Improving Early Intervention Services in Nebraska Through a Results-Driven Accountability Process

Submitted to the Nebraska Department of Education and

Department of Health and Human Services

November 27, 2018

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Funded by Nebraska Department of Education contract: MavGrant Form ID #1486

Table of Contents

Abstract

This study utilized a convergent parallel mixed method design to evaluate Early Intervention (EI) teams' use of Routines-Based Interviews (RBI) to improve child/family assessment and writing of functional IFSP outcomes that align with family-identified priorities. Professional development and technical assistance in two evidence-based strategies were implemented in seven pilot Planning Region Teams (PRTs) across Nebraska as part of the Early Intervention Co-Lead Agencies' Results-Driven Accountability efforts. Five of the pilot PRTs agreed to join the study. Three non-pilot PRTs participated to provide information about "business as usual" EI practices. Eighty participants (parents, EI service providers, services coordinators, and supervisors) were interviewed. Thirty IFSP documents were analyzed. A synthesis of qualitative and quantitative results yielded several key findings: (a) professional development and technical assistance resulted in more and higher quality outcomes on pilot site IFSPs when compared to non-pilot site IFSPs; (b) many EI service delivery practices were more similar than different across pilot and non-pilot PRTs; (c) when teams use an RBI families become deeply engaged in the assessment process which is linked to active participation in home visits, however, they are typically not included in the decision-making process regarding who will deliver EI services to their child and family, and (d) coaching family use of strategies within the context of a variety of routines occurs inconsistently during home visits across pilot and non-pilot PRTs. Recommendations for state agency and PRT leaders are provided.

Improving Early Intervention Services in Nebraska Through a Results-Driven Accountability Process

Part C of the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 requires that early intervention teams craft individualized and effective plans to meet the needs of young children with special needs and their families (Küpper, 2012). The newly updated Recommended Practices in Early Intervention/Early Childhood Special Education (Division of Early Childhood [DEC], 2014) reiterate the importance of promoting families' active participation in making decisions regarding goals, supports, and the services needed for their children and themselves. Specifically, early interventionists are reminded of the importance of embracing a set of family-centered (F1, F3) and capacity-building practices (F5, F6) that lead to family-professional collaboration (F4, F7) aimed at developing an effective Individualized Family Service Plan (IFSP) to help families achieve their goals.

Many early intervention (EI) teams, however, struggle to follow a process that results in systematically meeting the spirit of IDEA Part C or these recommended practices for families of children with special needs (McWilliam, 2010). Required by the U.S. Department of Education, the Nebraska Co-Lead Agencies responsible for oversight of EI services across the state are engaged in a multi-year Results-Driven Accountability (RDA) process to improve practices used with and outcomes for infants and toddlers with disabilities and their families. The focus of the RDA process has been on the implementation of evidence-based strategies for three areas of need: (a) child and family assessments, (b) development of functional IFSP outcomes that align with family –identified priorities, and (c) strengthening of home visitation practices to provide early intervention support within the context of family routines (Nebraska Early Development Network, 2013).

Currently, seven planning region teams (PRTs) across the state are participating in a pilot study of professional development and technical assistance focusing on evidence-based strategies that address the above areas of need. Strategies include the use of Routines-Based Interviews (RBI) [McWilliam, 2010] for assessment of child and family needs and priorities, as well as development of functional IFSP outcomes, and the use of the *Getting Ready* (Sheridan, Marvin, Knoche, & Edwards, 2008) framework for quality routines-based home visits. Thus far, professional development and technical assistance have been rolled out in phases that address the first two areas of need described above. Extensive training and support has been provided in the pilot sites for: Strategy 1—use of RBI with fidelity for child/family assessment, and Strategy 2—development of high quality functional IFSP outcomes (e.g., goals or targets for growth).

Preliminary analysis of a sample of RBI fidelity checklists and IFSPs generated by three of the pilot sites has indicated an acceptable level of initial and on-going fidelity in the implementation of RBI for assessment of child and family needs and priorities (Nebraska Departments of Education and Health and Human Services [NDE/NDHHS], 2016). This analysis also indicated an increased mean number of quality child and family outcomes, as scored on the IFSP Outcome Quality Checklist (Bainter & Hankey, 2015), on IFSPs developed by these three pilot site teams compared to baseline data (NDE/NDHHS, 2016). What is not clear, however, is how participants from PRT pilot sites now experience the assessment, IFSP development, and service delivery process, and whether or not those experiences are qualitatively distinctive from participants in non-pilot PRT sites, where “business-as-usual” practices are employed.

The purpose of this research study was to evaluate the practices of professionals and experiences of families in pilot site PRTs after systematic training in and implementation of Strategy 1—use of RBI for assessment of child and family strengths, needs, and priorities; and

Strategy 2—use of RBI information to develop high-quality, functional IFSP outcomes. In addition, information about "business as usual" practices was gathered from three PRTs that had **not yet** received the systematic training in Strategy 1 or 2.

A better understanding of how these systematic training and support efforts have influenced IFSP development and the EI service delivery process would guide the Co-Lead Agencies in scaling up effective practices across the state and identifying additional areas of need for professional development and technical assistance.

The study addressed the following research questions:

1. How have systematic training and support in the two strategies informed IFSP development (e.g., types of IFSP outcomes, quality and functionality of IFSP outcomes) and EI service delivery (e.g. "dosage" of EI—frequency/intensity of home visits and caregiver use of interventions between visits, professionals' job satisfaction, families' satisfaction with services) in the pilot PRT sites?
2. How do current practices used in pilot PRT sites for child/family assessment, IFSP development, and EI service delivery compare to current practices used in non-pilot PRT sites?

Literature Review

Assessment in EI. The RBI (McWilliam, 2010) has garnered support as an evidence-based strategy for ecological assessment of both child and family strengths and needs. When implemented with fidelity, families are prompted to share detailed information about daily routines with their child, including expectations for the child's participation and social interactions in that routine, as well as the families' level of satisfaction with how that routine is working within their family-life context. This assessment leads directly to the generation of IFSP

goal or outcome statements. Typically, a list of 6 or more family priorities are identified along with the regular routines, contexts, and family members available to provide support for children to obtain and practice skills. Use of the RBI for development of IFSPs has been found to result in (a) greater family satisfaction with the process of creating IFSPs, (b) a larger number of outcomes developed by the IFSP teams, and (c) outcomes that were more functional in nature than those generated in a "business as usual" approach (McWilliam, Casey, & Sims, 2009). Effective assessment of child/family needs and priorities has the potential to provide essential information to EI teams regarding the "dosage" of services and supports each child/family would need to meet the outcomes most valued by the family.

Optimal "dosage" of EI services. Generally, the concept of "dosage" is drawn from the fields of medicine and pharmacology wherein the term refers to amount and/or frequency of treatment. EI services are not, however, tangible, easily quantifiable objects such as medicines. Educational scholars have advocated describing dosage parameters, such as the form, frequency, duration, and delivery mechanism of interventions, as a helpful means for accurately portraying the treatment intensity of educational interventions (Parker-McGowan et al., 2014; Warren, Fey, & Yoder, 2007). Bagnato, Suen, and Fevola (2011) proposed a definition of "dosage" in EI services as the "amount of time that an individual child must engage and participate in an early childhood intervention program or service to show measurable functional progress" (p. 119). This definition recognizes that "dosage" captures more than just number of hours or days of service provided. The essential learning activities that occur within and between those service contacts must happen with appropriate frequency, focus, and intensity for families and children, resulting in meaningful growth for the participants.

Shelden and Rush (2001) report that EI that supports early learning experiences in children's homes with their usual caregivers yields significant improvements in developmental skills for many children with a range of abilities, environmental risk factors, and/or diagnoses. Thus, a renewed focus on children's needed experiences and supports, driven by consideration of families' strengths and priorities for the children, as well as available professional expertise may appropriately guide decisions about dosage of EI programs.

EI teams aim to encourage children's care providers to weave into the fabric of their everyday lives rich, interesting, and engaging learning opportunities. Everyday experiences become development-instigating learning opportunities (Dunst et al., 2001) when they promote children's exploration of their environments and practice toward competence. In addition to having stimulating home experiences, the responsiveness of caregivers can enhance children's development, and contingent reinforcement of children's social initiations often prompts their learning and generalization. It is not enough, therefore, for an EI service provider to just visit a home or visit frequently. Rather, optimization of natural learning environments and empowerment of caregivers as supports and first teachers of their children must occur. A multitude of potential opportunities for children's learning occur *between* visits from the service provider.

Team members charged with developing quality Individualized Family Service Plans (IFSPs), must think deeply about the family characteristics that shape parents' abilities to provide such learning environments for children with disabilities (Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011), as well as the configuration of resources offered by the EI program to support and assist the families and children (Shelden & Rush, 2010). Family characteristics drive the outcomes chosen and possibly the strategies used in EI, while a well-designed set of program

supports and services can be assembled to address the appropriate dosage of services for the desired outcomes. Teams need to consider (a) traits of the adult learners in the home, (b) social and cultural factors that influence effective EI practices, (c) what is needed to nurture parent-professional partnerships, and (d) how to best match the strengths of EI providers to the needs of individual families and children. Conducting an RBI early in a relationship with referred families, has the potential to uncover rich detail about caregiver traits, family contexts, and environmental factors that could be tapped to plan meaningful IFSPs and design successful interventions for young children with disabilities and their families.

Parent-professional partnerships. The development of successful partnerships between family members and service providers is essential for an effective dosage of EI to occur. Implementation of the RBI process in the assessment phase allows teams to establish from the outset that the family voice is highly valued and that this will be a parent-professional partnership moving forward.

Families appreciate strength-based, family-centered approaches to services (Dunst, Boyd, Trivette, & Hamby, 2002; Paulsell, Boller, Hallgren, & Esposito, 2010). DEC Recommended Practices (2014) define family-centered services as "practices that treat families with dignity and respect; are individualized, flexible, and responsive to each family's unique circumstances; provide family members complete and unbiased information to make informed decisions; and involve family members in acting on choices to strengthen child, parent, and family functioning" (p. 9).

Studies have shown that the quality of relationships between family members and home visitors influences parents' effectiveness in caring for children, the quality of family engagement in home visiting programs, as well as developmental outcomes for children (Paulsell et al., 2010;

Knoche et al., 2012). Furthermore, the "parent's level of engagement in intervention activities has been found to relate to…use of the strategies between home visits (Peterson, Luze, Eshbaugh, Jeon, & Kantz, 2007, p. 121). This utilization of strategies with children within children's natural environments and daily routines provides the "dosage" of needed intervention that brings about meaningful, functional improvements for children.

Provider and program strengths. EI teams are composed of individual professionals with varied backgrounds, experiences, strengths, and areas of interest. Members with greater skill and confidence may more efficiently effect changes than novice, less confident practitioners. Teams need to consider the unique skill sets each service provider possesses when planning supports for particular families.

In addition, there are a number of program variables that have been described in the literature as fundamental to EI's mission of effectively supporting families to maximize the development of young children with disabilities. Programs that embrace capacity-building help-giving and family-systems interventions have been found to have direct effects on parent self-efficacy and well-being, which in turn have indirect effects on parent-child interactions and child development outcomes (Trivette, Dunst, & Hamby, 2010). Efforts should be made to maximize the percentage of time within home visits that is devoted to supporting dyadic, parent-child interactions (McCollum & Yates, 1994). Parent-child engagement has a powerful effect on child outcomes, but researchers have found that service providers do not spend as much time prompting effective parent-child interactions during home visits as they think they do (Basu, Salisbury, & Thorkildsen, 2010; Peterson et al., 2007). Finally, programs emphasizing a strong assessment system yield positive outcomes for children. Effective assessment occurs when programs have systems in place to collect data that would inform decision-making, document the

practice of parent- and provider-developed strategies, and demonstrate planning for learning opportunities (Bernheimer & Keogh, 1995; McWilliam et al., 2009; Sheridan, Clarke, Knoche, & Edwards, 2006). Such systematic procedures for planning and delivering support and collecting data about the effectiveness of the supports enhance the ability of IFSP teams to determine whether or not the "dosage" of service provided is appropriate, effective, and leading to positive child and family outcomes.

Method

A convergent parallel mixed methods design was utilized for this study (Creswell & Plano Clark, 2011; Morse, 1991). Complementary quantitative and qualitative data on the topic of interest was gathered and analyzed from multiple sources for two groups—pilot PRTs (n = 5) and non-pilot PRTs (n = 3). In particular, in keeping with the parallel-databases variant of the convergent design, the quantitative and qualitative data gathered about this topic were independently collected and analyzed (Creswell & Plano Clark, 2011). There was a point of mixing when each group's quantitative and qualitative results were integrated to provide a thick, rich description of that particular group. Finally, a cross-group analysis of pilot- and non-pilot site findings illuminates the similarities and differences between these groups, as well as generalizations about "what was learned" (Creswell, 2013) from this exploration of PRTs that have and have not experienced intensive professional development and technical assistance to utilize the RBI process for assessment and to write high-quality, functional IFSP outcomes.

There were three data sources. Interviews were conducted with selected EI supervisors, services coordinators, EI service providers, and family members. Throughout the remainder of this document services coordinators and early interventionists are referred to as "service providers." A representative sample of de-identified IFSPs was obtained through a partnership

with the PRTs and Co-Lead Agencies. In addition, the state-wide CONNECT data system provided information regarding the number of infants/toddlers referred to and verified for EI services by each PRT.

