



# BIRTH TO 3 SOCIAL- EMOTIONAL INNOVATION GRANT EVALUATION

Final Report

## Acknowledgments

Thank you to the following for their support of the evaluation of the Birth to 3 Program Innovation in Social-Emotional Development initiative:

- Wisconsin Department of Health Services
- University of Wisconsin Institute for Research on Poverty
- Molly Murphy - Waisman Center Autism Treatment Programs
- Birth to 3 Program families
- Birth to 3 Program staff

The authors of this article are solely responsible for the content therein. The authors would like to thank the Wisconsin Department of Health Services for the use of data for this analysis, but these agencies do not certify the accuracy of the analyses presented.

## Table of Contents

<b>Acknowledgments</b> .....	1
<b>Executive Summary</b> .....	3
<b>Project Summaries</b> .....	5
<b>Client Interviews</b> .....	8
<b>Staff Interviews and Focus Groups</b> .....	10
Time 1 - March-April 2021 .....	10
Time 2 – Winter 2021 .....	15
<b>Staff Survey Data Analysis</b> .....	18
Time 1 – Spring 2021.....	18
Time 2 – December 2021.....	24
<b>Program Participation System (PPS) Analysis</b> .....	29
<b>Policy Recommendations</b> .....	38
<b>References</b> .....	39
<b>Appendixes</b> .....	40
Appendix A - Client Interview Guide.....	40
Appendix B - Staff Interviews and Focus Groups Interview Guides.....	41
B1 - Time 1 Interview Guide.....	41
B2 - Time 2 Interview Guide.....	42
Appendix C - Staff Survey Data Tables .....	43
Time 1.....	43
Time 2.....	48
Appendix D - Program Participation System (PPS) Descriptive Data for non-Grantee Programs .....	49
Appendix E - Program Participation System (PPS) Historical Trends in Select Variables for Grantee Programs.....	51

## Executive Summary

On July 1, 2020, the Wisconsin Department of Health Services awarded 15 grants to Birth to 3 Programs across the state to pilot new efforts to improve social and emotional outcomes for participating children. The Innovation in Social-Emotional Development initiative supported program enhancements that help families meet the needs of children with developmental delays and disabilities, including those who come to the attention of child protective services (CPS). Proposed innovations during these 18-month projects included: (1) advanced training in recommended screening, assessment, and intervention strategies, (2) improved coordination of services and collaboration between Birth to 3 Programs and CPS, and (3) media campaigns to raise public awareness of the Birth to 3 Program. A summary of the 15 innovation projects can be found on p. 5.

A team from the University of Wisconsin-Milwaukee was contracted to conduct a mixed-methods evaluation of the initiative. Qualitative data were gathered through interviews and focus groups with Birth to 3 Program representatives and CPS-involved families who received Birth to 3 Programs. Survey data were also collected at two time points from Birth to 3 Program providers and administrators. Additional data obtained from the Program Participation System (PPS) were analyzed to document trends in Birth to 3 Program services and outcomes of children and families served.

Interviews with parents whose children were referred to Birth to 3 Programs by CPS revealed that communication with CPS workers about Birth to 3 Programs could be clearer and that the referral process could be streamlined by minimizing duplicate assessments. Nevertheless, parents had positive perceptions of Birth to 3 Programs overall, and they appreciated the Primary Coach Approach to Teaming that linked them to a provider who helped to guide them through services. Parents reported that they benefited by receiving guidance in positive parenting strategies and with accessing services for their children. For parents whose children are placed in out-of-home care, Birth to 3 Program services offer opportunities to see their children and continue having a voice in parenting decisions.

Interviews and focus groups were completed with Birth to 3 program professionals at the project midpoint and at the end of the evaluation. Reinforcing parents' perspectives, Birth to 3 program staff reported that CPS workers may not be trained to detect child social and emotional difficulties, and they were not always well informed about Birth to 3 services. CPS-involved families also often reported experiencing stigma. Therefore, to promote successful engagement in Birth to 3 services, it is important that families receive clear, consistent, and strengths-based messages. Once families are engaged, Birth to 3 staff screen and assess children's social and emotional development using a variety of validated tools, which they pair with professional judgment to inform Individual Family Service Plans. The innovation grants enabled many providers to receive advance training in validated social and emotional screening, assessment, and intervention approaches. Although the COVID-19 pandemic delayed project timelines and required many activities to be completed virtually, most planned training and professional development activities were successfully completed. Participants also indicated that the grants led to improved alignment between Birth to 3 programs and CPS in some localities, and in two counties media campaigns were launched to raise public awareness of the Birth to 3 Program.

Results from an analysis of staff survey data collected at the project midpoint reinforced some of the barriers to engaging families in Birth to 3 program services, foremost of which were parents' mental health difficulties, conflicting work schedules, and feelings of being burdened or overwhelmed by other

child appointments. When children were successfully referred, Birth to 3 program providers indicated that they are confident in their ability to accurately screen for social and emotional delays and to monitor progress over time. They generally favored the use of evidence-based measures and interventions, though perceptions varied regarding the cross-cultural validity of the approaches they use.

A second wave of staff survey data collected at the end of the initiative underscored many pandemic-related barriers to completing assessments and engaging families while also highlighting some advantages of virtual services such as increased scheduling flexibility and convenience for staff and families. Despite the pandemic, most staff indicated that the projects had improved relationships within Birth to 3 program teams and collaboration with external providers and agencies. Many respondents affirmed that the project's training and professional development activities had increased staff knowledge, skills, and confidence to address children's social and emotional challenges, and they recommended further investments toward (a) cultivating a well-educated and highly skilled workforce, (b) improving the identification of social and emotional difficulties and the transition to appropriate intervention, (c) strengthening families by empowering parents and creating opportunities for social connection, and (d) improving collaboration between Birth to 3 programs and CPS along with other local agencies and providers.

PPS data associated with children who received Birth to 3 Program services between January 2017 and December 2021 were analyzed to assess change in services and social and emotional outcomes over time. Trends before and after the start of the project periods were compared along with differences between children served in counties that received innovation grants and those that did not. Results confirmed that social and emotional delays are highly prevalent among children receiving Birth to 3 Program services, and that these difficulties are more commonly identified among boys and children of color. The findings also pointed to likely impacts of the pandemic. Birth to 3 Program enrollments fell dramatically in early 2020, and the proportion of children served with social and emotional concerns and communication delays were much higher during the pandemic.

Children's social and emotional functioning improved significantly while receiving Birth to 3 Program services. To illustrate, less than 20% of children met age expectations for social and emotional functioning at service entry, but by service exit more than 40% met age expectations. At service entry, children served by non-grantee programs had higher average social-emotional scores, but at service exit children's scores did not differ between grantee and non-grantee programs. These findings indicate that, when compared to children served by non-grantee programs, children served by grantee programs made larger gains during their Birth to 3 service period.

## Project Summaries

This section summarizes the pilot projects that were implemented by Birth to 3 Programs that received an Innovation in Social-Emotional Development grant.

The **Barron County** project focused on strengthening team leadership through participation in the Wisconsin Infant Mental Health Reflective Supervision Learning Collaborative, building team capacity through training and implementation of the Devereux Early Childhood Assessment (DECA) and Your Journey Together (YJT) Curriculum, and integrating case-based discussions into their team schedule routinely.

The collaborative **Chippewa and Eau Claire Counties** project focused on collaborating with child protective services (CPS) and building team capacity through training and implementation of the DECA, Devereux Adult Resilience Survey (DARS), and YJT Curriculum.

The **Fond du Lac County** project focused on collaborating with CPS and training of staff to implement Parents Interacting with Infant (PIWI) and Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO). Additionally, the grant supported a literacy initiative to distribute books and to improve parent visitation rooms with the aim of improving caregiver-child interactions.

The **Jackson County** project focused on staff training and implementation of Circle of Security and the Ages and Stages Questionnaire (ASQ). The project also included ongoing trainings with Birth to 3 Program staff, parents and community partners in trauma informed care and resilience, and it aimed to promote leadership development through reflective supervision training.

The collaborative **Jefferson and Dodge Counties** project focused on the training of staff and implementation of Brazelton Touchpoints Approach in collaboration with staff from CPS. Project funds were also used to increase sustainability by promoting the professional development of two staff members who were trained as trainers in this approach.

The **Kenosha County** project developed parent focused materials, social media campaign, micro videos, and online “Parent U” program focused on promoting social emotional development and mindfulness. Additionally, they trained staff in Parent-Child Interaction Therapy (PCIT), which is an evidence-based intervention for young children with social and emotional difficulties, an Autism Navigator course through the University of Florida, and additional training in social-emotional development, functional outcome writing, and mindfulness.

The collaborative **La Crosse and Vernon Counties** project focused on the training of staff and implementation of Circle of Security and Infant Mental Health Capstone. The grant also supported activities to increase capacity and collaboration between the Birth to 3 Program, CPS, and the Safe Babies Court.

The **Milwaukee County** project focused on staff training and implementation of the ASQ-SE, Social Emotional Assessment Measure (SEAM), Facilitating Attuned Interactions (FAN), and Healing Focused Care Trainings. The Parenting Network developed a number of trainings specifically for Birth to 3 Program families. Additionally, a multimedia campaign was introduced that used social media and radio

advertisements to share public messages about the importance of children's social-emotional development and Birth to 3 Program services.

The collaborative **Monroe, Columbia, Juneau, Marquette, and Adams Counties** project focused on the training of staff and community partners in Circle of Security. They also began to use the DECA and the PICCOLO to assess parental capacity and child social-emotional development.

The **Pierce County** project focused on staff training and implementation of Positive Parenting Program (Triple P) Primary Care Stepping Stones. The project also aimed to enhance collaboration with CPS by training staff in Parents as Teachers, and by developing information sharing and warm handoff protocols with CPS for CAPTA-referred families.

The collaborative **Polk County and St. Croix Chippewa Indians of Wisconsin** project focused on training staff and community members in the DECA and Triple P Stepping Stones.

The **Sauk County** project focused on training staff and implementing the Growing Great Kids curriculum. The project also aimed to advance the development of a Growing Great Kids socialization parenting group.

The **Waukesha County** project focused on staff training and implementation of Circle of Security, the ASQ:SE, and the DECA. The project also aimed to enhance collaboration with CPS by enhancing processes through which CAPTA-referred families are linked to Birth to 3 Program services.

The **Waupaca County** project focused on strengthening team leadership through participation in the Wisconsin Infant Mental Health Capstone. The project also aimed to build team capacity and collaboration through training and implementation of Body Keeps the Score Brief Early Relational Assessment, Emotion Coaching, and special play. A caregiver-dyadic child group was provided in conjunction with staff. A group for staff and caregivers was developed and modified from Peaceful Parent Happy Child. Ongoing collaboration has been established with CPS partners to include a change in referral process and tools to support joint education to families on trauma. A parent visitation room was modified to create a suitable environment for promoting healthy caregiver-child interactions.

The **Wood County** project focused on staff training and implementation of Circle of Security, infant massage, Conscious Discipline, monthly distribution of activity bags to increase positive caregiver-child interactions, distribution of books and other items to support positive development, and providing an expanded service array through Interlocking Autism Therapy and Music Therapy Services of Center Wisconsin while providing all primary coaches new knowledge and skills to implement on their own in the future.



## Client Interviews

### Methods

As part of the evaluation of the Social-Emotional Development grant initiative, the Institute for Child and Family Well-being developed a plan to gather information from parents who were referred to a Birth to 3 Program by child protective services, i.e., CAPTA-referrals. All 15 grantees were asked to voluntarily identify eligible families who might participate in an interview about their Birth to 3 Program experiences. Several programs provided contact information of families matching this description, and some programs actively helped to recruit participants.

Five parents took part in interviews between August and November of 2021, all of whom were actively involved in CPS and had at least one child who had received Birth to 3 Program services. The interviews were conducted over the phone or Microsoft Teams. Interviewers began by explaining the purpose of the conversation and obtaining participants' informed consent. A semi-structured interview guide with probing questions directed the interviews (see [Appendix A](#)). Notes that were taken during the interviews were coded thematically and cross-validated with audio recordings. What follows is a synopsis of key themes related to the CPS referral process, family engagement in the Birth to 3 Program, and perceived benefits of program participation.

### CPS Referral Process

All parents interviewed were referred to the Birth to 3 Program by a CPS caseworker. Three participants were not familiar with the Birth to 3 Program prior to being referred, and this resulted in some confusion initially because they were not clear what they were being offered or whether it was separate from the expectations of the child welfare system. All interview participants acknowledged that they felt some initial discomfort about being referred for services, and two parents indicated that being referred by a CPS worker elicited the feeling that they were at fault for their child's delays. Yet, all parents indicated that these concerns dissipated once they met with Birth to 3 Program staff at intake, and two parents mentioned that they were relieved to learn during the screening process that their child's development was not as delayed as they had expected.

