Examining Perspectives of Children's Integrated Services (CIS) from Families Served by CIS Early Intervention

Executive Summary

Overview: As defined in the Child Care and Development Fund Plan for Vermont, Children's Integrated Services (CIS) is Vermont's "unique model for integrating early childhood health, mental health, evidence-based home visiting, family support, early intervention, and specialized child care services for pregnant and post-partum women and children birth to age 6.¹ The model is designed to improve child and family outcomes by providing family-centric holistic services, effective service coordination, flexible funding to address gaps in services, prevention, early intervention, health promotion, and accountability."

The prevention-focused program is designed to wrap around the whole family including support for parents or caregivers to understand and advocate for the needs of their children, provide a point person to support care coordination, and access to high-quality child development, mental health, and prevention services.

To contribute to Vermont's understanding and prioritization of the experience of families receiving these services, Building Bright Futures (BBF) supported the Child Development Division's Children's Integrated Services (CIS) State Team in an analysis of qualitative data to examine the perceptions and experiences of families who have received early intervention services as part of CIS. Of note, this is not a complete evaluation of CIS.

Data and Analysis: Qualitative data on families' experience with CIS were provided by the Vermont Children's Integrated Services State Team within the Department for Children and Families: Child Development Division within the Vermont Agency of Human Services. The survey, completed from November 2020–June 2021, captured 373 total responses with 232 responses to the primary question asking families about their experience with CIS. The Framework Approach for qualitative data analysis was used to develop and refine themes.

Findings: The majority of respondents reported a positive and helpful experience with CIS and indicated that the program supported their child's developmental progress and their own competence and confidence. Care coordination and the CIS workforce specifically, interpersonal interactions and relationships, effective and knowledgeable staff, and communication, were the most critical components of the CIS program for respondents. Respondents also reported challenges and barriers pertaining to their experience with CIS which included the COVID-19 pandemic, care coordination, and staffing.



¹ In addition, children up to age 13 and early childhood education programs programs are eligible for services through specialized child care

Limitations

- The data collection method does not capture the full population receiving CIS services, only families of children who received early intervention services
- 2. The data provided for this analysis was limited to one question
- 3. The survey had a 61% response rate which introduces self-selection bias
- 4. Data sharing agreements were restrictive
- 5. The interchangeable use of "CIS" and "Early Intervention" made it unclear if respondents understood the separate services
- 6. COVID-19 required significant shifts in the delivery of services, which makes it challenging to generalize families' experiences

Program, Policy, and Data Considerations

Four program and policy considerations regarding Children's Integrated Services (CIS) have resulted from the findings related to important service components and the impact on families, as well as the data limitations.

- **1.** Invest in the CIS workforce Vermont should invest in, and prioritize the CIS workforce as individuals working with young and vulnerable children and families.
- **2. Value coordination -** Vermont should fund the critical elements of coordination beyond case management to best serve the whole child and family.
- **3. Conduct a full evaluation of CIS -** A full evaluation of the CIS program is needed to determine challenges to service provision and which factors are most critical in delivering these services successfully.
- **4.** Evolve the CIS data system and infrastructure A CIS data system is needed, including the personnel capacity and expertise to execute high quality data collection, management, reporting, and utilization.

The data, limitations, and considerations in this brief are not published or reported elsewhere and therefore have not been fully utilized in informing decision-making and implementation on this critical topic at the time of publication.

Thank you to the Child Development Division's Children's Integrated Services State Team and families for providing the data to inform this data brief.

The findings of this brief do not necessarily indicate the views of the State of Vermont.



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Building Bright Futures (BBF) is Vermont's early childhood public-private partnership, charged under Vermont Title 33 § Chapter 46 and the Federal Head Start Act (Public Law 110-134) as Vermont's Early Childhood State Advisory Council (SAC), the mechanism used to advise the Governor and Legislature on the well-being of children in the prenatal period through age 8 and their families. BBF maintains the vision and strategic plan for Vermont's early childhood system. BBF's Network infrastructure includes 12 Regional Councils, seven VECAP Committees. and the State Advisory Council. **Buildingbrightfutures.org**



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Children's Integrated Services and Early Intervention services

As defined in the Child Care and Development Fund Plan for Vermont, Children's Integrated Services (CIS) is Vermont's "unique model for integrating early childhood health, mental health, evidence-based home visiting, family support, early intervention and specialized child care services for pregnant and post-partum women and children birth to age six.² The model is designed to improve child and family outcomes by providing family-centric holistic services, effective service coordination, flexible funding to address gaps in services, prevention, early intervention, health promotion, and accountability." The prevention-focused program is designed to wrap around the whole family including support for parents or caregivers to understand and advocate for the needs of their children, provide a point person to support care coordination, and access to high-quality child development, mental health, and prevention services.