Reflexivity of the Researcher

The principal investigator has experience as an early childhood special educator in the field of school psychology and has received training in and used RBI. In addition, the investigator is interested in the measurement and impact of "dosage" in EI services. Philosophically, the strategies proposed by the Nebraska RDA process seemed to provide an interesting framework for investigating improvements in EI service delivery and learning more about what is occurring with "dosage" of EI across Nebraska at this time. The researcher's past personal experiences with similar PRT participants were set aside or "bracketed" (Moustakas, 1994), so that the voices of these participants could emerge.

Setting and Participants

The setting for this study was eight of the 29 PRTs that exist in the state of Nebraska. These PRTs varied in size, serving rural, suburban, and urban communities across the state. Within each PRT, there is a structure in place to assess infants and toddlers who are referred and provide EI and service coordination to young children identified with developmental delays or disabilities and their families. Personnel within these structures typically include services coordinators and their supervisors, EI or special education administrators or supervisors, and EI service providers (e.g., early childhood special educators, speech/language therapists, occupational therapists, physical therapists, and others). Families of children with verified disabilities or developmental delays are key partners in EI services, and thus, a representative sample of family members participated in the study as well. Five of these PRTs (#1, 4, 18, 22,

and 27) had participated in the pilot roll out of evidence-based practices to improve child and family outcomes—receiving systematic, intensive professional development and technical assistance in Strategies 1 and 2—when this study was completed. Three of the PRTs (#2, 6, and 15) had not yet received systematic planning-region wide training in the practices, although some practitioners in these regions had previous completed trainings offered across the state.

Procedure

Data collection. Three sources of data were collected and analyzed for this study. Consideration of multiple data forms allowed the research team to triangulate, and thus validate, findings about the PRTs' EI practices (Yin, 1989).

Interviews. Within each PRT, a purposeful sample of participants were selected to reveal different perspectives of the topics of interest identified in this study (Creswell, 2013). Services coordinator supervisors, EI administrators, early interventionists, services coordinators, and family members were asked to participate in internet (via Zoom) or face-to-face interviews with a member of the research team. For the five pilot PRTs, a total of 22 family members, 19 service providers, and 12 supervisors/administrators were interviewed. For the three non-pilot PRTs, a total of 8 family members, 11 service providers, and 8 supervisors/administrators were interviewed. Interviews lasted 30 – 45 minutes and were audio-recorded and transcribed. To protect the participants' confidentiality, each interview participant was assigned a numerical identifier and any personally identifying information was stored in a locked file cabinet separately from the data.

Two interview protocols were utilized—one for PRT professionals and one for families (see Appendix A). Questions probed the experiences of these participants with child/family assessment, development of IFSP outcomes, planning of services during IFSP development,

home visit practices, and subsequent satisfaction with services and child/family outcomes.

IFSP documents. A random sample of 30 IFSPs from reported years 2015- 2016 and 2016- 2017 from across the eight PRTs were obtained from the regions by the Co-Lead Agencies. Personal identifying information, such a children's names and birthdates, social security numbers, parents' names, addresses, and phone numbers, and service provider names were removed from the documents. The documents were identified with a numerical identifier. Each document indicated the PRT from which it was obtained, the outcomes written by the team, the type and amount of services to be provided, and the job title of the service provider(s) (e.g., early childhood special educator, speech/language pathologist, physical therapist, occupational therapist). A data collection protocol (Stake, 2006) was developed to provide for systematic review of these archival documents (see Appendix B). Data collected from the IFSPs included descriptive information such as number of child and family outcomes, frequency of home visits planned, length of home visits planned, and role(s) of the service provider(s) assigned to deliver the supports.

In addition, the IFSP Outcome Quality Checklist (Bainter & Hankey, 2015) found in Appendix C was utilized to analyze and describe the quality of the outcomes found in these IFSPs. This checklist is a modified version of McWilliam's *Goal Functionality Scale III* (2009). The developers of the modified checklist scored the sample of IFSPs and these results were shared with the research team.

Statewide CONNECT data. The Co-Lead agencies collect yearly data on the number of infants/toddlers referred to and verified for EI services by each PRT in Nebraska through the CONNECT system. These numbers are then converted to provide the percentage of infant/toddler referrals that are subsequently verified for EI services by PRT. The percentages for

the eight PRTs were obtained from the CONNECT system for the reporting years 2013- 2014 and 2016- 2017, as these represented a year prior to the pilot sites' formal training in Strategies 1 and 2 and a year after pilot site training in the two strategies was completed.

Data analysis. A basic qualitative approach (Merriam, 2009) was utilized to analyze interview data. The pilot PRT data was analyzed first, then the non-pilot PRT data. This allowed the research team to independently describe and understand how each group's participants experienced the process of assessing child/family needs and priorities, developing IFSPs, and implementing planned services and supports.

Interview transcripts from the pilot PRTs were uploaded to MAXQDA (Kuckartz, 2007) software for data storage and organization, efficient coding, and thematic development. Members of the research team performed a constant comparative method of analysis (Merriam, 2009). In an iterative and inductive process, transcripts were read, and meaningful segments of the text identified and labeled with initial codes by two independent coders. Coders then compared their respective identified codes and reached consensus on these. Next, categories of codes were aggregated to identify patterns or establish themes. Links between themes were documented, with an aim of developing a thick, rich description of the pilot PRT participants' experiences.

A similar procedure was used for the non-pilot PRT interview transcripts, however, the coding system from the first group offered a set of *a priori* codes that were used when coding the non-pilot PRT transcripts. In addition, other segments of interest emerged and were assigned new codes. The researchers compared the new assignment of codes and came to consensus when in disagreement.

Quantitative data analysis approaches were utilized for the CONNECT data and IFSP documents. The CONNECT system provided the percentages of infant/toddler referrals who

were subsequently found eligible for EI for the year prior to trainings and the year during which the new practices were implemented in the pilot PRTs. Data collected from the IFSPs provided descriptive information such as number and quality ratings of child and family outcomes, frequency of home visits planned, length of home visits planned, and role(s) of the service provider(s) assigned to deliver the home visits.

Validation and reliability strategies. Several strategies were implemented in an effort to ensure the credibility, integrity, and stability of study findings. First, analysis of multiple sources of data provided an opportunity to triangulate data and corroborate evidence (Merriam, 2009.) Next, rigorous strategies were applied to ensure the integrity of the qualitative results. At least two coders independently coded the interview data, compared identified segments, and resolved differences through consensus, bringing interrater agreement to the process of coding and thematic development (Armstrong, Gosling, Weinman, & Marteau, 1997). In addition, preliminary findings from the pilot PRTs were shared with some participants and other interested persons at the annual state Part C stakeholder group meeting and feedback was requested regarding the accuracy of the findings. This member check is considered by some scholars to be "the most critical technique for establishing credibility" of qualitative findings (Lincoln & Guba, 1985, p. 314).

Limitations. A number of limitations are inherent with any mixed method convergent design (Creswell & Plano Clark, 2011). From the standpoint of qualitative approaches, it is not possible to interview all participants, and those who may feel marginalized by the processes used by the PRTs may, in particular, be difficult to access for interviews. In addition, the information provided by the interviews is self-reported. These factors limit the generalizability of these findings. This study is designed to minimize this limitation by utilizing purposeful sampling to

ensure a wide variety of participant roles are represented in the interviews and random sampling to collect quantitative IFSP data, thereby ensuring that a representative group of children and families are analyzed in this study. In addition, the use of multiple data sources allows for triangulation of evidence, thus controlling for researcher bias.

Results

A thick, rich depiction of the EI service process experienced by families, service providers, services coordinators, and supervisors/administrators was derived from analysis of interviews conducted with purposefully sampled members of the five pilot site PRTs and three non-pilot site PRTs. Descriptive data collected from randomly selected IFSPs completed in these PRTs, and information gleaned from the CONNECT system examines additional facets of the process. These results are summarized below.

Qualitative Findings

Pilot PRTs. Twenty-two parents from 19 different families participated in interviews. These parents (average age = 31 years) had a total of 21 children (average age = 28.5 months) receiving EI services. Thirty-one professionals (average age = 44.5 years) were also interviewed. Demographic characteristics of the parents, children, and professionals are found in Table 1.

Table 1

Pilot Site Interview Participant Demographic Data

	Parents (n = 22 in 19 families)	Children (n = 21 in 19 families)	Professionals (n = 31)
Age	x = 31.09 years SD = 6.84	x = 28.52 months SD = 8.86	x = 44.52 years SD = 11.01
Gender			
Male	13.64%	71.43%	6.45%

Female	86.36%	28.57%	93.55%
Ethnicity			
Hispanic	4.54%	19.05%	---
Non-Hispanic	95.45%	80.95%	100.00%
Race			
Black/AA	---	4.76%	---
American Indian	9.09%	9.52%	---
Asian	---	---	---
Caucasian/White	72.73%	71.43%	100.00%
Native Hawaiian/Pacific Islander	---	---	---
Two or more races	18.18%	14.29%	---
Language(s) Spoken by Child			
English		95.24%	
Spanish		4.76%	
Other		14.29%	
Language(s) Spoken to Child in Home			
English	100.00%		100.00%
Spanish	4.54%		---
Other	13.64%		9.68%
Marital Status			
Married	50.00%		
Divorced	22.73%		
Single, Never Married	18.18%		

Separated	---		
Widowed	---		
With partner, not married	9.09%		
Highest Level of Education Completed			
Less than high school	---		---
High school/GED	18.18%		---
Some training beyond HS but not a degree	36.36%		3.23%
Two-year degree	13.64%		---
Four-year degree	18.18%		16.13%
Graduate degree	13.64%		80.65%
Years Employed in Current Position			*x*= 12.06 years *SD* = 10.69
Years Employed in Early Childhood (Birth – Age 8)			*x*= 16.44 years *SD* = 11.94

Four broad categories of findings emerged from the qualitative data. Each category is represented by a number of themes. The categories include (a) assessment of family and child priorities and concerns, (b) development of IFSP outcomes, (c) planning and delivery of EI services, and (d) EI workforce and consumer satisfaction.

Assessment of family/child priorities and concerns. Initial professional development efforts in the pilot site PRTs focused on training the use of Routines-Based Interviews to fidelity as an integral addition to the practices previously used by EI teams to assess and evaluate family/child strengths and needs, priorities and concerns, as well as child eligibility for EI services. Five themes emerged from the data collected in these PRTs regarding the assessment and evaluation practices.

Theme 1: What is gained from RBIs. Participants identified several profound impacts of the use of RBI. They report that adherence to family-centered practices is improved. Service providers said the process was "better for families" and "more family-driven." Service providers described getting a deeper look at family life, a family's priorities, and the challenges faced by families that ultimately resulted in driving the creation of outcome statements for the IFSP. One provider said:

> As far as the routines-based interview part where we are actually doing the assessment, [families are] really just telling their story and I feel like we're basically just documenting it. I mean, we might sort of guide the interview through their day, but really once we get them started on… what their day looks like, most of them will just sit and tell you their story, what their day looks like and what they do with their children and how that involves… their interaction.

Families and professionals described the in-depth RBI as quickly building a "foundation" for the parent-professional relationship. A service provider explained:

> It's just been surprising to me how much people are willing to share for the most part…Information that in the past we would get from families, but maybe over 6 to 8 to 10 months of developing a relationship… [is] out there in the beginning.

Detailed RBI information provided preliminary insight to EI service providers and supervisors about the supports needed by families to achieve their prioritized outcomes. This was reportedly linked to team decisions about types and frequency of services. There were, however, infrequent reports of services/frequency decisions being made by administrators.

Finally, EI service providers report an ability to glean information to complete standardized tools for verification purposes in the course of the RBI interview. This eliminates duplication of questions for families in this process.

Theme 2: Family perspectives of RBI. None of the family members in this study used the term "Routines-Based Interview" to identify the process they experienced in their introduction to EI. Almost all, however, used wording that would apply to this procedure in describing their experiences. Family members used terms such as, "interview," "in-depth questions," "lengthy conversation," and "thorough look at our day." One mother stated that by walking through the family's daily routines in this detailed manner, she "started to identify where the entire family was affected" by the child's disability.

Theme 3: Professionals' perspectives of RBI. The wording used by the professionals to describe the RBI also sheds light on their experiences using it with families: "conversation," "detail," "structured," "intensive," "personal questions," "family-led," "pleased with how it's worked," "has helped (families) feel more involved," and "we have better (family) participation." A participant stated that she, along with her colleagues, have been "gung-ho" in their commitment to implementation of the RBI practice. Another service provider noted this change in the assessment process due to the addition of the RBI:

> The number one thing that is going on in that interview is to really get to know the families. I feel like it's really beneficial. I feel like I've really gotten to know families and their routines so much better than the way we used to do it.

Several participants expressed that the "boot camp" training format, with the opportunities to see an RBI modeled and practice doing the interview with real families was beneficial, though intense.

Most EI teams would like the family's eventual primary service provider (PSP) to be involved in the RBI with the family as the interview is so instrumental in laying the foundation of future family-professional partnerships. This does not, however, always play out as most teams' ultimate selection of PSPs happens later during the IFSP planning process.

Some districts within the pilot site PRTs have adopted the practice of utilizing an RBI with nearly 100% of families referred to their EI teams. Such widespread use speaks to the value these teams find in gathering the detailed information from the RBI for purposes of making valid decisions regarding a child's eligibility for EI and for offering the family relevant recommendations should a child not qualify. On the other hand, the time and personnel needed to complete and report on an RBI can result in a strain on the already-stretched resources of some EI teams.