Another concern that parents expressed was the burden of having to share the same information over and over again with different providers. Some participants indicated that they were asked to complete forms and share both basic and sensitive information multiple times. In the words of one participant: *"I had to tell my story a million times over to different service providers."*

### Family Engagement

Despite their initial reservations, all parents expressed a high level of satisfaction with their Birth to 3 Program providers. They especially appreciated that Birth to 3 Program staff were willing to listen and respect them as parents. Parents also communicated the importance of being treated as a partner or team member. One parent conveyed this viewpoint succinctly: *"We want to be empowered as parents."* At the same time, another parent acknowledged that engagement is a two-way process, and that parents must be willing *"to work with them [Birth to 3 Program providers], not against them."*

Participants also affirmed the importance and effectiveness of the Primary Coach Approach to Teaming. They indicated that they appreciated the full support of their team while at the same time having one person who acts as their primary provider. Another factor that contributed to family engagement was program and provider flexibility. While most families have time constraints, participants mentioned additional scheduling challenges related to their involvement in CPS, including the time required for court proceedings and substance use treatment meetings. Multiple parents mentioned that the program had adapted to their needs by finding another provider when initial services were not a good match for the family. Parents also appreciated when they were accommodated in terms of preferred meeting times and locations. Some parents had received virtual Birth to 3 Program services, though they generally preferred in-person visits at home or in a professional setting because it facilitated direct interactions among parents, children, and providers.

Overall, parents did not have reservations about meeting in person due to the potential risk of COVID-19 transmission. COVID did present some complications for scheduling visits, especially for one parent whose child was living in a foster care setting. Yet, again, the flexibility of Birth to 3 Program providers had helped parents to navigate these challenges.

### **Benefits of Program Involvement**

Parents highlighted several ways that they had been impacted by their involvement in a Birth to 3 Program. Most participants indicated that they had received practical advice that they could use in parenting their child. They received some of this information through direct communication with Birth to 3 program providers, who reinforced this content by sharing resources such as videos and tip sheets. Some parents also mentioned that Birth to 3 Program providers had helped them in receiving formal diagnoses for their children and receiving referrals to disability services.

In addition to increasing parenting knowledge and skills, the Birth to 3 Program had other ancillary benefits. For instance, one parent whose child was placed in out-of-home care was eager to see her child during Birth to 3 program sessions. She indicated that these meetings enabled her to communicate openly with the foster family, who she believed were likely to implement parenting strategies differently than she would. Other participants mentioned receiving assistance in applying for Supplemental Security Income (SSI), while another participant indicated that the program had helped her child with the transition to starting school.

### **Conclusion**

Overall, parents were highly satisfied with their Birth to 3 Program experience, and they all indicated that they would be willing to recommend the program to other families. In fact, multiple parents mentioned that they were sad that their Birth to 3 Program services would soon end, and some expressed concerns that their children would not continue to receive the services they need once the program ended. Capturing this sentiment, one parent affirmed that *“we want to give our kid every chance to succeed.”*

# Staff Interviews and Focus Groups

Time 1 - March-April 2021

## Introduction

As part of the evaluation of the Social-Emotional Development grant initiative, the Institute for Child and Family Well-being conducted initial interviews and focus groups with staff members across the 15 Birth to 3 grantee programs. Interview participants were asked to share information about their program's operations, including client referral and outreach processes, screening and assessment practices, and family engagement strategies. Staff shared approaches that are effective in promoting children's social and emotional development, challenges they face in meeting children's social and emotional needs, and ways that the current projects will enhance their program. Finally, participants reported how the COVID-19 pandemic affected Birth to 3 Programs, staff members, and clients.

## Methods

A total of 64 professionals took part in 16 virtual interviews and focus groups in March and April 2021. Offering the opportunity to participate in either interviews or focus groups afforded greater scheduling flexibility and enabled the evaluation team to reach stakeholders from all 15 grantee programs. The same set of questions was used to guide the interviews and focus groups, thereby enhancing consistency between approaches. Most interview participants were currently employed as Birth to 3 Program administrators, service coordinators, educators, or therapists. Some focus groups also included representatives of Child Protective Service (CPS) agencies, because one aim of the project is to identify promising strategies for engaging families and improving social and emotional outcomes for children in the child welfare system.

Interviews and focus groups ranging from 30 to 65 minutes were conducted via Microsoft Teams. Interviewers began by explaining the purpose of the interview and obtaining consent for audio recording the proceedings. A semi-structured interview guide with probing questions directed the focus groups (see [Appendix B1](#)). Notes were taken for all interviews and coded thematically. The current report synthesizes major themes that emerged from an analysis of interview and focus group data.

## Results

### Birth to 3 Program Process

#### *Referrals and Onboarding*

Interview participant responses indicated that referral and onboarding processes are similar across Birth to 3 Programs. Most referrals come from physicians, while other common referral sources include health departments, daycare centers, CPS agencies, social service agencies, and self-referrals. Referrals typically originate from a call or fax to a central line that is staffed by a dedicated point person who gathers initial information about the children and families. From there, a service coordinator reaches out to the family through a phone call or letter. For families that are harder to reach, including CAPTA-referrals (i.e., CPS cases), programs will often engage in multiple outreach attempts. The service coordinator will then meet with the family for intake and to start the screening and assessment process.

### Screening and Assessment

Staff reported using a variety of tools to screen and assess children’s social and emotional needs. Many programs use a validated screener such as the Ages and Stages Questionnaire-3 (ASQ-3) to detect potential delays in children’s social and emotional development. If an initial screen indicates that there is a potential social and emotional concern, programs typically conduct a more thorough assessment using a specialized tool such as the Devereux Early Children Assessment for Infants/ Toddlers (DECA-IT), or Social-Emotional Assessment/Evaluation Measure (SEAM). See Figure 1 for a list of screening and assessment tools that were identified during the staff interviews.

Most staff who complete screenings and assessments reported that they are confident in their ability to identify children’s social and emotional concerns.

**Figure 1: Social and Emotional Development Screening and Assessment Tools**

Ages and Stages Questionnaire: Social Emotional (ASQ:SE)
Developmental Assessment for Young Children-2 (DAYC-2)
Devereux Early Children Assessment for Infants/Toddlers (DECA-IT)
Social-Emotional Assessment/Evaluation Measure (SEAM)
Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)
Routines-Based Interview
Sensory Profile

---

*“I would say I am more confident with the tool paired with professional development than I am with just using the tool.”*

---

Interview participants emphasized that their confidence is reinforced by working with a team of Birth to 3 Program providers who share information about the social and emotional needs of a child. Staff reported high confidence identifying concerns using a standardized screening and assessment tools, though they often combine this information with professional judgment based on their observations and other information at hand. They indicated that screening and assessment tools are useful but that they also provide only partial information based on parent self-report.

### Challenges to Addressing Children’s Social and Emotional Needs

Interview participants shared that most children are not referred to the Birth to 3 Program for social and emotional concerns, but instead for other developmental and behavioral issues. However, social and emotional challenges are often uncovered during the initial assessment process, especially among families who have social and economic challenges. Staff reported that it is common for children with social and emotional concerns to have parents who are coping with substance misuse, family violence, and unresolved trauma, which can undermine their capacity to engage and interact with their children.

---

*“It’s nearly impossible to meet the child’s social-emotional needs when the parents’ social-emotional needs aren’t being met.”*

---

Many interview participants mentioned that some parents are wary of receiving county services, and this is especially apparent among families who are referred to the Birth to 3 Program by CPS. They also frequently acknowledged that the parents they serve genuinely want to meet their children’s needs, but that some do not know how to do so successfully. They stressed the importance of normalizing the struggles of parenting, especially because some parents view the need for services as a sign of weakness or an indication that they are doing something wrong.

Another significant challenge is that parents and professionals are not always attuned to signs that children have social and emotional concerns. For instance, interview participants mentioned that medical providers do not pay as much attention to social and emotional difficulties as other developmental concerns during well-child checkups. Likewise, parents may hear from other professionals such as daycare providers that their children are being “naughty” when there may be a more significant underlying developmental concern. Furthermore, social and emotional difficulties are sometimes categorized as mental health problems, which some parents may regard as stigmatizing.

Nearly all interview participants mentioned contextual barriers that hinder families from meeting the social and emotional needs of their children. For instance, some families are unable to receive mental health services for younger children due to a lack of availability and accessibility, especially in more rural areas.

Many families also struggle to meet basic needs such as food, housing, and physical safety, and as a result the services provided by the Birth to 3 Program may not be among their top priorities.

---

*“The families having so many other crises, so many other needs, they’re kind of just surviving each day and so being able to prioritize this kind of thing [Birth to 3 Program], even if they want to and see the benefit, sometimes they just don’t have the capacity to take on one more thing because of everything else that is happening in their lives.”*

---

### **Engaging Families to Meet Children’s Social and Emotional Needs**

A general theme that emerged during the interviews is that family engagement is essential to meeting children’s needs, and that clear and consistent communication is pivotal to engaging families. Staff also emphasized that Birth to 3 Program providers take a strengths-based approach to gain families’ trust and to keep them engaged in services. During initial outreach to families, for example, staff communicate the voluntary nature of the Birth to 3 Program, as some families may have had negative

**Figure 2: Family Engagement and Child Development Interventions**

Circle of Security
Growing Great Kids
Your Journey Together
Triple P
Special Play

experiences with mandatory county programs. When families are not ready to engage right away, interview participants indicated that it is important for families to know that the door is open for them to receive Birth to 3 Program services in the future.

Interview participants also reported that it is important for Birth to 3 Programs to take a team-based approach, and to utilize the knowledge and expertise of their team members. However, opinions diverged when it came to partnering with CPS. Some respondents indicated that it is important to include CPS staff as part of the service team, while others indicated that it is preferable to distance the Birth to 3 Program from CPS to minimize potential feelings of mistrust or stigma. Specific practices that were identified as helping Birth to 3 Program providers promote children’s social and emotional development included utilizing effective assessment tools such as the e-DECA and replacing punishment-based interventions with skill-building ones. In addition, as shown in Figure 2, staff identified several promising approaches that promote family engagement and child development.

Moreover, the Primary Coach Approach to Teaming was identified during all interviews as an essential component of the Birth to 3 Program practice that helps to engage families. Key elements of this approach include modeling interventions, integrating therapy into families’ routines, utilizing joint planning, and valuing parental feedback with respect to what is and is not working for a family.

---

*“Joint planning with them [parents] as part of the coaching has been really helpful...to meet the needs that they want rather than progressing down a list of milestones and really addressing what is important to the families keeps them engaged more.”*

---

## **Innovation Grants**

### *Opportunities*

Interview participants represented Birth to 3 Programs that were awarded Social-Emotional Innovation grants to improve outcomes for children with developmental delays and disabilities by introducing innovations such as new trainings, assessment protocols, and care coordination strategies. When asked why their program selected specific innovations, staff frequently reported that their team’s decision had been influenced by prior experience with similar innovations in the past. For example, some Birth to 3 Program staff have received advanced training in child development through the Infant, Early Childhood and Family Mental Health Capstone Certificate Program at UW-Madison. Therefore, before the request for proposals was issued by DHS, some programs already had innovations in mind that they wanted to implement (“If we someday get the money...”). Interview participants also indicated that their programs aimed to select evidence-based and trauma-informed interventions that were a good fit for their program and that filled significant service gaps in their county. Programs were influenced by a desire to learn from and partner with programs from other counties, as in the case of a cohort that is participating in a reflective supervision initiative.

Interview participants mentioned several potential benefits that will result from the Social-Emotional Innovation grant projects, including an increase in staff confidence and competencies. They emphasized the value of having the time and resources to dedicate their attention specifically to social and

emotional development, and they expect that the projects will help in developing shared language and practices across agencies. Some staff indicated that this initiative would help to close the divide between the Birth to 3 Program and Child Protective Services. Others maintained that the projects would help them to handle difficult and potentially stigmatizing conversations about family mental health challenges and child social and emotional difficulties. Trainings in motivational interviewing and Facilitating Attuned Interactions (FAN) were noted as particularly helpful in this regard.

---

*“We were knowledgeable before, but now we feel even more prepared and confident in our skills and abilities to support families who have concerns around the social-emotional aspects of everyday routines.”*

---

### *Challenges*

Staff remain enthusiastic about their innovation projects, though some reported feeling overwhelmed by the introduction of new grant-related activities on top of their regular program requirements. Some programs have encountered challenges in meeting training or certification requirements, such as identifying families that are appropriate for staff to work with and apply the skills they are learning.

However, the most significant challenge by far has been the COVID-19 pandemic, which arrived after programs submitted their grant proposals but before they began to implement their project innovations. Interview participants reported that they are doing the best they can under the circumstances, but that COVID-19 has resulted in unavoidable delays to their project timelines. The following section summarizes how COVID-19 has disrupted project implementation and program operations while also describing the impact that the pandemic has had on Birth to 3 Program staff and the families they serve.

### **COVID-19 Pandemic Effects**

All grantees reported that COVID-19 has interrupted the implementation of their projects. In many cases, planned trainings had to be put on hold. For instance, a reflective supervision training cohort has been delayed by a year. The trainings they have received have been conducted virtually, which has been a major transition. Participants reported that in many cases the trainings are not as effective online and that they benefit more from learning and interacting in person.

In addition to affecting their projects, staff reported that COVID-19 has had a major impact on program services. For example, many programs experienced a decrease in referrals at the start of the pandemic, though they have since observed a return to normal or above-normal levels. Interview participants reported that all or most services have been delivered by videoconference or phone during the pandemic, but they are beginning to transition back to in-person delivery. Staff noted that some families do not want virtual services, while others seem to prefer virtual services and are more willing to participate because they do not need to let someone in their home.

Some families have been unable to participate consistently due to limited internet access—particularly in rural areas. Some staff have found it difficult to provide services virtually, and many agreed that it can be difficult to engage families and complete assessments with young children online.

The pandemic also has been a challenging period professionally and personally for many Birth to 3 Program providers. It has been difficult to connect and communicate with each other, which has been especially difficult for new staff members. Programs have also been forced to make staffing changes, including layoffs and reallocations to other positions or agencies to fulfill pandemic-related roles. For many staff, these workplace challenges have been compounded by increased responsibilities and stressors at home such as having to homeschool their children or care for sick relatives.

