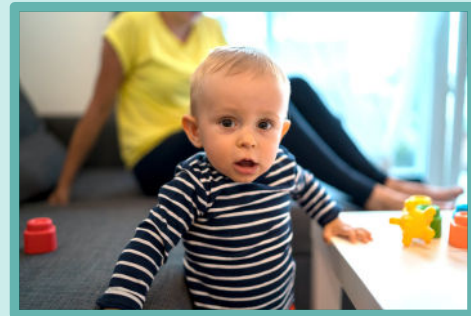


Final Evaluation Report of the Infant-Toddler Court Program

2018 to 2022

Prepared for the
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Section 1

Introduction



1. Introduction

Brief Overview of the Infant-Toddler Court Program

The goal of the national Infant-Toddler Court Program (ITCP) is to improve the health, well-being, and development of infants, toddlers, and families in the child welfare system. Launched in 2018, the ITCP works to expand research-based infant-toddler court teams (ITCs) to change child welfare practices and improve the health and well-being of infants, toddlers, and their families (Association of Maternal & Child Health Programs Innovation Hub, n.d.). The ITCP represents a potentially powerful platform via which Title V Maternal and Child Health and other promotion and prevention programs can more effectively engage and serve “hard-to-reach” young children and families to improve life-long health and development.

The National Resource Center (NRC) for the ITCP, operated by ZERO TO THREE, provides training and technical assistance to communities to implement ITCs. At the child/family level, cross-sector teams work collaboratively with families to address unmet health and safety needs of children and their families, with an equity-focused and trauma-responsive approach. At the community level, partners collaborate to identify and address disparities and inequities in access to services and system gaps and misalignment across prevention, intervention, and therapeutic services and supports.

Key roles in ITCs include the judge and child welfare leadership, who champion and support enhanced child protective services and court practices. A unique role in ITCs is the Community Coordinator, who helps to center child welfare planning and decision-making on the developmental needs of infants and toddlers and on meaningfully and equitably addressing protective factors that strengthen families. The ITC Community Coordinator also engages in critical outreach to build strong referral linkages in the community.

ITCP Objectives

Improve infant-toddler developmental health for children served through the Infant-Toddler Court Program

Promote the spread of evidence-based infant-toddler courts to other jurisdictions

Build the evidence-base for infant-toddler courts

Promote the implementation of two-generation, trauma-informed, evidence-based early interventions in the court and child welfare systems and across child- and family-serving systems

Advance the ability to address parents' past trauma and immediate service needs

Strengthen child welfare practices and early childhood systems to support the parent-child relationship and optimize the well-being of infants and toddlers in the child welfare system

ITCP: Evaluation Overview and Research Questions

The mixed-method implementation and outcomes evaluation of the ITCP was conducted by an external evaluator (RTI International). The study was funded with a four-year grant from the Health Resources and Services Administration's (HRSA's) Maternal and Child Health Bureau to

ZERO TO THREE. The first cohort of evaluation sites comprised eight sites who launched in Year 1 of the project period, and two additional evaluation sites that launched in Year 2. Additional grant funding during Year 3 allowed for the addition of a second cohort that focused on working with six state teams (five new states, each with three new sites) and an existing state with a new site (replacing an ITC site in that county that discontinued participation in the evaluation); also in Year 3, a third cohort of two 'increased reach' sites was added, which focused on increasing the number of children and families served in each jurisdiction.

The evaluation research questions are presented in **Table 1**, including both the planned questions and modified questions developed in response to the impact of the COVID-19 pandemic on the initial study design.

Table 1. Evaluation Questions

Construct	Planned Evaluation Questions	Evaluation Questions Modified for COVID-19
Child Safety	Are children involved with ITCP sites less likely to have substantiated or indicated maltreatment re-reports compared to a similar group of children from the National Survey of Child and Adolescent Well-Being (NSCAW II)?	Are children involved with ITCP sites less likely to have substantiated or indicated maltreatment re-reports compared to similar groups of children from the same county in regular dependency court and from counties with similar social vulnerability risk?
Child Permanency	Are children involved with ITCP sites more likely to reach permanency within the first 12 months compared to a similar group of children from NSCAW II?	Are children involved with ITCP sites more likely to reach permanency within the first 12 months compared to (a) a similar group of children from NSCAW II and (b) similar groups of children from the same county in regular dependency court and from counties with similar social vulnerability risk?
Child Well-Being	<u>Socio-emotional</u> : Are children involved with ITCP sites less likely to have emotional/behavioral problems compared to a similar group of children from NSCAW II? <u>Physical Health</u> : Are children involved with ITCP sites more likely to have better (excellent or very good) health compared to a similar group of children from NSCAW II?	<u>Socio-emotional</u> : Are children involved with ITCP sites less likely to have emotional/behavioral problems at follow up compared to baseline? <u>Physical Health</u> : Are children involved with ITCP sites more likely to have better (excellent or very good) health at follow up compared to baseline?
Access to Services	Are <u>children</u> involved with ITCP sites more likely to have access to needed services (e.g., well-being checkups, screening, early intervention) compared to a similar group of children from NSCAW II? Are <u>parents</u> involved with ITCP sites more likely to have access to needed services (e.g., trauma-informed mental health, substance abuse, parenting) compared to a similar group of parents from NSCAW II?	Are <u>children</u> involved with ITCP sites during the previous year of the COVID-19 pandemic more likely to have access to needed services (e.g., well-being checkups, screening, early intervention) compared to children involved with ITCP sites during the first year of the COVID-19 pandemic? Are <u>parents</u> involved with ITCP sites during the previous year of the COVID-19 pandemic more likely to have access to needed services (e.g., trauma-informed mental health, substance abuse, parenting) compared to parents involved with ITCP sites during the first year of the COVID-19 pandemic?

Section 2

Methods



2. Methods

The ITCP evaluation used a mixed-methods design consisting of three components: continuous quality improvement (CQI), a process (implementation) evaluation, and an outcome evaluation that comprised prospective and retrospective analyses (**Table 2** lists each state and county and its evaluation activities). The CQI component included monthly analysis of each evaluation site to review performance indicators and assess their progress by comparing data over time. The process evaluation examined implementation of the Safe Babies Court Team (SBCT) approach. The outcome evaluation used a quasi-experimental design with a comparison group from the National Survey of Child and Adolescent Well-Being (NSCAW), the only nationally representative sample of children involved with the child welfare system (CWS).

State	Process Evaluation	Prospective Outcome Evaluation	Retrospective Outcome Evaluation
Arkansas	Arkansas State Team Benton County* Jefferson County* Sebastian County	NA	Pulaski County
Colorado	Pueblo County*	NA	NA
Connecticut	New Haven County	New Haven County	NA
Florida	Florida State Team Broward County* Orange County Palm Beach County*	Broward County* Palm Beach County*	Bay County Pasco County Okaloosa County*
Hawaii	NA	NA	Honolulu County*
Iowa	Polk County	Polk County	Polk County
Minnesota	St. Louis County:* • Duluth • Virginia	St. Louis County:* • Duluth • Virginia	NA
Mississippi	Forrest County Rankin County	Forrest County Rankin County	Forrest County Rankin County
New Jersey	New Jersey State Team Essex County Hudson County Passaic County	NA	NA
Ohio	Ohio State Team Cuyahoga County Montgomery County Scioto County*	NA	NA
Oklahoma	NA	NA	Tulsa County

State	Process Evaluation	Prospective Outcome Evaluation	Retrospective Outcome Evaluation
South Carolina	South Carolina State Team Laurens County* Richland County Spartanburg County*	NA	NA
Washington	Washington State Team Kitsap County Pierce County* Spokane County Thurston County*	Pierce County*	NA

Note: Seven HRSA-funded sites participated only in Discretionary Grant Information System (DGIS) reporting and not evaluation activities (process or outcome evaluation activities): Matanuska-Susitna, AK; Arapahoe, CO; Washoe, NV; Broome, NY; Lucas, OH; Payne, OK; Salt Lake, UT.

*Sites located in counties that met the criteria for the HRSA definition of rurality: <https://data.hrsa.gov/tools/rural-health?tab=StateCounty>

Process Evaluation Activities. The process evaluation was conducted with three cohorts of sites as listed in **Table 3**. It consisted of two rounds of partner interviews (baseline, follow-up) for the first cohort, and three rounds of interviews (baseline, midpoint, and follow-up) with the second cohort and the increased reach cohort. Each evaluation period was separated by at least six months.

Table 3. Sites and Interview Time Points for the Process Evaluation

Cohort	# of Sites*	Period	Dates	# of Interviews
1	9 sites—Palm Beach County, FL, Broward County, FL, Polk County, IA, Forrest County, MS, Rankin County, MS, New Haven County, CT, Pierce County, WA, North Duluth and Virginia in St. Louis County, MN	Baseline	May 2019–Jun 2020	40
		Follow-Up	Jan–Jul 2022	40
2	6 states, 16 sites—Orange County, FL; Cuyahoga, Scioto, and Lucas Counties, OH; Benton, Jefferson, and Sebastian Counties, AR; Laurens, Richland, and Spartanburg Counties, SC; Essex, Hudson, and Passaic Counties, NJ; Kitsap, Spokane, and Thurston Counties, WA	Baseline	Jan–Oct 2021	108
		Midpoint	Sep–Dec 2021	39
		Follow-Up	Apr–Jul 2022	103
Increased Reach	2 sites—Polk County, IA, Pueblo County, CO	Baseline	Jan–Feb 2021	10
		Midpoint	Dec 2021–Jan 2022	6
		Follow-Up	Jun–Jul 2022	10
Total	26 sites	-	-	356

*Polk County is counted in Cohort 1 as well as in the increased reach sites

Data were collected via 1-hour semi-structured interviews. Interviews were conducted with three to five state-level team members including a Statewide Coordinator (for states in the second cohort) and site-level Community Coordinators. Key partners interviewed at baseline and follow-up timepoints included judges, attorneys, Court Appointed Special Advocates (CASAs), Guardians Ad Litem (GALs), child welfare administrators, social workers, and service providers. A total of 356 interviews were completed.

Outcome Evaluation Activities. The outcome evaluation focused on the main child welfare outcomes: safety, permanency, and well-being. The outcome evaluation design was a quasi-experimental design to create a comparison group from NSCAW II using propensity score matching (PSM) to select a subsample of infants and toddlers with a substantiated/indicated maltreatment investigation who either stay with their original caregiver in-home or were placed out-of-home. PSM is a method of reducing the effects of selection bias by finding groups of children who are sufficiently similar based on their propensity to be treated such that intervention effects can be attributed to the intervention—in this case, participation in an ITC—rather than to selection bias.

For well-being outcomes, prior to the onset of the COVID-19 pandemic, data were collected directly from parents when the family agreed to participate in the ITC and evaluation. Each Community Coordinator received a laptop preprogrammed with the study's instrumentation. Parents were asked to complete a computer-based interview made up of selected NSCAW III measures: the Child Behavior Checklist (CBCL) (Achenbach & Rescorla, 2000) and the Maternal Depression items adapted from the depression section of the National Comorbidity Survey Replication that screens for depression (Gadernann et al., 2012; Kessler et al., 2012) and uses the criteria established in the Diagnostic Manual of Mental Disorders (DSM 5). The interview used audio-computer assisted self-interviewing (ACASI), allowing parents to listen to the questions and answer choices on headphones as they saw them on the screen. Community Coordinators provided a private space for parents to complete the self-interview on the laptop. The data were transmitted to an RTI secure website that immediately uploaded and encrypted the data, then deleted the data from the laptop to ensure that no parent's information was accessible.

Data Collection Challenges. The primary challenge during the evaluation was the COVID-19 pandemic that began in March 2020. Its impact was felt on the process side, as court hearings and family services had to transition from in-person to a virtual platform. On the outcomes side, states put in place blanket orders on restricting family time (visitation), issuing termination of parental rights (TPR) continuations, and putting reunifications on hold—changes that impacted permanency outcomes (time to permanency and type of permanency) and analysis.

Three main modifications were implemented in response to the COVID-19 pandemic:

- Retrospective permanency study: Using NSCAW II as a comparison group was no longer feasible as the data collected on NSCAW cohorts occurred before the pandemic. The outcome evaluation was expanded, after Institutional Review Board (IRB) approval, to conduct a secondary data analysis of ITC cases pre-pandemic. The sample focused on children and families that, by May 2018, had at least a year since their maltreatment

report associated with their entry to an ITC. The comparison group was created using PSM to select a subsample of infants and toddlers from NSCAW II with a maltreatment investigation and a placement history similar to the children at Infant-Toddler Court Team (ITCT) sites.