Theme 4: Challenges of the assessment process. Participants identified a number of challenges related to the assessment process. Scheduling conflicts arise among professionals on the teams, as well as when professionals attempt to mesh with family calendars. In particular, finishing the assessment and IFSP planning within the 45- day mandated timeline was the most frequently reported challenge. With the adoption of RBI, professionals report needing more time to incorporate the practice into the assessment process as well as complete written reports on the RBI results for the multidisciplinary team and/or IFSP documents. One service provider shared this issue with rescheduling with families:

> So we have to set another meeting, and sometimes, depending on schedules, that's the biggest problem. You've got all these peoples' schedules that you need to work with. You've got to get your LEA [school district representative]. You have to have the provider, the services coordinator, at the bare minimum to attend… Sometimes just

coordinating those schedules makes you…bump [the meeting] out further and that's the part I hate the most.

Professionals described the completion of an RBI as requiring a great deal of emotional energy, both for themselves and for family members. (It should be noted that family members interviewed for this project did not describe this phenomena.) In addition, some professionals reported conducting two RBIs in one day, a particularly tiring experience.

Team members report struggling to conduct RBIs with fidelity when cultural or language differences exist between the professionals and family members. It is, for example, particularly challenging and time intensive to gather detailed information about each routine of a family's day when working through an interpreter. One service provider said that since interpreters are not familiar with the tool, information may not be accurately conveyed to families or short-cuts may be used by the interpreter: "It's very difficult to deal with an interpreter…considering the interpreters [aren't] always relaying our questions word for word, maybe summarizing…It just doesn't flow the best in some of those situations." Another scenario that poses challenges is when children are in foster care. Teams focus supports on biological family members who may, at that time, have limited contact with their children and that contact may occur in neutral sites as opposed to home environments. Discussing usual routines under these conditions may not relate closely to the family's current experiences.

A final challenge described by professionals was that of keeping up with state-level expectations for the assessment process. Typically, changes or recommended practices are conveyed to school district administrators, who are then tasked to communicate the information to service providers. Participants reported variability in how well local administrators communicated this information to them. One supervisor said, "It's good to have those

conversations with NDE [Nebraska Department of Education], but sometimes you forget to tell the people in the trenches."

Theme 5: Suggestions for improvement of the assessment process. Primarily, suggestions for improvement of the assessment process involved support for families' orientation to the process. The multiple steps and variety of personnel that families encounter create a complex procedure that is completely foreign to most families. Various forms of "education" about this process were suggested by parents, for example, providing written materials explaining the process for families to read or connecting parents with other parents who have been through the process. Professionals acknowledged that stronger efforts to explain the process and ensure parents' understanding were often needed: "I feel like it might be helpful to have another way of walking [families] through the process…and I think if we could find a way to better communicate that to them, that would be helpful."

Finally, adaptations to the intake forms that are developed and used at a local level have not always kept pace with changes that have come about to the assessment process. For example, prior to the widespread use of RBI, services coordinators explored family concerns about referred children's functioning within the home environment. Now, this is systematically discussed in detail through the RBI. Revision of the intake forms would prevent duplicating questions asked of families.

Development of IFSP outcomes. The second round of professional development efforts for the pilot site PRTs addressed utilizing information gained from the RBI to prioritize and write functional and measurable IFSP outcomes. Five themes around IFSP development practices emerged from the interview data.

Theme 1: Fundamental shift toward functional outcomes. Professionals identified essential changes in this process that resulted in outcomes expressed in the words of parents and related to functional, everyday routines and activities. The outcomes also improved in measurability. Practitioners who had caseloads of preschool and school-age children stated that they could envision this format for writing outcomes being useful for children "up to age 8" or "to age 21."

Occasionally, parents needed a model or example of a way to measure their child's progress toward a desired outcome, but most reported soon catching on to this practice. Many parents readily and accurately described setting the measurement criteria for their children's outcomes. Parents articulated measuring success using the following terms: "distance walked," "number of steps walked," "number of feedings taken from the feeding tube reduced," "number of times he crawls with his head up off the floor throughout a week," "percentage of time he sits by himself without falling over," "saying 50 words," and "having under three (toileting) accidents a day." These criteria represented skills families found to be easily observed and measured across the routine activities of everyday life.

Theme 2: Influence of family culture on priorities. In the context of a family systems framework, culture may be defined as "the foundational values and beliefs that set the standards for how people perceive, interpret, and behave within their family, school, and community" (Turnbull et al., 2011, p. 8.) As a result of completing the in-depth RBI interview, service providers expressed having a deeper understanding of family culture and how this influenced a family's priorities in choosing particular IFSP outcomes. One professional said she was able to "see where a family was coming from" in choices made regarding what to work on first. Another professional explained: "We have a lot more variety of culture(s) and background(s) in our

district than we used to…Some of (them) lean (toward) different priorities." She now reports a better understanding of "why some things are not as important as other things (to a particular family)."

Theme 3: Family perspectives on IFSP outcome development. When asked how they determined what outcomes were priorities for their plans, parents said, "We told them what we wanted to work on," and "The main focus of his struggle led to a goal." A number of parents described the development of the IFSP outcomes as a "collaborative" effort with the providers. Several relayed the series of questions providers often used to help guide the process—what specifically would you like to see your child doing? What are some routines or activities where he/she could work on that? What will it look like when he/she can do it?

While families valued the opportunity provided through the RBI to share detailed information about daily family life, some desired more guidance with regard to prioritizing outcomes. Some were unsure of the best way to tackle the numerous areas of concern identified in the RBI. A parent explained how members of her team supported her prioritization of outcomes: "They… just help me organize what's more important… like priorities… because I might be stressed out about something but they usually have an insight about what I should figure out first, and what order I should do it so that it doesn't stress me out too much."

Theme 4: Professional perspectives on IFSP outcome development. Service providers described their roles in IFSP outcome development as sources of guidance to families. They shared that they "asked parents questions" to identify routines and measurement criteria for the outcome, offered "choices or suggestions" if parents were unable to articulate these components on their own, and helped families "be specific." One provider mentioned that different families needed "different levels of support" in the outcome-writing process.

A number of administrators expressed the view that service providers devised the outcomes ahead of IFSP meetings and then took these outcomes to families for review and input. This did not, however, match the widely described process of service providers and families that family words were used to write the outcomes. One administrator said:

> They, the services coordinator and the early childhood special education provider, go back to the RBI and they go back to the concerns that the parents had and the concerns are always ready, like this is our first concern, second concern, third concern…They look at those and they kind of write the goals based on those primary concerns that the parents have.

Another administrator explained:

> We really work as a team to determine how the goals are written, because my service providers are the ones to be carrying out those goals in most cases. So, we get the expertise from my speech language pathologist, for example. You know, occupational therapist, depending upon the needs of the family. Very collaborative.

Theme 5: Challenges of IFSP outcome development and suggestions for improvement.

Noted researcher, John Creswell (2013), speaks of "examining silences" in qualitative data with an aim of understanding "what is not said" (p. 186). In this set of data, it seemed remarkable that across professional and family participants, it was rare to encounter references to problems or challenges regarding the process of IFSP outcome development.

Although participants were directly asked, there were no suggestions offered for improvement of the IFSP outcome development practices. In contrast, many participants expressed a high level of satisfaction with this process and attributed the ease of writing IFSP

outcomes with families to the detailed information gathered through assessment of family and child needs through the RBI:

> The IFSP goals now are not taken off of... the Peabody or the assessment tool that we use because that may be not something the family is wanting their child to do or is important to them. Now, we are focusing on what can really help those families. I feel that has also really come along in the last few years that we've done this. We've gotten so much better with that and we've seen progress, because I know back in the day, they've had the same goals forever.

One challenge discussed by professionals was that they occasionally work with service providers and administrators who have not participated in the professional development activities. These individuals may operate from a "school-age" mindset with regard to writing outcomes.

Planning and delivery of EI services. Descriptions of teams' subsequent identification of service providers, setting of "dosage" of EI, and delivery of supports to families were of interest, given the extensive input into professional development for effective assessment of child/family needs and development of functional IFSP outcomes. Five themes emerged describing participants' experiences once IFSP outcomes were written.

Theme 1: Choosing EI providers and determining dosage of services. Use of a primary service provider model of service delivery was widely reported in the pilot site PRTs. See Shelden and Rush (2010) for a complete explanation of this model. Most families did not report active involvement in this aspect of decision making for their child and family, rather, common practice is that professionals made a recommendation and families generally rely upon their advice. Some families stated they did not fully comprehend what options might be open to them

as they navigated the complicated process of initial referral to and identification for EI services. One mother said: “I don’t understand why we didn’t have the physical therapist when he wasn’t walking.” With time, however, parents reported feeling comfortable asking for additional resources such as co-visits from other providers, or even changing service providers to address current family priorities.

Several families mentioned they had multiple service providers. For example, two therapists or a therapist and an Early Childhood Special Educator visited, alternating weeks. In addition, all families also had visits from services coordinators—usually monthly. One district reported a policy of having “two-by-two” home visits. Across PRTs, families were rarely able to clearly articulate what role their providers played, and several could not say when the next visit was occurring. Table 2 contains a tabulation of the frequency and length of home visits parents reported during the interviews.

Table 2

Family Report of Frequency of Home Visits in Pilot PRTs (*n*= 19)

Frequency of Visits	**# of Families Reporting**
Every week	4
Every two weeks	12
Once a month	3

Family Report of Length of Home Visits in Pilot PRTs (*n*= 14)

Length of Visits	**# of Families Reporting**
30 minutes	3
45 minutes	3

1 hour	6
1 ½ hours	2

Theme 2: What happens in a visit. Participants were asked to describe a "typical" home visit. The active engagement of families in home visits was reported to be generally high, with some exceptions noted by every service provider. Many participants reported that family members were often actively engaged in the home visits, with several attributing this to the selection of goals salient to families as a result of the RBI assessment. A service provider said: "I think that engagement has increased since moving to this model though. Because again, we're not going in and telling them what to do…we're going based off of their concerns."

Service providers acknowledged, however, that family engagement was variable. One said, "Some families, I've got both parents down on the floor doing something with me to try it out. Others I am pulling teeth to get them to answer a question for me or to try it. And I would say, it's probably half and half…of my caseload in terms of what…sometimes I have to do." Another provider stated, "Those [home visits] are the best when they do get actively engaged. I mean, that's what I'm striving for. It doesn't always happen, though, I'm going to be honest. It doesn't always happen."

The data revealed the presence of several types of interaction patterns in these home visits. These included parent-professional, parent-child, parent-child-professional, and professional-child interactions. Often parent-professional interactions involved exchanges of information. Parents updated the service provider on child progress or family events that had occurred since the previous visit. Participants said parents asked questions or identified new concerns or priorities. One parent described a typical home visit in this way: "They ask me every

week is he doing more of this, is he doing more of that. We check [his] goals." A service provider shared this account:

> I have one parent, especially, she's just very excited when I get there. [She] says, "Oh, all these things that we talked about last time, he's doing this, this, and this. I really want to focus on this, this time." She knows what to look for, and it makes her feel like she…became a parent instead of just me coming in to fix it when I get there. I really have felt that it's a huge change.

A few parents mentioned they primarily "just talked" to the service provider. One family said the child was not usually present at the visit which was held at a center-based program site.

In addition to parent-professional interactions, professionals described observing parent-child interactions: "We tell them we don't want to be a burden and something they feel obligated to do, but really, (focus on) what will best enhance… the interaction and the help they can give their own child." Another type of interaction depicted was parent-child-professional interactions:

> It's a great way to be able to coach them because, you know, you've got the mom, or whoever the primary caregiver is that you're working with, you've got the child…right there-- following through with… ideas, asking questions. You're able to direct them and give them that information.

Finally, there were numerous references to professional-child interactions. One parent described home visits from multiple providers in this way: "They come in and it's...actually kind of cute. They all sit on the floor. They sit on the floor with the kids and play with them." Another parent mentioned it was her "downtime," in that she could relax while professionals interacted with her child.

A number of elements that have been identified in adult educational coaching literature were mentioned as present during home visits (Hanft, Rush, & Shelden, 2004; Rush & Shelden, 2005; Stormont, Reinke, Newcomer, Marchese, & Lewis, 2015). These included "parent training," "giving feedback," "modeling," "demonstrating," "problem solving," "giving suggestions," and making an "action plan."

Theme 3: Role of routines. Within the Results Driven Accountability initiatives, families' daily routines have served as the foundation for the assessment process utilizing RBI, as well as the development and wording of IFSP outcomes. When asked specific questions about the role of routines in intervention practices, however, they seemed less likely to influence the structure or focus of home visits on a consistent basis. Participants mentioned that the following routines had, at least at one point in time, served as the context for real-time coaching or intervention: "feeding baby food while in high chair," "meal" or "snack" time, "dressing," "cleaning up toys," "playing," "reading books," "changing sibling's diaper," "playing at the park," "walking up and down stairs at home and in the community," "climbing on swing set," "crawling up into the car," "getting out of bed," and use of particular toys (e.g., "push toys," "chalkboard"). Other parents described discussing routines with their service providers, such as, "bed time," "walking in the park," "cuddling and watching TV with family," "toilet training," and "making choices at meal time."

Few parents reported regularly planning to convene a home visit around a particular routine. Some parents denied that their service provider(s) helped them or their children participate in any family activities or routines. Their comments included: "I wouldn't say they do that," "No, they just kind of let me do that," "No, We haven't had that," "They usually just like to help him and we watch," and "It hasn't worked out scheduling wise to do that yet, no."