CIS is administered by the Vermont Agency of Human Services, Department for Children and Families, Child Development Division. Started in 2009, the CIS program integrates evidence-based and informed service provision and braids funding for a multidisciplinary service array, including four key programs to create a seamless system for families:

- + IDEA Part C Early Intervention
- Early Childhood and Family Mental Health (ECFMH)
- Specialized Child Care
- Strong Families Vermont Home Visiting

In Vermont, IDEA Part C Early Intervention services are known as CIS Early Intervention (EI) services and are only delivered through CIS. Of note, other components of CIS (ECFMH, Strong Families Vermont Home Visiting, and Specialized Child Care) can be delivered in a range of programs and settings.³

Vermont's Early Childhood System landscape

Vermont's Early Childhood System is made up of many programs, services, community-based organizations, and initiatives to support young children and their families. Families often express frustration with navigating "the System," especially when developmental concerns have been identified. In these circumstances, service delivery (e.g., program structure, ease of access, workforce, and staffing) are critical. Creating a more seamless and integrated system of care that supports families through transitions and provides more coordinated care is a critical goal of stakeholders, and is reflected in Vermont's Early Childhood Action Plan as Goal 4.ⁱⁱ Data from the various completed Needs Assessments across the early childhood and maternal child health systems illustrate that there are some service delivery models that demonstrate strong commitments to interagency collaboration. However, rigid policies and funding cause many services to continue operating in silos. These conditions make it challenging for service providers to sufficiently collaborate, for families to navigate access to services, and for data collection to be streamlined in a way that supports continuous quality improvement.ⁱⁱⁱ

² In addition, children up to age 13 and early childhood education programs programs are eligible for services through specialized child care

³ The State of Vermont contracts with 11 regional, non-profit, community based organizations to deliver CIS EI services; 9 of those are contracted through the Child Development Division and 2 are contracted through the Department of Mental Health as Integrating Family Services contracts, which includes CIS. For the purposes of federal reporting, there are 12 regional CIS EI teams.

Purpose

To contribute to Vermont's understanding and prioritization of the experience of families receiving services, Building Bright Futures (BBF) supported the Child Development Division and the Children's Integrated Services (CIS) State Team in an analysis of qualitative data representing families' experiences with CIS for a subset of families who completed the EI Family Survey between November 1, 2020 and June 30, 2021. The project was designed to examine the perceptions and experiences of families who have received early intervention services as part of the CIS program. Of note, this is not a complete evaluation of CIS and further examination is needed to inform decision-making (see policy considerations below).

The stated goals of the project were to examine:

- + Families' perspectives of the impact of CIS on the child or family
- + Families' perceptions of which components of CIS were most impactful
- + Families' perceptions of the major challenges and barriers related to CIS
- + Families' perceptions of opportunities for improvement of CIS



Data and Analysis

Data

Qualitative data were provided to BBF by the Children's Integrated Services State Team within the Child Development Division and the Agency of Human Services. The specific data source for this project was a single question asked through the EI Family Survey conducted between November 2020 and June 2021 as required by the Individuals with Disabilities Education Act (IDEA) Part C, Early Intervention reporting requirements. The survey was sent out to 606 families who had received EI services for at least six months and who were either active with early intervention or were planning to exit as their child reached their third birthday. 371 families (61%) responded to the survey. Of the 371 responses, 232 families responded to the following question which was provided for analysis: "We would like to hear about your experience receiving CIS services overall. The information you share helps us know what is working well and where we can improve." Responses were captured from families in each of Vermont's 12 CIS-Early Intervention regions (Barre, Bennington, Brattleboro, Burlington, Hartford, Middlebury, Morrisville, Newport, Rutland, Springfield, St. Albans, and St. Johnsbury), ranging from five to 68 responses within each region.

Analysis

The Framework Approach^{iv, v} was used to assess themes from interviews in NVivo (qualitative data analysis software) by two trained BBF Data Team members. The BBF Data Team members independently completed each phase of qualitative analysis: familiarization and data management, developing and testing a thematic framework, and descriptive and explanatory accounts to summarize, map, and display the data. The BBF Data Team met after each phase to reach agreement. Themes and sub-themes were identified and refined throughout the project to best represent the data and to reach final consensus.