- Prospective permanency and safety study: Because the federal, state, and court pandemic-related orders could have extended time to permanency and maltreatment reports, we identified counties with a similar risk score in the CDC Social Vulnerability Index to that of an ITCT county in each state. We made amendments to IRB protocols and to Data Use Agreements with states to expand the request to child welfare agencies to include de-identified data from similar groups of children involved in regular dependency court in the matched counties. We received files for ITC children and for all children in comparison counties with similar social vulnerability risk for National Child Abuse and Neglect Data System (NCANDS) and Adoption and Foster Care Analysis and Reporting System (AFCARS) data of children aged 0–36 months at the time of the maltreatment report during the same period as ITC families (the earliest court date was July 26, 2018, for a child with an open case date of April 16, 2019). We used PSM to create a comparison group to analyze permanency and safety outcomes after receiving files up to 2022.
- Pilot child and parent well-being study: The pandemic halted the in-person efforts to collect data from ITC families on well-being indicators. Additionally, it was no longer feasible to compare ITC families to NSCAW cohorts (for whom data was collected pre-pandemic) and there is no other source of national well-being data to create a comparison group. An IRB amendment was approved to transition to virtual interactions between Community Coordinators and parents, including the completion of a virtual consent form. Because of the social-distancing restrictions placed on court and child welfare buildings, this amendment also provided approval to change the in-person self-interviewing instrument (ACASI) to an RTI-administered computer-assisted personal interview (CAPI) that would be conducted over the phone with parents and caregivers. This part of the study was considered a pilot effort comparing baseline to follow up scores without a comparison group. Three instruments were added to the battery: the COVID-19 Family Stress Screener, the Connor Davidson Resilience Scale (CD_RISC-2), and the Parent Reflective Functioning Questionnaire.

As a result of these modifications, the outcomes evaluation is composed of several different samples covering data collected before the pandemic or during the first years of the pandemic.

Supplemental Evaluation Activity: Development of the Child Well-Being Dashboard. The goal of the Child Well-Being Dashboard was to provide ITCs and community/state teams with a tool to improve child welfare outcomes by providing a comprehensive picture of the geographic risk and protective areas for child and family well-being, accounting for both social and environmental factors, to enable strategic resource planning.

Using the RTI Merge platform (see AI-Driven Research Platform for Social Sciences—RTI Merge), we used as a starting point (a) the free code from <https://www.predict-align-prevent.org/about-us> (code at: [Algorithmic fairness: A code-based primer for public-sector data scientists](#)), (b) RTI SynthPop, a virtual, anonymized population that represents real people and households, to allow for projections of data at increased granularity for strategic resource allocation while preserving the privacy of individuals and households, filtering for households with children aged 0-36 months, and (c) the RTI Merge platform to integrate multiple data sets relevant for predicting involvement with the CWS, including the CDC Social Vulnerability Index, NCANDS, and AFCAS data from the last 5 years, along with key indicators of social determinants of health.

The dashboard allowed the identification of key protective and risk factors at a granular level, including types of placements and other outcomes of interest. The dashboard was produced first for one state during Year 3 and was expanded with a reduced number of key indicators nationwide during Year 4. A license was obtained from the **National Data Archive on Child Abuse and Neglect (NDACAN)**¹ after IRB approval. The NDACAN license included permission to use de-identified data sets, including NCANDS and AFCARS, for the dashboard. This was the first time that NDACAN granted a license to use these data sets for a public dashboard.

¹ See: [Datasets Available from the National Data Archive on Child Abuse and Neglect \(NDACAN\), Cornell University, College of Human Ecology \(hhs.gov\)](#)

Section 3

Process Evaluation

Findings



3. Process Evaluation Findings

Currently, there are 122 sites at various stages of implementation across 28 states, including sites supported by the NRC that are in the early stages of installation (9 jurisdictions) or exploration (8 jurisdictions). A total of 6 state teams and 26 sites participated in the process evaluation, as detailed in the Methods section. Cohort 1 comprised 9 existing sites; Cohort 2 comprised 16 new sites with state-level support. The third cohort comprised the two increased reach sites (one of which was also part of Cohort 1 and the other a site with several years of experience), each looking to expand the capacity of their ITCs to serve more children/families.

Table 4 summarizes the findings from the process evaluation.

Table 4. Process Evaluation Summary of Findings

	State-Level (Cohort 2)	Site-Level (Cohorts 1 and 2)
Key Partners	<ul style="list-style-type: none"> Judicial system Child welfare system Professionals with ability to affect change within the state 	<ul style="list-style-type: none"> Judicial system Child welfare system Attorneys, GALs/CASAs, Service Providers
Collaborative Relationships	<ul style="list-style-type: none"> Developed among the state agency and other state-level partners on the State Advisory Groups (SAGs) Virtual options helped reach broader audience² Targeted and frequent communication very early led to greater success 	<ul style="list-style-type: none"> Community Coordinator communication critical to collaboration Developed through the partnerships among the professionals on Family Team Meetings (FTMs) and community partners on the Active Community Teams (ACTs)
Trainings/ Technical Assistance	<ul style="list-style-type: none"> <u>Most Helpful</u>: Leadership Calls and Ad hoc conversations <u>Needs</u>: Grant writing and/or sustainability planning later in implementation 	<ul style="list-style-type: none"> <u>Most Helpful</u>: Cross Sites Conference (Cohort 1); Coordinator Academy (Cohort 2); Trauma Training (Both) <u>Needs</u>: How to recruit and maintain engagement with families
Chief Obstacles	<ul style="list-style-type: none"> Understanding the steps and stages in the process of implementing an ITC and how to balance site and statewide needs Understanding CQI and evaluation 	<ul style="list-style-type: none"> COVID Pandemic Buy-in, especially for those whose time is not always compensated (i.e., attorneys, clinicians) Turnover

² The broader audience included individuals who may have been prevented from participating either by distance or time constraints.

State-Level Development and Functioning

Leadership and oversight of new sites in Cohort 2 was overseen by 'state teams' tasked with both supporting their respective site-level programs with implementation and helping to build collaboration focused on early childhood system integration at the state level. The make-up of state teams varied from state to state. In some states, this leadership was provided by the state's child welfare agency or by the judicial system through the Administrative Office of the Courts. In the other states, leadership was provided by a state infant mental health association, state child advocacy organizations (e.g., the Ohio Children's Defense Fund), or the state CASA program. A key challenge for the state teams was facilitative administration in states where the judicial and child welfare systems are county-based.

Key Partners in State Advisory Group (SAG). Judicial and child welfare system engagement and leadership are essential to successful implementation, spread, and sustainability of ITCs. State teams without leadership from the judiciary/child welfare system struggled with obtaining buy-in from these systems. In addition to these critical partners, other key partners included representatives from service provider organizations, potential funders, health care systems, university partners, and subject matter experts in issues such as housing or Medicaid. As much as possible, SAG leadership invited and encouraged the participation of professionals with the power to effect change within their respective agencies. States partnering with those in positions of decision-making authority were more likely to see change occur. During midpoint and follow-up evaluations, it was noted that as the work began and progressed, teams identified partners they may have overlooked when initially developing their SAGs and adjusted their invitation lists accordingly. At baseline, four of the six states in Cohort 2 had begun SAG meetings. By midpoint all the states' SAG groups had met at least once and, at follow-up, all SAG groups were meeting regularly although frequency varied with some meeting monthly while others were meeting bimonthly or quarterly. Interviewees noted SAGs were most helpful in addressing concerns raised by the individual sites such as assisting sites with streamlining mental health service referrals for ITC families.

Collaborative Relationships. Obtaining buy-in early in the process was critical to successful state-level work in supporting implementation of ITCs and engagement with the SAG. Programs that had taken the time to create strong partnerships and relationships very early, even during grant writing for the program, found themselves in a better position to support the work once things began. State teams typically held periodic meetings with the sites, though the frequency varied from state to state with the majority meeting at least monthly. These meetings were usually held virtually as it required less travel, especially in larger states where sites were located further apart. Some states noted incongruence between state-level support and front-line implementation. While state-level leadership in various agencies expressed support for ITCs, local sites noted this did not always trickle-down to front-line child welfare workers and attorneys, which resulted in Community Coordinators often encountering resistance. Midpoint and follow-up evaluations noted this improved over time, especially when local professionals

were able to see change occur and observe the ITC working to benefit children and families.

Training and Technical Assistance. During the initial period of working with sites to support installation of new sites, state leaders indicated Leadership Calls with the NRC were the most helpful Technical Assistance (TA) activity. These calls provided important technical support and direction specific to their state's unique needs. As implementation at local sites progressed from the installation stage to working with families, many state-level leaders also appreciated the ability to have ad hoc conversations with NRC Technical Assistance Specialists and other staff to address concerns or challenges as they arose. One ongoing area of training need was sustainability planning, including grant writing. However, professionals felt that this training would be most useful somewhat later in the implementation process rather than when teams are intensely focused on supporting uptake of new practices and procedures.

Chief Obstacles and Solutions. While the COVID pandemic presented challenges, state teams indicated that operating in the virtual environment was to their advantage. While they missed the camaraderie of in-person meetings, state-level staff indicated they could communicate effectively with the site leadership teams by virtual means and that this allowed for greater flexibility as they did not have travel constraints. Similarly, holding meetings virtually allowed more partners to participate in the SAG meetings, especially for those whose were located a distance away. The main challenges state teams experienced were understanding the program as a whole, the process of learning their roles and function, and the process of supporting local sites' unique implementation needs while simultaneously supporting and building the statewide initiative. Additional challenges included data collection efforts in the interest of CQI and evaluation. Often, states were unsure where to focus their data collection efforts or desired to collect additional or different data than what the NRC database captured. Several states found themselves supplementing the data collected in the NRC database with their own separate database or other data collection methods, which increased the burden of data collection and could result in duplicate entry of data.

Site-Level Development and Functioning

As with state teams, judicial and child welfare leadership involved and supportive of ITC implementation was critical to success at the site level. Teams that encountered resistance or barriers related to strict protocols dictating practice on either of those fronts found it took longer to enroll families in the program. Through thoughtful intentional relationship-building, connections with and support from these critical partners improved over time. As previously mentioned, the relationships markedly improved once the benefits of the program were perceived. In addition to judicial and child welfare partners, other key partners included attorneys, GALs, and service providers.

Key Partners in Site Leadership Teams and Active Community Teams. Key partners at the site-level included the judge, attorneys, case workers, GALs, and service providers such as infant and early childhood mental health therapists, early intervention specialists, and substance use disorders treatment representatives.

Collaborative Relationships. At the site level, the Community Coordinator was in regular communication with families as well as key system partners. Communication occurred in person during court and Family Team Meetings (FTMs), as well as via email, phone, and text in-between meetings. The Community Coordinator also facilitated Active Community Team meetings bimonthly or monthly depending on the site. For Cohort 1 (existing) sites, one of the most time-demanding responsibilities was court calendar scheduling and setting a date and time with the judge so all parties would be aware and know when hearings were taking place. In several sites, judges identified a specific day to hear all ITC cases which alleviated this challenge.

At baseline, sites in Cohort 1 were supporting children and families. All but one site was implementing FTMs on a regular basis; two sites were implementing FTMs less than monthly (bimonthly/quarterly).

Cohort 2 began enrolling families by the evaluation midpoint. Enrollment numbers during this initial implementation stage were lower than anticipated. A key obstacle to enrollment was lack of buy-in from child welfare agencies and parent attorneys, resulting in low referrals to the program. Additionally, several sites' stringent initial eligibility requirements created a barrier to enrollment; these were later re-evaluated and loosened as time went on. Coordinator turnover also contributed to slow enrollment. At follow-up, all Cohort 2 sites were conducting regular court hearings and FTMs. Frequency varied by site with a most occurring monthly with a few sites holding FTMs bimonthly and court hearings every 60 or 90 days.

Despite the initial challenges that Cohort 2 experienced with buy-in and commitment from agency and community partners, follow-up interviews indicated collaboration improved greatly from baseline to follow-up. Increased collaboration resulted from ongoing training about the program, continued and intentional communication, and the demonstrable benefits of program participation for both children and their families.

Training and Technical Assistance. For Cohort 1, wherein existing sites were focused on continuous quality improvement, the annual Cross Sites Meeting was one of the most valued TA activities. For Cohort 2, these new sites indicated the most helpful training activity was the Community Coordinator Academy. In addition, all cohorts indicated training on trauma and its effects were also very beneficial as were the ongoing Site Leadership Team Meetings. After Cohort 2 sites began enrolling families, supplemental FTM training was also viewed as very valuable. Continuous training needs are site-specific but topics include substance use disorders, the use of medical marijuana, supporting families affected by intimate partner violence, and how to engage families. Professionals reported that the training they received led to a much more trauma-responsive approach in working with families. Many sites recommended training for resource and kinship families caring for children supported by the ITC, to help them understand how the program works and about court-related processes including their role as a witness; the latter training topic was also recommended for service providers and community partners who do not often interface with the court system. Sites noted that while they appreciated all the training and TA offerings, the number could feel overwhelming and, at times, it was hard to discern who would most benefit from which opportunity. While partners were invited to take part

in training and TA, scheduling and time constraints often conflicted resulted in their not being able to attend. Sites described needing additional written information describing the training and the types of roles that the training was targeting.

Chief Obstacles and Solutions. The COVID pandemic presented a challenge both for sites already in operation and new sites that had to begin installation under pandemic restrictions. Sites already working with families had to quickly transition to a virtual environment. To help facilitate the transition, Site Leadership Teams worked with their agencies and community partners to provide equipment (i.e., tablets, phones), platforms compliant with security needs (including one provided for ITCs with the support of the NRC), or internet access (wi-fi hotspots) to families so they could continue their services and participate in meetings and court hearings virtually. To maintain a sense of normalcy and connection for the families, Site Leadership Teams also found innovative ways to facilitate quality family time (visitation) by meeting outside in parks and providing passes to places like zoos and other outdoor venues. Sites that were initiating implementation during stay-at-home orders and distancing protocols found it hard to garner support for their ITC and build rapport with families and other professionals without the opportunity for making in-person connections.