Theme 4: Challenges with service delivery. A number of challenges in current service delivery practices emerged from the interviews. Families tended to report that when they have trouble using an intervention planned at their home visit, they wait until the next home visit to talk it over with their service provider. Many of these families also report that they have contact information for the provider and have been invited to call or email for support, they just do not do that.

Providers and supervisors noted that they often consider a practice called "front-loading" when planning EI services, which may be defined as allowing for more frequent visits early on with families with a plan to fade service as families grow more confident and competent. Yet, they also report that they usually do not end up using this strategy.

Finally, some professionals cited growing caseloads over the course of a year as having an impact on frequency of home visits offered to families:

> Professionally, kind of a challenge I would say is at the end of the school year when everybody's caseloads are full, full, full, full, full, and trying to be supportive of one another but yet knowing your limits…I would say that's probably the biggest challenge is just that ebb and flow of caseloads.

Theme 5: Suggestions for improvement of service delivery. One service provider suggested that the rich information gained in the RBI would be valuable when planning home visits. She wished for time to go back to the RBI results to reflect on what was said, how that might guide intervention or point her to routines that might have been difficult for the family. An EI supervisor suggested that service providers should improve in their use of "activity-based interventions, with bursts of service to provide more feedback [on a particular skill] in the moment." The supervisor acknowledged a related challenge to this approach: "That's a struggle

to do especially with… a lot of distance to drive and so forth. But…that has already improved, it's just I think that's an area that we really need to grow."

Finally, several families expressed a desire for "more," that is, more frequent visits or more time during the visit. One parent stated: "I think if we would have started off with having more sessions per month…I think that would have been better than starting with fewer and then me getting frustrated." Another shared: "I wish that we could get more of that same… collaboration… I don't know if it needs to be weekly per se, but just more frequent visits where someone is here continually helping me make sure I'm staying on track."

EI workforce and consumer satisfaction. The development and retention of a highly trained and qualified workforce in the field of early childhood special education is of concern nationwide (Institute of Medicine [IOM] & National Research Council [NRC], 2015). This study sought information about job satisfaction within the EI workforce in these five pilot site PRTs. In addition, data about consumer's satisfaction with programs provides vital insight regarding the social validity of the program approaches and interventions (Strain, Barton, & Dunlap, 2012).

The Co-Lead Agencies were interested, therefore, in better understanding the impact of the professional developmental trainings and technical assistance on the recipients of this support. From the professionals' perspective, the research team wanted to gather information about the infrastructure of the EI teams, cohesiveness of the teams, and individual service providers' levels of job satisfaction. From the consumer perspective, researchers explored family satisfaction with EI services. Four themes emerged from the participant interviews.

Theme 1: Minimal changes to EI team infrastructure. Most participants reported no additions to staff Full Time Equivalency (FTE) as a result of their teams implementing the professional development initiatives that resulted in regular use of RBI in the assessment process

and an increased number of functional IFSP goals generated by the RBI. There were, however, several reports of re-organization of existing staff across districts or ESUs. Primarily, staff that may have served birth to 5 or birth to 21 populations were reassigned to focus on EI service delivery. This strategy provided more flexibility for scheduling of collaborative team meetings, evaluation/assessment practices, and EI services within home and daycare settings that was not possible when staff members were tied to scheduled services for students attending preschools or schools.

Theme 2: Professionals report high levels of job satisfaction. Service providers and supervisors often reported that they "loved" their jobs. Further questioning revealed the qualities of the job that translated into a high level of job satisfaction. These included flexibility of schedule, variety of tasks, strong team relationships, and the intrinsic rewards found in working with families and their young children.

One service provider stated that she enjoyed the variety encountered on a day-to-day basis: "I just love that every day is a new day and a new schedule… new interactions, new things to think about." Another said,

> I love the fact that I do primarily birth to three, a little bit of three to five. I love that I'm in the homes, that I'm out and about and not staying in an office. I love the balance. I've seen kids and [done] paperwork and all of that.

Many service providers and supervisors described strong team relationships and administrative support as key factors in high job satisfaction. Participants used the following words and phrases to describe team relationships: "we get along well," "everyone is on the same page," "open dialogue," "supportive," "responsive to other team members' personal and professional needs," "outstanding," "tight-knit," "trust," "confident," "amazing," "exceptional,"

and “comfortable with each other.” Service providers claimed to feel unafraid to say what they were thinking in team meetings, and felt that other team members viewed them as capable of supporting the developmental needs of children across cognitive, language, social, and motor domains. A supervisor reported: “I would say, especially within their teams, they are like a family themselves.” Another administrator described relationships on his team as “tremendous” and went on to say: “I've been so impressed and pleased with the level of growth that I've seen in our EI teams…There's been a buy-in and a commitment to a different way of things, a research-supported way of providing services…There are no holdouts.“ Another participant observed, ”When you don't have that cohesiveness, it makes the job 100 times more difficult…I think we have a team that gels really well. Their personalities get along so that helps. Their philosophies are similar, that helps.”

Some participants identified changes prompted by the professional development initiatives as leading to improved job satisfaction. When asked about how he rated his level of job satisfaction, one supervisor said:

> Very high. [W]hen I think about job satisfaction I think about…the vision of how things can continually improve, and so I see I've been…energized and excited by what I've seen with this decision and these efforts to provide EI services differently.

Participants described the intrinsic rewards experienced when one works with young children and their families as contributors to high job satisfaction. A service provider stated:

> I've always enjoyed working with families. I guess…something that I really like is when I can see growth in a family being empowered…It really makes me feel better when I feel like I can see a difference in a parent…and the way they can advocate and they interact with their children.

Theme 3: Suggestions for improvement. When professionals were asked what would make their jobs better, the most common response was "time." Some service providers would like more time to collaborate with colleagues and plan home visits. Some would like to spend less time on evaluation and report-writing tasks. As time passes, service providers experience full calendars as additions accrue to their caseloads, resulting in less flexibility for scheduling visits. Many service providers experience frustration with regulatory timelines when scheduling families and numerous colleagues proves challenging. For example, providers have found that with some CAPTA (Child Abuse Prevention and Treatment Act) referrals, difficulties arise with contacting and scheduling several meetings with biological parents in a timely manner. Several supervisors suggested that more clerical and office assistance would free up time in their busy and varied schedules.

Districts represented by these PRTs vary in size and staffing patterns for EI teams. Some districts are large enough to have teams comprised of staff, at least in foundational roles such as Early Childhood Special Educator, speech/language pathologist, OT, and PT, dedicated to EI services. Other districts or ESUs form teams from staff whose roles cross programs such as preschool or school-age special education. One suggestion for improvement of EI team efficiency is the use of staff dedicated to EI only: "Sometimes I'm envious of large districts where they have everybody on the birth to three issues, birth to three…On this team, I'm the only one that's just birth to three, and then…our PT and OT, speech, we share them with school age…I understand that's just the nature of it, but it can be hard because everybody is being pulled in different directions." For many small districts and rural areas, however, this would be expensive and an inefficient use of limited resources.

Another suggestion for improvement regarding service delivery was for on-going

professional development building on the initial efforts rolled out by the state department. In particular, this provider requested further training for teams focused on planning who would deliver services to meet the outcomes defined in IFSPs.

Theme 4: Families report high levels of satisfaction with EI services. The parents interviewed described responsive relationships with service providers and satisfaction with both their children's and families' progress toward meeting IFSP outcomes. The following are representative quotes from parents: "The team now we've had come in here has just been off the charts," "We have a very focused approach," and, "I felt like they did a good job of lining us up with the correct people to address those concerns that we had at the beginning." One parent shared this assessment of the team that worked with her and her mother who was also a frequent caregiver for her children:

> My team was great from start to finish. They were able to explain things in a way that I would understand. I never had any extra questions at the end of the meeting…They had complete patience with both me and my mom, and then, also, the kids.

When asked what would make EI services better, many families expressed that they would not change anything about their experience. One mother said, "I honestly don't know that there is anything I probably would change."

Summary of pilot PRT qualitative results. Four broad categories of findings emerged from the qualitative data. These categories explicate how pilot site PRT participants experience the process of assessing child/family needs and priorities, developing functional IFSP outcomes, and implementing the services and supports planned by IFSP teams. In addition, findings related to EI workforce and consumers were reported.

Non-pilot PRTs. Eight parents participated in interviews. These parents (average age = 33 years) had a total of 9 children (average age = 20.2 months) receiving EI services. Nineteen professionals (average age = 49.8 years), including service providers, services coordinators, and supervisors/administrators were also interviewed. Demographic characteristics of the parents, children, and professionals are found in Table 3.

Table 3

Non-Pilot Site Interview Participant Demographic Data

	Parents (n = 8 in 8 families)	Children (n = 9 in 8 families)	Professionals (n = 19)
Age	x = 33.00 years SD = 4.66	x = 20.22 months SD = 9.32	x = 49.79 years SD = 10.28
Gender			
Male	---	55.56%	10.53%
Female	100.00%	44.44%	89.47%
Ethnicity			
Hispanic	---	---	---
Non-Hispanic	100.00%	100.00%	100.00%
Race			
Black/AA	---	---	---
American Indian	---	---	---
Asian	---	---	---
Caucasian/White	100.00%	100.00%	94.74%
Native Hawaiian/Pacific Islander	---	---	---

Two or more races	---	---	5.26%
Language(s) Spoken by Child			
English		100.00%	
Spanish		---	
Other		---	
Language(s) Spoken to Child in Home			
English	100.00%		100.00%
Spanish	---		15.79%
Other	---		10.53%
Marital Status			
Married	75.00%		
Divorced	12.50%		
Single, Never Married	12.50%		
Separated	---		
Widowed	---		
With partner, not married	---		
Highest Level of Education Completed			
Less than high school	12.50%		---
High school/GED	12.50%		---
Some training beyond HS but not a degree	50.00%		5.26%
Two-year degree	12.50%		---
Four-year degree	12.50%		15.79%
Graduate degree	---		78.95%
Years Employed in Current Position			*x*= 12.73 years

			SD = 8.87
Years Employed in Early Childhood (Birth – Age 8)			*x*= 21.39 years *SD* = 11.41

Four broad categories of themes emerged from the qualitative data gathered from the sample of non-pilot PRTs for this phase of the study. The categories included: (a) descriptions of assessment practices, (b) characteristics of IFSP outcomes, (c) EI service planning and delivery, and (d) EI workforce and consumer satisfaction.

Descriptions of assessment practices. Three themes emerged from this data that addressed current assessment practices in the non-pilot sites. The role played by families, what was gained by teams using RBI, and practices used to identify infants and toddlers for EI services were described.

Theme 1: Role of families. Eighteen unique participants described the role of families in the assessment process. Depending on whether or not the participants were on teams using RBI, the role of families in this process was described quite differently. Six participants specifically referenced the utility of RBI for establishing a "family-driven" focus within the parent-professional relationship. Service providers said, "The RBI is a wonderful tool to really get to know the family. And know better how to help them," and "They're… driving the process as far as we just have a systematic way of gathering that information through the Routines-Based Interview."

In contrast, twelve of the participants described families' involvement in the process in terms of using evaluation or screening checklists with families (e.g., Developmental Assessment of Young Children-2 [DAYC-2, Voress & Maddox, 2013]; Ages and Stages Questionnaire:3 [ASQ:3, Squires & Bricker, 2009]) or described families as engaged in providing information in general terms. The information provided by families was highly valued by professional team

members. Some examples of participant statements included: “They’re the main focus…they’re the ones that have all the information;” “We rely on them heavily, because they know their child. We're strangers and…sometimes little ones aren't the most cooperative with…people they don't know;” and, “I would say as much as we can, we try to get them to be…an actual joint effort…a partner in that process because the better we partner together, then, the more meaningful the information is.”

Theme 2: What was gained from use of RBI. Additionally, those participants whose teams described using RBI in their child/family assessment process related what was gained from using this tool, including identification of family priorities for IFSP outcomes, family language for use in writing the outcomes, insight into choosing a Primary Service Provider, active engagement of families in home visits, and uncovering of additional family issues or priorities beyond the initial referral concerns. One service provider stated: “All of the goals are family-driven that come up with the RBI.” An administrator shared:

> Through the RBI…the family is a major contributor to the IFSP now. And I have to be honest with you, prior to, it was a lot of the service providers and the services coordinators determining the goals for the child and we were lacking quite a bit in our PRT. As a whole, it was lacking family outcomes on the IFSP. So, the RBI has helped with that process and it has also helped with the parents being the…main driver of the information that ends up getting on to the IFSP or the goals determined by the team.

Another service provider shared, “There are so many other things that you're able to talk about…family needs and things through the RBI that it kind of puts things in perspective and helps them [families] prioritize exactly…where they want to start, how they want to start, and go from

there." One family member talked about her experience with the RBI, although she did not identify the interview by that title:

> We talked about…what process I do every day-- from when I first wake up with [the twins] until the time they go to bed. And I pointed out the main ones that were frustrating me, or…irritating me because I couldn't…figure out the communication or I couldn't figure out what they wanted. Or they would fight me during…dress[ing] time and they would fight during meal time. And those are my main goals to… just take a step back and just kind of study them and kind of learn…how they reach out to me.

