Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

ECCS CoIIN

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

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ECCS CoIIN OVERVIEW

The Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) was a five-year nationwide initiative to improve outcomes in population-based children's developmental health and family well-being, funded by the Health Resources & Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). The purpose of ECCS CoIIN was to support ECCS CoIIN participants (12 state-level Impact Grantees [IG] and their corresponding 28 Place-Based Community [PBC] teams) in promoting early childhood developmental health and family well-being. The National Institute for Children's Health Quality (NICHQ) and its partners supported these efforts by serving as the Coordinating Center (CC), providing capacity building technical assistance (TA) to the ECCS CoIIN participants. Designed as a Collaborative Improvement and Innovation Network (CoIIN), ECCS CoIIN combined a Collective Impact framework and Continuous Quality Improvement (CQI) methodologies to support IG and PBC teams working to develop seamless systems of care for children from birth to kindergarten entry, ultimately yielding improvements in children's developmental health and family well-being.

A revised ECCS CoIIN logic model was developed in Year 3 of the program based upon lessons learned during the project implementation period to date. The following learnings in this report stem from a set of priority questions that the ECCS CoIIN coordinating center sought to address. The findings represented here do not reflect a full-program impact evaluation. In addition, many state grantees conducted individual evaluations of their ECCS CoIIN programs that are not represented in this report. The areas included in this evaluation report are as follows:

- **Building connections between state and local level Early Childhood Systems (ECS) (STATE AND LOCAL CONNECTIONS)**
- **Expand ECS by building capacity through infrastructure, services, and personnel (STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS)**
- **Policy implementation through programmatic, regulatory, and legislative changes in support of ECS (POLICY TRANSFORMATION)**
- **Developing and strengthening partnerships to support ECS activities (PARTNERSHIP DEVELOPMENT)**

As ECCS CoIIN participants differed in areas of focus for individual project implementations, not all strategies were universally adopted by all participants. Thus, in this report, commonalities among ECCS CoIIN participants efforts are highlighted. Finally, outcomes related to ECCS CoIIN participants' efforts to **improve, strengthen, and sustain their ECS** are also examined (**ECS IMPROVEMENT AND SUSTAINABILITY**). This latter activity was central to ECCS CoIIN activities – in fact, the other strategies discussed in this report often served to ultimately support ECS improvement and sustainability efforts.

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METHODS

NICHQ utilized seven data collection streams to inform the evaluation. Areas were chosen to maximize prior data collection, and to limit the data collection burden on ECCS CoIIN participants. Sources of quantitative data collection included the Contextual Factors Survey (fielded in 2018 and 2020, measuring facilitators [i.e., enabling factors] and barriers to ECCS CoIIN implementation), and the Partnership Survey (fielded in 2018, 2020, and 2021, measuring strength and development of partnerships on the state and local level). Sources of qualitative data included IG and PBC submitted bimonthly reports (2020-2021), key informant interviews with IG and PBC team leads (2020), family partner focus groups (2021), and a mid-point evaluation synthesis (2019).

STATE AND LOCAL CONNECTIONS

Compared to previous iterations of the ECCS program, ECCS CoIIN was designed to emphasize community-level integration and connections in system-building activities. State and local connections were a key component of ECCS CoIIN, with nearly all IGs identifying these as a strategy to support ECCS implementation. Most IGs used community-based and cross-sector approaches in building state and local connections; as a result, many outcomes also related to community integration and partnerships. Participants reported increased coordination between state and local partners to implement strategic planning around building collaboratives, networks, and coalitions to support systems growth. Other outcomes shared included more holistic visions to guide systems building efforts with the inclusion of community voices, which led to the establishment of state-level policies and strengthened cross-sector partnerships in some cases. Facilitators for building state and local connections emphasized relationship building and community partnerships.

While some ECCS CoIIN participants shared challenges with state leadership as a barrier to building state and local connections, in general, challenges tended to vary state-to-state. Examples of barriers to state and local connections included limited capacity due to managing the COVID-19 pandemic, funding interruptions resulting in growth and sustainability concerns, and differing systems priorities and goals.

For more information about state and local connections, please refer to the States and Communities Working Together ECCS CoIIN Brief.

STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

All ECCS states and communities were able to strengthen their developmental promotion, early screening, and service connections activities through the five years of participating in ECCS CoIIN; however, specific efforts varied based on the goals of each constituency. Many IGs and PBCs developed, improved, or strengthened partnerships in pediatric health care (clinic) settings to facilitate developmental screenings. Around half of ECCS CoIIN participants discussed the importance of obtaining diverse funding to further developmental promotion, early screening, and service connections. Overall, developmental promotion, early screening, and service connection efforts were more keenly experienced at the state level compared to the community level, with PBCs ranking barriers to developmental promotion, early screening, and service connections as "less influential" than IGs to their ECCS implementation. This finding could speak to the fact that efforts to enact developmental promotion, early screening, and service connection may first require state-level input and coordination to fully implement within communities. Key barriers shared by ECCS CoIIN participants included a lack of funding to support systems building, a lack of political will, competing initiatives and other siloed efforts, and time constraints.

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POLICY TRANSFORMATION

For the purpose of this report, policy implementation included both programmatic and regulatory changes along with formal legislative and political processes. Most states and localities transformed their policies through goal alignment, process coordination, and connecting to their communities on both the state and local levels. Some examples included unbundling Medicaid coding in support of developmental screenings, developing equitable referral systems, and updating state agency Memorandums of Understanding (MOUs) on federal Title IX and Title XIX funding.