Staff also reported that the pandemic has been a time of increased stress and chaos for the families they serve. In addition to increased caregiving and schooling responsibilities due to the closure of daycare facilities and schools, many are struggling with acute financial stressors. Staff have also heard from families that they are feeling socially isolated, and staff are concerned that reduced socialization might lead to a rise in the number of children with social and emotional concerns. Some staff indicated that they have seen an increase in referrals of older children (i.e., close to 3 years old), and they are concerned about children who may have missed out on Birth to 3 Program services because of the pandemic. They referred to these children as “COVID kids” or “COVID babies,” meaning that they have missed out on normal developmental skill-building opportunities due to disruptions in everyday life.

Interview participants also noted unexpected benefits of the pandemic, including reduced travel time and costs. Some also mentioned having more time to complete trainings and being able to include more team members in the project. Despite the challenges of virtual service delivery, staff also acknowledged that it afforded greater flexibility in scheduling and service duration, reduced their travel time, and increased their capacity to reach more families in a limited amount of time. Some providers reported that they have improved their communication and coaching skills while learning to be more creative in their service delivery. Moreover, some parents appear to be more actively involved in the therapeutic process when services are delivered virtually, perhaps because Birth to 3 Program providers are not with them in person to facilitate the session.

## Time 2 – Winter 2021

### **Introduction**

Following interviews and focus groups in March and April 2021, the evaluation team from the Institute for Child and Family Well-being organized a series of focus groups in December 2021 to gather additional information from the grantees at the close of the project. All 15 of the participating Birth to 3 Programs had a stakeholder present in at least one of the four focus groups. This second wave of qualitative data collection aimed to shed further light on progress that was made during the project along with opportunities for future growth.

### **Methods**

In total, 22 professionals took part in one of the four focus groups that were conducted virtually via Microsoft Teams. Most participants were Birth to 3 Program administrators, service coordinators, educators, or therapists. One representative of a Child Protective Service (CPS) agency agreed to participate in the focus groups, which ranged in length from 22 to 67 minutes, and were facilitated by a

trained interviewer using a semi-structured interview guide (see [Appendix B2](#)). Notes were taken for all focus groups and coded thematically. What follows is a summary of key findings that were organized into three overarching themes: (1) accomplishments; (2) challenges; (3) sustainability plans.

## **Results**

### *Accomplishments*

Focus group participants were asked to recount their program's major accomplishments during the Innovation Grant period. Many cited the benefits of professional development activities aimed at enhancing staff competencies to address children's social and emotional difficulties. Examples included the Infant Mental Health Capstone program at UW-Madison along with trainings in screening and assessment tools such as the Devereux Early Childhood Assessment (DECA) and interventions such as Circle of Security.

Another notable accomplishment was the advanced use of media by two Birth to 3 Programs. One program enhanced its capacity to engage Birth to 3 Program families through online training videos and messaging through social media. Another grantee used conventional media (e.g., radio spots) and social media (e.g., Google ads; marketing videos) to increase public awareness of Birth to 3 services. Notably, focus group participants from other Birth to 3 Programs praised these efforts and expressed interest in exploring similar strategies in the future.

Participants were also asked to share how the Innovation Grant projects had enhanced their program's capacity to engage families that were referred through child protective services (CPS). Many respondents indicated that their projects had enabled Birth to 3 Program and CPS staff to attend the same trainings. For example, one site trained Birth to 3 Program and child protective service providers in the DECA and how to use it as a practice tool to enhance family engagement and the detection of child social and emotional difficulties. The perceived benefits of these cross-system trainings included the development of common language and understanding among Birth to 3 Program and CPS staff. Some participants also noted that these shared experiences help to strengthen collaboration between Birth to 3 and CPS staff while also increasing the consistency of communication with families.

In addition to professional development activities, three grantees altered organizational policies and procedures to fortify connections between the Birth to 3 Program and CPS. For instance, one program created a new memorandum of understanding (MOU) with CPS to improve inter-agency collaboration, and they now use this document to facilitate the onboarding process with newly hired staff. Participants generally agreed that these protocols may help to streamline the referral process. To the extent that these efforts help to establish stronger partnerships and "warm" referral exchanges between Birth to 3 Program and CPS staff, they may also increase the likelihood that referrals result in successful family engagement.

### *Challenges*

Reinforcing the first staff interview report, participants underscored various challenges that had been brought about by the COVID-19 pandemic. Trainings and program services were frequently rescheduled, and some activities requiring face-to-face contact were canceled altogether. Many scheduled in-person activities were moved online, and some participants maintained that this may have limited engagement with families and relationship building among staff.

The pandemic also resulted in downstream effects that impacted the projects indirectly. For instance, in some sites staff were reallocated to handle COVID-related duties. Participants also indicated that both Birth to 3 Programs and CPS had experienced especially high rates of staff turnover during the pandemic. These challenges sometimes resulted in trainings being delayed. More broadly, they reduced continuity within Birth to 3 Programs and impeded progress toward establishing stronger connections between the Birth to 3 Program and CPS.

### *Sustainability and Future Directions*

The closing discussion of each focus group aimed to identify activities that enhanced programs' capacity to effectively address children's social and emotional difficulties, with an emphasis on practices that are sustainable and that can be disseminated across programs. Many participants noted the benefits of specific trainings and assessment tools that equip staff with the knowledge and skills to identify child social and emotional challenges. Several interventions and curricula such as Circle of Security and Your Journey Together were also recommended. Participants also emphasized that diverse approaches are needed and that programs need to have the flexibility and independence to implement approaches that effectively meet the needs of their communities.

At the same time, participants acknowledged that staff do not always have the knowledge and resources they need to intervene effectively on a family's behalf. Birth to 3 Programs are unable to address all factors that contribute to children's social and emotional difficulties, especially the complex needs of families that are referred by CPS. There was some consensus among participants that, in addition to strengthening connections between the Birth to 3 Program and CPS, there is a need to establish stronger systems of care within local communities. Yet, barriers to increasing service access were also acknowledged, including a basic lack of resources in certain communities along with limitations on the amount of time that staff can devote to facilitating warm referrals.

Toward this end, communities of practice may represent a promising strategy for sustaining and extending progress that has been made during the Innovation Grant projects. Some participants reported that the projects had contributed to a shift in organizational culture toward elevating the importance of addressing children's social and emotional needs. Communities of practice among Birth to 3 Programs may help to sustain their commitment to this issue while also facilitating information exchange around best practices. Communities of practice may also promote relationship building among Birth to 3 Program providers and other community partners that serve families with young children. Intentional efforts along these lines may strengthen connections and enhance care coordination between providers and agencies, thereby enhancing the quality of services that families receive.

# Staff Survey Data Analysis

Time 1 – Spring 2021

## Introduction

The Institute for Child and Family Well-being developed a survey and collected data from 179 Birth to 3 Program providers, administrators, and other stakeholders from April to May 2021. Along with staff demographics, the survey gathered data related to five areas of practice and service delivery: (1) program strengths, (2) social and emotional screening and assessment, (3) facilitators and barriers to engaging families and promoting children’s social and emotional development, (4) professional development and training, and (5) impact of COVID-19 on programs, staff, and consumers.

Table 1 shows that at least one staff member from all 15 Birth to 3 Program Social-Emotional Innovation Grantee sites responded to the survey (response rate = 72.2%); more than one-third (36.2%) were from Milwaukee County. Of those that completed the survey, 86% were in direct service positions in Birth to 3 Programs and affiliated services (e.g., service coordinators, teachers, and therapists), 11.2% were in administrative positions in Birth to 3 Programs, 1.1% were in other types of positions, and 1.7% did not provide role information.

As shown in Appendix C1, 86.7% of the sample was non-Hispanic White, which is higher than the proportion of the general Wisconsin population (80.9%). All participants had achieved some postsecondary education, and more than half (51.9%) had a graduate degree. On average, participants reported having 14 years of professional experience in social or human services, including nearly a decade (9.5 years) in a Birth to 3 Program.

**Table 1. Staff Respondents by County**

County	Frequency	Percentage
Barron	5	2.8%
Chippewa/Eau Claire	14	8.0%
Fond du Lac	6	3.4%
Jackson	2	1.1%
Jefferson/Dodge	16	9.2%
Kenosha	10	5.7%
La Crosse/Vernon	7	4.0%
Milwaukee	63	36.2%
Monroe/Columbia/Juneau/ Marquette/Adams	13	7.5%
Pierce	6	3.4%
Polk/ St. Croix Chippewa Indians of Wisconsin	1	0.6%
Sauk	7	4.0%
Waukesha	6	3.4%
Waupaca	11	6.3%
Wood	4	4.0%

## Results

### Program Strengths

Participants responded to a series of questions about the degree to which their Birth to 3 Programs were successful in several areas of practice and service delivery (see Table 2). Results showed that 95.2% either agreed or strongly agreed that their Birth to 3 Program is successful in establishing relationships with families. Other notable strengths included: (1) providing early intervention services in natural

environments; (2) communicating and working well as a team; (3) connecting children to services in a timely manner; and (3) developing appropriate individualized family service plans (IFSPs). When asked to rate the strength of the connection between their local Birth to 3 Program and CPS, nearly 40% rated the connection as very good or excellent, while more than 20% rated the connection as fair or poor (not shown).

Other areas where there appeared to be more room for program improvement included:

- providing culturally competent services;
- connecting with families that are “hard to reach”;
- providing trauma-informed services;
- increasing public awareness of our program.

**Table 2. Staff Perceptions of Program Strengths**

<i>Our Birth to 3 Program is Successful in...</i>	Mean Score	Agree or Strongly Agree (%)
Providing Early Intervention Services in Natural Environments	6.52	93.5%
Establishing Relationships with Families	6.48	95.2%
Communicating and Working Together Well as a Team	6.37	87.6%
Connecting Children to Services in a Timely Manner	6.34	92.3%
Developing Appropriate Individualized Family Service Plans	6.30	91.7%
Providing Strengths-Based Services	6.22	87.6%
Collaborating with Other Programs and Providers	5.92	76.3%
Helping Children with Individualized Family Service Plans Develop Positive Social and Emotional Skills	5.90	78.1%
Connecting with Families that are “Hard-to-Reach”	5.66	63.3%
Providing Culturally Competent Services	5.64	65.7%
Providing Trauma-Informed Services	5.56	60.9%
Increasing Public Awareness of Our Program	5.30	50.3%

Note. Responses ranged from (1) strongly disagree to (7) strongly agree

Staff were also asked to rate the degree to which their Birth to 3 Program successfully engaged in specific practices that are expected to promote children’s social and emotional development. Results presented in Table 3 indicate that nearly three-fourths (74.2%) agreed or strongly agreed that their program uses strategies that are effective in promoting responsive parenting and parent-child interactions. Staff reported similar ratings of agreement when they were asked if their local Birth to 3 Program: (1) uses strategies that are effective in helping children to regulate their emotions (73.9%); (2) is successful at implementing effective strategies that promote children’s social and emotional

development (70.3%); and (3) provides services that are effective in promoting healthy and stable family relationships (69.7%). Notably, whereas 91.7% of respondents agreed or strongly agreed that their program was successful generally in developing IFSPs, only 64.8% agreed or strongly agreed that their program is successful specifically in developing IFSPs that help families address their children’s social emotional needs.

*Screening & Assessment*  
Out of the 179 survey respondents, 131 (73.6%) reported that they had screened or assessed a child’s social and emotional development within the last year. Of those 131 staff members,

98.2% reported that they slightly agreed, agreed, or strongly agreed that it is important to use screening and assessment tools that are supported by evidence (see Appendix C2). In addition, 94.6% of Birth to 3 Program staff reported some level of agreement with the claim that children who are referred to the Birth to 3 Program by CPS should be screened for social and emotional delays. Results also indicated that most staff were confident in their ability to accurately identify children who have social and emotional delays and assess children’s social and emotional progress over time.

On the other hand, responses varied considerably to other items such as: *The social and emotional screening/assessment tool(s) our program uses may not be valid for some families based on their cultural background*. More than one-quarter (25.3%) of respondents agreed or strongly agreed with that statement, while 22.8% slightly agreed, 40.7% were neutral, and 11.1% reported some level of disagreement. Similarly, participant responses varied when asked about the accuracy of the social and emotional screening/assessment tool(s) that their program uses. For instance, more than 30% of participants reported some level of agreement that the tool(s) used by their program **underestimate** the social and emotional delays that children have, while more than 30% of participants reported some level of disagreement with that statement. Conversely, only 11.8% reported some level of agreement and 45.7% reported some level of disagreement with the claim that their screening and assessment tools **overestimate** children’s social and emotional delays (not shown).

*Facilitators and Barriers*

All 179 survey participants were asked to respond to a series of items about facilitators and barriers to promoting children’s social and emotional development (see Appendix C3). A large majority of respondents (87.0%) either agreed or strongly agreed that it is important to connect families to services that are supported by evidence. However, nearly 45% reported some level of agreement with the following statement: *I have concerns that evidence-based interventions are not responsive to the needs of families from different cultural backgrounds*.