Theme 3: Practices used to determine eligibility for EI. A third finding regarding the assessment and evaluation practices used in these non-pilot sites was that teams utilize diverse methods to find infants and toddlers eligible for EI services. Traditional developmental checklists, in particular the DAYC-2, were frequently mentioned and appeared to be used widely across the non-pilot PRTs: "Generally we do a skills evaluation first. Our district currently is using the DAYC." Teams often rely on medical records: "If it is a child who has a medical diagnosis at birth…we don't proceed with a skills assessment, we use the medical documents to determine eligibility." An administrator from one team described consideration of Adverse Childhood Experiences (ACEs) and expressed a need for more guidance from the Co-Lead Agencies: "I…have team members and teams that I work with that still struggle with that gray area in early childhood as far as looking at the information of ACEs and family dynamics." Some teams reported using multiple tests and/or checklists such as instruments designed for domain specific measurement (e.g., speech/language tools such as the Preschool Language Scale [Zimmerman, Steiner, & Pond, 2002] or Receptive-Expressive Emergent Language Test [Bzoch & League, 2003]). The Child Abuse Prevention and Treatment Act (CAPTA, 2016) requires

Health and Human Services workers to refer families of infants and toddlers to EI in all cases of substantiated abuse and/or neglect. The EI teams then contact the families who may voluntary participate in the intake, evaluation/assessment, and EI service process. Some teams consider such children "automatic qualifiers." One service provider stated, "In the case of a CAPTA referral or if it's a foster placement, we also know that we are going to intervene with that family regardless of skills. We do the skills evaluation and then we do the RBI to determine family priorities. But we then just use the clinical judgement in those cases, and we do determine eligibility." Administrators and service providers who serve teams in more than one school district report differences in levels of finding infants and toddlers eligible for EI services. An administrator said, "One team doesn't qualify enough, another qualifies everyone."

Characteristics of IFSP outcomes. Two themes emerged in the category related to IFSP outcomes generated by teams in the non-pilot sites. These included descriptions of RBI driving the process when teams used this tool and the relative roles of family members and service providers in the outcome-writing process.

Theme 1: RBI driving the outcome-writing process. Under half of the participant segments coded for outcome-writing referenced the RBI as integral to the process of choosing priorities and writing outcomes. One administrator referenced how the RBI was used to generate the language used in the IFSP outcomes: "We work on it right there with the family. We really do. Our primary question is, 'What would it look like in your home if your child was able to this?'" A service provider said the RBI aided in identifying family/child routines to state in outcomes.

> At the end of the RBI when we leave that family assessment we have a list of priorities. And if we've been good enough and we've dug deep enough, we know what routine that's going to

be, what time of day that's going to be, who is going to be [involved]-- we have a good idea of that.

Theme 2: The relative roles of family members and service providers in writing outcomes. Many family members reported that their professional team members helped them with the process by prompting them to identify what they wanted to work on, or by helping them get their thoughts down in writing. One parent said: "The wording is kind of confusing…but they would break it down [for] me," and another reported, "We set some family goals too." The interviewer probed for information about measurement criteria in the outcomes by asking families how they would know if an outcome was met. Parents described being able to observe a particular skill, such as, "go[ing] down a curb without having to hold onto something," "walking," "crawling," "drinking on her own," or "climbing stairs." Family members did not mention specific routines or child/family activities into which such skills would be embedded. One mother said, "It was just basic…it was…family, or family or therapist, would like to see her walk. Or family would like to see her say different words." Many parents and professionals mentioned an emphasis on family wording or language being used to state the outcomes, with shaping or "guidance" from professionals. One speech/language pathologist said: "We've learned that we do need to put things in parent terms, rather than my 'speechy' terms…[We are] really focusing on the family, given the words that they used in the RBI process."

There were some professionals, however, who described outcomes as generated by the service providers: "Our EDN coordinator actually writes the IEPs, develops the goals," and "the ECSE teacher prepares the draft." In all such cases, professionals stated that families were able to edit or approve the outcomes before finalizing the IFSP document.

EI service planning and delivery. Three themes emerged related to the practices of non-

pilot PRTs in planning and delivery of EI services to eligible infants/toddlers and their families. These included descriptions of methods for selecting services needed by the children/families and service providers to deliver the services, what happens in home visits, and "between-visit" implementation of interventions selected to support child and family progress toward meeting outcomes.

Theme 1: Methods for selecting services and service providers. Participants described three primary methods for making decisions about what services families would receive and who would deliver the services. One method consisted of the team considering the family concerns/priorities, IFSP outcomes, and needs of the child and attempting to match the provider(s) who could best address these to that child/family. An administrator said that his teams attempted to select "the provider whose…skill set or background experiences most fits that family." A second method was matching the educator or therapist to the child/family based on the child's special education verification. For example, a child with an orthopedic impairment would most likely receive services from the physical therapist while a child with a speech/language impairment would receive services from a speech/language pathologist. Finally, service provider caseloads drove some decisions as children and families were assigned to whomever had time in their schedule that matched family availability for home visits.

Many teams reportedly made these decisions in collaborative conversations with families, whereby professionals laid out typical practices and sought input from families regarding availability or preferences for frequency of home visits. One parent stated: "They always asked me what I wanted." However, another parent expressed that she wished she had received more information prior to making the initial decision regarding services. On some teams, professionals made the decisions without the input of families. A service provider reflected: "I don't think that

we have that discussion with the family." On rare occasions, family members indicated that they had made the choice of service provider(s). One parent said, "I chose the OT." Another parent said that she chose to have multiple service providers work with her: "I did all of them just to be safe."

Findings about teams' adoption of a Primary Service Provider model of service delivery were mixed. Several professionals indicated their teams were "planning" or "attempting" to use this decision-making model. Table 4 shows parent interview reports of the frequency and length of home visits, as well as the number of professionals providing these services. Many families reported working with multiple service providers.

Table 4

Family Report of Frequency of Home Visits and Service Providers in Non-Pilot PRTs (*n*= 7)

Frequency of Visits	**# of Families Reporting**	**Reported Service Providers by Family**
Six times a month	1	PT (2x), OT(1x), SLP (2x), HI (1x), SC (1x)
Every week	1	OT/PT alternate visits
Every two weeks	3	2 service providers at the same time SLP/ECSE alternate visits Single provider- did not identify role
Once a month	2	Single provider- did not identify role More than 1—"they come once a month"

Note. PT= physical therapist, OT= occupational therapist, SLP= speech/language pathologist, HI= deaf educator, SC= services coordinator, ECSE= early childhood special educator.

Family Report of Length of Home Visits in Non-Pilot PRTs (*n*= 7)

Length of Visits	**# of Families Reporting**
30 minutes	2
45 minutes	1
1 hour	4

Theme 2: What happens in home visits. Participant interviews painted a rich picture of typical practices occurring in home visits. Often visits began with the professional receiving updates from the family regarding changes in the child or family status, new concerns for child or family, or questions the family had for the provider. Several coaching practices emerged from the home visit data, including sharing information, modeling of strategies, practicing strategies, talking about strategies for distal routines (e.g., bedtime, bath time, rides in the car), and making suggestions. Parents were asked if the service provider helped them or their child participate in family activities and routines during the home visit. Three of the eight parents said no. Five parents said yes, and identified the following routines/activities: games, crawling, breakfast, and lunch. Professionals described supporting children in routines: "I'd like to come when that's going on, so meal time, bath time. And they're very open to that because it's their goal."

The data revealed the presence of several types of interaction patterns in these home visits. Nineteen segments coded as "interactions" included the child. Two described triadic parent-child-professional interactions, such as this parent observed: "They also make…me get down the floor and work with them. So they actually show me how to help her." Seventeen described dyadic interactions involving professional-child. One parent stated: "They brought things in, they always do," and another said, "When they're here, if he's hungry, they'll ask to

feed him. If he wants to play…they do some stuff like that. If we are sitting outside on the porch…they'll sit. They ask to hold him and… just play with him."

Professionals and parents reported documentation of the home visit as occurring on a regular basis: "[S]he always writes down her suggestions…She has a paper and she writes down the good stuff that he's doing and stuff that we can improve on and she usually puts… suggestions and everything on it too." Two parents described the documentation forms used by their teams as action plans prompting caregiver efforts to implement strategies between the home visits. One explained, "They fill out their paperwork and talk with me further… 'Ok, here's what you should focus on…before the next time I come. Let's try to make this happen.'" Another said, "Then down below [is written] maybe what to work on for the next visit and what I can do to help get him to that visit."

Professionals' perceptions of the families' level of engagement in the home visits were mixed. Many reported high levels of parent participation and effective partnership relationships, including this service provider:

> Thinking about the families that I work with right now, everyone's very actively engaged. Doing a lot of their own problem solving and…when I'll go to a visit, they'll say, oh, we just thought of this, we could try this at this time, that sort of engagement with the process really and taking that ownership over.

An administrator said:

> Our families are actively engaging. They are the teachers of their kids, the service provider of their children. They are on the floor with the team members playing and talking and learning and asking questions and sharing and we work really hard to build

> relationships with them and therefore, we get lots of really excellent family participation back, and engagement.

In contrast, some professionals were much less satisfied with levels of family engagement for families they served. One service provider stated:

> I would love for that to be better. I think that sometimes we don't always do a good job of explaining that we need the parents to be present, and that their job is to follow up on these things that we've discussed at the home visits. So that we can see what progress has been made, the next time we come to see them.

Other descriptors that emerged with regard to family engagement in home visits included: "50-50", "hit or miss", "it varies, it depends," and "very active, very good." One parent said: "[I] will try out a strategy once in a while."

Theme 3: "Between-visit" implementation of interventions. Detailed information regarding the "between-visit" implementation of interventions to promote child and/or family progress toward meeting IFSP outcomes emerged from the parent and professional interviews. Professionals described families with high levels of implementation: "by and large [they] do a great job," "40- 50% follow through on their assignment," and "I would say that's excellent-look at how it's making a difference."

Professionals also described families with low levels of implementation: "A lot of families…don't do the things that we thought we had agreed upon," "that's not well," "not so well," and "one-fourth to one-third of my families had no time, no opportunity, or they had questions and couldn't carry [the interventions] out." Further, the professionals shared these perspectives regarding why families do not implement interventions: "cultural beliefs," "life is

pretty hectic," "life takes a…detour," "no time or [they] can't find the materials," "maybe [they] feel coerced a bit, they tell providers what they want to hear, they're 'pleasers.'"

Parents were asked how the service provider ensured they were comfortable using strategies after the provider left. Some families were able to state the plan that they intended to implement (e.g., the mother said she was coached on how to get her child to sit up, the parent stated that she was going to print out behavioral tickets to use with all of her children). Another parent explained that she relied on the expertise and guidance of the service providers:

> They ask me "Do you have any ideas… or any thoughts or questions as to what you want to do next, how you want to see it?" And I mainly leave it up to them and I say "You tell me. You tell me and we'll do it." I feel more confident and comfortable in that, than me trying to make my own choice.

Most parents said that the service provider asked them how it had gone at the next visit. While several parents were satisfied with this approach, one parent talked about a particular strategy for feeding her child that was proposed in a recent home visit and said, "Well, I haven't seen them since, but it is going terrible."

Aside from the anecdotal updates gathered at subsequent home visits, no parents or professionals described gathering more formal or systematic data regarding between-visit implementation of strategies.

EI workforce and consumer satisfaction. Three themes emerged from the qualitative data including descriptions of the professionals' levels of job satisfaction, their suggestions for improving their jobs, and family descriptions of their levels of satisfaction with services and progress toward identified IFSP outcomes.

Theme 1: Professionals report high levels of job satisfaction. Service providers and supervisors frequently stated that they were satisfied with their jobs. Qualities that promoted this high level of job satisfaction included the interpersonal nature of the work, the ability to make a difference in the lives of families and young children, and the specialized focus on early childhood and special education.

One service provider discussed the love she had for her work saying "The kids are joyful and I get to laugh and have fun every day." Another said:

> I love working with families...one of my most favorite parts about my job is being able to go into family homes and really get down on the floor with families and their children and talk about what their dreams are for their babies and help them grow.

For many service providers supportive team relationships also contributed to their high job satisfaction. Participants spoke about how their teams share a "common vision" and are "honest," "cohesive," "respectful and collegial," and "collaborative."

One supervisor shared:

> I'm very fortunate. I supervise the best group of professionals. They work very well together. They know each other's strengths. It's just almost like a married couple, you know, one can start a sentence and the other one can finish it. They just support each other so nicely.

Theme 2: Professionals provide suggestions for improvement. Despite most participants reporting high levels of job satisfaction, EI team members had multiple suggestions for desired improvements for their jobs. Service providers expressed concerns regarding time constraints making it difficult to perform all of their expected job tasks. Many expressed frustration regarding the Part C mandated 45-day implementation timeline and how it was difficult to

appropriately gain information from families in such a short time. They also discussed difficulties in balancing the necessary time they felt they should spending on each family in light of large caseloads and time spent on necessary travel.

Service providers also expressed the desire to have dedicated teams or team members that focused on early childhood. One provider stated:

> I think professionally [on] our team here we have an EDN coordinator, we have an occupational therapist, speech language pathologist and we have a physical therapist...The person on our team that isn't there...is an early childhood special educator. We have a preschool teacher who…has a degree, a unified degree that allows for regular early childhood and special education. She attends meetings and provides input as far as our informal meetings. But she doesn't do any evaluation or service provision and she's a part of the preschool team. So I feel like that is an area that would add to our team and our entire process.

Additional professional development and training was also requested by multiple service providers and supervisors as they discussed the varying needs of both their teams and their families. Providers asked for more training on evaluation, goal writing, and the coaching process, as well as for information and techniques to help families in situations of distress. For example, one service provider explained that they were serving more children in foster care. She went on to say, “A lot of my teams are adapting to that, meaning we are dealing with some pretty heavy stuff, and just I would like to see more training on them...termination of parental rights...parent mental illness...dirty homes...domestic abuse.”