Other challenges for sites included obtaining buy-in from parent attorneys and service providers. Both groups had difficulty committing to the increased time required by ITCs without receiving additional payments or billing options. Attorneys initially feared the ITC could be seen as another case plan requirement their clients might not fulfill that could result in their client being penalized in the dependency process.

Strategies that sites identified for improving collaboration among community partners included holding pre-implementation meetings in which an explanation of the program would be provided along with realistic timelines for target hiring dates as well as when teams can expect to start enrolling families; trainings specifically designed for and delivered to key court and child welfare staff to deepen their understanding of their roles; a kickoff celebration that brings together local partners to strengthen relationships from the beginning; and sharing marketing materials with potential community partners to spread awareness.

Lastly, programs faced turnover challenges reflecting the larger challenges of high turnover in child welfare nationally. During the evaluation period, two sites from Cohort 1 saw turnover in the Community Coordinator position. Cohort 2 saw turnover in the Community Coordinator position among four sites as well as turnover in the State Coordinator position in three states. Many sites confirmed they faced high child welfare or court personnel changes broadly.

Implementation Outcomes

Respondent reports from Cohort 2 on the baseline and follow-up web surveys indicate after a new ITC was implemented, the frequency of hearings went up (**Figure 1**), frequent quality family time was put in place at more sites (**Figure 2**), and several areas of collaboration improved based on the Wilder Collaboration Factors Inventory (**Figure 3**).

Figure 1. Frequency of ITC Hearings

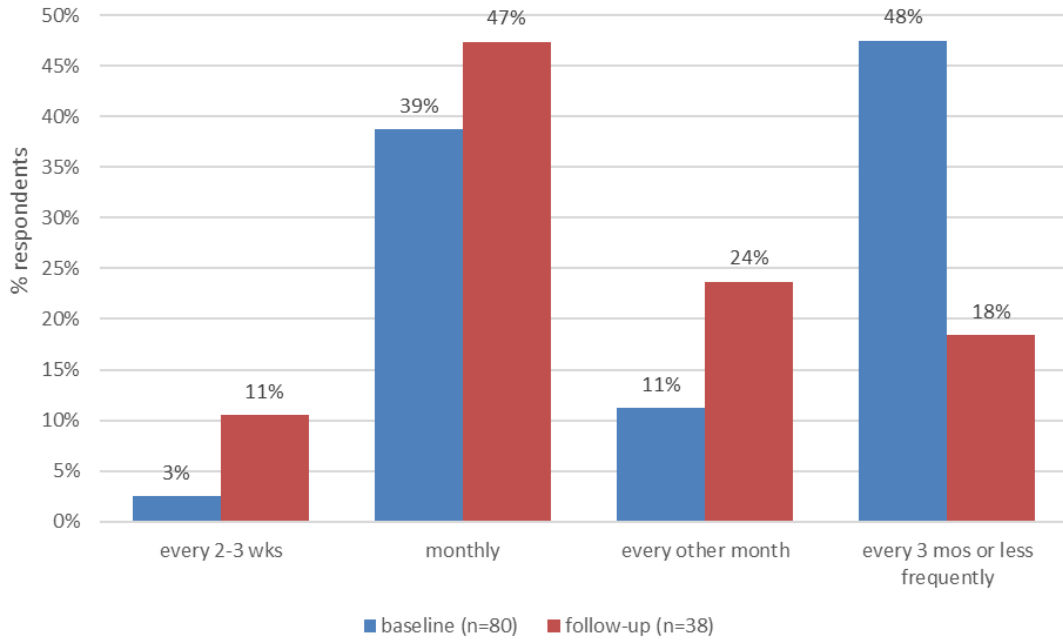


Figure 2. Frequency of Quality Family Time

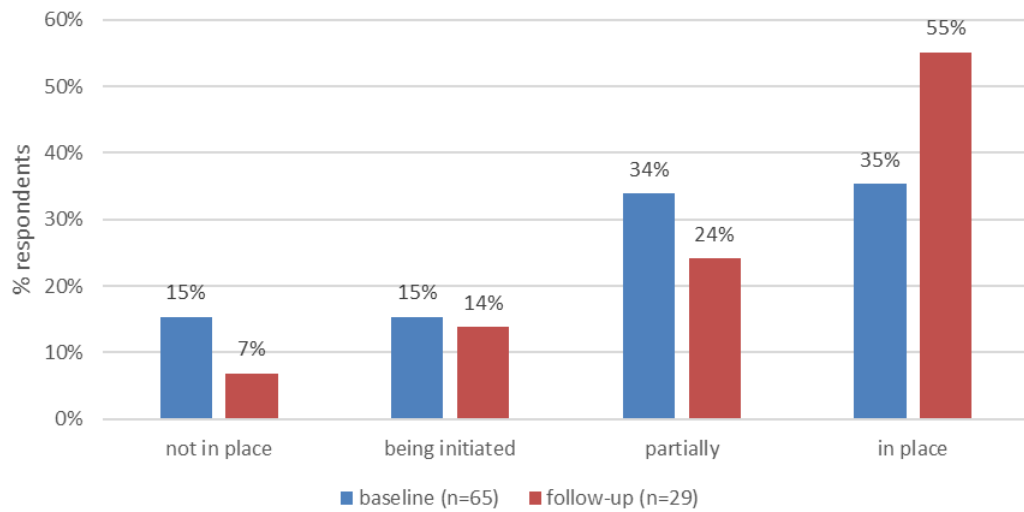
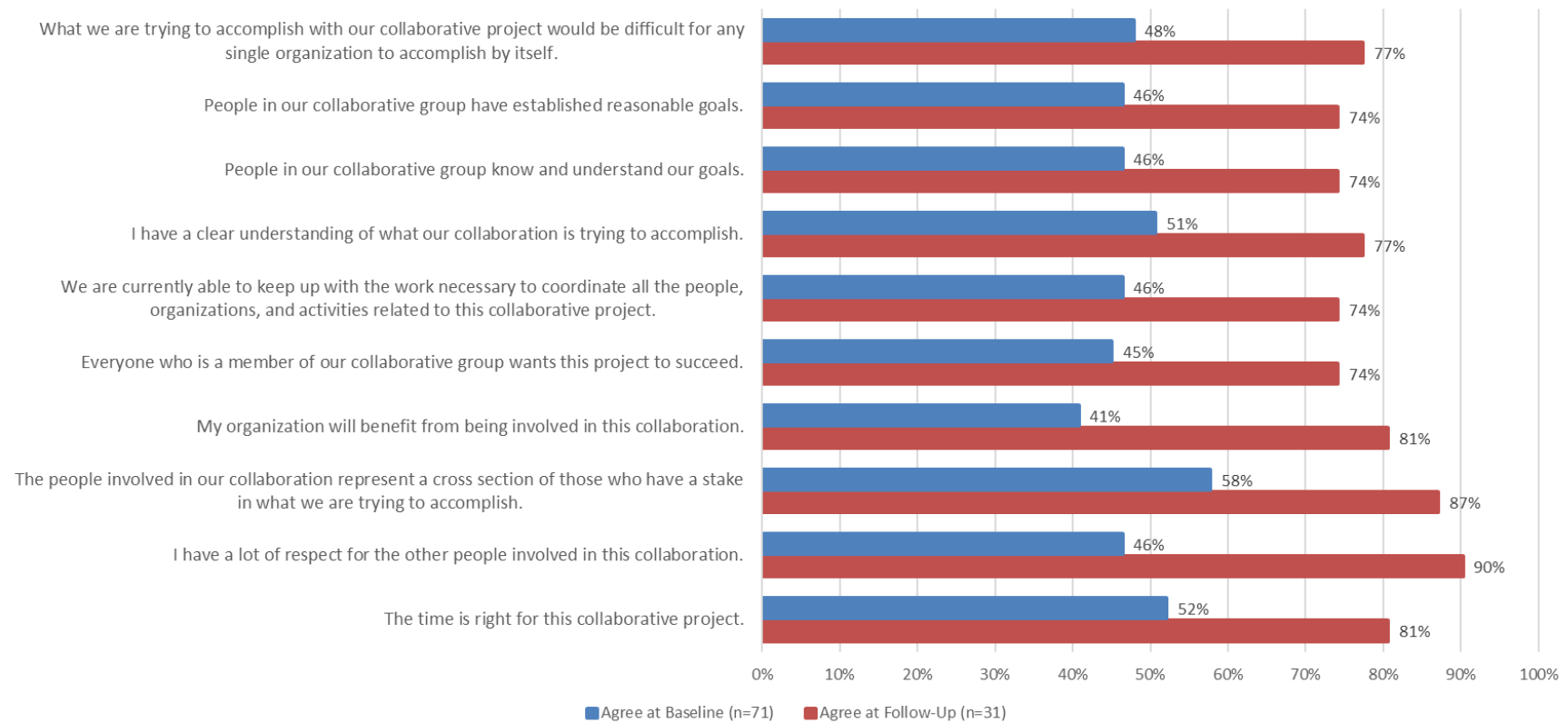


Figure 3. Most Improved Areas of Site-Level Collaboration



Increased Reach Development and Functioning

The third cohort under evaluation comprised two increased reach sites in Pueblo County, Colorado, and Polk County, Iowa. The main objective of these sites was to expand the number of children and families reached.

Key Partners. Key partners in helping to increase reach in these sites were the Community Coordinators, the judges, and child welfare leadership, who worked together to bring on additional judicial staff and caseworkers and to identify additional prospective families to enroll in the program.

Strategies Pursued. To serve additional families, the Pueblo site adjusted their court dockets and structures to support increased capacity. This included blocking off additional time at the court and with the state child welfare agency for FTMs specifically for ITC cases. The Polk site began taking referrals from other courts. However, after discovering how traumatic it can be for families to bounce from court to court, the site ultimately decided only to transfer families from other courts that were in the beginning stages of their proceedings.

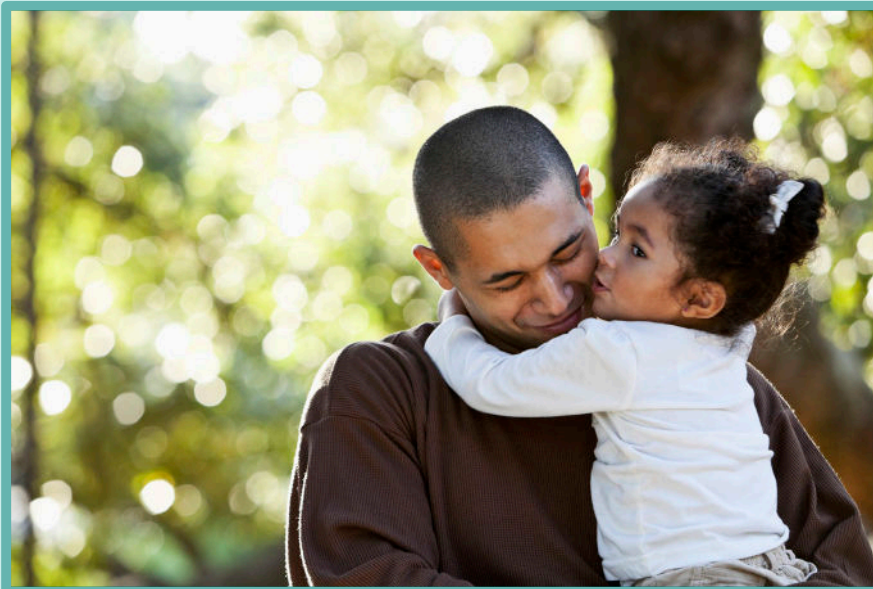
Reach. Neither site reached the full increased capacity target during the evaluation though, at times, they were just under the goal of 40 families. The main obstacle to achieving capacity was a shortage of caseworkers and referrals to the ITC. Both sites attributed their successes to strong support from their judges, the leadership and initiative of their Community Coordinators, and the robust working relationships with community service providers and other partners.

Chief Obstacles and Solutions. COVID presented many challenges for the increased reach sites including how to assist with family time and how to best offer hybrid options for court and FTMs. At midpoint, it was noted that everyone was suffering from Zoom fatigue (excessive use of video conferencing). When service providers and court proceedings began resuming in person, staff found it hard to motivate parents to attend and saw a drop in participation. Other challenges included turnover and caseworker shortages, lack of concrete supports and resources (i.e., affordable housing) in their respective communities, and long waits to engage in mental health services and substance use disorders treatment. The Polk County site also encountered policy restrictions on the number of family visits allowed by the Department of Human Services (DHS), which they were able to supplement with other opportunities by engaging resource caregivers, family, and friends to facilitate additional time for parents to be with their children.

Diffusion of Enhanced Practices. It was noted that trauma-responsive practices in supporting children and their families spread into non-ITC cases in court proceedings and ITC staff were often called to consult on non-ITC cases to give advice and explain how to access or assist with referrals to services in the community.