**Table 3. Staff Perceptions of Program Strengths**

<i>Our local Birth to 3 Program...</i>	Mean Score	Agree or Strongly Agree (%)
uses strategies that are effective in promoting responsive parenting & parent-child interactions.	5.87	74.2%
uses strategies that are effective in helping children to regulate their emotions.	5.80	73.9%
provides services that are effective in promoting healthy and stable family relationships.	5.79	69.7%
is successful at implementing effective strategies that promote children’s social and emotional development.	5.69	70.3%
is successful in developing Individualized Family Service Plans that help families address their children’s social and emotional needs.	5.65	64.8%

Note. Responses ranged from (1) strongly disagree to (7) strongly agree

**Table 4. Barriers to Engaging Families in Birth to 3 Programs**

	Not a Barrier	Minor Barrier	Moderate Barrier	Significant Barrier
Parent mental health difficulties	0.6%	23.5%	49.4%	26.5%
Parent feeling burdened or overwhelmed with other child appointments	0.6%	32.7%	42.0%	24.7%
Concerns or questions about the usefulness of remote services	6.8%	31.5%	37.0%	24.7%
Parent work schedules	3.1%	29.8%	42.9%	24.2%
Economic insecurity or housing instability	3.1%	34.8%	42.9%	19.3%
Unreliable internet, phone, or other technological barriers	9.9%	38.9%	33.3%	17.9%
Parent lack of trust in service systems or service providers	7.5%	49.7%	27.3%	15.5%
Lack of public awareness of the Birth to 3 Program	6.8%	36.0%	44.7%	12.4%
Parent concerns about being judged as a parent	6.8%	47.2%	34.2%	11.8%
Lack of referrals because some local providers have negative perceptions of the Birth to 3 Program	29.8%	37.3%	21.1%	11.8%
Lack of childcare	22.2%	34.0%	32.7%	11.1%
Transportation	45.1%	27.2%	16.7%	11.1%
Parent concerns about COVID-19 transmission	10.0%	46.9%	32.5%	10.6%
Parent concerns about a child being judged or labeled	6.8%	52.5%	30.9%	9.9%
Family violence	6.8%	49.7%	34.8%	8.7%
Lack of referrals because some local providers are unaware of the Birth to 3 Program	28.4%	45.7%	17.3%	8.6%

When asked about the degree to which various resources and services were available in their communities, participants' responses were mixed. For example, when asked whether there are racial and ethnic disparities in accessing services that address children's social and emotional delays, 38.7% agreed or strongly agreed, 22.1% slightly agreed, 20.2% were neutral, and 19.0% reported some level of disagreement. In response to this question, 56.6% of Milwaukee County staff agreed or strongly agreed, whereas 28.4% of staff from other counties agreed or strongly agreed. Responses also varied among participants when they were asked if their community lacks effective social and emotional interventions for children and if families who are poor have limited access to these services in their community.

Table 4 presents participant ratings of potential barriers to engaging families in Birth to 3 Programs. Heading this list, more than three-quarters of staff (75.9%) regarded parent mental health difficulties as a moderate or significant barrier to family engagement.

Other factors that were often rated as moderate or significant barriers included:

- Parent work schedules;
- Parent feeling burdened or overwhelmed with other child appointments;
- Concerns or questions about the usefulness of remote services.

Staff indicated that transportation was less of a challenge, with 45.1% indicating that it is not a barrier and 27.2% regarding it as only a minor barrier to engaging families. Similarly, very few staff reported that their program faced a significant barrier in terms of a lack of referrals due to limited awareness of the Birth to 3 Program among local providers.

There were a few other notable differences between staff from Milwaukee County and staff from the remaining counties in their perceptions of barriers to family engagement. Compared to the ratings overall, the following were more likely to be rated as moderate or significant barriers in Milwaukee: (1) Parent feeling burdened or overwhelmed with other child appointments (81.4%); (2) Unreliable internet, phone, or other technological barriers (71.2%); (3) Parent work schedules (78.0%); (4) Lack of referrals because some local providers are unaware of the Birth to 3 Program (33.9%).

#### *Professional Development and Training*

Participants were asked if they have attended or plan to attend various professional development and training opportunities that are relevant to Birth to 3 Program personnel (see Appendix C4). More than three-fourths of staff (78.4%) indicated that they had been trained in the Primary Coach Approach to Teaming, and 75.6% had completed the Wisconsin Birth to 3 Program Child Outcome Training. In addition, 73.6% reported that they had completed a training related to trauma-informed care. Less than half of the sample had completed the Facilitating Attuned Interactions (FAN) training (43.0%) or a motivational interviewing (MI) training (42.7%), though more than 15% indicated that they planned to receive MI training in 2021. Approximately 10% of respondents had completed the UW-Madison Infant, Early Childhood and Family Mental Health Capstone Certificate Program. Only 5.2% of staff had completed the Autism Focused Intervention Resources & Modules (AFIRM) training, while less than 2% had completed the CORE of a Good Life Training.

#### *Impact of COVID-19*

Staff were asked to report their level of agreement with a series of statements related to the impact of the COVID-19 pandemic (see Appendix C5). More than 93% of respondents agreed or strongly agreed that during the pandemic their Birth to 3 Program improved its use of technology to serve clients. Similarly, more than 93% agreed or strongly agreed that they had worked together well as a team with their coworkers. Furthermore, nearly 4 out of 5 participants agreed or strongly agreed that their Birth to 3 Program had adapted well to changes brought about by COVID-19 (79.2%) and that they personally had adapted well to changes in their job that resulted from COVID-19 (78.4%). Reinforcing these findings, less than 5% of staff strongly agreed that COVID-19 had brought about responsibilities at home that made it more difficult to manage their job responsibilities. Only 19.2% of respondents agreed or strongly agreed that there has been an increased demand for Birth to 3 Program services during the pandemic, though 46.3% noticed an increase in the number of children with social and emotional difficulties. Despite the fact that CPS reports and investigations decreased during COVID, only 15.7% of respondents reported that they had observed a significant decrease in referrals from CPS to their Birth to 3 Program.

## Key Takeaways

- Most survey respondents indicated that their Birth to 3 Program uses effective strategies to promote children’s social and emotional development, though there may be a need for further conversations about how to develop IFSPs that help families address their children’s social and emotional needs.
- When asked about connection between their Birth to 3 Program and CPS, nearly 40% rated it as very good or excellent while more than 20% rated it as fair or poor.
- Providers expressed a high degree of confidence in their ability to accurately screen for social and emotional delays and assess children’s social and emotional development over time.
- Almost all providers agreed that it is important to use evidence-based screening and assessment tools, though they varied in their perceptions of the cross-cultural validity and overall accuracy of the tools their program uses to measure children’s social and emotional development.
- Similarly, most providers agreed that it is important to link families to evidence-based interventions, but many had concerns that these interventions may not be culturally responsive.
- Staff identified barriers to engaging families in Birth to 3 Program services, foremost of which were parents’ mental health difficulties, conflicting work schedules, and feelings of being burdened or overwhelmed by other child appointments.
- Less than 20% of participants had observed an overall increase in demand for Birth to 3 Program services since the start of the COVID-19 pandemic, but 46% indicated that there had been an increase in the number of children they serve with social and emotional difficulties.

## Introduction

Extending survey data collection efforts in April and May 2021, additional survey data were gathered from 125 Birth to 3 Program staff in December 2021. The survey was distributed to the same sample of professionals as time 1, regardless of whether the first survey was completed. In total, 109 respondents completed both the time 1 and 2 surveys. As shown in [Table 5](#), the most common professional role among respondents was service or care coordinator (25.8%) followed by speech and language

**Table 5. Staff Role**

<i>Job Title</i>	<i>Percentage</i>
Administrator	13.5%
Service/Care Coordinator	25.8%
Early Interventionist	2.8%
Birth to 3 Educator	8.4%
Physical Therapy	14%
Occupational Therapy	14%
Speech and Language Pathologist	18.5%
Other	2.8%

pathologist (18.5%). For additional information about the sample, please see the Time 1 summary above and [Appendix C](#).

This report presents results from an analysis of data collected at time 2, with a primary focus on staff perceptions regarding the effectiveness of virtual technologies. In addition, training and professional development activities that were completed during the project are described along with staff perceptions of their program’s capacity to promote children’s social and emotional development. Finally, results are summarized from participant responses to

open-ended questions about achievements during the current project and future investments that might further enhance their program’s impact.

## Results

### Perceptions of Virtual Services

Staff were asked to respond to a series of items to gauge their perceptions about the degree to which virtual technologies can be used to implement Birth to 3 Programs effectively. The first set of items aimed to assess the degree to which virtual technologies were perceived to be effective for engaging families. Results shown in [Table 6](#) indicate that staff ratings varied considerably. For instance, 81.0% of staff agreed that virtual services were either very or extremely effective for reducing family concerns about COVID transmission. More than three fourths of staff rated virtual technologies as very or extremely effective for scheduling or rescheduling visits, and a large majority of respondents indicated that virtual technologies were at least somewhat effective for staying connected with families and for reducing missed visits.

Staff responses indicated they were less confident that virtual technologies were effective at facilitating more complex exchanges with families. For example, only one quarter of staff indicated that virtual technologies were very or extremely effective for engaging families during a visit. More than one third (35.3%) reported that virtual services were either not at all effective or only a little effective for building relationships with families. Finally, more than half (53.6%) of staff perceived virtual services to be not at all or a little effective for recruiting new families.

**Table 6. Effectiveness of Virtual Technologies: Family Engagement**

How effective are virtual technologies for...	M	Not at all	A little	Somewhat	Very	Extremely
...reducing family concerns about COVID transmission?	3.2	0%	2.6%	16.4%	43.1%	37.9%
...scheduling and rescheduling family visits?	2.8	0%	6.9%	26.7%	42.2%	24.1%
...making services more convenient for families?	2.6	0%	7.8%	38.3%	35.7%	18.3%
...staying connected with families?	2.4	2.6%	12.1%	38.8%	33.6%	12.9%
...reducing the number of missed family visits?	2.3	7.8%	16.4%	30.2%	33.6%	12.1%
...engaging families during a visit?	1.9	5.2%	25.9%	44.0%	20.7%	4.3%
...building relationships with families?	1.8	8.6%	26.7%	44.8%	17.2%	2.6%
...recruiting new families?	1.4	21.1%	32.5%	33.3%	11.4%	1.8%

Note. Responses range from 1 to 5. M = mean score.

Respondents were also asked to rate how effective virtual technologies are for facilitating Birth to 3 Program assessment and intervention practices. Results indicated that 86.2% of staff perceived that it was possible to effectively provide educational information virtually (see Table 7). A comparatively lower proportion of respondents indicated that virtual technologies were at least somewhat effective for working with parents on caregiving skills (74.1%) or for providing families with social and emotional support (74.1%).

Staff were less optimistic that virtual technologies could be used to conduct assessments effectively. For instance, 37.1% of participants reported that virtual assessments of child development were not at all or only a little effective. Moreover, nearly three fourths (74.1%) staff perceived virtual assessments of the home environment to be not at all or a little effective, and less than 1% reported that they were very or extremely effective. Reinforcing these results, answers to a separate, open-ended question showed that 87% of staff considered assessments to be more difficult to complete virtually than in person.

**Table 7. Effectiveness of Virtual Technologies: Assessment and Intervention**

How effective are virtual technologies for...	M	Not at all	A little	Somewhat	Very	Extremely
...providing educational information to families?	2.4	2.6%	11.2%	44.0%	31.0%	11.2%
...working with parents on caregiving skills?	2.0	6.9%	19.0%	47.4%	21.6%	5.2%
...providing families with social and emotional support?	2.0	5.2%	20.7%	47.4%	19.8%	6.9%
... completing assessments of child development?	1.8	5.2%	31.9%	47.4%	13.8%	1.7%
... asking sensitive questions?	1.6	13.0%	33.0%	35.7%	17.4%	0.9%
...assessing the home environment?	1.0	35.3%	38.8%	25.0%	0.9%	0%

Note. Responses range from 1 to 5. M = mean score.

Respondents were also asked about the effectiveness of virtual technologies for enhancing staff work experiences and program activities. More than 80% agreed that virtual technologies were very or extremely effective for reducing staff concerns about COVID transmission (see [Table 8](#)), mirroring their previous responses regarding family concerns about COVID. Well over 90% of staff agreed that virtual technologies were very or extremely effective for reducing staff travel time, and 75% reported that virtual technologies were very or extremely effective for increasing flexibility in staff schedules. A large majority of respondents also agreed that virtual technologies were at least somewhat effective for improving time management and for facilitating supervision meetings, team meetings, and staff trainings. Despite some consensus that many work responsibilities can be performed well in a virtual environment, responses were mixed as to whether virtual technologies enhance staff job satisfaction.

**Table 8. Effectiveness of Virtual Technologies: Staff Work Experiences and Program Activities**

How effective are virtual technologies for...	M	Not at all	A little	Somewhat	Very	Extremely
...reducing staff travel time?	3.5	0.9%	0.9%	4.3%	34.5%	59.5%
...reducing staff concerns about COVID transmission?	3.2	0%	6.9%	12.9%	37.1%	43.1%
...increasing flexibility in staff schedules?	3.1	1.7%	4.3%	19.0%	30.2%	44.8%
...facilitating staff supervision meetings?	2.9	4.4%	6.1%	21.1%	36.8%	31.6%
...facilitating staff team meetings?	2.9	4.3%	7.0%	17.4%	36.5%	34.8%
...improving staff time management?	2.8	3.5%	9.6%	21.7%	30.4%	34.8%
...facilitating staff training?	2.7	5.2%	7.0%	25.2%	35.7%	27.0%
...enhancing staff job satisfaction?	2.1	13.8%	17.2%	30.2%	25.9%	12.9%

Note. Responses range from 1 to 5. M = mean score.