In addition, the BBF Data Team carefully reviewed existing CIS goals, performance measures, reports, and presentations to contextualize the data and findings, and ensure appropriate and sufficient understanding of the program and its infrastructure.



Three themes and eight sub-themes were identified (Figure 1). Families' perceptions of critical CIS components were related to their overall experience with the program and the impact they perceived for their child and family.

Themes resulting from an examination of perspectives of Children's Integrated Services (CIS) from families served by CIS Early Intervention

The impact of CIS

- + Positive and helpful experience
- + Children's developmental progress
- + Parental and family competence

The most critical components of CIS

- + Care coordination
- The CIS workforce
 - + Interpersonal interactions & relationships
 - + Effective and knowledgeable staff

Barriers and challenges

The COVID-19 pandemic | Care coordination | The CIS workforce

Theme 1: Families' perceptions of the impact of CIS

The impact of CIS was significant for the majority of families who responded to the survey question. Respondents overwhelmingly described their experience as positive. Families articulated a range of developmental progress for their children, as well as impacts on their competence and ability to support their child.

Positive and helpful experience

The majority of respondents indicated satisfaction with the CIS program and that their overall experience was positive and helpful. Within this theme, respondents articulated the importance of CIS as a supportive program that served as a resource for their child and family. Respondents noted that several elements contributed to this satisfaction: help and support in understanding how to best advocate for their child to access services that best meets their needs, that services were accessible and met families' needs, and the ability to consistently ask questions or ask for help when needed. Many respondents also expressed that their experience was positive and helpful because they had access to what they needed in a timely manner, that navigating services were seamless, and the staff working with their child or family were incredible. Themes related to the most important components of CIS are described below in Theme 2.

Children's developmental progress

A significant number of respondents described developmental progress in a range of domains for their children. While multiple developmental domains were referenced, speech and language, and motor (fine and gross) domains of development rose to the level of sub-themes. The majority of respondents who described an overall positive impact on their child's developmental progress did not specify the developmental domain.

Parental and family competence

Parent and caregiver competence emerged as a third sub-theme. Competence was described in the following ways: families gaining an understanding of their child's strengths and abilities; knowing their rights and developing the skills to effectively advocate for their child; developing the skills to help their child develop and learn; and feeling empowered and to take action, whether through advocating for necessary services or implementing and practicing what they had learned through interactions with their CIS team or providers.

Theme 2: Families' perceptions of the most critical components of CIS

While the majority of respondents provided feedback on their experience, satisfaction, and the helpfulness of CIS as a whole, many respondents also articulated that two discrete components of CIS were critical to their child's development or the ability to access needed services: care coordination and the CIS workforce.

Care coordination

Respondents referenced elements of care coordination⁴ as a critical aspect, or service component of CIS. Care coordination was described by respondents as a point person, or the larger CIS team, that helped their family access and navigate complex services and resources; an individual consistently responding to and addressing questions and concerns, and supporting communication and making connections among key providers; and navigating transitions between services. Respondents included the following examples of the impacts of care coordination: integration and coordination of multiple services, lightening the burden on parents and caregivers, advocating for necessary services, supporting transitions, and connecting parents and caregivers directly to resources.

The CIS workforce

Individual staff members supporting families were also referenced as one of the most critical aspects, or service components of CIS by respondents. Three key concepts emerged within this sub-theme: interpersonal interactions and relationships; effective and knowledgeable staff; and communication.

- Interpersonal interactions and relationships: Respondents reported that the positive interpersonal relationships and interactions with staff members were critical to their child and family's experience in the program. Respondents frequently used the following terms to describe individual staff members: understanding, empathetic, patient, flexible, compassionate, personable, resourceful, supported, kind, helpful, caring, understanding, and non-judgmental. Respondents also noted that staff members took the time to develop strong relationships and to truly understand their needs and concerns, which allowed respondents to feel seen, safe, and supported.
- + Effective and knowledgeable staff: Respondents' perceptions of a staff member's efficacy and knowledge also emerged as a key concept. Respondents described the importance of the ability of staff to provide tangible feedback, encouragement, and support to parents/caregivers. Others shared how an individual presenting in a professional and communicative manner contributed to their positive experience. Respondents also referenced that staff were highly skilled in working with children and families, specifically in their ability to meet families where they were and their understanding of child development, parent-child interactions, and the family environment. Respondents often suggested that these attributes contributed to their own competence as parents and caregivers and helped them to better navigate the service system.
- **Communication:** Finally, respondents described the importance of strong communication between their families, CIS staff, and other service providers. Staff members were responsive and provided consistent and reliable information and updates; kept each member of the team well-informed; and provided in-depth and clear explanations to ensure families understood processes and what to expect.