Section 4

Outcomes Evaluation: Key Findings



4. Outcome Evaluation: Key Findings

This section presents key findings of the outcome evaluation. **Appendix A** provides the sampled dataset, analysis strategy, sociodemographic characteristics of the sample, and the key findings for each set of outcomes.

Infant-Toddler Developmental Health

Access to Health Services

Infants and toddlers served by ITCs accessed health services at the same level as pre-COVID and even experienced increased receipt of health services compared to pre-COVID.

- Over half of ITC children (56%) pre-COVID and 38% during COVID were identified as having a physical health need. Pre-COVID, health care was received for 99% of identified needs, compared to 97% of needs during the first year of COVID. The mean number of days between referral and receipt was 24 days pre-COVID and 18 days during COVID.
- Receipt of services for health care needs in 30 days or less was significantly more likely during COVID (78%) compared to pre-COVID (64%, $p < .05$).
- Logistic regression analysis of 236 instances of health care services received showed higher odds during COVID of receiving health care within 30 days or less (OR 3.8, CI: 1.6-8.9, $p < .01$) and within 14 days or less (OR 2.7, CI: 1.3-6.0, $p < .05$).
- Overall, independently of COVID group, children with special health care needs (SHCNs) were more likely than those without SHCNs to receive health services within 30 or fewer days (OR 6.6, CI: 2.2-19.2, $p < .001$), and within 14 days or less (OR 5.8, CI: 2.3-14.6, $p < .001$).
- Children with developmental concerns were also more likely to receive health services within 30 or fewer days compared with those without developmental concerns (OR 3.5, CI: 1.1-11.3, $p < .05$).
- Black children were less likely to receive services within 14 days or less compared with White children (OR 0.4, CI: 0.2-1.0, $p < .05$).
- Of note, there was a significant decrease in participation of Black children in ITCs during COVID, compared with pre-COVID (31% vs. 22%). In contrast, although not significant, rates of participation in ITCs increased during COVID for Hispanic/Other children (11% vs. 23%) and White children (36% vs. 46%).

Permanency: Timing and Type

Results of a quasi-experimental, retrospective substudy found that infants and toddlers supported by ITCs exited the child welfare system significantly faster than children in a matched comparison group from NSCAW II (Casanueva et al., under review).

- Mean time to permanency for the ITC group was 450.6 days compared to 654.9 days for those in the NSCAW II group.
- Children in the ITC group were 1.6 times as likely to exit foster care to some type of permanency compared to the NSCAW II group.
- ITC children were significantly less likely to remain in foster care by the end of the study period (2.7% vs. 16.9%, $p < .001$).
- Overall, being Hispanic was found to be a significant predictor of time to permanency for reunification only (hazard ratio = 0.45, $p < .05$) where it was associated with longer times to reunification.

Reunification was the most common type of permanency for young children in ITCs and was significantly higher among ITC children compared to the NSCAW II sample (43.7% vs. 25.6%, $p < .001$).

- Despite longer times to reach reunification, Hispanic children were more likely to be reunified than non-Hispanics (Hispanic 40% vs. 36% White, 31.9% Black, and 24% Other), although these rates did not differ significantly.
- There were no significant differences between the ITC and NSCAW group on exit from the child welfare system for adoption or for exit to relative custodian/guardianship/other.
- Type of permanency was significant across models, with adoption and guardianship both taking longer than reunification.

Analysis of data collected during the COVID pandemic (between 2019 and March 2022), comparing permanency outcomes for ITC children with a matched group of children from comparison counties without an ITC site (counties matched on the CDC Social Vulnerability Index), found no significant differences in permanency outcomes.

- 31.7% of ITC children reached permanency during the study period compared with 29.6% of non-ITC children ($p = .6799$).
- 27.7% of ITC children were reunified compared with 26.0% of non-ITC children; 12.9% of ITC children were with a relative custodian/guardian at case closure compared with 10.4% of non-ITC children ($p = .5521$).

Child Safety: Maltreatment Recurrence

- Analysis of data collected during the COVID pandemic (between 2019 and March 2022), comparing maltreatment recurrence for ITC children with a matched group of children from comparison counties without an ITC site (counties matched on the CDC Social Vulnerability Index). ITC children were significantly less likely than matched children in comparison counties to experience maltreatment recurrence.
- ITC children had a 12-month recurrence of 3.6% compared to 10.0% among non-ITC children ($p < .0001$).

- The odds of 12-month recurrence were significantly lower among ITC children than comparison children after controlling for gender, race/ethnicity, previous involvement with the child welfare system, and family domestic violence (OR=.36, $p<.01$).

Parent Service Needs and Access to Services

Parents participating in an ITC were able to maintain similar levels of receipt within 30 days and within 14 days as before COVID (Casanueva et al., 2022).

- Overall, 897 instances of services needs were analyzed, 411 pre-COVID and 486 during COVID. Of these 897 needs, 659 (76%) received services.
- Among parents that accessed services, a higher percentage of parents in need received mental health services in 30 or fewer days and substance use disorder (SUD) services in both 14 and 30 or fewer days during COVID compared to pre-COVID.
- Using logistic regression for all 897 parent service needs, service receipt was reduced during COVID (OR=0.2, CI: 0.1-0.3, $p<.0001$).
- Across service needs overall, independent of COVID group, females were more likely to receive services than males (OR=2.2, CI: 1.5-3.3, $p<.001$), parents aged 20 to 29 were less likely to receive services than parents 30 years or older (OR=0.7, CI: 0.5-1.0, $p<.05$), and parents with substance use problems were less likely to receive services than parents without substance use problems (OR=0.5, CI: 0.3-0.9, $p<.05$).
- Parents with a child where the reason for removal or involvement with the child welfare system included physical abuse were more likely than parents without that reason to receive a needed service (OR=1.9, CI: 1.1-3.0, $p<.05$) and this result was similar for parents of children that were identified as neglected compared to other reasons (OR=2.5, CI: 1.8-3.6, $p<.0001$).
- Parents of a child placed with kin (OR=0.4, CI: 0.2-0.6, $p<.001$) and non-kin foster (OR=0.2, CI: 0.1-0.4, $p<.0001$) compared with parents with a child who remained in-home during the first 6 months were less likely to receive services.
- Analysis of time between referral and receipt of services examined 659 needs for which services were received were analyzed (359 pre-COVID and 300 during COVID). Of these needs, 409 (62%) were met within 30 days and 289 (44%) were met within 14 days. The mean time to receipt was 55 days pre-COVID and 43 days during COVID.
- Across 659 needs for which services were received, there were no differences pre- and during COVID on receipt in 30 or fewer days and 14 or fewer days from referral.
- Across services overall, independently of COVID group, Hispanic/Other parents were more likely to receive a service within 30 or fewer days (OR=3.6, CI: 1.9-6.7, $p<.0001$) and within 14 or fewer days from referral (OR=3.4, CI: 2.0-5.8, $p<.0001$) compared with White parents.

Child and Parent Well-Being

Parent and caregiver self-report data was collected via ACASI prior to the COVID pandemic, then via CASI administered over the phone during the COVID pandemic (between 2019 and March 2022), using standardized instrumentation to assess child emotional/behavioral problems, parental depression, parental reflective functioning, resilience, and stress associated with the pandemic. Data were collected at baseline and follow-up (case closing or 6 months before study closing). No significant differences were found baseline to follow-up on any outcome. Results included:

- Low reports of child emotional/behavioral problems in the clinical range at both time points.
- Similar scores to the general population of parents on parent reflective functioning, with no differences by sociodemographic, risk factors, depression, or results of the child emotional/behavioral scores.
- Up to a third of parents and over half of caregivers reported stress related to COVID-19.

The study interview included questions regarding the child's health status, whether immunizations were up to date, and if the child was attending an early childhood program at baseline and follow-up. No significant differences were found across the two time points.

- Approximately two-thirds of parents and caregivers reported that their children were in excellent health at both time points.
- Nearly all (about 95%) children at both points in time had their immunizations up to date.
- Less than one in five children attended an early childhood program/child care at baseline, and one in four at follow-up.

The study interview included questions about services ("parenting training" and "parent skills training characteristics") that the parent had been referred to and received in the last 12 months, at both baseline (reflecting early in the case) and follow-up (again, at case closing or within 6 months of the study closing).

- More than 70% of parents reported receiving parenting services at both time points.
- Over half of parents received parenting services in the previous 12 months.
- About two-thirds of parents reported having listened to a presentation about parenting skills or child development.
- About half of parents reported receiving coaching directly as they practiced skills with their child.

Section 5

Discussion



5. Discussion

The results of the ITCP evaluation demonstrate its impact in supporting timely access to developmental health services for very young children and services and supports to their parents, including preventive health care and therapeutic intervention to support the parent-child relationship. This is particularly evident in the finding that children and their parents were able to access needed services during the COVID-19 pandemic at the same level as prior to the pandemic, despite the severely limited service landscape and challenges associated with social distancing. Overall, children experienced an increased receipt of health services during this difficult period. However, health equity issues were also identified in that Black children, regardless of timing (i.e., pre or during COVID), were less likely to receive health services as expediently (within 14 days) as White children and fewer Black children were supported by ITCs during COVID.

The evaluation also included quasi-experimental research that demonstrated positive permanency and maltreatment recurrence outcomes. In a retrospective study comparing children served by nine ITC sites with a matched comparison group using NSCAW II data, the former were 1.6 times as likely to exit foster care to permanency and more than 2 times as likely to exit to reunification compared with adoption. In a prospective study using a matched comparison group of other counties, the repeat maltreatment rate within 12 months among ITC families increased to 3.6% during COVID. However, even with this increase—which was not unexpected given the enormous stress on families with young children—this figure was significantly lower compared with the children in the matched comparison group. The recurrence rate also remained well below the 9.7% national standard (Children's Bureau, 2022)

The positive child and family outcomes reflect the impact of the NRC's TA and implementation support in building more collaborative child welfare practices and strengthening integration, alignment, and coordination across early childhood systems. This was evidenced by the nimble individualized support that the NRC provided to ITCs to adapt to the pandemic environment, including the transition to virtual platforms for FTMs and court hearings—critical vehicles for collaborative practice that ensures timely, holistic, and individualized response to child and family needs. Indeed, collaboration was critical for ITCs to navigate the pandemic and implement rapid changes, and the process evaluation found that collaboration markedly improved as reported by cross-system partners. Research on effective implementation of new practices shows that developing trusting relationships among partners is essential for successful implementation, innovation, and system building (Bartley et al., 2022; Milligan et al., 2022).

Limitations

While the only children excluded from analysis were those from a few families that withdrew from ITC participation, it is unknown how many children were excluded because their data were not entered into the NRC dataset. This dataset was the starting point to identify children and prepare the list of cases for analysis or for requests of data received from states.

As this study was conducted during the time of the COVID-19 pandemic, results are not representative of regular ITC operation. However, the analysis completed with data pre-pandemic comparing permanency outcomes of ITC children and those that received traditional child welfare services (the NSCAW II sample) is generalizable to other children supported by ITCs during non-pandemic periods.

For the process evaluation, while every effort was made to engage ITC professionals in the web survey, the high level of turnover, high stress related to the pandemic, and the difficulties balancing multiple demands likely explain the low response rates which limits generalizability of the findings.

The planned outcome evaluation data collection from parents and caregivers was severely limited by the pandemic. Additionally, it was difficult for Community Coordinators to add to their many responsibilities conducting the research informed consent process and supporting parents with the Audio-Computer Assisted Self-Interview (ACASI) process.

Once the pandemic started, the transition to the Computer-Assisted Personal Interviews (CAPI) conducted by the evaluation team staff was also challenging. Even if parents and caregivers consented to be contacted by a member of the evaluation research team, it was necessary to engage in the re-consent process to ensure that participants understood the risk of their participation. This limited engagement in the CAPI. The use of non-local phone numbers was also a deterrence for participants to accept/answer the evaluation team calls for scheduling the interview. Beyond low response rates, disclosure of any problems was minimal. This was likely because, at the time of baseline, families were very concerned about reporting any problem that could put their CWS case at risk.

Finally, results of the prospective analysis of permanency are not representative of non-pandemic times. Even with the best efforts of ITCs, during the pandemic's first year hearings were canceled for months, creating a huge backlog of both ITC and non-ITC cases. As a consequence, the data collected during this time period (up to the second year of the pandemic), showed that only about a third of all cases had reached permanency.

Programmatic and Technical Assistance Recommendations

The evaluation findings point to several priorities for the ITCP and the TA provided by the NRC, described below.

Equity

States and sites must be supported in closely examining barriers to enrollment and access to services for Black children and their families and in action planning to address those barriers. There are many pathways via which the NRC has been providing this support or can increase the effectiveness of its support including:

- As part of the NRC's case mapping activity, guiding reflective discussions that unearth structures and processes—within and compounded across sectors—that are producing racial inequities for families involved with the child welfare system,

- Providing targeted TA that builds state teams' capacity to lead shared analysis among state and local partners about the underlying drivers of racial inequities,
- Engaging individuals of color with lived experience in child welfare as parent leaders at all levels of the program (NRC, state, site),
- Providing states with resources and consultation to promote ITC-aligned policies that advance a more equitable early childhood system of care, using the ITCP Policy Framework and related tools,
- Partnering with national organizations to provide health equity training and TA specific to different sectors (e.g., pediatrics, judiciary, child welfare), populations (e.g., tribal communities, families affected by SUD), and mechanisms (e.g., family-engaged developmental monitoring), and
- An evaluation design that will substantively improve understanding of barriers and creative solutions that states and sites can utilize to support ITC implementation and spread to more effectively reach children and families of color with the approach.