Theme 3: Families report high levels of satisfaction. Overall parents reported feeling satisfied with services provided, with many saying they had no complaints or nothing they would

change. Some representative family comments included: “We’re happy with it,” “Thankful,” and “We never have to worry or wonder.” One mother said, “I honestly have no complaints of the program or the people in the program. I wouldn't change it for anything…If it wasn't for their program, I think I would be a very frustrated mother.”

When asked about satisfaction with progress toward achieving IFSP outcomes, parents generally expressed that they were more pleased with their children’s progress toward outcomes than with their family’s progress toward family outcomes. For example, a mother made this comment when asked about her level of satisfaction with her child’s progress toward meeting her IFSP goals: “I think 100%. I’m just satisfied…it blows us away what she’s accomplishing right now.” With regard to family outcomes, on the other hand, parents often shouldered responsibility for the perceived lack of progress: “We’ve got to work on some of those yet…I think a lot of it is just me, I need to push myself more,” “[That] might be a little under satisfactory, but you know, it happens, I mean we’re busy.”

Summary of non-pilot PRT qualitative results. Four broad categories of findings emerged from the non-pilot PRT qualitative data. These categories detail how non-pilot PRT participants describe the EI assessment process, characteristics of IFSP outcomes, and EI service planning and delivery. In addition, findings related to EI workforce and consumer satisfaction were reported.

Quantitative Findings

Number and functionality of IFSP outcomes. The outcomes on the 30 IFSPs had been evaluated using the IFSP Outcome Quality Checklist (Bainter & Hankey, 2015) by the developers of the checklist. The checklist notes the demonstration or lack thereof of five quality indicators for each child outcome present on the IFSP, and three quality indicators for each

family outcome that is present. For example, quality child outcomes emphasize the child's participation in a routine, include an observable behavior useful in that routine, state a criteria for completion that is reasonable and linked to the outcome, are written in words the family would use, and are linked to family priorities listed in the IFSP. Quality family outcomes state specifically what a family will do in connection with a stated family priority, include a criteria for outcome completion, and are written in words the family would use. For each IFSP the number of child and family outcomes, as well as the total number of outcomes, was tabulated. Across these IFSPs, the number of outcomes varied. Therefore, for every IFSP, the percentage of outcomes in which each of the 8 child and family quality indicators was present was calculated. The calculations for the two groups of IFSPs were aggregated. Mean number of outcomes and mean percentages of quality indicators present are reported in Table 5. Statistical comparison of the means was conducted via independent t-tests. Due to the small sample sizes of these groups, the Hedges' *g* was calculated to estimate the effect size, that is, the degree of the difference between the means of the two groups. These results are found in Table 5 as well.

Table 5

Descriptive Statistics and Results and Effect Sizes of Independent T-Tests of Pilot and Non-Pilot Site Number and Quality of IFSP Outcomes

	n	*M*	*SD*	*t*	*df*	*p*-value	Hedges' *g*
Child IFSP Outcome Quality							
# of Child Outcomes							
Pilot Sites	19	3.74	2.31	2.30	25.42	.030*	0.81
Non-pilot Sites	11	2.00	1.79				
% of Child Indicator 1 Present							
Pilot Sites	18	84.11	28.99	2.82	15.31	.013*	1.19
Non-pilot Sites	11	41.82	44.27				
% of Child Indicator 2 Present							
Pilot Sites	18	76.06	37.01	2.15	18.39	.045*	0.86
Non-pilot Sites	11	41.82	44.27				
% of Child Indicator 3 Present							
Pilot Sites	18	41.00	30.78	2.88	26.63	.008**	1.00
Non-pilot Sites	11	13.36	20.79				

% of Child Indicator 4 Present							
Pilot Sites	18	80.28	33.43	0.70	18.39	.488	0.28
Non-pilot Sites	11	70.09	40.00				
% of Child Indicator 5 Present							
Pilot Sites	18	85.28	27.38	-0.87	26.94	.394	0.30
Non-pilot Sites	11	92.45	17.21				
Family IFSP Outcome Quality							
# of Family Outcomes							
Pilot Sites	19	2.32	1.77	3.14	28.00	.004**	1.031
Non-pilot Sites	11	0.73	1.01				
% of Family Indicator 1 Present							
Pilot Sites	18	85.17	34.75	-0.78	16.56	.445	0.26
Non-pilot Sites	5	93.40	14.76				
% of Family Indicator 2 Present							
Pilot Sites	18	70.39	42.62	-0.14	6.32	.895	0.07
Non-pilot Sites	5	73.40	43.45				
% of Family Indicator 3 Present							
Pilot Sites	18	90.72	27.59	0.51	4.88	.632	0.34
Non-pilot Sites	5	80.00	44.72				
Total IFSP Outcome Quality							
Total # of Outcomes							
Pilot Sites	19	6.16	2.71	3.86	25.44	.001**	1.37
Non-pilot Sites	11	2.73	2.10				

*$p < .05$. **$p < .01$.

The group of 19 IFSPs from the pilot PRTs had an average of 6.16 outcomes per IFSP, with an average of 3.74 of those focusing on child outcomes, while 2.32 focused on family outcomes. An emphasis on the child's participation in a routine (Child Indicator 1) and a link to the family's priorities (Child Indicator 5) were most commonly seen in the child-focused outcomes. These indicators were found be present, on average, in 84% and 85% respectively of the children's outcomes on these 19 plans. A criteria for outcome completion (Child Indicator 3), however, was only present, on average, in 41% of the child outcomes. For the family-focused outcomes, using words the family would use (Family Indicator 3) was most commonly seen with an average of nearly 91% of the outcomes demonstrating this indicator. A criteria for completion

of a family goal (Family Indicator 2) was found, on average, in just 70% of the family outcomes.

The group of 11 IFSPs from the non-pilot PRTs had an average of 2.73 total outcomes per IFSP, with an average of 2.00 of those focusing on child outcomes, while an average of 0.73 focused on family outcomes. An emphasis on using the words the family would use to describe the outcome (Child Indicator 4) and linking the outcome to the family's priorities as stated on the IFSP (Child Indicator 5) were the most commonly seen quality indicators in the child-focused outcomes. These indicators were found be present, on average, in 70% and 92% respectively of the children's outcomes on these 11 plans. A criteria for outcome completion (Child Indicator 3), however, was only present in an average of 13% of the child outcomes. Six out of the 11 IFSPs had no family outcomes. The five IFSPs that did, however, contained a high percentage of the quality indicators. A statement that is specific and based on a family priority from the IFSP (Family Indicator 1) was most commonly seen with an average of 94% of the outcomes demonstrating this indicator.

Training in the development of high quality IFSP outcomes had been systematically deployed across the pilot sites, while professionals in the non-pilot sites may or may not have taken advantage of offered trainings. A statistical analysis comparing outcome quality ratings from pilot site IFSPs to non-pilot site IFSPs was completed and the results are reported in Table 5 above. These results suggest positive and substantial impacts of the systematic professional development initiatives on both the number and some demonstrated indicators of quality of outcomes developed by IFSP teams. Specifically, pilot site IFSPs had more child outcomes (M = 3.74, SD = 2.31*)* than the non-pilot site IFSPs (M = 2; SD = 1.79). This mean difference was significant, $t(25.42) = 2.30$, $p = .03$, $g = 0.81$. Due to the small sample sizes of these groups, the Hedges' g was calculated to estimate the effect size, that is, the degree of the difference between

the means of the two groups. Theoretically, standardized mean differences in this type of group design can take any value, but Lipsey and Wilson (1993) reported that 95% of the mean effect sizes found in their review of 302 social sciences meta-analyses fell between -0.08 and +1.08. Historically, effect sizes greater than .8 are considered to be large (Cohen, 1977). Thus, systematic training and support for use of RBI with fidelity and writing quality IFSPs resulted in a large effect for a number of child outcomes. Pilot site IFSPs had more family outcomes on average as well (M = 2.32, SD = 1.77), when compared to the non-pilot sites (M = .73, SD = 1.01). The effect size was even stronger for this significant result, t(28) = 3.14, p = .004, g = 1.031. The pilot site IFSPs were, on average, within the range of overall number of six to twelve outcomes that McWilliam (2010) suggested would result from RBIs implemented with fidelity (M = 6.16, SD = 2.71). The non-pilot site IFSPs had a lower total number of outcomes (M = 2.73, SD = 2.10). This mean difference was significant, t(25.44) = 3.86, p = .001, g = 1.37. Thus, the training resulted in a large effect size for total number of outcomes on the IFSPs.

There were also significant differences between the two groups for three out of five child outcome quality indicators. This was analyzed by comparing the percentages of each indicator found on the IFSPs. This approach allowed the researcher to control for the differing number of outcomes per IFSP. Pilot site IFSPs had a higher mean percentage for child quality indicator 1—emphasizes child participation in a routine—(M = 88.11, SD = 28.99), when compared to the non-pilot sites (M = 41.82, SD = 44.27). The effect size was large for this significant result, t(15) = 2.82, p = .013, g = 1.19. Pilot site IFSPs also had a higher mean percentage for child quality indicator 2—includes observable behavior—(M = 76.06, SD = 37.01), when compared to the non-pilot sites (M = 41.82, SD = 44.27). The effect size was large for this significant result, t(18) = 2.15, p = .045, g = 0.86. Finally, pilot site IFSPs had a higher mean percentage for child

quality indicator 3—criteria for completion that is reasonable and linked to the outcome—(M = 41.00, SD = 30.78), when compared to the non-pilot sites (M = 13.36, SD = 20.79). The effect size was also large for this significant result, t(27) = 2.88, p = .008, g = 1.00. The mean differences in the percentages present for child indicators 4 (the outcome uses words the family would use) and 5 (the outcome is linked to a family priority on the IFSP) were not significantly different between the two groups.

While statistical analysis showed the two groups were significantly different with regard to the number of family outcomes present on the IFSPs, no significant differences were found between them with regard to the quality of family outcomes as measured by three indicators. That is, when non-pilot sites' IFSPs included family outcomes, they tended to demonstrate a similar level of quality to the pilot sites' IFSP family outcomes. Some possible explanations for this finding are that when teams write family outcomes it may be generally easier to attain the quality indicators for family outcomes than it is to attain quality indicators for child outcomes, or the non-pilot site IFSPs that contained family outcomes had been written by teams who had participated in the professional development strategies of RBI and/or quality outcome training. This finding regarding quality of family outcomes should, however, be interpreted with caution, as six of the 11 non-pilot site IFSPs contained no family outcomes while all 19 of the pilot site IFSPs contained one or more family outcomes. Further investigation of this phenomena with a larger sample size of IFSPs would be helpful.

Service providers assigned to support families. The service pages of the IFSPs yielded descriptive data about the providers assigned to deliver the supports needed to accomplish the IFSP outcomes. All 30 plans listed a services coordinator who would visit the family one time per month, although the length of visits varied across these plans from 15 to 60 minutes.

Seventeen of 19 pilot PRT IFSPS and six of 11 non-pilot PRT IFSPs listed a primary EI service provider along with the services coordinator. In the pilot PRTs, the majority of primary service providers were early childhood special educators (n = 9), followed by speech/language pathologists (n = 5), and occupational therapists (n = 2). One plan did not identify the role of the primary service provider. Two plans listed two providers. One plan listed an additional provider from an outside agency—a family support worker. In the non-pilot PRTs, the majority of primary service providers were speech/language pathologists (n = 3), followed by an early childhood special educator (n = 1), physical therapist (n = 1), and occupational therapist (n = 1). Four plans listed two providers, and one plan listed three.

Dosage of EI services. The IFSP service pages also reported the frequency and length of visits planned. These descriptive results are summarized in Table 6.

Table 6

IFSP Documentation of Frequency of Home Visits

Frequency of Visits	**Pilot PRTs (n=19) # of IFSPs Documenting this Frequency of Visits**	**Non-Pilot PRTs (n=11) # of IFSPs Documenting this Frequency of Visits**
Five times a month	0	1
Four times a month	0	0
Three times a month	1	2
Two to three times a month	1	0
Two times a month	5	2
One to two times a month	2	4
One time a month	8	0
Less than one time a month	2	2

IFSP Documentation of Length of Home Visits

Length of Visits	**Pilot PRTs (*n*=19) # of IFSPs Documenting this Length of Visits**	**Non-Pilot PRTs (*n*=11) # of IFSPs Documenting this Length of Visits**
30 minutes	5	4
45 minutes	11	6
45 – 60 minutes	1	1

CONNECT data. The percentages of child referrals who, subsequent to assessment/evaluation, qualified for EI in the PRTs was of interest. This data is collected in the CONNECT statewide data system and published by the Co-Lead Agencies. Results from the 2013- 2014 and 2016- 2017 reporting years are shown in Table 7 below. These years were chosen to represent data from the PRTs because they are pre- and post-RDA training efforts for the pilot PRTs in Strategies 1 and 2.

The descriptive data reported in the CONNECT system of the percentage of infants/toddlers referred who are subsequently found eligible for EI services demonstrates a great deal of variability. For two of the pilot PRTs (#1 and 4) the yearly percentage dropped from pre- to post-RDA professional development, while for three pilot PRTs (#18, 22 and 27), the yearly percentage rose. For two non-pilot PRTs (#2 and 15) the yearly percentage rose from 2014 to 2017, while for one non-pilot PRT (#6), the yearly percentage remained fairly stable. Variability in this data has a number of possible explanations including diverse evaluation/assessment practices and tools, differences in local policies and practices in use of "clinical judgment" when making eligibility decisions, differences in the populations represented in the PRTs, and other factors. It is important to note that the RDA professional development efforts aimed to improve

practices that are **not** directly linked to approaches for determining eligibility, thus, increasing these percentages or hitting some percentage target was **not** a goal of these initiatives. Nonetheless, this data is collected on a yearly basis and further inquiry into patterns of eligibility determination within and across PRTs in the state may be of interest.