⁴ "Care coordination is a process that links children with special health care needs and their families to services and resources in a coordinated effort to maximize the potential of the children and provide them with optimal care." ^{vi}

Theme 3: Barriers and challenges experienced

While the majority of families described positive experiences with CIS, there were a subset of families with shared experiences of challenges and barriers. Three barriers and challenges are of note: The COVID-19 pandemic; care coordination; and staffing.

- + The COVID-19 pandemic:⁵ Because of the timing of the CIS EI Family Survey, respondents most often referenced barriers and challenges related to the COVID-19 pandemic. For example, many respondents referenced that telehealth sessions, while the best option at that time, were not as helpful or valuable as in-person service provision. Telehealth options created challenges appropriately engaging with children, holding their attention, and developing strong connections and relationships with children and families. Importantly, many families also referenced that CIS providers did a nice job adapting to the challenges posed by the pandemic in transitioning to telehealth models.
- + Care coordination: Several respondents indicated experiencing a lack of consistent communication and inability to reach or engage with staff; not having a point person to support coordination; or challenges scheduling services and meetings with one or more service providers.
- + The CIS workforce: Similarly, the CIS workforce was referenced as a challenge and barrier. Respondents noted the negative impact of staff who were not engaged, staff with high caseloads, and frequent staff turnover.

In addition to analyzing qualitative survey data, the BBF Team carefully reviewed existing Children's Integrated Services (CIS) goals, performance measures, reports, and presentations, alongside meeting with the CIS State Team, to contextualize the data and findings, and ensure appropriate and sufficient understanding of the program and its infrastructure. In meetings with the CIS State Team, the BBF Team learned about the ways in which these data are used to inform a Continuous Quality Improvement (CQI) cycle and philosophy. These data are shared regionally with CIS-EI Teams and then aggregated and shared with the Vermont Interagency Coordinating Council (VICC) to inform annual quality improvement planning. For families who shared a concern or challenge, the Team indicated they have a process for reaching out individually to the family and following up with the appropriate service providers to ensure that resolution is reached.



Limitations

Several limitations are of note in the following areas: data collection and analysis; alignment and distinction between the overall CIS program and the individual service components (IDEA Part C Early Intervention, Strong Families Vermont Home Visiting, Early Childhood and Family Mental Health [ECFMH] and Specialized Child Care); analysis limitations; and the COVID-19 pandemic.

Data Collection and Analysis

Subsample of CIS participants

A major limitation to the existing survey is that it does not have the ability to capture data from all families who have participated in CIS. The survey is targeted to a sub-sample of families who have received early intervention services for at least six months, which provides important but ungeneralizable data related to the overall impact of CIS for families who have received services that did not include early intervention (Strong Families Vermont Home Visiting, Early Childhood and Family Mental Health [ECFMH] and Specialized Child Care).

⁵ A second open ended question was included in the CIS Early Intervention Family Survey which may have included additional perspectives specific to the COVID-19 pandemic. These data were not available to the BBF Team. "Specifically, how has your experience been receiving CIS-Early Intervention services during the COVID-19 pandemic?"

Singular question

It's important to note that the data collected within this survey included only families' responses to one question about their experience in the CIS system and is therefore not a full evaluation of CIS, nor is it a clinical assessment documenting standardized outcomes for children and families. The broad question was asked about families' experience with CIS which led to a wide range of responses and interpretations. Because there were no concrete follow-up questions, it was difficult to draw conclusions about challenges and opportunities for improvement, especially as the majority of respondents shared positive experiences with the program. The singular question was likely intentionally broad to capture a variety of experiences. However, it lacked specificity to fully understand why families' experiences were so positive. Further, while two strong sub-themes emerged within the theme "critical components of CIS," the question asked did not specifically request this information, nor were there follow-up questions. While the analysis prioritized four areas of investigation referenced on page 1 the singular question did not provide enough data for a theme to emerge on opportunities for improvement.

Survey response rate

Another limitation is self-selection bias; 61% of families participated in the survey, which means not all perspectives were captured. A 61% response rate is considered to be a high response rate in such surveys; however, it is important to consider who is missing and why when interpreting the results. In addition, families' perspectives were captured at a singular point in time and therefore may not represent the views of families who have participated in early intervention as part of the CIS system over time. Further, it was not possible to disaggregate responses by CIS region, a participant's demographic characteristics (e.g., child age, race, ethnicity), or by participation in additional services from CIS.

