods were developed:

1. **Centralize and expand provider network**
    - Centralize the provider network to serve multiple CDSAs which will expand the provider network. Create a provider agreement with a system of accountability, incentives and sanctions that promotes evidence-based practices and ensures that appropriate evidence-based practices are being used and fidelity is being met.

2. **Expand professional development opportunities and standards**
    - Create standardized and consistent statewide professional development for CDSA staff and community service providers. The number and types of online trainings available will be expanded, and providers will be asked/required to participate in these trainings as well. Modify certification process by exploring national standards to determine the most effective evidence-based practices for social/emotional services and incorporate these into the current certification process for community providers and CDSA staff.
    - Develop consistent standards for evaluation and assessment that use a standard set of tools to help create uniform assessment practices, which in turn will have a direct effect on the quality of Child Outcome ratings.

3. **Strengthen the State system for planning and dissemination by using implementation science model**
    - Infrastructure strategic planning will provide a refined implementation framework to identify best practices and evidence-based practices at the provider and staff level. This approach will encourage innovation at the provider level leading to an increase in the types of practices that community service providers could choose from to impact social/emotional health and well-being.
    - Examine the current structure to determine if it meets the needs of the current EI system, particularly around TA and quality standards. Examine all job duties to identify redundancies, and examine the N.C. ITP budget to decide if additional resources can be focused toward SSIP implementation activities. The N.C ITP will explore using a staff member to expand and manage the provider network.

4. **Continue expansion of Integrated Child Outcomes Pilot Project**

    The successful implementation of global child outcomes integration at two CDSAs should be expanded to include all six CDSAs chosen as a subset for the SSIP. By increasing opportunities to involve families and community service providers in global child outcomes observation, tracking, and rating processes, the N.C. ITP anticipates being able to increase the likelihood that children who received early intervention services through the N.C. ITP will successfully participate and function in home, classroom, and community settings and that parents have been empowered to understand their children's functioning related to same age peers and will know how to communicate their children's needs and progress.

5. **Create an EI service delivery model of clearly defined practice standards for equal access for children and families**

    This activity will identify the most effective early childhood evidence-based practices targeting the social/emotional health of children with disabilities.

6. **Overhaul family outcomes measurement process**
    - Explore alternative survey instruments to measure family outcomes which will lead to a better response rate and help make the family outcomes data more representative of the families served.
    - Analyze survey dissemination to improve response rate by increasing the participation of CDSA direct staff in the survey process.

Three additional broad improvement strategies with lower priority were identified as being necessary to achieve the SiMR:

7. **Disseminate child outcomes data at the CDSA level and investigate additional/alternative data to measure child and family outcomes**

8. **Explore and implement telehealth options to increase access to social/emotional experts**

9. **Capitalize on and expand partnerships with other agencies and stakeholders to meet program needs**

Theory of Action