### Training and Professional Development Activities

Participants were asked to report the trainings and professional development activities they had completed since the start of the project in July 2020. More than 40% of respondents indicated that they had attended a trauma-informed care training, which was the most frequently cited activity. Other frequent trainings and professional development activities during the project included reflective supervision (32.8%), motivational interviewing (30.4%), Facilitating Attuned Interactions (30.4%), Primary Coach Approach to Teaming (27.2%), and Circle of Security (27.2%). Less frequently cited activities included participation in the UW-Madison Capstone Certificate Program (8.0%), autism-focused intervention training (1.6%), and CORE of a Good Life training (1.6%). See [Appendix C6](#) for full results.

### Program Capacity to Promote Children’s Social and Emotional Development

Staff were asked to rate their Birth to 3 Program’s performance in areas of practice that are expected to promote children’s social and emotional development. Results shown in [Table 9](#) indicate that staff perceptions of their program were stable across the two time points. Staff were also asked a series of questions at both time points to assess their perceptions of recommended screening and assessment practices and their own confidence in screening and assessment. Results shown in [Appendix C7](#) indicate

for most items that staff ratings did not differ significantly between the two time points. From time 1 to time 2, there was evidence of a marginally significant increase ( $p = .06$ ) in agreement with the following item: *Many children in our community have social and emotional delays that go undetected because they are not referred to our Birth to 3 Program*. This change could be associated with grant activities, which may have raised staff awareness of local gaps in referral. The lack of change over time in responses to other items may be related to limited duration of time between the two surveys (8 months); it could also be due to the generally high ratings of program capacity at time 1, meaning that there was limited room for improvement (i.e., ceiling effect). The lack of observed change also could be related to project implementation barriers that emerged due to the pandemic.

**Table 9. Staff Perceptions of Program Strengths (N = 96)**

Our local Birth to 3 Program...	Mean Score Time 1	Mean Score Time 2
uses strategies that are effective in promoting responsive parenting & parent-child interactions.	5.95	6.04
uses strategies that are effective in helping children to regulate their emotions.	5.92	5.86
provides services that are effective in promoting healthy and stable family relationships.	5.79	5.92
is successful at implementing effective strategies that promote children’s social and emotional development.	5.77	5.85
is successful in developing Individualized Family Service Plans that help families address their children’s social and emotional needs.	5.67	5.77
Note. Responses ranged from (1) strongly disagree to (7) strongly agree. No significant differences observed.		

**Project Successes and Future Directions**

The survey concluded with two open-ended questions, one of which asked participants to describe at least one way in which their innovation grant project was successful. Three main themes emerged from their responses. First, many comments indicated that the project had helped to improve relationships among Birth to 3 Program providers and collaboration with other providers and agencies. These changes manifested in strengthened relationships, improved teamwork, and shared language. Second, several respondents affirmed that the training and professional development activities raised awareness of children’s social and emotional challenges while increasing staff knowledge, skills, and confidence to address these challenges. Third, the innovation grants were perceived to have contributed positively to direct practices, including enhanced screening protocols and techniques to promote positive parent-child interactions.

The second question asked respondents to imagine if they could receive funding for another innovation project what they would propose to further enhance their program’s impact on children’s social and emotional outcomes. Many proposals represented extensions of the current project activities. For instance, respondents mentioned additional training to improve screening and assessment practices. A few comments also pointed to the need to enhance the capacity of Birth to 3 Programs to transition from social and emotional problem identification to appropriate intervention. Several respondents emphasized the need to strengthen families by empowering parents and creating opportunities for social connection. Some also indicated that it was important to link families to formal interventions that

foster positive parent-child interactions such as Triple P, Parent-Child Interaction Therapy, Circle of Security, and Your Journey Together.

Several respondents also reinforced the need for ongoing efforts to enhance interagency collaboration. For instance, two participants mentioned that client care could be improved by enhancing program databases and the integration of data systems. Others focused on addressing other family needs that affect children's social and emotional development. For example, some staff indicated that there is a lack of access to mental health specialists. In addition, several respondents mentioned that some families, especially those who come to the attention of CPS, have basic needs such as transportation, housing, and food insecurity that must be met to successfully engage them. Further efforts to strengthen connections between the Birth to 3 Program, CPS, and other community agencies toward developing a more integrated system of care may enhance service coordination and ultimately child and family outcomes.

## Program Participation System (PPS) Analysis

This evaluation uses administrative data to describe the demographics, service characteristics, and social-emotional development of children served by the Birth to 3 Programs that were awarded Innovation in Social-Emotional Development grants.

### Methods

#### *Sample*

The UWM evaluation team obtained de-identified administrative records associated with 32,485 children served in Wisconsin’s Birth to 3 Programs between 1/1/2017 and 12/31/21. The sample is divided into two time periods for comparisons: (1) program enrollments prior to the grant period (1/1/17 to 6/30/20); (2) enrollments after the start of the grant (7/1/20 to 12/31/21). Because the dataset includes statewide Birth to 3 program records during this time period, children served by programs in 22 counties that received Social-Emotional Development grants could be compared to children served in 50 other counties by Birth to 3 Programs that did not receive a grant award.

Table 10 describes the total sample and subsamples for this analysis.

**Table 10. Description of sample and subsamples**

	Number of Counties	Number of Children Pre-grant Period (1/1/17 to 6/30/20)	Number of Children Grant Period (7/1/20 to 12/31/21)	Total
Grantees	22	11,200	4,323	15,523
Non-grantees	50	12,005	4,957	16,962
Total	72	23,205	9280	32,485

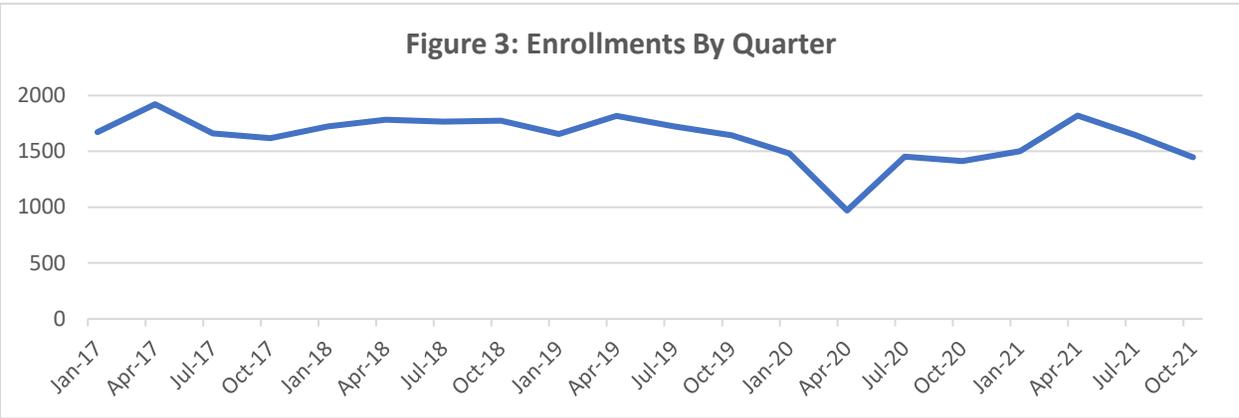
#### *Analysis Plan*

Descriptive statistics (i.e., means; percentages) were calculated for all child demographics, service characteristics, and social-emotional development. When applicable, significance testing was conducted to assess differences between grantees and non-grantees and between the pre-grant period and grant period. Data were also aggregated into six-month increments to assess historic trends that may have pre-dated grant implementation. Complete data tables for non-grantee programs and for the historic trend analysis are presented in Appendix D and E, respectively. In addition, an analysis was performed to examine variation in child social-emotional functioning by population demographics and service characteristics.

### Results

#### *Enrollment*

Figure 3 shows the statewide quarterly Birth to 3 Program enrollment totals, which declined in 2020 following the start of the COVID-19 pandemic. Prior to January 2020, the average 3-month enrollment total was 1,730 children. Between April and June of 2020, the average was 970 newly enrolled children, roughly equaling a 44% decline in enrollments.



*Child demographics*

Table 11 presents demographic data for children served in grantee programs. In grantee programs, the mean child age at the start of service was about 20 months (613 days), with a range of 13 days old to just under three years of age. Compared to the pre-grant period, children who enrolled during the grant period were 24 days older in grantee programs ( $p < .01$ ) and 17 days older in non-grantee programs ( $p < .01$ ).

Of all children served, 34.8% were female (Table 11). Results shown in Appendix D1 indicate that same proportion of female children (34.8%) were served by the non-grantee programs. Comparisons of records during pre-grant period and grant period indicated that there were no significant changes in the proportion of males and females served.

**Table 11. Child Demographics: Grantee Programs**

	Total		Pre -grant period		Grant period	
	N	%	N	%	N	%
Age in days (range 13 to 1,082)	15,521	613.41	11,198	606.75	4323	630.67*
Female	5,408	34.8%	3904	34.9%	1504	34.8%
Non-Hispanic Asian	426	2.7%	317	2.8%	109	2.5%
Non-Hispanic Black	2,817	18.1%	2062	18.4%	755	17.5%
Non-Hispanic White	8,994	57.9%	6384	57.0%	2610	60.4%*
Hispanic	2,830	18.2%	2100	18.8%	730	16.9%*
Other race/ethnicity <sup>1</sup>	456	2.9%	337	3.0%	119	2.8%

Note. 1 Other race/ethnicity includes American Indian/Alaskan Native, Hawaiian/Pacific Islander, and multiracial children. \* indicates statistically significant difference between pre-grant and grant periods ( $p \leq .05$ ).

The racial/ethnic composition of the total sample is 57.9% non-Hispanic White; 18.2% Hispanic; 18.1% non-Hispanic Black; 2.7% non-Hispanic Asian, and 2.9% other race or ethnicity. Appendix D1

shows that, compared to grantee programs, non-grantee programs served a higher proportion of non-Hispanic White children (74.1%) and a lower proportion of Hispanic (12.7%) and non-Hispanic Black (5.0%) children. The racial/ethnic differences are likely due to the geographic distribution of the grantee and non-grantee programs. For example, children in Milwaukee’s Birth to 3 Program represented nearly 90% of Black children served by the 15 grantee programs and 69% of Black children served by Birth to 3 Programs statewide.

*Referral sources*

Most children served by grantee Birth to 3 Programs were referred by health providers (57.4%, [Table 12](#)), and another one-third of referrals were made by parents or other relatives (31.2%). It is likely that, prior to making a self-referral, some parents were informed of a potential child developmental concern by a medical provider; the current analysis is unable to account for this possibility or variation in how programs define and document referral sources. Small proportions of referrals came from community providers (5.5%), CAPTA (1.9%) and other sources (3.9%). Referral patterns in non-grantee programs followed a largely similar pattern (see [Appendix D2](#)).

Compared to the pre-grant period, the average number of referrals per month decreased across most referral sources. However, parent or relative referrals saw the sharpest decrease from about 87 referrals per month prior to the grant to about 67 referrals per month during the grant. Compared to other referral sources, the proportion of Birth to 3 Programs referrals from parents or relatives decreased significantly (pre-grant = 32.5%; post-grant = 28.0%,  $p < .01$ ). A historical trend analysis ([Appendix E1](#)) suggests that health care referrals have been trending upward since 2017. Compared to the pre-grant period, there was a slight uptick in the average number of monthly referrals and proportion of total referrals from CAPTA during the grant period, though this change was not statistically significant (2.2% vs. 1.8%,  $p = .13$ ).

**Table 12. Referral Sources- Grantee Programs**

	Total		Pre -grant period		Grant period	
	N	%	N	%	N	%
Health provider <sup>1</sup>	8,907	57.4%	6292	56.2%	2615	60.5%*
Parent or relative	4,850	31.2%	3640	32.5%	1210	28.0%*
Community provider <sup>2</sup>	861	5.5%	611	5.5%	250	5.8%
CAPTA	295	1.9%	201	1.8%	94	2.2%
Other source <sup>3</sup>	610	3.9%	456	4.1%	154	3.6%

Note. 1. *Health provider* referral sources include audiologist, CSHCN regional center, hospital or specialty clinic, other healthcare provider, physician, public health agency, tribal health center or tribal CSHCN. 2. *Community provider* referral sources include childcare provider, county social services agency, Head Start provider, school district, tribal school or tribal Head Start provider. 3. *Other* referral sources are not specified.

\*Indicates statistically significant difference between pre-grant and grant periods ( $p \leq .05$ )

*Child characteristics*

Birth to 3 Programs administrative records indicated that 63.1% of children in grantee counties had a communication delay documented during services, while 30.2% had a developmental disability,

19.8% had an identified physical disability or mobility impairment, and 2.9% of children had other challenges such as vision and hearing impairments or severe health risks (Table 13). Relative to grantee counties, non-grantee counties reported a significantly higher prevalence of communication delays (65.6%) and developmental disabilities (37.8%) and lower rates of physical disability or mobility impairment (14.3%) and other characteristics (3.9%).

Across the grantee programs, a higher percentage of communication delays was observed among children during the grant period than before the grant period (pre-grant = 62.1%; grant = 65.9%,  $p < .01$ ). A historical trend analysis (Appendix E) showed that the prevalence of communication delays varied with no clear trend over time. There was a noticeable spike in the first half of 2021 when 69% of children served had communication delays, though the prevalence dropped back down to 65% in the second half of 2021. The prevalence of children with developmental disabilities also increased after grant implementation (pre-grant = 28.2%; grant = 35.4%,  $p < .01$ ), but the historical analysis (Appendix E) suggests the proportion of children served with developmental disabilities has been increasing since 2017. Rates of physical disability or mobility impairment among children served in grantee programs decreased after the start of the grant (pre-grant 20.6%; grant = 17.7%,  $p < .01$ ). When analyzed in 6-month increments (Appendix E), the proportion of children with physical disability and mobility problems was roughly 20% until 2021, when semi-annual rates dropped to 16% and 17%.