Preventing Maltreatment Recurrence

The finding that the repeat maltreatment rate increased, although attributable in part to the stress and isolation that families experienced during the pandemic, demands heightened focus for the program. Going forward, the NRC should provide targeted TA in key areas that mitigate risk including:

- **State and local capacity to engage in regular case reviews that are grounded in reflective practice.** Greater reflection in child welfare processes is a crucial strategy for countering work that is fast paced, often reactive in nature, and that carries with it a significant amount of vicarious trauma. The NRC is currently developing new resources that provide guidance for best practices in conducting reflective reviews of ongoing cases, intermittent review of closed cases, and review of cases involving repeat maltreatment. These resources will be used in consultation with states and sites to assist them in building processes and procedures that holistically identify family needs and more fully address the gaps contributing to recurrence.
- **System capacity for effectively supporting families with very young children affected by substance use disorder (SUD).** SUD, particularly perinatal SUD, is a major risk factor for CWS involvement and re-entry for families with very young children. The NRC should continue to build TA strategies and resources that can help (1) states increase the availability and accessibility of high quality SUD services for P-3 families, peer mentor programs, and resources to ameliorate the economic stressors affecting families with young children, and (2) professionals (e.g., judges, attorneys, caseworkers, child mental health providers) to understand the importance of a healing approach and effective treatment for SUDs, with a special focus on pregnant individuals and parents of very young children. Parent leaders are critically important contributors to this area of TA, and the NRC must continue to build its own capacity to support parent leaders and ensure their voices are integrated throughout the program.

Early Childhood System Building

The central work of the ITCP is promoting collaborative practice that improves the health, well-being, and development of infants, toddlers, and families in the child welfare system and that addresses factors that heighten the risk of child welfare involvement. This collaborative work is in service of early childhood system building—that is, addressing coordination gaps and misalignment across systems and creating the infrastructure for improvement and integration through policies, practices, and resource flows (conditions of systems change) (Kania et al., 2018, June). The evaluation findings suggest that partners at the state and local levels are committed to growing and strengthening collaboration, a testament to the impact of the NRC’s work fostering shared vision and trust among system partners. Going forward, the NRC can build on this work by:

- Engaging national partners in identifying and creating opportunities to increase collaboration (e.g., American Association of Pediatrics [AAP] chapter grants to increase collaboration between the pediatric sector and ITCP in states),
- Providing states with policy resources and consultation to identify opportunities for increasing system coordination, alignment, and integration in the early childhood system of care, and
- Developing strategies to add to its “TA toolkit” that support the less explicit and transformative conditions of systems change: the quality of connections and communication among cross-sector partners, power dynamics, and mental models (Kania et al., 2018, June).

References

- Achenbach, T. M., & Rescorla, L. A. (2000). *Manual for the ASEBA preschool forms and profiles* (Vol. 30). Burlington, VT: University of Vermont.
- Association of Maternal & Child Health Programs Innovation Hub. (n.d.). *Best practice: Infant-Toddler Court Teams, based on the ZERO TO THREE Safe Babies Court Team Approach*. Association of Maternal & Child Health Programs. Retrieved from <https://www.amchpinnovation.org/database-entry/infant-toddler-court-teams-based-on-the-zero-to-three-safe-babies-court-team-approach/>
- Bartley, L., Metz, A., & Fleming, W. O. (2022). What implementation strategies are relational? Using Relational Theory to explore the ERIC implementation strategies. *Frontiers in Health Services, 2*, 913585.
- Casanueva, C., Kluckman, M., Harris, S., Brown, J., & Fraser, J. (2022). Supporting parents' services access during the COVID-19 pandemic through the Infant-Toddler Court Team Program. *Maternal and Child Health Journal, 26*(12), 2377-2384.
- Casanueva, C., Williams, J., Kluckman, M., Harris, S., & Fraser, J. (under review). The effect of the ZERO TO THREE Infant-Toddler Court Teams on type and time of exits from out-of-home care: A new study ten years after the first competing risks analysis. *Children and Youth Services Review. Child Welfare Information Gateway*. (2019). *What is child abuse and neglect? Recognizing the Signs and Symptoms*. Children's Bureau. <https://www.childwelfare.gov/pubpdfs/whatiscan.pdf>
- Children's Bureau. (2022). *Round 4 of the CFSRs*. Department of Health and Human Services, Administration for Children and Families, Children's Bureau. <https://www.acf.hhs.gov/cb/monitoring/child-family-services-reviews/round4>
- Davidson, J. (2021). *Connor-Davidson Resilience Scale (CD-RISC) Manual*. www.cd-risc.com
- Gadermann, A. M., Alonso, J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2012). Comorbidity and disease burden in the National Comorbidity Survey Replication (NCS-R). *Depression and Anxiety, 29*(9), 797–806. <https://doi.org/10.1002/da.21924>
- Heckman, J., Ichimura, H., & Todd, P. (1998). Matching as an econometric evaluation estimator: Evidence from evaluating a job training programme. *Review of Economic Studies, 64*(4), 605-654. <https://doi.org/https://doi.org/10.2307/2971733>
- Huth-Bocks, A. (2020). *COVID-19 family stress screener*. University Hospitals.
- Kania, J., Kramer, M., & Senge, P. (2018, June). *The water of systems change*. FSG, *Reimagining Social*. https://www.fsg.org/resource/water_of_systems_change/
- Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research, 21*(3), 169–184. <https://doi.org/10.1002/mpr.1359>
- Luyten, P., Mayes, L. C., Nijssens, L., & Fonagy, P. (2017). The parental reflective functioning questionnaire: Development and preliminary validation. *Plos one, 12*(5), e0176218.
- Milligan, K., Zerda, J., & Kania, J. (2022). The relational work of systems change. *Stanford Social Innovation Review*.
- Rosenbaum, P. R., & Rubin, D. B. (1985). Constructing a control group using multivariate matched sampling methods that incorporate the propensity score. *American Statistician, 39*, 33-38. <https://doi.org/10.1080/00031305.1985.10479383>
- SAS. (2013). *SAS*. (Version 9.4) [Computer software]. Cary, NC: SAS.

Appendix



Appendix A: Outcome Evaluation

Demographics of children and families served at Evaluation Sites

The following states and sites were included in the outcome evaluation:

Table 1. States and counties included in the outcome evaluation

State	Prospective study sites (county)	Retrospective study sites (county)
Florida	Broward, Palm Beach	Bay, Pasco, Okaloosa
Mississippi	Forrest, Rankin	Forrest, Rankin
Connecticut	New Haven	NA
Iowa	Polk	Polk
Washington	Pierce	NA
Minnesota	St. Louis	NA
Hawaii	NA	Honolulu
Arkansas	NA	Pulaski
Oklahoma	NA	Tulsa

The outcome evaluation focused on six sets of outcome analyses:

- A. Developmental Health Needs & Access to Services for Infants & Toddlers Served by ITCs
- B. Permanency – Retrospective Study
- C. Permanency – Prospective Study
- D. Safety – Maltreatment Recurrence – Prospective Study
- E. Health Needs & Access to Services for Parents Served by ITCs
- F. Child and Parent Well-Being – Prospective Study

In this appendix, we present the sampled dataset, the analysis strategy, the sociodemographic characteristics of the sample, and the key findings for each set of outcomes.

A. Developmental Health Needs & Access to Services for Infants & Toddlers Served by ITCs

Dataset:

- SBCT dataset for April 2019 through July 27, 2021.
- 11 ITCs across seven states.
- 178 children: 66 with cases opened before COVID and 112 with cases opened during COVID.
- Cases opened in March 2020 (N=7) at the start of the pandemic were not included in the analysis.

Analysis:

- All analyses were completed using SAS. Descriptive statistics were used to characterize service use by child, setting, and child welfare characteristics. Cross-tabulations and significance tests were conducted (Pearson χ^2 tests for categorical variables, t-test for continuous variables) to test for differences by case opened period.
- Logistic regression models were used to test for differences pre- and during COVID, controlling for the following covariates: child gender, age, race/ethnicity, special needs, ASQ-3 concerns, main type of setting during the first 6 months, physical abuse, and neglect. Models included interaction terms between the group variable (pre- or during COVID) and control variables that were statistically significant.

Sociodemographic Characteristics:

- Most children were between 0 and 12 months old (59%), 24% were 13 to 24 months old, and 17% were 25 or more months old. About half of children were male (51%).
- During the first 6 months of participation in the ITC, the main setting for 20% of children was in-home with parents, 38% with kin, and 42% with non-kin resource caregivers. About a quarter of children (26%) were identified as having special health care needs (SHCNs).
- Based on the ASQ-3, 17% had one or more developmental areas classified as “Concern.”
- Among the reasons for removal, 63% of children had neglect among removal reasons, and 12% had experienced physical abuse.
- There was one significant difference by race/ethnicity between the two groups. Most children pre-COVID were Black (53%), followed by White (36%), and Hispanic/Other (11%). For cases opened during COVID, 23% were Hispanic/Other, an increase of 12 percentage points; 31% were Black, a decrease of 22 percentage points; and 46% were White.

Key Findings:

- Overall, 777 instances of service needs were analyzed, 403 pre-COVID and 374 during COVID.
- Over half of children (56%) pre-COVID and 38% during COVID were identified as having a physical health need. Pre-COVID, health care was received for 99% of identified needs, compared to 97% of needs during the first year of COVID. Mean number of days between referral and receipt was 24 days pre-COVID and 18 days during COVID.
- Receipt of services for health care needs in 30 days or less was significantly more likely during COVID (78%) compared to pre-COVID (64%, $p < .05$).

- Logistic regression analysis (**Table A-1**) of 236 instances of health care services received showed higher odds during COVID of receiving health care within 30 days or less (OR 3.8, CI: 1.6-8.9, $p < .01$) and within 14 days or less (OR 2.7, CI: 1.3-6.0, $p < .05$).
- Overall, independently of COVID group, children with SHCNs were more likely than those without SHCNs to receive health services within 30 or fewer days (OR 6.6, CI: 2.2-19.2, $p < .001$), and within 14 days or less (OR 5.8, CI: 2.3-14.6, $p < .001$).
- Children with developmental concerns were also more likely to receive health services within 30 or fewer days compared with those without developmental concerns (OR 3.5, CI: 1.1-11.3, $p < .05$).
- Black children were less likely to receive services within 14 days or less than White children (OR 0.4, CI: 0.2-1.0, $p < .05$).

Table A-1. Children's services receipt within 30 or fewer days of referral and within 14 or fewer days of referral among families with a case opened during COVID compared to families with a case opened before COVID

Characteristic	Receipt within 30 or fewer days of referral				Receipt within 14 or fewer days of referral			
	Total services ^a (N=648)		Health care ^b (N=236)		Total services ^c (N=648)		Health care ^d (N=236)	
	OR (95% CI)	p-value	OR (95% CI)	p-value	OR (95% CI)	p-value	OR (95% CI)	p-value
Case opened during COVID (ref. Case opened pre-COVID)	1.0 (0.7,1.4)	0.8651	3.8 (1.6,8.9)	0.0021	0.9 (0.6-1.3)	.6746	2.7 (1.3-6.0)	.0113
Child female (ref. male)	0.8 (0.5,1.1)	0.1470	0.9 (0.4,2.1)	0.7910	0.8 (0.6-1.2)	.3390	0.8 (0.4-1.8)	.6708
Child age (ref. 25 months of age or older)								
0-12 months	1.0 (0.6,1.7)	0.9336	1.0 (0.2,4.4)	0.9906	1.6 (0.9-2.8)	.1363	1.3 (0.3-5.3)	.7212
13-24 months	1.1 (0.6,2.0)	0.7454	1.4 (0.3,7.0)	0.6488	1.4 (0.7-2.6)	.3049	2.3 (0.5-10.3)	.2755
Child race (ref. White)								
Black	0.8 (0.6,1.2)	0.3209	0.4 (0.2,1.1)	0.0674	0.7 (0.5-1.1)	.1048	0.4 (0.2-1.0)	.0446
Hispanic or Other	0.8 (0.5,1.2)	0.2807	0.5 (0.1,2.0)	0.3312	0.7 (0.4-1.1)	.1143	0.4 (0.1-1.2)	.0916
Any physical abuse (ref. no)	1.0 (0.7,1.6)	0.8513	2.5 (0.9,7.3)	0.0878	1.1 (0.7-1.7)	.7120	1.4 (0.5-3.6)	.5156
Any neglect (ref. no)	1.5 (1.0,2.2)	0.0508	0.6 (0.2,1.7)	0.3023	2.2 (1.5-3.3)	.0001	1.0 (0.4-2.6)	.9202
Main setting during the first 6 months (ref. In-home)								
Kin	0.8 (0.5,1.2)	0.2904	0.4 (0.1,1.5)	0.1774	0.6 (0.4-1.0)	.0653	0.7 (0.2-2.1)	.5209
Non-kin foster	0.9 (0.6,1.5)	0.8007	0.8 (0.3,2.3)	0.6356	0.9 (0.6-1.5)	.8180	2.0 (0.8-5.3)	.1476
Special needs (ref. no special needs)	1.6 (1.0,2.3)	0.0337	6.6 (2.2,19.2)	0.0006	1.5 (1.0-2.2)	.0590	5.8 (2.3-14.6)	.0002
ASQ-3 with one or more areas of concern (ref. no developmental concerns in ASQ-3)	1.5 (1.0,2.2)	0.0525	3.5 (1.1,11.3)	0.0315	1.6 (1.1-2.3)	.0220	2.1 (0.8-5.4)	.1314