COVID-19 pandemic analysis limitations

As with all analyses taking place after the start of the COVID-19 pandemic, it is important to acknowledge that the pandemic contributed to participants' experiences. As noted in the findings, the COVID-19 pandemic was one of two sub-themes that emerged within the challenges section. Many respondents noted challenges resulting from the pandemic which were largely not about the CIS system itself. COVID-19 required significant shifts in the delivery of services from in-person to telehealth during this time, which makes it challenging to generalize families' experiences from this point-in-time survey to families' broader experience with CIS.

Language used to describe CIS and Early Intervention

When analyzing the data, it was unclear whether families were describing the impact of early intervention, or their overall experience with CIS because the terms "CIS" and "Early Intervention" were used interchangeably throughout. Some respondents consistently referenced CIS while others referenced early intervention, and others used both to describe their experience. There was no way to discern whether families received any other CIS services beyond early intervention.

Inability to share direct quotes or quantify the prevalence of themes

Because respondents did not consent to having their statements used for publication purposes, this brief is not able to include illustrative quotes from families. Additionally, the data sharing agreement did not allow for quantifying the prevalence of themes.

Clear and Aligned Messaging

Language used to describe CIS and Early Intervention

As CIS is a program that values seamless navigation of services for families, an important question to consider is whether families understood the role of early intervention compared to the broader CIS program, and whether that matters as long as families had access to what they needed. Families' knowledge of program characteristics and nomenclature may be less important than access to services and outcomes, but it's important to consider moving forward.

Program, Policy, and Data Considerations

Four program and policy considerations regarding Children's Integrated Services (CIS) have resulted from the findings related to important service components and the impact on families, as well as the data limitations.

Service provision

Respondents overwhelmingly reported the impact of the CIS program on child outcomes and parent and family competence, which are key goals of early intervention. The first set of program and policy considerations are reflective of the two components of service provision that had the biggest impact on child and family outcomes.

- 1. Invest in the CIS workforce: The characteristics and expertise of individual staff members supporting families, alongside the partnerships built with families, were referenced as one of the most critical service components of CIS by respondents. This is aligned with existing national research on home visiting and family-centered programs. This finding is particularly important in the Vermont context given the current workforce shortage. Vermont should invest in, and prioritize the CIS workforce as individuals working with young and vulnerable children and families. While investing in the early childhood workforce was a key recommendation from Vermont's Early Childhood State Advisory Council in both 2020 and 2021 resulting in some investments in CIS and the early childhood workforce, there is still work to be done. Supported strategies include increased compensation, workforce sign-on and retention bonuses, relocation costs, tuition reimbursement, loan repayment, housing stipends for employees, health benefits, and financial support for child care.
- 2. Value coordination:⁶ Vermont should fund the critical elements of coordination beyond case management to best serve the whole child and family. Care coordination emerged as one of the critical components that respondents reported as positively impacting their experience with CIS. The time teams spend coordinating services and supports for families make up a significant portion of the total cost of providing services. Xiv This coordination includes service coordination, case management, and the time teams spend coming together to support an integrated, comprehensive support system. While case management is billable as part of the CIS program,⁷ additional critical elements of coordination are not.

Data considerations

The second set of considerations resulted from the limitations related to existing data infrastructure, capacity, and survey instruments.

- 3. Conduct a full evaluation of CIS: A full evaluation of the CIS program including new program wide data collection from families, providers, and administrators, and a retrospective analysis of quantitative and qualitative data is needed to determine challenges to service provision and which factors are most critical in delivering these services successfully.
- **4. Evolve the CIS data system and infrastructure**: As recommended by Vermont's Early Childhood State Advisory Council in both 2020^x and 2021,^{xi} a CIS data system, and personnel capacity and expertise are needed to execute high quality data collection, management, reporting, and utilization. Monitoring through a statewide data system will allow for routine assessment of programmatic changes and identify and address issues as they arise in real time to inform Continuous Quality Improvement. While the development of such a data infrastructure will take time and resources, the current CIS EI Family Survey should be revised to capture the experience of all families receiving any CIS service.

⁶ Care coordination is a term broadly used by health professionals to describe the process of linking children and families with appropriate services and resources in a coordinated effort to support optimal outcomes. VI, XII Within CIS Early Intervention, the term most often used to describe this body of work is "service coordination," as required by IDEA Part C.XIII Case management services are services furnished to assist individuals, eligible under the State Plan, in gaining access to needed medical, social, educational and other services."XV

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