**Table 13. Child Characteristics- Grantee Programs**

	Total	Pre-grant period	Grant period
<i>Sample size</i>	15,436	11,136	4,300
Communication delay	63.1%	62.1%	65.9%*
Developmental disability <sup>1</sup>	30.2%	28.2%	35.4%*
Physical disability/mobility impairment	19.8%	20.6%	17.7%*
Other characteristics <sup>2</sup>	2.9%	3.1%	2.6%

Note. 1. *Developmental disabilities* includes autism spectrum, brain trauma, cerebral palsy, epilepsy, intellectual disability, and other/unknown. 2. *Other characteristics* include blind, visually impaired, deaf, hard of hearing, and severe health impairments.

\*Indicates statistically significantly difference between pre-grant and grant periods ( $p \leq .05$ )

#### *Services received*

As shown in Table 14, PPS records indicated that most children served in grantee counties received communication services during their Birth to 3 Program involvement (83.7%). Most children also received occupational therapy (68.9%), special instruction (67.1%), and physical therapy (66.6%). A small proportion of children received mental health services (4.5%) and other services (5.1%). Children in non-grantee counties were less likely to receive the following services: communication (79.2%); occupational therapy (53.1%); special instruction (49.7%); physical therapy (48.9%); mental health (1.8%). Children served by non-grantee programs were more likely to have received “other services” (11.7%).

In grantee programs, there was a significant increase in all major service categories during the grant period, with the largest gains in occupational therapy (pre-grant = 67.8%, grant = 72.0%,  $p < .01$ ) and communication (pre-grant = 82.8%, grant = 86.0%,  $p < .01$ ).

**Table 14. Service receipt- Grantee Programs**

	Total	Pre-grant period	Grant period
<i>Sample size</i>	15,453	11,189	4,264
Communication	83.7%	82.8%	86.0%*
Occupational therapy	68.9%	67.8%	72.0%*
Special instruction	67.1%	66.3%	69.4%*
Physical therapy	66.6%	65.9%	68.4%*
Mental health <sup>1</sup>	4.5%	4.5%	4.7%
Other services <sup>2</sup>	5.1%	5.4%	4.2%*

Note. 1. *Mental health* includes psychological services, and social work. 2. *Other services* includes assistive technology, audiology, family education and counseling, health services, interpreter services, medical services, nursing services, nutrition services, transportation services, vision services, and other unspecified services.

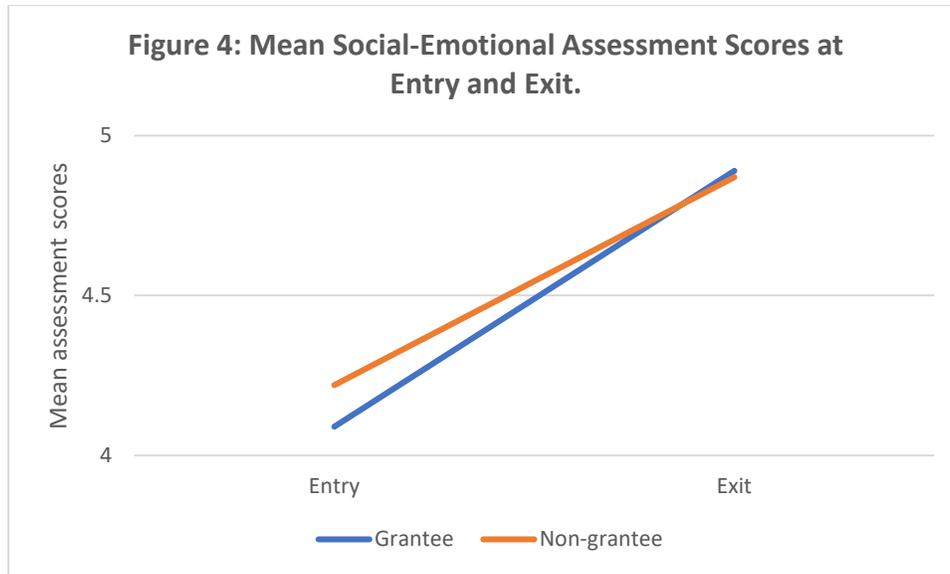
\*Indicates statistically significantly difference between pre-grant and grant periods ( $p \leq .05$ )

### *Social-Emotional Functioning*

Table 15 presents children’s social-emotional assessment scores that were recorded by the 15 grantee programs. Birth to 3 Programs use a variety of data sources to inform their assessment ratings (e.g., Peabody Development Scales, parent interview). The lowest score (1) indicates the child is not yet functioning at age expectations and the highest score (7) indicates the child is at age expectations for all or most everyday situations. For interpretation, children who receive a score of 6 or 7 are considered to be functioning at or above age expectations.

For children served by grantee programs, mean social-emotional functioning scores at the end of services were significantly higher than at the beginning of services (entry = 4.09, exit = 4.89,  $p < .01$ ). Similarly, the proportion of children who met age expectations was significantly higher at the end of services than at the beginning of services (entry = 18.3%, exit = 41.2%,  $p < .01$ ). Most children who were functioning below age expectations at the beginning of services improved by the end of services, as indicated by the percentage whose assessment scores increased by at least one point (60.5%). Non-grantee programs also recorded significant improvement in average assessment scores by service exit (Appendix D).

Comparing children served in grantee programs (Table 15) to children in non-grantee programs (Appendix D), children in non-grantee programs were consistently rated higher on average social-emotional functioning at service entry (grantees = 4.09; non-grantees = 4.22,  $p < .01$ ). However, mean social-emotional functioning scores at the end of services did not differ significantly between grantees and non-grantees (grantees = 4.87; non-grantees = 4.89). These findings suggest that, compared to children in non-grantee programs, children in grantee programs had greater social-emotional needs at the start of services but made larger gains by service exit.



Results also revealed that, when compared to the pre-grant period, during the grant period children entering grantee Birth to 3 Programs across Wisconsin had significantly lower social-emotional functioning scores at entry and exit. Children’s average scores at the beginning of services were 4.19 before the grant and 3.80 after the grant ( $p < .01$ ). At the end of services, children’s average scores were 4.92 before the grant period and 4.66 during the grant period ( $p < .01$ ). Non-grantee programs also recorded similar declines in social-emotional scores during the grant period, suggesting that the trends are unrelated to the grant activities and instead connected to other factors that drove down average scores across Birth to 3 Programs statewide (Appendix D).

**Table 15. Social-Emotional Functioning at Service Entry and Exit—Grantee Programs.**

	Total		Pre-grant period		Grant period	
	Entry	Exit	Entry	Exit	Entry	Exit
Number of children served	14,364	8,752	10,438	7,608	3,926	1,144
Mean Score (range = 1 – 7)	4.09	4.89*	4.19	4.92*	3.80	4.66*
Meets age expectations <sup>1</sup>	18.3%	41.2%	20.1%	42.0%*	13.7%	35.5%*
Improved from entry <sup>2</sup>	--	60.5%	--	61.8%	--	52.2%

<sup>1</sup> *Meets age expectations* at exit is equivalent to the Birth to 3 Summary Statement #2.

<sup>2</sup> *Improved from entry* is equivalent to Birth to 3 Summary Statement #1. More information on summary statements can be found at <https://www.dhs.wisconsin.gov/birthto3/indicators.htm>.

Note. The sample for *improved from entry* comprises only children who did not meet age expectations (Grantee pre-grant  $n = 7,608$ ; grant  $n = 1,144$ ; Non-grantee pre-grant  $n = 9,516$ ; grant  $n = 1,952$ ).

\* Indicates exit was significantly different from entry ( $p < .01$ ).

### Associations between social-emotional functioning at service entry and child demographic and service variables

Unadjusted odd ratios (OR) were calculated to describe associations between social-emotional functioning scores at the beginning of services and key child and service indicators. Table 16

presents the odds of entering services with a social-emotional assessment score below 6 (e.g., below age expectations) by indicator. Below is a summary of some key findings:

- Males were more likely than females to have assessments below age expectations (OR = 1.35,  $p < .01$ ). Children who enrolled at 18 months or older were 2.74 times more likely than younger children to have scores below age expectations ( $p < .01$ ).
- Compared to non-Hispanic White children, children of color were more likely to have social-emotional assessment scores below age expectations at the start of services (OR Non-Hispanic Asian = 2.01; Non-Hispanic Black = 1.75; Hispanic = 1.42; Other race or ethnicity = 1.42, all  $p < .01$ ).
- Initial social emotional assessment scores were associated with referral source: Children who were referred by parents were more likely to be scored below age expectations compared to children who were referred by health providers (OR = 0.68,  $p < .01$ ) and CAPTA (OR = .59,  $p < .01$ ).
- Children with identified communication delays were more than 2.5 times as likely to have social-emotional scores lower than age expectations at the beginning of Birth to 3 Program services (OR = 2.61,  $p < .01$ ). Children with physical disabilities were less likely to have assessment scores below age expectations (OR = 0.63,  $p < .01$ ).
- Developmental disabilities as a broad category had a small but significant negative association with social-emotional difficulties (OR = 0.93,  $p < .01$ ). That is, children with disabilities were less likely to be initially assessed as below age expectations compared to other children receiving Birth to 3 Program services. However, the pattern varied among

**Table 16. Associations Between Social Emotional Assessment Scores and Key Indicators**

	OR
<b>Child demographics</b>	
<b>Race, ref. = Non-Hispanic White</b>	
Non-Hispanic Asian	2.01*
Non-Hispanic Black	1.75*
Hispanic	1.38*
Other race/ethnicity	1.42*
Female	0.74*
At least 18 mos. at service start	2.74*
<b>Referral source, ref. = parent/relative</b>	
Health provider	0.68*
Community provider	0.95
CAPTA	0.59*
Other source	0.73*
<b>Child characteristics, ref. = no delay</b>	
Communication delay	2.61*
Developmental disability	0.92*
Physical disability	0.63*
<b>Services ref. = no service received</b>	
Communication services	1.76*
Occupational therapy	1.76*
Special instruction	2.06*
Physical therapy	0.89*
Mental health	0.70*

Note. ref = reference group for mutually exclusive categories.

\* Indicates statistically significant association with social emotional scores below age expectations at the beginning of services ( $p < .05$ ).

disability categories. For example, children with autism spectrum disorder were much more likely to function below age expectations (OR = 49.6,  $p < .01$ ), though less than 1% of children in Birth to 3 Programs were reported to have autism spectrum disorder.

- Three service types were associated with social emotional scores below age expectations at enrollment: special instruction (OR = 2.06,  $p < .01$ ), communication services (OR = 1.76,  $p < .01$ ), and occupational therapy (OR = 1.76,  $p < .01$ ). Children who received physical therapy (OR = .89,  $p < .01$ ) and mental health services (OR = 0.70,  $p < .01$ ) were less likely to be initially assessed below age expectations when compared to children who did not receive those services.

## Limitations

Birth to 3 Program records provide detailed information about children and their service experiences, but it is important to keep in mind the following limitations when interpreting the findings. First and foremost, interpretations of the results should account for the confounding influence of the COVID-19 pandemic, which influenced enrollments and other dimensions of Birth to 3 Program service delivery throughout the grant period. The pandemic also disrupted the implementation of grant activities. Given the lack of a randomized design or another robust method of equalizing Birth to 3 Programs that received innovation grant awards to Birth to 3 Programs that did not receive an award, causal claims regarding the impact of grant-related activities should be made cautiously.

It should also be acknowledged that the large sample sizes increase statistical power and the likelihood that small changes will produce statistically significant test results. As a result, some statistically significant findings may not be practically meaningful. Another consideration is that assessment and data collection protocols vary across programs, meaning that the reliability of social-emotional assessment ratings are uncertain. Finally, comparisons between the grant and pre-grant periods should be interpreted with caution because children who received Birth to 3 Program services for a longer time are likely to be under-represented in the sample that exited services during the grant period.

## Summary of Key Findings

Despite these limitations, the data provide important information about social-emotional functioning and Birth to 3 Program services. Key findings are summarized below.

**Social-emotional concerns are prevalent in this service population but the prevalence is not equally distributed.** Most children in Wisconsin enter Birth to 3 Programs with social-emotional functioning below age expectations. Boys were more likely than girls to have low social emotional scores at their initial assessment. There are also racial/ethnic differences in children's social-emotional scores at program entry.

**On average, children below age expectations made significant gains in social-emotional functioning by service exit.** More than half of children who were below age expectations at the start of services made substantial gains by the time they left services.

**Parents are an important referral source.** Compared to children who were referred by other sources, children who were referred by their parents were more likely to have social-emotional functioning scores below age level.

**Communication delays commonly co-occur with social-emotional concerns.** When compared to children who had other identified reasons for receiving services, children with a communication delay were over two and a half times more likely to have social-emotional functioning scores below age expectations. This finding supports previous studies that have linked early communication skills to social-emotional difficulties.<sup>1</sup>

**Lower initial social-emotional functioning was associated with a greater likelihood of service connection.** Children with social-emotional concerns were likely to receive communication services, occupational therapy, and special instruction—all of which have the potential to enhance children’s social-emotional skills.