^a Receipt of total services within 30 days or less from referral N=648. Overall Wald Test: Chi Square=31.25, DF=12, p<.01

^b Receipt of health services within 30 days or less from referral N=236 Overall Wald Test: Chi Square=52.92, DF=12, p<.0001

^c Receipt of total services within 14 days or less from referral N=648. Overall Wald Test: Chi Square=53.57, DF=12, p<.0001

^d Receipt of health services within 14 days or less from referral N=236 Overall Wald Test: Chi Square=55.14, DF=12, p<.0001

B. Permanency: Retrospective study

Dataset:

- Analysis of permanency used data from children who were served by an ITC for at least one year between 2010 and 2018 to provide enough time for placements to occur and for the services listed in the family's case plan to be provided.
- Children participating at nine ITCs across six states were matched to children 0 to 36 months that participated in the National Survey of Child and Adolescent Well-Being (NSCAW II).
- NSCAW II included 5,871 children ranging in age from 0 to 17.5 years old at the time of sampling. Children were sampled from child welfare investigations closed between February 2008 and April 2009. The study operated in 81 counties in 30 states. Infants and children in out-of-home placement were oversampled to ensure adequate representation of high-risk groups.
- For the NSCAW II comparison group, the inclusion criteria were that the child was 36 month of age or younger at baseline, that the child was placed out-of-home, and that the child had follow-up data at 18 months and/or 36 months follow-up. More than 1,000 families from NSCAW II were identified using these criteria and 183 were a match for IT families.

Analysis:

- Propensity score matching (PSM) (Heckman et al., 1998; Rosenbaum & Rubin, 1985) was used to create a subsample of mother/child pairs from NSCAW II to match those who participated in ITC. The first step was to obtain a score that represented the probability (logit) of participating in ITC for each mother/child pair. This score was obtained through a logistic regression model that included the child's age, gender, race/ethnicity, special needs, maltreatment characteristics, and the parent's experience of domestic violence, history in jail, mental health problems, substance use disorders and employment services.
- After matching, all characteristics were balanced through PSM. A mean of 20 children per site were matched.
- Time to permanency was first examined by estimating survival time (time to permanency) using non-parametric Kaplan-Meier (or product-limit) models.
- Models were estimated for grouping by ITC vs. comparison and by type of permanency (adoption, reunification, guardianship). Survival curves for both models were plotted. Examination of the hazard plots indicated that the proportional hazards assumption was appropriate (i.e., the survival curves did not overlap or cross).
- Consequently, all following models used semi-parametric Cox regression survival models to account for right censoring (children not yet reaching permanency) and to estimate the impact and significance of covariates and focal predictors of time to permanency.
- All models were estimated in SAS 9.4.

Sociodemographic Characteristics:

- Sociodemographic, maltreatment characteristics, as well as child, mother, and family characteristics among families that participated in an ITC compared to pre-matched and matched families from NSCAW II are presented in [Table B-1](#).

Table B-1. Sociodemographic, child, mother, and family characteristics among families that participated in an ITC compared to pre-matched and matched families from NSCAW II

Characteristic	Pre-matching			After matching		
	ITC (N=205) %	NSCAW II (N=1089) %	p value	ITC (N=183) %	NSCAW II (N=183) %	p value
Child						
Age in months (mean)	11.7	10.0	.0422	11.1	11.8	.5112
Gender male	51.2	51.8	.8807	51.9	54.6	.6004
Race/ethnicity						
White	55.6	28.6	<.0001	53.0	48.1	.3467
Black	29.3	36.0	.0654	31.2	32.2	.8222
Other	5.9	5.8	.9933			
Hispanic	9.3	29.6	<.0001	10.4	11.5	.7376
Special needs	23.4	17.9	.0703	25.7	22.1	.4228
Maltreatment history						
Prior contact with CWS	64.2	69.4	.1537	64.3	68.1	.4379
Any physical maltreatment	11.7	14.6	.2755	12.0	12.6	.8735
Any neglect	69.8	41.0	<.0001	66.1	72.1	.2133
Any emotional maltreatment	2.4	3.2	.5565	2.7	6.0	.1251
Abandonment	2.9	5.1	.1881	2.7	6.6	.0821
Parent						
Domestic violence	61.0	39.9	<.0001	59.0	51.4	.1411
Employment services	8.3	33.2	<.0001	9.3	10.4	.7256
Ever incarcerated	52.7	43.6	.0186	49.2	46.5	.6008
Mental health problems	72.7	56.8	<.0001	70.0	72.7	.5634
Substance use disorders	87.3	62.5	<.0001	86.3	81.4	.2008

Note: Bold represents statistically significant differences.

Key Findings:

- The ITC and NSCAW II groups differed significantly in how the children exited the foster care system (**Table B-2**). Reunification was the most common type of permanency for ITC children and was significantly higher among ITC children compared to the NSCAW II sample (43.7% vs. 25.6%, $p < .001$).
- While there were no significant differences on exit from the CWS for adoption or for exit to relative custodian/guardianship/other, ITC children were significantly less likely to remain in foster care by the end of the study period (2.7% vs. 16.9%, $p < .001$).

Table B-2. Experience of exits from the child welfare system

Type of foster care exit	ITC (N=183) % (SE)	NSCAW II sample (N=183) % (SE)
Reunification	43.7 (3.67)	25.6 (3.2)***
Adoption	39.9 (3.62)	42.1 (3.7)
Relative custodian/guardianship/other	13.7 (2.54)	16.4 (2.7)
Still in foster care at end of study period	2.7 (1.21)	16.9 (2.8)***

*** $p < .001$

Key Findings:

- Mean time to permanency for the ITC group was 450.6 days compared to 654.9 days for those in the NSCAW II group (**Table B-3**).
- Type of permanency also was significant across models, with adoption and guardianship both taking longer than reunification.

Table B-3. Length of time (in days) to foster care exits by group

Type of foster care exit		ITC (N=183)	NSCAW II (N=183)
Reunification	Median	281	463
	Mean (SE)	309.9 (20.0)	476.4 (23.3)
Adoption	Median	519	571
	Mean (SE)	570.6 (26.9)	638.4 (32.7)
Relative Custodian/ Guardianship/Other	Median	502	520
	Mean (SE)	488.2 (58.9)	549.5 (59.6)
Any exit	Median	389.5	540.5
	Mean (SE)	441.8 (18.7)	572.9 (22.1)

Key Findings:

- Survival models estimated the main effects of group and permanency type with and without the covariates outlined above. **Table B-4** shows the hazard ratios for both sets of models.
- In both models, the main effect of ITC was significant, with children in the ITC group being 1.6 times as likely to exit foster care to some type of permanency compared to the NSCAW II group.
- Overall, being Hispanic was found to be a significant predictor of time to permanency for reunification only (hazard ratio = 0.45, $p < .05$) where it was associated with longer times to reunification.
- Despite longer times to reach reunification, Hispanic children were more likely to be reunified than non-Hispanics (Hispanic 40% vs. 36% White, 31.9% Black, and 24% Other), although these rates did not differ significantly.

Table B-4. Survival model estimates of type of exit from child welfare, unadjusted and adjusted

Characteristic	Unadjusted Model		Adjusted Model	
	Hazard Ratio	<i>p</i> value	Hazard Ratio	<i>p</i> value
ITC (ref. NSCAW II)	1.56	< 0.001	1.55	< 0.001
Type of foster care exit (ref. Reunification)				
Adoption	0.36	< 0.001	0.33	< 0.001
Relative/Guardianship/Other	0.44	< 0.001	0.41	< 0.001
Child				
Gender male (ref. female)			0.90	ns
Race/Ethnicity (ref. White)				
Hispanic			0.64	< 0.05
Black			1.06	ns
Other			0.94	ns
Special needs			1.11	ns
Maltreatment characteristics				
Previous contact with CWS (ref. no)			1.08	ns
Any physical maltreatment			1.05	ns
Any neglect			1.24	ns
Any emotional maltreatment			0.77	ns
Abandonment			1.20	ns
Parent				
Domestic violence			0.95	ns
Employment services			0.91	ns
Ever in jail			1.13	ns
Mental health problems			0.85	ns
Substance use disorders			0.92	ns

C. Permanency: Prospective Study

Dataset:

- This study used files between 2019 and March 2022 provided by states and prepared for the Children's Bureau as part of the Adoption and Foster Care Analysis and Reporting System (AFCARS)³ on children participating in ITC and children from counties with a similar CDC Social Vulnerability Index score,⁴ as shown in **Table C-1**. Children in Connecticut, Iowa, Florida, and Mississippi were included in the analysis.

Table C-1. ITC and comparison counties

State	ITC counties	Comparison counties
Connecticut	New Haven	Hartford
Florida	Broward Palm Beach	Duval Lake Lee Miami-Dade
Iowa	Polk	Black Hawk Clinton Pottawattamie Scott
Mississippi	Forrest Rankin	Hinds Lamar Lauderdale Jackson

Analysis:

- PSM (Heckman et al., 1998; Rosenbaum & Rubin, 1985) was used to match ITC children of the same age and maltreatment case characteristics with children in similar counties that were opened in the same period. Separate PSM was done in each state, matching on a propensity score generated from a logistic model which included age, gender, ethnicity, race, an indicator for whether the report occurred before March 2020 (controlling for effects of COVID-19), number of prior removals, placement type and substance abuse in household.
- The PSM created up to five matches for each ITC child. The matched cases included 150 ITC children and 742 children in comparison counties.
- All analysis were completed using SAS. Descriptive statistics were used to characterize service use permanency. Children with removal dates before March 31, 2021, were ineligible for the analysis since the time since removal needed to be at least 365 days to assess permanency (N=255). Children who reached permanency is less than or equal to eight days (N=30) and children whose discharge reason was either emancipation or runaway (N=3) were also removed from analysis, resulting in a final total of 604 children. Cross-tabulations and significance tests were conducted (Pearson χ^2 tests).

³ AFCARS Foster Care Datasets available from the National Data Archive on Child Abuse and Neglect (NDACAN) (hhs.gov)

⁴ CDC/ATSDR Social Vulnerability Index (SVI)

Sociodemographic Characteristics:

- Sociodemographic, maltreatment characteristics, as well as child, mother, and family characteristics among families that participated in an ITC compared to pre-matched and matched families from comparison counties are presented in **Table C-2**.

Table C-2. Sociodemographic, child, and family characteristics among families that participated in an ITC compared to pre-matched and matched families from comparison counties

Characteristic	Pre-matching			After matching		
	ITC (N=152) %	Comparison counties (N=6,167) %	p value	ITC (N=150) %	Comparison counties N=742 %	p value
Child						
Age less than 1 year	63.2	53.3	0.0156	69.1	62.7	0.1211
Gender male	52.0	51.4	0.8832	51.3	51.1	0.9545
Race/ethnicity						
White	60.5	58.9	0.6789	61.3	61.2	0.9731
Black	44.7	45.0	0.9480	44.0	43.3	0.8678
Other	4.0	3.9	0.9957	4.0	4.2	0.9206
Hispanic	14.5	17.3	0.3577	14.7	11.9	0.3403
Special needs	7.2	9.8	0.2853	7.3	5.9	0.5146
Placement before COVID (3/1/2020)	30.9	43.2	0.0025	30.7	32.1	0.7355
Placement with kin	42.7	46.8	0.3183	42.7	41.8	0.8407
Maltreatment history						
Prior contact with CWS	75.0	74.6	0.6518	73.3	78.0	0.2106
Removed due to physical maltreatment	7.2	11.0	0.1452	6.7	7.6	0.7071
Removed due to neglect	62.5	59.0	0.3842	62.0	52.2	0.0274
Abandonment	2.6	4.6	0.2606	2.7	3.6	0.5532
Parent						
Domestic violence	23.6	23.8	0.9610	23.9	14.9	0.0194⁵
Incarcerated	6.6	6.3	0.8822	6.7	5.0	0.4009
Mental health problems	19.1	17.8	0.6783	18.7	16.6	0.5336
Substance use disorders	65.1	60.3	0.2257	65.3	67.7	0.5805

Note: Bold represents statistically significant differences.

⁵ Missing data prevented using this variable for matching.

Key Finding:

- Among non-ITC cases, 29.6% reached permanency and among ITC cases, 31.7% reached permanency (p=.6799). There were also no significant differences between ITC and non-ITC cases on type of permanency (p=.5521) (**Table C-3**).