Table 7

Percentage of infant/toddler referrals verified for EI services by PRT

	July 1, 2013- June 30, 2014	July 1, 2016- June 30, 2017
Pilot PRTs		
PRT #1	39.64%	32.08%
PRT #4	54.69%	51.96%
PRT #18	28.72%	32.91%
PRT #22	41.46%	52.38%
PRT #27	28.07%	42.20%
Non-pilot PRTs		
PRT #2	37.08%	41.30%
PRT #6	48.15%	46.24%
PRT #15	30.77%	44.83%

Summary of quantitative results. A randomly selected group of 30 de-identified IFSPs and their Quality Outcome Checklists were analyzed to compare number and quality of outcomes between the pilot and non-pilot PRTs. In addition, dosage of EI services (frequency and length of visits) was described for this group of children and families. Finally, the CONNECT statewide data system yielded information about the percentages of infant/toddler

referrals verified for EI services by PRT for a year before training and implementation of Strategies 1 and 2 and a year after. This data complements and/or corroborates data collected in the qualitative phase of this study.

Synthesis of Qualitative and Quantitative Findings

Implications of systematic training and technical assistance. The first research question this study aimed to answer was how systematic training and support for implementation of effective RBI assessment practices and writing quality IFSP outcomes in the Nebraska pilot PRTs informed the types of outcomes that were developed by IFSP teams, the functionality and quality of those outcomes, and EI service delivery. A synthesis of the qualitative and quantitative findings that resulted from a mixed method investigation yielded a number of implications. Seventeen out of 19 pilot PRT IFSP documents examined contained both child-focused and family-focused outcomes. All of the parents interviewed acknowledged identifying both child and family outcomes for their IFSPs. McWilliam (2010) suggests that "the product of a successful needs assessment and intervention planning process…would be 6 – 10 functional outcomes" (p. 97). In this study, the pilot PRT IFSP documents had an average of 6.16 total outcomes, with a range from 1 to 13 outcomes. These findings suggest that use of RBI in the assessment phase enables teams to generate an expected number of outcomes, and that both child and family outcomes are generally represented on the IFSPs in the pilot PRTs.

With regard to outcome quality, pilot site participant interviews yielded rich descriptions of parents actively prioritizing their desired outcomes for their children and stating those outcomes in their own words during IFSP development. The IFSP Outcome Quality Checklist confirmed this finding in that high percentages of the pilot PRT IFSPs met Child Indicator 4—Uses words the family would use, and Child Indicator 5—Links to family priority on the IFSP.

Interestingly, interviewed parents across the pilot PRTs were highly adept at explaining in specific and measurable terms how they were able to tell if the children achieved those outcomes. The related IFSP Outcome Quality Checklist indicator for this (Child Indicator 3), however, was found in under half of the outcomes written. A possible explanation for this discrepancy may lie in the more stringent standard set for measurability of an outcome by the checklist, while parents were able to explain measurability in a less formal manner.

For purposes of this study, dosage of EI service was narrowly defined as the frequency and length of home visits, as well as caregiver use of interventions between home visits. Qualitative findings indicated that parents from pilot PRTs were not typically included in the decision-making process of who would deliver EI services to their child/family. These decisions seem to be driven primarily by the developmental domain identified as the initial concern at referral as that often reportedly determined the role of the service providers tapped for the initial evaluation and assessment. An effective administration of an RBI, itself, promotes an early bond between professionals and families due to the in-depth and personal nature of the questions and active listening skills demonstrated by the interviewer. Thus, teams tended to choose one of these initial family contacts as the EI primary service provider. A number of EI teams stated that service provider decisions were guided by a structured decision-making process developed by Shelden and Rush (2010). This was completed by professionals in their team meetings. Parents often reported that their input regarding or approval of this selection was sought at the IFSP meeting. As parents became comfortable with EI, some said they asked for co-visits from other service providers or were comfortable changing service providers as warranted due to changing priorities for their children. Other families demonstrated a lack of awareness of the specific "role(s)" of their service provider(s).

Adding RBIs to assessment practices and the often resultant longer lists of outcomes to be addressed with children and families might be expected to result in the need for more professional staff. However, these professional development efforts have reportedly had minimal impact on the overall number of full-time service providers hired by districts and/or educational service units in the pilot PRTs. A re-organization of these resources has been reported by a number of these entities. This has often taken the form of dedicating service providers to work solely with EI or other community-based teams, freeing them from the school-based site schedules. This phenomena may reflect the adoption of a primary service provider that off-sets staff time previously absorbed by sending multiple service providers out to home visits. Professionals do report time stressors, however, particularly as caseloads grow throughout the year. Many state that more staff is needed to provide time to accommodate more in-depth assessments/evaluations, write reports of this work, and plan for home visits.

There were some differences noted between parents' reports of frequency and length of home visits and the dosage information documented on the 19 pilot PRT IFSPs. In the interviews, the majority of families reported having home visits two to four times a month, and for the majority of respondents, these lasted an hour. The majority of the IFSPs indicated planned visits one to two times a month, with most lasting 30 to 45 minutes. The families who participated in this study were notified of the study by their service provider and volunteered for the interviews, thus, there may be inherent differences in these families' levels of engagement and participation in EI services when compared to other family members who were not invited to or interested in being interviewed. Another possible explanation for the differences between parent report and IFSP documentation of frequency and length of home visits may simply be that some teams document conservative numbers and lengths of visits to ensure that levels of service

delivery stated on the IFSPs are met. This phenomena warrants more careful exploration in future studies of dosage of EI services.

It was only possible to gather information about caregiver use of planned interventions between home visits through the interviews. Service providers and supervisors were asked to share their sense of whether or not families implemented the strategies. Across the pilot PRTs reports were mixed—some respondents thought their families did fairly well based on follow-up discussions at the subsequent visit, several thought their families fell on a continuum from consistent use to not using planned strategies at all. None of the professionals reported collecting on-going data regarding strategy use or child progress. Families were asked how service providers made sure they were comfortable using strategies with their children after the service provider had gone. Most reported "talking" about their comfort level with the strategy, few reported trying it out when the service provider was there. A few parents said that if they had trouble using a strategy they waited until the next visit to ask for help from or to problem-solve with their service provider. This occurred even though the parents acknowledged that they had the service providers' contact information and would feel comfortable e-mailing, texting, or calling them.

The qualitative findings suggest a high degree of cohesion among the professional team members on the pilot PRTs EI teams. Many teams reported meeting together weekly or every other week for collaborative activities, such as coaching of colleagues, and scheduling. There were, however, some situations where regular team meetings did not occur—generally in rural districts where few infants/toddlers were identified for services.

All professionals interviewed in the pilot PRTs reported high levels of job satisfaction. Professionals primarily valued the intrinsic rewards found in working with families with young

children and observing change and progress. Families also expressed generally high degrees of consumer satisfaction with EI services. Parents were particularly positive about their children's progress toward achieving their IFSP outcomes. They were somewhat less enthusiastic when asked about their satisfaction with their progress toward achieving family outcomes, and interestingly, they often took responsibility for this, saying that they could be doing better.

"Business as usual" EI practices. The second research question asked about the comparison of EI practices in pilot and non-pilot PRTs. Thus, it was necessary to synthesize the qualitative and quantitative findings that resulted from studying the non-pilot PRTs to better understand the "business as usual" approaches used for child/family assessment, IFSP development, and EI service delivery in these sites. The three non-pilot PRTs selected for this phase of the study are representative of Nebraska PRTs who have NOT received the systematic intensive professional development and technical assistance from the Co-Lead Agencies on the evidence-based strategies of using the RBI with fidelity to assess child and family needs and priorities and to develop functional IFSP outcomes. It should be noted, however, that such training has been available in Nebraska for a number of years. Thus, although teams across the three non-pilot sites have not experienced wide-spread and systematic training in the strategies, particular service providers and/or teams may have been trained and may be using the strategies. This is also representative of conditions across the other, non-pilot "business as usual" PRTs in Nebraska.

With regard to assessment of child and family strengths, needs, and priorities, non-pilot PRT professionals described the importance of tapping into families for key information and they reported doing so at each step of the multi-step process from referral to IFSP development. Some of the strategies used with families included completion of intake interviews by services

coordinators, completion of eco-maps, engagement of parents in completing screening or developmental checklists, conversations with family members during evaluations, and completion of RBIs. However, the use of RBIs as a means to gather key information regarding child and family functioning across daily routines and activities was inconsistent. One-third of the 19 professionals interviewed specifically mentioned the use of this tool and the related benefits for IFSP development. The other two-thirds of the professionals mentioned standardized evaluation tools or medical records as the primary sources of child information, although the role of family members in completing evaluation tools or supplementing medical information was reportedly valued.

When families and professionals were subsequently asked about the process used to write outcomes for the IFSP, half of the non-pilot PRT participants referenced the RBI as providing the family language used to write outcomes and the method leading to prioritizing the goals. The alternative approach often was described as provider-driven, with professionals interpreting evaluation results, suggesting or discussing outcomes to address perceived skill deficits, and running a draft of these outcomes by parents for edits or approval.

Across the non-pilot sites, IFSPs analyzed by the research team tended to focus on a small number of child outcomes, and six of the 11 sampled IFSPs contained no family outcomes. All eight of the interviewed parents, however, indicated that their IFSPs had at least one family outcome and they were able to discuss their level of satisfaction in meeting their family goal(s). For the IFSPs with family outcomes, the percentage of quality indicators present was very high Child outcomes, however, often lacked an emphasis on child participation in a routine, an observable, measureable behavior, and any criteria for completion of the outcome. Strengths of the child outcomes in the non-pilot PRT sample were their family-centeredness. They tended to

be written in language the family would use (70% met this indicator), and they were linked to family priorities stated in the IFSP (92% met the indicator).

There was concordance between the qualitative and quantitative data regarding the reported "dosage" of EI services across the non-pilot PRT sites. Parents who were interviewed and the IFSP documents indicated most families received one to two home visits per month. Most parents reported visits lasted an hour, while most IFSPs indicated visits would last 45 minutes. Also, about half of the families and half of the IFSPs indicated a single EI service provider. The use of a primary service provider model of service delivery was inconsistent across the non-pilot PRTs sampled in this study. Several professionals indicated that their teams or districts are moving in the direction of using a primary service provider model. Interview participants reported that families usually had a minimal role in the planning of who would provide the services, though families were usually engaged in making decisions regarding how often they would have home visits.

Again, for the non-pilot PRTs, it was only possible to gather information about caregiver use of strategies with the children between home visits through participant interviews. There were anecdotal reports of high implementation and of low implementation. There were no indications by professionals or families that systematic data regarding implementation of strategies was collected. When asked how service providers made sure they were comfortable using suggested strategies, families reported they had tried them out or talked them through during the visit. Families said they would discuss any challenges with planned strategies at the next home visit.

Qualitative findings in the non-pilot sites indicated a high degree of cohesion among EI team members. Professional team members reported a strong sense of respect for and trust in

their colleagues leading to positive collaborations. Thirteen of 19 professionals reported monthly team meetings and two professionals were members of teams that met twice a month. There were two teams that held weekly meetings. One professional reported no regular meetings for her team. It should be noted that the districts represented in this sample ranged from rural districts serving a small number of children/families to larger districts with substantial caseloads.

Families expressed high levels of satisfaction with EI services and, often, the progress their children made toward achieving IFSP outcomes exceeded family expectations. Professionals expressed similar degrees of satisfaction with their jobs, although several suggestions for improvement emerged. In particular, professionals struggle with time and travel obligations. Training in addressing particular family needs such as those encountered in CAPTA referrals, families providing foster care, or families from diverse cultural backgrounds was identified as an area of focus for future professional development.

Comparison of EI practices in pilot and non-pilot PRTs. Systematic use of RBI with fidelity and training in functional IFSP outcome writing yielded, on average, more and higher quality outcomes in pilot site IFSPs when compared to non-pilot site IFSPs. Across all PRTs, participants using RBI reported improved family engagement in home visits.

EI service delivery practices were more similar than different across pilot and non-pilot sites as evidenced by a number of findings. Upon referral to EI, families are valued as partners in the evaluation and assessment process, however, families are not typically included in the IFSP decision-making step regarding who will deliver EI services to their child and family. Common activities of service providers during home visits include obtaining updates from families, modeling strategies, giving suggestions and feedback, and completing documentation of the visit

Some key coaching behaviors were not mentioned in either pilot or non-pilot PRT interviews (e.g., reflection, practice, goal-setting). With the exceptions of meal times and play times, families are rarely coached to practice a strategy with their child in the context of a family routine. Finally, data collection regarding family implementation of strategies "between home visits" was not mentioned by any participants. Thus, these findings seem to indicate that higher quality IFSPs are not sufficient in and of themselves to ensure use of routines-based interventions during home visits.

Recommendations

Implementation of strategies 1 and 2 yields higher quality IFSPs. Findings from this project confirmed the effectiveness of the two evidence-based strategies that have been promoted by Nebraska's Co-Lead Agencies in the first two stages of RDA training and technical assistance (Nebraska Early Development Network, 2013). The statistical analysis of IFSP outcome quality of the pilot and non-pilot PRT groups provides evidence that universal training and implementation with fidelity of RBI and IFSP quality outcome training yields significant and meaningful improvements in the number of IFSP child and family outcomes. Furthermore, child outcome quality indicators such as emphasizing child participation in a routine, identifying an observable child behavior, and establishing a criteria for successful completion of the outcome are advanced by this type of child/family assessment. In addition, the quantitative evidence is collaborated by qualitative descriptions provided by study participants. The State of Nebraska Co-Lead Agencies have a multi-year plan for furthering the reach of the RDA EI improvement strategies across all PRTs in Nebraska. This will bring uniformity to the state's use of best practices for child/family assessment and writing high-quality, functional IFSP outcomes.