**The results point to the impact of the pandemic on Birth to 3 Programs as well as the children and families they serve.** Birth to 3 Program enrollments fell dramatically at the start of the pandemic. New enrollments began to increase by the third quarter of 2020, although the trend was gradual and may have been impacted by new variants and local outbreaks. The proportion of children served with social-emotional concerns and communication delays were much higher during the pandemic. While this analysis cannot identify the specific reasons why social-emotional skill gains decreased during the grant period, it is plausible that less contact outside the home, parenting stress, and other pandemic-related changes may have contributed to communication and social-emotional delays.<sup>2,3</sup>

## Policy Recommendations

Drawing on the evaluation findings, we submit the following recommendations about program elements and innovations that could be sustained and incorporated in the State Systemic Improvement Plan.

- 1. Support efforts to establish best practice standards for social and emotional screening, assessment, and monitoring.** Examples of best practices include: (a) Using reliable, valid, and culturally appropriate screening and assessment tools, (b) Gathering information from multiple raters and contexts; and (c) Integrating standardized screening and assessment results with professional judgment.<sup>4,5</sup>
- 2. Support efforts to increase access to validated interventions that promote child social and emotional development.** Birth to 3 Programs can enhance child social-emotional outcomes by linking families to empirically supported interventions, especially those that foster healthy attachments and parent-child interactions. Examples of well-supported interventions that are available in some communities include Positive Parenting Program (Triple P), Parent-Child Interaction Therapy (PCIT), and Circle of Security.<sup>6-8</sup>
- 3. Support the formation and maintenance of Birth to 3 Program communities of practice.** Birth to 3 Program communities of practice may facilitate peer-to-peer information exchange, mentoring, and continuous quality improvement initiatives that improve quality of care.
- 4. Support media campaigns that raise public awareness of Birth to 3 programs.** Local and statewide public messaging may help caregivers identify signs of child social and emotional concerns and increase the frequency that caregivers contact Birth to 3 programs for assistance.
- 5. Identify and address barriers to making successful CAPTA referrals.** Less than 2% of children that receive Birth to 3 Program services are CAPTA referrals. Potential barriers between CPS agencies and Birth to 3 Programs include: (a) misalignment of procedures, priorities, and organizational culture; (b) limited awareness and understanding of the Birth to 3 Program among CPS staff and families; (c) stigma associated with CPS; (d) competing family needs and priorities.<sup>9,10</sup>
- 6. Encourage organizational policies and procedures that expedite appropriate referrals from CPS to Birth to 3 Programs.** Strategies for improving referral connections include establishing memoranda of understanding (MOUs) and having a Birth to 3 Program liaison (i.e., point person) who is responsible for communication with CPS.
- 7. Facilitate common training and professional development opportunities for Birth to providers and Child Protective Service workers.** Shared activities may strengthen connections to Birth to 3 Programs by increasing CPS workers' awareness of Birth to 3 Program services while fostering common knowledge and collaborative relationships among CPS workers and Birth to 3 Program providers.
- 8. Identify sustainable and equitable funding solutions to support social-emotional interventions statewide.** To sustain many of the innovations listed above, and especially efforts to increase the number of children who receive high-quality social and emotional interventions, strategies to increase base funding for Birth to 3 Program services should be considered.

## References

1. Rautakoski, P., af Ursin, P., Carter, A. S., Kaljonen, A., Nylund, A., & Pihlaja, P. (2021). Communication skills predict social-emotional competencies. *Journal of Communication Disorders, 93*, 106138.
2. Egan, S. M., Pope, J., Moloney, M., Hoyne, C., & Beatty, C. (2021). Missing early education and care during the pandemic: The socio-emotional impact of the COVID-19 crisis on young children. *Early Childhood Education Journal, 49*(5), 925-934.
3. Linnavalli, T., & Kalland, M. (2021). Impact of COVID-19 Restrictions on the Social-Emotional Wellbeing of Preschool Children and Their Families. *Education Sciences, 11*(8), 435.
4. Yates, T., Ostrosky, M. M., Cheatham, G. A., Fettig, A., Shaffer, L., & Santos, R. M. (2008). Research synthesis on screening and assessing social-emotional competence. *The Center on the Social and Emotional Foundations for Early Learning, 1-19*.
5. Agazzi, H., Shaffer-Hudkins, E. J., Armstrong, K. H., & Hayford, H. (2020). Best practices in assessment and intervention with infants and toddlers. In *Promoting Positive Behavioral Outcomes for Infants and Toddlers* (pp. 21-33). Springer, Cham.
6. Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive Parenting Program: A systematic review and meta-analysis of a multi-level system of parenting support. *Clinical Psychology Review, 34*(4), 337-357.
7. Thomas, R., Abell, B., Webb, H. J., Avdagic, E., & Zimmer-Gembeck, M. J. (2017). Parent-child interaction therapy: a meta-analysis. *Pediatrics, 140*(3). e20170352.
8. Yaholkoski, A., Hurl, K., & Theule, J. (2016). Efficacy of the circle of security intervention: A meta-analysis. *Journal of Infant, Child, and Adolescent Psychotherapy, 15*(2), 95-103.
9. Albuquerque, J., Aguiar, C., & Magalhães, E. (2020). The collaboration between early childhood intervention and child protection systems: The perspectives of professionals. *Children and Youth Services Review, 111*, 104873.
10. Corr, C., & Santos, R. M. (2017). "Not in the same sandbox": Cross-systems collaborations between early intervention and child welfare systems. *Child and Adolescent Social Work Journal, 34*(1), 9-22.

## Appendixes

### Appendix A - Client Interview Guide

1. To start things off, we'd like to know a little bit about how you came to receive services from the Birth to 3 Program. How were you first connected with Birth to 3? Were you referred by another agency or service provider or did you seek the services on your own?
2. Could you tell us about any challenges or difficulties you were hoping that the Birth to 3 Program might help you with?
  - a. Some families are referred to the Birth to 3 Program because their children are having social and emotional challenges. For instance, some children have difficulty expressing their emotions appropriately or interacting with other children and adults. Was this true for your child?
  - b. Can you describe any of the social or emotional challenges they were having?
3. Before you connected with the Birth to 3 Program, did you have any concerns about receiving Birth to 3 services?
  - a. *Probe, if necessary:*
  - b. For example, parents might be anxious about finding out that their child has a developmental delay, or they might be worried about their child being labeled.
  - c. If this is true for you, could you tell us a little bit about your concerns?
4. Parents that receive Birth to 3 Program services are asked assessment questions so that staff can better understand a child's needs.
5. What do you remember about your child being assessed? What did you learn?
6. Can you describe some of the services that you received through the Birth to 3 Program?
  - a. *Probe, if necessary:* Did you receive help from a service coordinator, teacher, speech therapist, occupational therapist, physical therapist, or any others?
7. During visits, Birth to 3 staff work with parents on "parent coaching", that is, talking and suggesting ways to interact with your child to support their learning and growth. Can you describe your experience with parent coaching? Can you think of any ways that parent coaching was helpful? Can you think of any ways that it could be improved?
8. All parents have many responsibilities, and some find it difficult to fit Birth to 3 services into their schedules. Did you face any challenges to accessing services or making appointments?
  - a. *Probe, if necessary:* If so, could you tell us a little bit about these challenges?
9. How satisfied are you with the services you received? Were the services helpful for you and your child? Did they help you reach your goal and how so?

#### Switching gears...

10. One of the goals of this project is to help Birth to 3 Programs meet the needs of children and families who have been involved with child protective services (CPS). Some parents we're interviewing have been involved with CPS. Is that true for you?
  - a. We've learned that some parents who are involved with CPS have concerns about receiving Birth to 3 services because they might get blamed for their child's difficulties. Was this an issue for you and, if so, could you tell us a bit about your concerns?
  - b. Can you think of anything that Birth to 3 Programs can do to improve services for families who are involved with CPS?

11. Finally, we know that the COVID-19 pandemic has had a major impact on all of our lives. We're hoping you'll share what life has been like for you and your family during COVID-19.
  - a. First off, how has it affected your child? Has it impacted them socially or emotionally?
  - b. How has the pandemic affected you? What has helped you to cope with the situation?
  - c. Are there any resources or supports that would have made your life better during COVID-19?
12. Is there anything else you would like to share about your experiences in the Birth to 3 Program generally or more specifically about its impact on you and your child?

## Appendix B - Staff Interviews and Focus Groups Interview Guides

### B1 - Time 1 Interview Guide

1. What are the most common social-emotional challenges that you see among the children who are referred to Birth to 3 services? What are their most critical needs?
2. We would like to gain a better understanding of how your Birth to 3 program works:
  - a. Starting at the beginning, where do most of your referrals come from? Do you have protocols that facilitate the referral process and your outreach to new families?
  - b. We want to learn more about what the assessment process looks like in your Birth to 3 Program. What formal screening and assessment tools does your team use to identify social-emotional concerns?
    - i. Do you also screen or assess family strengths and needs that might affect children's social-emotional development?
  - c. What is your level of confidence in identifying social-emotional concerns in children?
    - i. How confident are you in the accuracy of the screening and assessment tools that you use?
  - d. What are some of the challenges to engaging families in Birth to 3 and connecting them to services? What strategies do you use to promote family engagement?
  - e. What strategies do you find to be effective for engaging families who are difficult to engage?
    - i. We're particularly interested in strategies for engaging families who are involved in the child welfare system. Can you share any strategies that you've found to be effective or that might be effective for engaging these families?
3. When it comes to strategies that promote children's social-emotional development, what does your program do that is effective or that has a positive impact? How do you know your program or strategies are effective?
  - a. What are some of the most significant challenges that your program faces when it comes to meeting children's social-emotional needs?
  - b. Are there specific gaps in children's social-emotional services in your area?
  - c. What additional resources or support does your program need in order to meet those challenges?
4. In general, how do you think the current grant will help you to improve your Birth to 3 Program?
  - a. Why did you select the particular innovations you proposed?
  - b. How are things going so far?
5. Switching gears, we would like to learn more about the impact of COVID-19 on Birth to 3:

- a. How has the COVID-19 pandemic affected your Birth to 3 services? How has it affected your staff?
  - b. How has COVID-19 affected the families you serve? For instance, have you noticed any differences in the kinds of families that receive Birth to 3 or the kinds of services that they need?
  - c. Has COVID-19 forced you to make any significant changes to your innovation project?
6. Is there anything else you would like to share about your Birth to 3 Program generally or more specifically about your capacity to promote children’s social-emotional development?

## B2 - Time 2 Interview Guide

1. What were the major goals of your program’s innovation grant?
2. What would you say are the main things your program accomplished during the innovation grant?
  - Probe: More specifically, how did the project enhance your program’s capacity to promote children's social and emotional development?
  - Do you have any examples or stories to share?
3. Did you do anything during the project to keep track or measure your progress and accomplishments? If so, please share.
4. What challenges did you encounter during the innovation grant?
5. What did you do to address those challenges?
6. Is there anything that you hoped to accomplish that you were unable to because of these challenges? If so, please share.
7. Did the innovation grant change how you engage families referred through CAPTA?
8. Is there anything you learned during the project that will help your program to better serve CPS-involved children and families? If so, please share.
9. Has this grant changed your relationship with CPS? If so, please share.
10. How will the project improve your program’s effectiveness in the future?
  - How will you know if children and families are benefiting?
11. How will you sustain the activities and the progress you’ve made during the grant?
12. Which grant activities would you recommend including in a statewide plan to improve Birth to 3 Programs and their impact on children’s social and emotional development?
13. Aside from your innovation grant activities, what other strategies would you recommend for improving Birth to 3 Programs statewide?
14. Is there anything else you would like to share about your Birth to 3 Program overall or more specifically about your program’s capacity to enhance children’s social and emotional development? If so, please share.

## Appendix C - Staff Survey Data Tables

Time 1

### Appendix C1. Staff Demographic Characteristics

Characteristics	Mean or Percentage
Race/Ethnicity	
Non-Hispanic Asian	1.9%
Non-Hispanic Black	2.5%
Non-Hispanic White	86.7%
Hispanic	5.7%
Other race/ethnicity	3.2%
Education	
Some college credit, no degree	0.6%
Associate degree	1.3%
Bachelor degree	35.0%
Some graduate school credit, no degree	11.3%
Completed graduate school	51.9%
Employment	
Years employed in current position	9.1
Years employed in Birth to 3 Program	9.5
Years of experience in social or human services	14.0

**Appendix C2. Perceptions of Screening and Assessment among Birth to 3 Program Providers**

	Mean Score	Strongly to Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
It is important to use screening and assessment tools that are supported by evidence.	6.50	0.6%	1.2%	6.6%	29.3%	62.3%
I think that children who are referred to the Birth to 3 Program by CPS should be screened for social and emotional delays.	6.45	2.4%	3.0%	1.8%	30.5%	62.3%
I am confident in my ability to accurately identify children who have social and emotional delays.	5.95	2.3%	0.8%	15.4%	60.8%	20.8%
I am confident in my ability to accurately screen children for social and emotional delays to determine if they are eligible for the Birth to 3 Program.	5.86	3.9%	3.1%	22.5%	41.1%	29.5%
I think that all children who are referred to the Birth to 3 Program should be screened for social and emotional delays.	5.84	10.2%	4.8%	10.8%	30.5%	43.7%
I am confident in my ability to accurately assess children’s social and emotional progress over time.	5.82	1.5%	3.1%	26.2%	47.7%	21.5%
The social and emotional screening/assessment tool(s) our program uses provide(s) useful information when developing an Individualized Family Service Plan.	5.75	4.9%	4.9%	17.9%	51.2%	21.0%
Many children in our community have social and emotional delays that go undetected because they are not referred to our Birth to 3 Program.	5.57	3.6%	19.8%	13.8%	37.1%	25.7%
The social and emotional screening/assessment tool(s) our program uses may not be valid for some families based on their cultural background.	4.60	11.1%	40.7%	22.8%	19.1%	6.2%
Note. Responses ranged from (1) strongly disagree to (7) strongly agree.						