Table C-3. Experience of exits from the child welfare system among matched children participating in ITC and comparison counties

Type of foster care exit	ITC (N=101) %	Comparison counties (N=503) %	<i>p value</i>
Overall permanency	31.7	29.6	.6799
Type of permanency			.5521
Reunification	27.7	26.0	
Adoption	11.9	18.2	
Relative custodian/guardianship/other	12.9	10.4	
Still in foster care at end of study period	47.5	45.1	

D. Safety – Maltreatment Recurrence Prospective Study

Dataset:

- This study used files between 2019 and March 2022 provided by states and prepared for the Children’s Bureau as part of the National Child Abuse and Neglect Data System (NCANDS)⁶ on children participating in ITC and children from counties with a similar CDC Social Vulnerability Index score.⁷
- There were 166 ITC child-reports and 71,075 child-reports in the comparison group before PSM. Comparison counties are identified in **Table D-1**.

Table D-1. ITC and comparison counties

State	ITC counties	Comparison counties
Connecticut	New Haven	Hartford
Florida	Broward Palm Beach	Duval Lake Lee Miami-Dade
Iowa	Polk	Black Hawk Clinton Pottawattamie Scott
Mississippi	Forrest Rankin	Hinds Lamar Lauderdale Jackson

Analysis:

- The index maltreatment report for each ITC child was identified as the most recent report that occurred before the case open date in the SBCT database. If there was not a report before the open date, the earliest report after the case open date was used.
- PSM (Heckman et al., 1998; Rosenbaum & Rubin, 1985) was used to match ITC children at the child-report level. The initial step in PSM is generating a score which represents the probability of being involved in an ITC. Separate logistic regression models were run using SAS 9.4 for each state which included variables for age, sex, ethnicity, race, an indicator for whether the report occurred before March 2020 (controlling for effects of COVID-19), an indicator for whether the report was substantiated, the number of prior maltreatment reports, indicator for household domestic violence, and indicator for any prior household substance abuse.⁸
- For this analysis, matching reports had to have a predicted score within 0.1 of the ITC child report’s predicted score. Five matching reports for each ITC child were targeted. A matched report could only

⁶ [National Child Abuse and Neglect Data System \(NCANDS\) Child-Level Datasets available from the National Data Archive on Child Abuse and Neglect \(NDACAN\) \(hhs.gov\)](#)

⁷ [CDC/ATSDR Social Vulnerability Index \(SVI\)](#)

⁸ Due to large amounts of missing values the IA model did not include household substance abuse. Due to convergence issues the CT model did not include the substantiated indicator.

be matched to one ITC child, however a comparison child could have multiple reports end up matching to ITCT reports.

- Recurrence was defined as a substantiated or indicated maltreatment re-report that occurred within 12 months after a previous substantiated or indicated maltreatment report. The index report for children involved with ITCs was the one associated with their ITC participation.
- Logistic regression models were used to test for differences in maltreatment recurrence.

Sociodemographic Characteristics:

- Sociodemographic, maltreatment history, as well as child, mother, and family characteristics among families that participated in an ITC compared to pre-matched and matched families from comparison counties are presented in [Table D-2](#).

Table D-2. Sociodemographic, maltreatment report and child characteristics pre- and post-matching children in ITC and children in comparison counties

Characteristic	Pre-matching			Post-matching		
	ITC (N=166) %	Comparison counties (N=71,075) %	p value	ITC (N=165) %	Comparison counties (N=825) %	p value
Child						
Age less than one year old	69.1	37.9	<.0001	69.1	71.3	0.5732
Male	48.8	50.2	0.7105	48.5	45.5	0.4758
Race/Ethnicity						
White	64.5	45.3	<.0001	64.2	63.6	0.8825
Black	38.6	45.0	0.0941	38.2	39.2	0.8157
Hispanic	9.6	15.7	0.0323	9.7	10.9	0.6457
Special needs	7.3	1.3	<.0001	6.6	1.2	0.0011
Prior child welfare involvement	21.1	9.0	<.0001	21.2	15.2	0.0535
Living at home at time of report	97.6	98.4	0.3399	97.6	99.3	0.0687
Substantiated report	86.8	18.3	<.0001	86.7	84.2	0.4304
Report prior to March 2020	38.6	45.5	0.0748	38.2	39.6	0.7270
Household						
Mental illness	0.0	1.0	0.6473	0.0	2.1	0.1410
Substance abuse	53.4	5.1	<.0001	53.8	46.4	0.1221
Domestic violence	16.3	8.7	0.0006	16.4	15.6	0.8149
	Mean	Mean	p value	Mean	Mean	p value
Child						
Mean age (years)	0.5	1.0	<.0001	0.5	0.4	0.2880
Mean number of prior reports	0.4	0.4	0.3223	0.4	0.3	0.6164
Mean number of prior removals	0.1	0.0	<.0013	0.1	0.1	0.0138

Note: Bold represents statistically significant differences.

Key Findings:

- ITC children were significantly less likely than matched children in comparison counties to experience maltreatment recurrence ($p < .0001$).
- Children in other counties during the same time period (2019 to March 2022) had a 12-month recurrence of 10.0% compared to 3.6% among ITC children (**Table D-3**).

Table D-3. Estimates of recurrence for children in ITC and children in comparison counties

	Maltreatment recurrence within 12 months of index report	
	Children in comparison counties %	ITC children %
Unweighted	10.23	5.46
Weighted	10.04	3.63

Key Finding:

- The odds of 12 months recurrence were significantly lower among ITC children than comparison children after controlling for gender, race/ethnicity, previous involvement with CWS (**Table D-4**), and family domestic violence (OR=.36, $p < .01$).

Table D-4. Logistic Regression Model predicting Maltreatment Recurrence

Characteristic	Adjusted model	
	Odds ratio	p value
ITC (ref. non-ITC counties)	0.36	0.003
Child gender male (ref. female)	0.69	0.15
Child race/ethnicity (ref. White)	1.00	
Hispanic	0.51	0.222
Black	0.59	0.056
Previous involvement with CWS	0.90	0.764
Domestic violence	0.71	0.349

E. Health Needs & Access to Services for Parents Served by ITCs

Dataset:

- SBCT dataset for April 2019 through July 27, 2021, for analysis of 11 ITCs across seven states.
- 187 parents: 72 with cases opened before COVID and 115 with cases opened during COVID.

Analysis:

- All analyses were completed using SAS statistical software (SAS). Descriptive statistics were used to characterize service use by parent, setting, and child welfare characteristics. Cross-tabulations and significance tests were conducted (Pearson χ^2 tests for categorical variables, t-test for continuous variables) to test for differences by case opened period.
- Logistic regression models were used to test for differences pre- and during COVID, controlling for the following covariates: parent gender, age, race/ethnicity, education, employment, housing, main type of setting during the first 6 months, physical abuse, and neglect, substance use problems, and mental health problems. Models included interaction terms between the group variable (pre- or during COVID) and control variables.

Sociodemographic Characteristics:

- Most parents were between 20 and 29 years of age (57%), 35% were 30 years or older, and less than 10% were 19 years or younger. Over half of parents were female (59%). About a third of parents owned or rented their house (34%), while the rest were living in different household arrangements with relatives, friends, or did not have a place.
- Over half of parents had mental health needs (56%) and 74% of parents had substance use problems. During the first 6 months of participation in the ITC, the main setting for 20% of children was in-home with parents, 38% with kin, and 42% with non-kin foster caregivers. Among the reasons for removal or CPS involvement (Child Welfare Information Gateway, 2019), close to 63% of children had neglect among the reasons, while 12% had physical abuse.⁹
- Three significant differences were found among sociodemographic factors between the pre- and during COVID groups. During COVID, the percentage of Hispanic/Other parents increased (from 5% to 25%), Black parents decreased (from 40% to 20%), and White parents remained similar (55% to 54%; overall race/ethnicity $p < .001$). During COVID, the percentage of parents employed decreased (from 39% to 25%, $p < .05$) and parents with less than a high school education increased (from 72% to 90%; $p < .01$).

⁹ Neglect is defined as the failure of a parent or other caregiver to provide for a child's basic need; these needs may include physical, mental or emotional neglect such as not providing food, education or medical treatments. Physical abuse is defined as a nonaccidental physical injury to a child caused by a parent, caregiver, or other person responsible for a child, and can include physical harm that causes injury such as shaking or hitting a child.

Key Findings:

- Overall, 897 instances of services needs were analyzed, 411 pre-COVID and 486 during COVID. Of these 897 needs, 659 (76%) received services.
- Using logistic regression for all 897 parent service needs, service receipt was reduced during COVID (OR=0.2, CI: 0.1-0.3, $p<.0001$). Across service needs overall, independently of COVID group, females were more likely to receive services than males (OR=2.2, CI: 1.5-3.3, $p<.001$), parents aged 20 to 29 were less likely to receive services than parents 30 years or older (OR=0.7, CI: 0.5-1.0, $p<.05$), and parents with substance use problems were less likely to receive services than parents without substance use problems (OR=0.5, CI: 0.3-0.9, $p<.05$).
- Parents with a child where the reason for removal or involvement with CPS included physical abuse were more likely than parents without that reason to receive a needed service (OR=1.9, CI: 1.1-3.0, $p<.05$) and this result was similar for parents of children that were identified as neglected compared to other reasons (OR=2.5, CI: 1.8-3.6, $p<.0001$). Parents of a child placed with kin (OR=0.4, CI: 0.2-0.6, $p<.001$) and non-kin foster (OR=0.2, CI: 0.1-0.4, $p<.0001$) compared with parents with a child who remained in-home during the first 6 months were less likely to receive services.
- For time between referral and receipt, the 659 needs that were received were analyzed, 359 pre-COVID and 300 during COVID. Of these needs, 409 (62%) were met within 30 days and 289 (44%) were met within 14 days. The mean time to receipt was 55 days pre-COVID and 43 days during COVID.
- Across 659 needs that were received, there were no differences pre- and during COVID on receipt in 30 or fewer days and 14 or fewer days from referral (**Table E-1**). Across services overall, independently of COVID group, Hispanic/Other parents were more likely to receive a service within 30 or fewer days (OR=3.6, CI: 1.9-6.7, $p<.0001$) and within 14 or fewer days from referral (OR=3.4, CI: 2.0-5.8, $p<.0001$) compared to White parents.

Table E-1. Parent service access and receipt within 30 or fewer days of referral among families with a case opened during COVID compared to families with a case opened before COVID

Characteristic	Receipt within 30 or fewer days of referral ^a (N=659)			Receipt within 14 or fewer days of referral ^b (N=659)		
	OR	95% CI	p value	OR	95% CI	p value
Case opened during COVID (ref. case opened pre-COVID)	1.2	0.8-1.7	.4265	0.9	0.6-1.3	.6465
Parent female (ref. male)	1.0	0.6-1.6	.9870	1.3	0.8-2.0	.3036
Parent age (ref. 30 years or older)						
Less than 20 years	1.2	0.7-2.2	.4661	1.1	0.6-1.9	.8320
20 to 29 years	1.0	0.7-1.5	.9309	0.9	0.6-1.4	.6808
Parent race (ref. White)						
Black	1.0	0.7-1.6	.8513	1.4	0.9-2.1	.1376
Hispanic or Other	3.6	1.9-6.7	<.0001	3.4	2.0-5.8	<.0001
Parent has more than high school education (ref. high school or less)	2.3	1.4-3.8	.0007	1.8	1.1-2.8	.0136
Parent employment (ref. no)	1.3	0.8-2.0	.2871	1.4	0.9-2.1	.1589
Parent lives in own/rented home (ref. no)	0.7	0.5-1.0	.0684	0.6	0.4-0.9	.0059
Parent has mental health problems (ref. no)	1.5	1.0-2.2	.0634	1.2	0.8-1.8	.3671
Parent has substance use problems (ref. no)	1.5	0.9-2.4	.1452	1.1	0.7-1.8	.6508
Child main setting during the first 6 months (ref. in-home)						
Kin	0.6	0.4-0.9	.0169	0.8	0.5-1.2	.2569
Non-kin foster	0.6	0.4-0.9	.0281	1.1	0.7-1.7	.7316
Child any physical abuse (ref. no)	3.4	1.9-5.9	<.0001	1.8	1.1-2.9	.0215
Child any neglect (ref. no)	1.7	1.2-2.5	.0056	1.6	1.1-2.4	.0112

^a Receipt of services within 30 days or less from referral total N=659. Overall Wald Test: Chi Square=65.59, DF=15, p<.0001

^b Receipt of services within 14 days or less from referral total N=659. Overall Wald Test: Chi Square=49.00, DF=15, p<.0001

F. Child and Parent Well-Being Prospective Study

Dataset:

- Data set from RTI based on baseline (entry to ITC) and follow-up (case closing or 6 months before study closing) interviews with ITC parents and caregivers. During the time before the COVID-19 pandemic, Community Coordinators at each site explained to parents how to use a laptop prepared by RTI, and provided a private space for parents and caregivers to complete an audio-computer assisted self-interviewing (ACASI).
- Once the pandemic started, ACASI were replaced with phone interviews with computer assisted personal-interviewing (CAPI) conducted by RTI staff ([Table F-1](#)).