Family participation in IFSP planning. An essential goal of EI is to build families' competence and confidence in advocating for their children. More transparency and inclusion of families in the IFSP team decision-making process regarding selection of a primary service provider and establishment of length/frequency of home visits is warranted. Professionals may be able to set the stage for parent engagement for such decisions by providing more information to families about various team members' areas of expertise, how team members collaborate and coach each other across developmental domains, what options for service delivery might complement the family's desired outcomes, and what other families with similar priorities have done. This may, admittedly, require even more time for outreach and communication with families during what professionals experience as an already tight federally mandated timeline.

Re-focus EI service delivery on family routines. While engagement in an RBI provides an effective process for families to prioritize outcomes for their child and family, and for teams to write IFSP outcomes in functional and measurable terms, as well as collaboratively plan EI services, it is not sufficient in and of itself to ensure effective implementation of those plans. Results from this study indicate service providers are not widely using family activities and routines as contexts for discussing, demonstrating, practicing, providing feedback on, or reflection upon evidence-based interventions. It is in such contexts that caregivers most benefit from coaching support (Hanft et al., 2004; McWilliam, 2010; Woods, Kashinath, & Goldstein, 2004; Woods, Wilcox, Friedman, & Murch, 2011). Coaching families within daily activities and a wider variety of routines would re-focus teams on parent priorities and strengthen the connections for these adult learners between proposed strategies and on-going use of the strategy. This would set the stage for more intentional action planning, including setting of goals for when, where, and by whom a strategy would be implemented. These steps are key to

maximizing the "dosage," that is the frequency and intensity of interventions for infants and toddlers, that occurs between visits.

In addition, when families encountered difficulty implementing a strategy, they reported waiting until the next home visit to address these issues. This occurred in spite of the fact that the families had provider contact information and reported feeling welcome to contact the provider. A critical feature of the action plan, therefore, will be an emphasis on communication. Providers may want to develop a plan in conjunction with families for "checking in" between home visits to assess strategy success. Today's technology provides many options for doing so in an efficient manner for both families and providers.

On-going progress monitoring. No EI service providers from across eight Nebraska PRTs sampled in this study reported frequent, on-going collection of data regarding child or family progress toward achieving IFSP outcomes. Having a written action plan has the potential to support service providers' efforts at follow-up home visits to collect data about family use of an intervention between visits—a key in a collaborative data-based decision making process (Bernheimer & Keogh, 1995; Sheridan et al., 2006). Such data provides evidence regarding the appropriateness of the "dosage" of intervention for ultimately achieving child and family outcomes. The Co-Lead Agencies are encouraged to provide professional development around a set of strategies for EI providers to engage family members in observing their children and documenting their use of and satisfaction with interventions between home visits.

The next phase of the RDA process is underway as the pilot PRTs have begun professional development and on-going technical assistance to implement the *Getting Ready* framework in home visits. This is the third evidence-based strategy in the RDA plan. It is anticipated that the *Getting Ready* approach will add structure and consistency to what happens

in a home visit, refocus the professional and family on daily activities and routines of concern, strengthen coaching practices, and prompt creation and follow-up evaluation of action plans (Sheridan et al., 2008). These are essential steps toward addressing the third area of need identified in Nebraska's RDA plan—strengthening of home visitation practices to provide support within the context of family routines (Nebraska Early Development Network, 2013).

Workforce-identified needs. Service providers across pilot and non-pilot PRTs in Nebraska express generally high levels of satisfaction with their jobs and strong commitment to the work they do on a daily basis. Families across both groups describe the trusting and collaborative relationships they have developed with the service providers. Thus, calls by service providers for on-going support and training deserve careful consideration from the Co-Lead Agencies. In particular, service providers and administrators frequently identified the following topics for further training and/or technical support: (a) cultivating relationships with and addressing the needs of families with diverse cultural or language backgrounds, or families referred through CAPTA; (b) the role of clinical judgment in the evaluation process, and consideration of Adverse Childhood Experiences; and, (c) strategies for managing intake, evaluation, assessment, and IFSP development tasks within the Part C mandated 45-day timeline.

Conclusion

The State of Nebraska Co-Lead Agencies have rolled out professional development and technical assistance for the first two evidence-based strategies of a Results-Driven Accountability process in several pilot PRTs. Implications of these strategies for IFSP development and EI service delivery were examined. The results of this study indicate widespread use of RBI with fidelity fosters early working relationships with families, and enables families to generate, using their own words, a group of quality IFSP outcomes. Higher

quality IFSPs, however, were not found to be sufficient in and of themselves to ensure use of routines-based interventions during home visits.

The next phase of the RDA process is underway as the pilot PRTs begin completing professional development and training to add the *Getting Ready* framework to home visits. It is anticipated that these approaches will add structure and consistency to what happens in a home visit, will allow providers to add more "coaching" tools to their tool kits, and will re-energize a focus on family routines as contexts for family-provider collaboration on interventions. Further professional development may be needed to prompt providers and families to gather data regarding child and family progress toward achieving the outcomes that are of such great importance to these families. These are vital steps toward addressing the third area of need in Nebraska—strengthening of home visitation practices to provide support within the context of family routines (Nebraska Early Development Network, 2013).

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Appendix A

Family Team Member Interview Protocol

Project: Understanding Early Intervention Services in Nebraska
Participant ID#:_____
Time of Interview:_____
Date:_____
Place:_____
Interviewer:_____
Say: Thank you for agreeing to chat with me about your experiences with Early Intervention services for your child and family. Before we begin, I'd like to go over the consent form with you. *After obtaining interviewee signature:* OK. Let's get started.

Questions:

1. Describe the process that you and your team used when your child was referred to the Early Intervention team to identify the concerns and priorities for your child and family, as well as your child's and your family's strengths.

   How did you decide what to focus upon in Early Intervention?

2. What would have made that initial process of identifying those strengths, concerns, and priorities better for you and your family?

3. How did you and your team identify what outcomes/goals should be on your child's IFSP? Describe the process used to write the outcomes/goals.

   How did you and your team decide how you would know when those outcomes/goals were met?

4. What would have made the process of choosing and writing outcomes/goals better for you and your family?

5. Describe how you and your team determined what services your family and your child received and who would deliver those services.

   How did you determine how often the service provider would visit your home and how long the visit would last?

6. What would have made the process of identifying services and who would work with your family better for you?

7. How would you describe your working relationship with your Early Intervention service provider(s)?

8. What does a typical home visit look like for you and your child?

9. During the home visits, does the service provider help you and your child participate in your family's activities and routines? If so, what activities or routines?

10. How does the service provider make sure you are comfortable using strategies/ideas after the provider is gone?

11. What would make Early Intervention services better for you and your family?

12. How would you describe your level of satisfaction with your child's progress toward meeting his/her IFSP outcomes/goals?

13. How would you describe your level of satisfaction with your family's progress toward meeting family outcomes/goals?

14. Is there anything else you would like to share about the process you and your team used for identifying your priorities, IFSP planning, or Early Intervention service delivery that we haven't yet talked about?

Thank you for your time!

Professional Team Member Interview Protocol

Project: Understanding Early Intervention Services in Nebraska
Participant ID#:_____
Time of Interview:_____
Date:_____
Place:_____
Interviewer:_____
Say: Thank you for agreeing to chat with me about your experiences with Early Intervention services in your community. Before we begin, I'd like to go over the consent form with you.
After obtaining interviewee signature: OK. Let's get started.

Questions:

1. Once a referral of a child/family is made to your team, describe the process that your team uses to assess child/family strengths, concerns, and priorities.

2. How would you describe the role of family members in the assessment process?

3. What would make the assessment process better for you?

4. How does your team decide what outcomes/goals should appear on the IFSP? Describe the process used to write the outcomes/goals.

5. How would you describe the role of family members in choosing and writing the outcomes/goals?

6. Describe how your team determines what services the child/family will receive and who will deliver those services.

7. How would you describe the role of family members in planning services and who would work with their family?

8. What would make this IFSP planning process better for you?

9. How would you describe the working relationship among the professional members of your team? Do you have team meetings? If so, how often?

10. How would you describe your personal level of satisfaction with your job? What would make it better?

11. **(For pilot site participants only)** What changes have you seen in your assessment process since your team began participating in the pilot project?

12. **(For pilot site participants only)** What changes have you seen in your process of choosing and writing IFSP outcomes/goals since your team began participating in the pilot project?

13. **(For pilot site participants only)** What changes have you seen in the planning and delivery of services since your team began participating in the pilot project? Has your team made any changes in the number of or type of service providers on your staff?

14. How would you describe family participation in Early Intervention services in your community in terms of keeping appointments for home visits?

15. How would you describe family participation in Early Intervention services in your community in terms of active engagement in home visits?

16. How would you describe family participation in Early Intervention services in your community in terms of families implementing planned interventions between home visits?

17. Is there anything else you would like to share about the process your team uses for assessment, IFSP planning, or Early Intervention service delivery that we haven't yet talked about?

Thank you for your time!

Appendix B

ARCHIVAL IFSP DOCUMENT CODING PROTOCOL

Participant ID#:_____ PRT#_____ Pilot ☐ Non-Pilot ☐

Roles of IFSP Team Members:_____

_____

Date of Document Creation:_____

<table>
<tr><td>Description of outcomes:

1. # of child outcomes _____
2. # of family outcomes_____
3. Total # of outcomes_____
4. Average quality outcome rating for this IFSP _____</td><td rowspan="2">Description of plan for service:

1. What is (are) the role(s) of service provider(s)?_____ _____ _____
2. Frequency of visits_____
3. Length of visits_____</td></tr>
<tr><td>Uniqueness of situation for experience of process:</td></tr>
<tr><td>Potential categories/ themes:</td><td>Possible excerpts for triangulation:

Page:
Page:
Page:</td></tr>
<tr><td colspan="2">Commentary (quotations, incidents, or impressions):</td></tr>
<tr><td colspan="2">Factors (factors or variables related to topic of interest that emerge):</td></tr>
</table>

Adapted with permission from Stake, R. (2006). *Multiple case study analysis.* New York, NY: Guilford Press. Retrieved from http://education.illinois.edu/circe/EDPSY490E/worksheets/worksheet.html for use by Kuhn, M. (2017) Improving early intervention services in Nebraska through a results-driven accountability process.

Appendix C

IFSP Outcome Quality Checklist Outcome #: _____

Child NSSRS: _____Connect #:___IFSP Date: _____PRT #:_____ Rater:_____ Date Completed:_____

Child Outcomes – Does the Outcome:	**Yes (+)**	**No (-)**	**Comments**
1. Emphasize child participation in a **routine(s)**? (Child will participate in *outside time* by….*NOT* child will participate in *running; or* child will participate in *breakfast and snack time* by….*NOT during eating and drinking times).*			
2. Include **an observable indicator** of what the child will do that is necessary, clearly connected, and/or useful in participating in the **above routine(s)? (Routine(s) must be identified in #1 to score a +).** (Child will *hold spoon for 4 bites* during ….*NOT grasps spoon;* or child will *use word or sign to let family know* during….*NOT* child will *not scream;* or child will *play with a car by rolling it on the floor* at playtime*...NOT* child will *sit up and hold bottle* at….*)*			
3. Include a reasonable time frame for completion, with criteria that are clearly linked to the outcome? (Child will hold spoon for 4 bites at lunch *each day for 2 weeks… NOT 3 of 4 trials;* or child will use 2 words together at playtime *on the weekends for 2 weeks…. NOT 1 day across 3 observed days/sessions)*			
4. Describe priorities in words the family would use (i.e. jargon-free)?			
5. Link to the family priorities as listed on page 2 of the IFSP?			
Family Outcomes – Does the Outcome:	**Yes (+)**	**No (-)**	**Comments**
1. State specifically what the family will do (i.e. the family is the actor) based on a family priority as listed on page 2 of the IFSP, i.e. reflecting a family need or interest? (Sally will *get information about child care or respite…. NOT have knowledge of medical, financial, and developmental services;* or Russ will *feel satisfied or comfortable that he knows how to play with Ronnie…. NOT* family will *play appropriately with their child)*			
2. Include an indicator of when or how the family will know the goal is met? (find child care *by June 15 or by the end of the month)*			
3. Written in words the family would use? (I.e. jargon-free…. NOT *family will utilize resources in their community*. **(If it is difficult to determine whether the outcome is written in the "family's words", score as a "yes").**			

Please check one:____Child Outcome_____Family Outcome **Raw Score for this outcome** (# correct items/total # of items)_____

Instructions for completion: Rate each IFSP outcome using a separate page. Begin by categorizing the outcome as either a **family** outcome in which the parent's name is specified as the focus; or as a **child** outcome in which the child's name designates the focus. Using the appropriate section, rate the outcome on each of the criteria listed. A (+) indicates the criterion is present, a (–) indicates it is missing. Use the comments section for feedback or next steps. Record the raw score for this item in the space provided. When all outcomes on the IFSP have been scored, complete a summary sheet. *(Adapted with permission from RA McWilliam Goal Functionality Scale III, 2009.)* Bainter & Hankey (2015). Nebr. RDA project.