### Appendix C3. Facilitators and Barriers to Promoting Children’s Social and Emotional Development

	Mean Score	Strongly to Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
It is important to connect families to services that are supported by evidence.	6.27	2.4%	3.0%	7.3%	38.4%	48.8%
In our community, there are racial and ethnic disparities in accessing services that address children’s social and emotional delays.	4.78	19.0%	20.2%	22.1%	25.2%	13.5%
In our community, there is a lack of effective social and emotional interventions for children and families who are involved in the CPS system.	4.75	17.8%	26.4%	21.5%	20.9%	13.5%
In our community, families who have low incomes or who lack private health insurance have limited access to services that address children’s social and emotional delays.	4.70	23.8%	18.3%	20.1%	25.6%	12.2%
I have concerns that evidence-based interventions are not responsive to the needs of families from different cultural backgrounds	4.34	20.9%	34.4%	25.2%	12.9%	6.7%

Note. Responses ranged from (1) strongly disagree to (7) strongly agree.

#### Appendix C4. Professional Development and Training

	Have Attended	Plan to Attend in 2021	Have Not Attended
Primary Coach Approach to Teaming	78.4%	1.9%	19.8%
Wisconsin Birth to 3 Program Child Outcome Training	75.6%	3.1%	21.3%
Trauma-Informed Care	73.6%	7.5%	18.9%
Facilitating Attuned Interactions (FAN)	43.0%	1.3%	55.7%
Motivational Interviewing	42.7%	15.3%	42.0%
Wisconsin Infant and Early Childhood Mental Health (WIAMH) Conference	39.2%	3.2%	57.6%
Reflective Supervision	32.3%	7.6%	60.1%
Circle of Security	30.1%	0.6%	69.2%
Protective Factors	28.8%	0.6%	70.5%
Parents Interacting With Infants (PIWI)	18.1%	0.6%	81.3%
Healing Focused Care	15.6%	8.4%	76.0%
Touchpoints	14.6%	5.7%	79.6%
Your Journey Together	13.4%	0.6%	86.0%
UW-Madison Capstone Certificate Program	10.3%	0.0%	89.7%
Autism Focused Intervention Resources & Modules (AFIRM)	5.2%	1.3%	93.5%
CORE of a Good Life	1.9%	0.6%	97.4%

### Appendix C5. Impact of COVID-19 on Programs and Professionals

	Mean Score	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Our Birth to 3 Program has improved its use of technology to serve clients.	4.48	0.6%	1.9%	4.3%	35.4%	57.8%
My coworkers and I have worked well together as a team.	4.47	0%	2.5%	4.3%	37.3%	55.9%
Our local Birth to 3 Program has adapted well to changes brought about by COVID-19.	3.97	1.8%	3.7%	15.3%	54.0%	25.2%
I have adapted well to changes in my job that have resulted from COVID-19.	3.91	1.9%	5.6%	14.2%	56.2%	22.2%
I have learned that some families prefer to receive services online or by phone.	3.89	1.9%	11.8%	6.2%	55.3%	24.8%
It has been even more difficult to connect with families that are "hard-to-reach".	3.84	1.2%	13.7%	16.8%	36.6%	31.7%
It has been more difficult to keep families engaged in services.	3.53	3.1%	16.8%	20.5%	43.5%	16.1%
I have noticed an increase in the number of children I see with social and emotional difficulties.	3.38	1.9%	15.6%	36.3%	35.0%	11.3%
It has been more difficult to establish relationships with the families we serve.	3.37	3.7%	21.1%	21.7%	41.6%	11.8%
COVID-19 has had a negative impact on my job satisfaction.	2.83	14.7%	27.0%	26.4%	23.9%	8.0%
I have noticed a decrease in referrals from child protective services to the Birth to 3 Program.	2.73	7.5%	30.2%	46.5%	13.2%	2.5%
There has been an increased demand for Birth to 3 Program services.	2.69	12.4%	32.3%	36.0%	12.4%	6.8%
Due to COVID-19, I have responsibilities at home that make it more difficult to manage my job responsibilities.	2.47	24.5%	35.6%	12.9%	22.1%	4.9%

Note. Responses ranged from (1) strongly disagree to (5) strongly agree.

Time 2

<b>Appendix C6. Training and Professional Development Activities</b>	<b>Attended (%)</b>
Trauma-informed care	40.8%
Reflective Supervision	32.8%
Motivational Interviewing	30.4%
Facilitating Attuned Interactions	30.4%
Primary Coach Approach	27.2%
Circle of Security	27.2%
WI Infant Early Child Mental Health Conference	23.2%
WI Birth to 3 Program Child Outcome Training	20.8%
Protective Factors	13.6%
Healing Focused Care	13.6%
Touchpoints	12.0%
Parents Interacting With Infants	10.4%
Your Journey Together	10.4%
UW Capstone Certificate	8.0%
Autism Focused Interventions	1.6%
CORE of a Good Life	1.6%

**Appendix C7. Staff Perceptions of Screening and Assessment (N=100)**

	Mean Score Time 1	Mean Score Time 2
It is important to use screening and assessment tools that are supported by evidence.	6.57	6.66
I think that children who are referred to the Birth to 3 Program by CPS should be screened for social and emotional delays.	6.54	6.60
I am confident in my ability to accurately identify children who have social and emotional delays.	6.03	6.06
I am confident in my ability to accurately screen children for social and emotional delays to determine if they are eligible for the Birth to 3 Program.	5.91	6.05
I think that all children who are referred to the Birth to 3 Program should be screened for social and emotional delays.	6.04	5.93
I am confident in my ability to accurately assess children's social and emotional progress over time.	5.94	5.88
Many children in our community have social and emotional delays that go undetected because they are not referred to our Birth to 3 Program.	5.64	5.87*

Note. Responses ranged from (1) strongly disagree to (7) strongly agree.  
\*Marginally significant increase from time 1 ( $p = .06$ ).

## Appendix D - Program Participation System (PPS) Descriptive Data for non-Grantee Programs

**Table D1. Child Demographics- Non-Grantee Programs**

	Total		Pre -grant period		Grant period	
	N	%	N	%	N	%
Mean age in days (range 6 to 1,089)	16,958	622.85	12,001	617.99	4,957	634.6*
Female	5,903	34.8%	4,153	34.6%	1,750	35.3%
Non-Hispanic Asian	392	2.3%	253	2.1%	139	2.8%*
Non-Hispanic Black	843	5.0%	585	4.9%	258	5.2%*
Non-Hispanic White	12573	74.1%	8,952	74.6%	3,621	73.0%*
Hispanic	2155	12.7%	1,502	12.5%	653	13.2%
Other race/ethnicity <sup>1</sup>	999	5.9%	713	5.9%	286	5.8%

Note. <sup>1</sup> Other race/ethnicity includes American Indian/Alaskan Native, Hawaiian/Pacific Islander, and multiracial children. \* indicates statistically significant difference between pre-grant and grant periods ( $p \leq .05$ ).

**Table D2. Referral Sources- Non-Grantee Programs**

	Total		Pre -grant period		Grant period	
	N	%	N	%	N	%
Health provider <sup>1</sup>	9,420	55.5%	6643	55.3%	2777	56.0%
Parent or relative	5,453	32.1%	3,816	31.8%	1,637	33.0%
Community provider <sup>2</sup>	860	5.1%	631	5.3%	229	4.6%
CAPTA	260	1.5%	194	1.6%	66	1.3%
Other source <sup>3</sup>	969	5.7%	721	6.0%	248	5.0%*

Note. <sup>1</sup> *Health provider* referral sources include audiologist, CSHCN regional center, hospital or specialty clinic, other healthcare provider, physician, public health agency, tribal health center or tribal CSHCN. <sup>2</sup> *Community provider* referral sources include childcare provider, county social services agency, Head Start provider, school district, tribal school or tribal Head Start provider. <sup>3</sup> *Other* referral sources are not specified.

\*Indicates statistically significant difference between pre-grant and grant periods ( $p \leq .05$ )

**Table D3. Child Characteristics- Non-Grantee Programs**

	Total	Pre-grant period	Grant period
<i>Sample size</i>	16,863	11,937	4,926
Communication delay	65.6%	64.6%	68.1%*
Developmental disability <sup>1</sup>	37.8%	37.9%	37.4%
Physical disability/mobility impairment	14.3%	14.4%	14.1%
Other characteristics <sup>2</sup>	3.9%	4.1%	3.5%

Note. <sup>1</sup> *Developmental disabilities* includes autism spectrum, brain trauma, cerebral palsy, epilepsy, intellectual disability, and other/unknown. <sup>2</sup> *Other characteristics* include blind, visually impaired, deaf, hard of hearing, and severe health impairments.

\*Indicates statistically significantly difference between pre-grant and grant periods ( $p \leq .05$ )

**Table D4. Service receipt- Non-Grantee Programs**

	Total	Pre-grant period	Grant period
<i>Sample size</i>	15,453	11,189	4,264
Communication	79.2%	79.5%	78.6%
Occupational therapy	53.1%	53.3%	52.7%
Special instruction	49.7%	50.6%	47.5%*
Physical therapy	48.9%	49.1%	48.5%
Mental health <sup>1</sup>	1.8%	1.6%	2.3%*
Other services <sup>2</sup>	14.0%	14.5%	12.8%*

Note. <sup>1</sup> *Mental health* includes psychological services, and social work. <sup>2</sup> *Other services* includes assistive technology, audiology, family education and counseling, health services, interpreter services, medical services, nursing services, nutrition services, transportation services, vision services, and other unspecified services.

\*Indicates statistically significantly difference between pre-grant and grant periods ( $p \leq .05$ )

**Table D5. Social-Emotional Functioning at Service Entry and Exit—Non-Grantee Programs.**

	Total		Pre-grant period		Grant period	
	Entry	Exit	Entry	Exit	Entry	Exit
Number of children served	16,043	11,468	11,338	9,516	4,705	1,952
Mean Score (range = 1 – 7)	4.22	4.87*	4.30	4.91	4.03	4.69*
Meets age expectations <sup>1</sup>	19.8%	40.7%	21.5%	41.3%	15.6%	37.3%*
Improved from entry <sup>2</sup>	--	56.0%	--	57.1%	--	51.0%

<sup>1</sup> *Meets age expectations* at exit is equivalent to the Birth to 3 Summary Statement #2.

<sup>2</sup> *Improved from entry* is equivalent to Birth to 3 Summary Statement #1. More information on summary statements can be found at <https://www.dhs.wisconsin.gov/birthto3/indicators.htm>.

Note. The sample for *improved from entry* comprises only children who did not meet age expectations (Grantee pre-grant n = 7,608; grant n = 1,144; Non-grantee pre-grant n = 9,516; grant = 1,952).

\* Indicates exit was significantly different from entry ( $p < .05$ )

## Appendix E - Program Participation System (PPS) Historical Trends in Select Variables for Grantee Programs

A = January – June; B = July – December

**Table E1. Referral Sources- Grantee Programs**

	17a	17b	18a	18b	19a	19b	20a	20b	21a	21b
Health provider	53.1%	55.3%	58.0%	56.2%	56.4%	57.6%	59.3%	61.1%	60.8%	59.7%
CAPTA	1.2%	2.6%	1.9%	1.6%	2.1%	1.5%	1.8%	2.6%	2.2%	1.8%
Community provider	6.9%	5.1%	5.7%	4.8%	5.8%	4.9%	4.6%	5.3%	5.6%	6.4%
Parent or relative	34.5%	33.3%	32.1%	33.4%	31.9%	31.3%	30.3%	27.1%	28.6%	28.2%
Other	4.2%	3.7%	3.9%	4.0%	3.9%	4.7%	4.0%	3.9%	2.8%	4.0%

**Table E2. Child Characteristics- Grantee Programs**

	17a	17b	18a	18b	19a	19b	20a	20b	21a	21b
Communication delay	62.1%	61.0%	65.4%	62.7%	61.8%	60.0%	59.9%	62.4%	69.5%	65.3%
Developmental disability	26.0%	27.8%	27.1%	26.1%	27.0%	31.7%	32.8%	35.2%	35.3%	35.6%
Physical disability or mobility impairment	20.6%	19.3%	18.4%	21.3%	22.4%	21.7%	19.7%	20.2%	15.6%	17.4%

**Table E3. Service receipt- Non-Grantee Programs**

	17a	17b	18a	18b	19a	19b	20a	20b	21a	21b
Physical therapy	62.8%	65.0%	63.5%	66.7%	70.3%	67.9%	65.1%	68.2%	67.3%	69.7%
Occupational therapy	62.6%	66.3%	67.4%	68.9%	70.8%	71.0%	67.5%	72.4%	71.3%	72.3%
Communication	81.8%	83.0%	83.0%	81.0%	83.7%	85.6%	81.2%	85.5%	86.4%	86.0%
Special instruction	61.4%	64.8%	66.0%	66.7%	72.2%	68.7%	63.0%	69.4%	68.1%	70.9%