Table F-1. Parent and caregiver interviews completed at baseline and follow up overall, and for parental depression and child CBCL

Time point	Overall N	Parental depression N	Child CBCL N
Baseline	146	103	85
Follow-up	43	35	32
Matched (baseline and follow-up)	31	25	15

Analysis:

- All analysis were completed using SAS. Descriptive statistics were used to characterize child and parent well-being.
- Child well-being was assessed with the Child Behavior Check List (CBCL) (Achenbach & Rescorla, 2000).
- Parent well-being was assessed with the Major Depression scale used by the National Comorbidity Survey Replication. This is a highly standardized interview that screens for mental health and substance use disorders using the criteria established in the *Diagnostic and Statistical Manual of Mental Disorders (DSM 5)* (Gadernann et al., 2012; Kessler et al., 2012). Questions are scripted to ask about lifetime depression and the previous 12-month period.
- Parenting was assessed with the Parent Reflective Functioning Questionnaire (Luyten et al., 2017).
- Resilience was assessed with the Connor Davidson Resilience Scale (CD_RISC-2) (Davidson, 2021).
- Stress was assessed with the COVID-19 Family Stress Screener (Huth-Bocks, 2020).
- Cross-tabulations and significance tests were conducted (Pearson χ^2 tests for categorical variables) to test for differences at baseline and follow-up.

Sociodemographic Characteristics:

- Sociodemographic, maltreatment history, as well as child, mother, and family characteristics among families that participated in interviews are presented in **Table F-2**.

Table F-2. Sociodemographic, maltreatment report and child and family characteristics

Characteristic	SBCT parent		P-value
	Baseline (N=98) N (%)	Follow-Up (N=34) N (%)	
Child			
Age			
Less than 12 months	48 (49.0%)	9 (26.5%)	0.07
1	28 (28.6%)	13 (38.2%)	
2 or older	22 (22.4%)	12 (35.3%)	
Gender			
Male	52 (53.1%)	22 (64.7%)	0.24
Female	46 (46.9%)	12 (35.3%)	
Race/Ethnicity			
Hispanic	15 (15.3%)	8 (23.5%)	0.53
Black	28 (28.6%)	8 (23.5%)	
White	55 (56.1%)	18 (52.9%)	
Adult			
Age			
Less than 20	7 (7.1%)	2 (5.9%)	0.57
20 to 30	67 (68.4%)	20 (58.8%)	
31 to 40	20 (20.4%)	11 (32.4%)	
Over 40	4 (4.1%)	1 (2.9%)	
Gender			
Male	16 (16.3%)	2 (5.9%)	0.13
Female	82 (83.7%)	32 (94.1%)	
Marital status			
Married	11 (11.2%)	5 (14.7%)	0.59
Not married	87 (88.8%)	29 (85.3%)	
Education			
Less than HS	35 (35.7%)	7 (20.6%)	0.10
HS or more	63 (64.3%)	27 (79.4%)	
Enrolled in school			
Yes	9 (9.2%)	2 (5.9%)	0.55
No	89 (90.8%)	32 (94.1%)	
Employment			
Not employed	56 (57.1%)	11 (32.4%)	0.01
Employed	42 (42.9%)	23 (67.6%)	

Key Finding:

- Analysis of the parents and caregivers data collected by RTI showed very low reports of child emotional/behavioral problems (CBCL) in the clinical range at both baseline and follow-up. There were no significant differences at both data points on the CBCL subscales and total scores (**Table F-3**).

Table F-3. Behavioral Problems Among Children 1.5 to 17 Years Old by Parent or Caregiver Report

CBCL scale	Children in the clinical range	
	Baseline N= 85	Follow up N= 32
Internalizing	9.4	12.5
Externalizing	10.6	6.3
Total	10.6	9.4

Key Finding:

- Analysis of parental depression showed no significant differences between baseline and follow up on the clinical indicator of major depression in the last 12 months (**Table F-4**).

Table F-4. Parental Major Depression in the past 12 months

Major depression scale	Major depression in the clinical range		p value
	Baseline N=102	Follow up N= 35	
Depression symptoms last 12 months	21.4	20.0	0.86
Major Depression last 12 months	17.6	20.0	0.76
Depression symptoms last month	15.5	2.9	0.05
Major Depression last month	12.7	2.9	0.10

Key Finding:

- Baseline analysis of the Parent Reflective Functioning Questionnaire showed similar scores to the general population of parents (**Table F-5**). We analyzed any differences by sociodemographic, risk factors, depression and CBCL. There were no significant differences at baseline by covariate.

Table F-5. Parent Reflective Functioning at Baseline by Covariates

Characteristic	N	Parent reflective functioning					
		Pre-mentalizing mode (Lower mean is better)		Certainty about mental states (Medium mean score is better)		Interest & curiosity in mental states (Medium to medium high mean score is better.)	
		Mean	SD	Mean	SD	Mean	SD
Total	39	1.6	0.92	4.7	1.10	5.9	0.92
Child							
Age in months							
0 to 11 m	23	1.4	0.49	4.8	1.14	6.1	0.66
12 m or older	13	1.8	1.21	4.6	1.14	5.5	1.16
Gender							
Male	19	1.5	0.95	4.8	1.27	5.9	1.07
Female	17	1.6	0.70	4.7	0.98	5.9	0.73
Race/ethnicity							
White	23	1.7	0.94	4.7	0.96	5.9	0.97
Black	9	1.4	0.65	4.9	1.49	5.7	0.99
Other	0						
Hispanic	4	1.3	0.48	4.8	1.40	6.1	0.29
Special needs							
Yes	16	1.6	1.03	4.7	1.10	5.8	0.91
No	20	1.5	0.65	4.7	1.18	6.0	0.93
Maltreatment history							
Prior contact with CWS							
Yes	20	1.6	0.64	4.8	1.17	6.0	0.77
No	16	1.6	1.04	4.6	1.10	5.8	1.09
Any physical maltreatment							
Yes	3	1.2	0.38	4.1	1.51	5.5	0.50
No	33	1.6	0.86	4.8	1.10	5.9	0.94
Any neglect							
Yes	19	1.7	1.05	4.7	1.04	5.8	0.99
No	17	1.4	0.49	4.8	1.24	6.0	0.84
Any emotional maltreatment							
Yes	0						
No	36	1.6	0.83	4.7	1.13	5.9	0.91
Abandonment							
Yes							
No	36	1.6	0.83	4.7	1.13	5.9	0.91
Parent							
Domestic violence							
Yes	26	1.5	0.85	4.8	0.98	5.9	0.99
No	10	1.8	0.77	4.5	1.45	6.0	0.72
Employment services							
Yes	9	1.3	0.57	5.0	0.96	6.2	0.71
No	27	1.6	0.90	4.7	1.18	5.8	0.96
Ever incarcerated							
Yes	32	1.5	0.82	4.7	1.02	5.9	0.93
No	4	2.1	0.83	5.0	1.95	6.2	0.78
Mental health problems							
Yes	34	1.5	0.82	4.8	1.09	5.9	0.93
No	2	1.9	1.30	4.3	2.12	5.6	0.59

Characteristic	N	Parent reflective functioning					
		Pre-mentalizing mode (Lower mean is better)		Certainty about mental states (Medium mean score is better)		Interest & curiosity in mental states (Medium to medium high mean score is better.)	
		Mean	SD	Mean	SD	Mean	SD
Substance use problems							
Yes	30	1.6	0.83	4.8	1.09	5.9	0.94
No	6	1.6	0.89	4.3	1.34	6.2	0.76
Major depression ever							
Yes	8	1.4	0.68	4.3	1.25	6.0	0.75
No	29	1.7	0.99	4.8	1.03	5.9	0.97
Major depression last 12 mos							
Yes	7	1.5	0.71	4.2	1.34	5.8	0.68
No	30	1.7	0.98	4.8	1.02	5.9	0.98
CBCL internalizing clinical							
Yes	2	1.9	1.30	3.8	1.30	6.1	1.30
No	14	1.6	1.15	5.0	0.94	5.8	1.23
CBCL externalizing clinical							
Yes	1	1.0		4.7		7.0	
No	15	1.7	1.15	4.9	1.06	5.7	1.19
CBCL total clinical							
Yes	1	1.0		4.7		7.0	
No	15	1.7	1.15	4.9	1.06	5.7	1.19

Key Finding:

- Analysis of the Parental Reflective Functioning Questionnaire (PRFQ) subscales showed no significant differences between baseline and follow up ([Table F-6](#)).

Table F-6. Parent Reflective Functioning at Baseline and Follow-up

PRFQ Subscales	Baseline (N=37)	Follow up (N= 17)	p value
	Mean	Mean	
Prementalizing modes	1.6	1.8	.33
Certainty about mental states	4.7	4.7	.90
Interest and curiosity in mental states	5.8	6.0	.52

Key Finding:

- Analysis of the COVID-19 Family Stress Screener showed that up to a third of parents and over half of caregivers had stress related to COVID-19. Given small samples at follow up, results are not reliable (Table F-7).

Table F-7. Stress related to COVID-19 at Baseline and Follow-up by type of respondent

	Parent		Caregiver	
	Baseline (N=47) %	Follow up (N=5) %	Baseline (N=17) %	Follow up (N=2) %
Food running out or being unavailable	31.9	0	17.6	0
Losing a job or decrease in family income	34.0	20.0	23.5	0
Housing or utilities	31.9	20.0	23.5	0
Loss of or limited childcare	17.8	0	23.5	0
Taking care of children, including those who are normally in school	13.0	20.0	52.9	0
Tension or conflict between household members	17.0	0	5.9	0
Physical health concerns for me or a family member	34.0	20.0	41.2	50.0
Increased anxiety or depression	30.4	0	41.2	0
Reminders of past stressful/traumatic events	27.7	20.0	23.5	0
Loss of social connections, social isolation	19.1	0	35.3	50.0

Key Findings:

- Analysis of parental resilience showed no significant differences between baseline and follow (Table F-8).

Table F-8. Parental Resilience at Baseline and Follow-up

Parent resilience scale	Baseline N=36 Mean	Follow up N= 17 Mean	p value
Total Score	6.2	5.9	.48

Key Findings:

- Analysis of child health as reported by parents and caregivers showed that at baseline and follow up about two third of children were in excellent health (**Table F-9**).
- About 95% of children at both points in time had their immunizations up to date.
- Less than one in five children attended child care at baseline, and one in four at follow-up.

Table F-9. Child Health, Immunizations, and childcare attendance

Characteristic	Baseline (N=111) %	Follow up (N=36) %	p value
Excellent health	69.4	61.1	.36
Up to date in immunizations	94.6	97.2	.17
Currently attends early childhood program	17.4	25.7	.28

Key Findings:

- Analysis of parenting services showed that over 70% of parents at baseline and follow-up reported ever receiving parenting services (**Table F-10**).
- Over half of parents received parenting services in the previous 12 months.
- About two-thirds of parents reported having listened to a presentation about parenting skills or child development.
- About half of parents reported having coaching directly as they practiced skills with their child

Table F-10. Characteristics of Parenting Skills Training Received in Past 12 Months at Baseline and Follow-up

Parenting services	Baseline (N=109) % Yes	Follow up (N=35) % Yes	p value
Ever referred to parent training	74.3	74.3	1.00
Received parenting training in the last 12 months	51.9	66.7	0.13
Parent skills training characteristics			
Which of the following occurred for at least 10 minutes on many of the days in which you received these services?			
You watched videotape examples of parents and children doing things together (e.g., playing, working, solving problems, disciplining, etc.) as a way of learning and talking about parenting skills.	48.2	77.3	0.02
You watched videotape of yourself doing things together with your child.	23.2	13.6	0.35
You were coached by someone directly as you practiced skills with your child or children.	55.4	40.9	0.25
You listened to a presentation of information about parenting skills or child development.	66.1	86.4	0.07
You practiced skills with other parents in role-play situations.	26.8	31.8	0.66
You completed or reviewed homework assignments that involved things to practice.	64.3	81.8	0.13
You read or learned things about parenting on a computer.	48.2	72.7	0.05
Which of the following topics would you say were discussed in a substantial way?			
How to play effectively with one's child	60.7	77.3	0.17
How to praise and reward positive behavior	66.1	90.9	0.03
How to ignore misbehavior	37.5	54.5	0.17
Nonviolent approaches to discipline	62.5	90.9	0.01
Establishing daily routines for children	73.2	90.9	0.09
Feeding, sleeping, or toilet training habits	58.9	72.7	0.26
Communication and/or problem-solving with children	67.9	90.9	0.04
Supporting children's success in school	39.3	72.7	0.01
Providing medical care for children	55.4	68.2	0.30
Maintaining a child-safe home environment	73.2	90.9	0.09

Key Findings:

- Analysis of child health insurance as reported by parents and caregivers showed that at baseline and follow up 95% of children were covered by an insurance plan (**Table F-11**).
- About 90% of children were covered by Medicaid.
- Close to one in ten children were not covered by health insurance at some point during the previous 12 months.

Table F-11. Parent and Child Health Insurance Status by Parent Report at Baseline and Follow-up

Insurance	Baseline (N=111)	Follow-up (N=36)
Child		
Covered by any insurance plan	94.6	100
Covered by Medicaid	88.3	94.4
Any period without health insurance in the past 12 months	9.9	8.3
Parent		
Medicaid	64.5	71.4
Other insurance plan	17.3	17.1
Uninsured	18.2	14.3