A key part of enabling these changes was aligning different funding streams, including federal, state, and philanthropic dollars. Facilitators reported for policy transformation included relationship building and engagement for the purpose of diverse coalition building, such as public and private partnerships. Goal alignment was discussed as both a barrier and a facilitator. Developing a shared vision was considered an influential policy facilitator by IGs and PBCs alike, but some described how goal alignment alone did not create conditions for policy transformation and must be accompanied with political will. While ECCS CoIIN participants were less aligned in their perception of policy barriers, several referred to leadership and program capacity limitations as influential to their work.

PARTNERSHIP DEVELOPMENT

During ECCS CoIIN, partnerships strengthened not only on the state and community levels, but also between the state and the community levels. Partnerships with early care and education leadership, other early childhood initiatives and coalitions, and public health and human services grew throughout the ECCS CoIIN project. Toward the end of ECCS CoIIN, partnerships with executives and legislative leadership also grew in number and strength. However, evaluation data suggested that partnerships with academic institutions, nonprofits, and businesses may have regresses, though these challenges could be related to impacts of the COVID-19 pandemic.

Barriers around developing relationships and aligning priorities were discussed among both IGs and PBCs, though the nature of the barriers varied. On the local level, participants reported facilitators and barriers related to community-based work, communication, and aligned missions, while on the state level, facilitators and barriers reported focused on misaligned systems goals and activities, funding opportunities or barriers, and leadership buy-in.

ECS IMPROVEMENT AND SUSTAINABILITY

All ECCS CoIIN participants reported progress within ECS improvement and sustainability efforts. Moreover, the other evaluation areas (such as state and local connections, ECS capacity building, policy transformation, and partnership development) were often discussed as facilitators for ECS improvement and sustainability. The majority of ECCS CoIIN participants discussed strategies to support ECS improvement and sustainability that stemmed from Collective Impact activities, such as creating a shared vision, promoting aligned activities, and funding streams, and developing shared data systems. While family leadership, CQI approaches, and building public will were strategies discussed by fewer participants, those who did use these strategies found them central in furthering their ECCS implementation.

Challenges in ECS improvement and sustainability tended to be specific to each state and community context and were often related to issues of coordination and collaboration among state- and community-level stakeholders, such as changes in leadership, the tension around building and implementing programs simultaneously, an unwillingness to collaborate on system implementation, and time constraints.

In general, participants reported sustainable outcomes related to community and state infrastructure and service integration. Some examples included embedding ECCS principles and visioning within strategic planning, actively including community members in state-level decision making and building or enhancing online platforms to help facilitate effective service referrals.

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Measurement

Measurement was a key component of cataloging success and improvement within ECS improvement and sustainability; however, quantifying and measuring systems-level change was an area that ECCS CoIIN participants found particularly challenging. Participants discussed global measurement challenges generally associated with data infrastructure, particularly around the coordination and collection of data. ECCS CoIIN-specific challenges included changes to the project measurement strategy coupled with turnover at state, local, federal, and CC levels.

Conditions supporting measurement related to developing and coordinating shared data systems (such as establishing long-term governance with existing data systems and/or building infrastructure for new shared data systems) and incorporating CQI methods and techniques into program processes (such as regularly reviewing program data and testing strategies for improvement). For more information about ECCS CoIIN measurement activities and learnings, please refer to the System Level Performance Measurements Brief.

Strategies to Support Equity

Equity was a guiding principle for the ECCS CoIIN initiative and its importance to systems-building efforts made it a common theme underlying ECCS CoIIN participants' activities. As such, the majority of ECCS CoIIN participants built and developed strategies to support equitable systems of care for their constituencies. Common equity-focused strategies included expanded data and referral systems to support more equitable access to services, family and community leadership and engagement, universal developmental screening and promotion and leveraging funding to address inequitable service gaps.

RECOMMENDATIONS AND CONCLUSIONS

As ECCS CoIIN was a series of collaborative partnerships between interrelated and interdependent agencies and organizations, recommendations span many stakeholders involved in ECS building efforts. Recommendations were shared directly by ECCS CoIIN participants in evaluation activities or identified by the evaluation team, informed by the analysis of different evaluation activities.

Expand, Braid, and Align Cross-Sector Funding Streams

Due to the collaborative nature of developing and implementing program and policy changes across different stakeholders, a reported enabling factor to several areas of ECCS implementation was the braiding and alignment of different funding streams. Expanding availability of funding sources that encourage collaborative cross-sector work to build early childhood systems could support better circumstances for partnership, capacity building, and implementation. This could also potentially lead to more buy-in and political will from key agencies and sectors.

Coordinate National and State Evaluation

Though ECCS CoIIN participants demonstrated progress in their efforts to build and strengthen ECS, not all participants focused their ECS building efforts in the same areas. Even among participants who focused and measured ECCS progress in the same areas, individual evaluation strategies were not standardized. In addition, some participants' systems were more developed at baseline compared to others. As a result, state-level evaluation work from the ECCS CoIIN participants could not be aggregated and compared with one another. To support coordinated evaluation of systems building work and examine aggregate results at project end, a coordinated state level and national evaluation strategy around systems maturity could be beneficial. A guiding framework should include flexibility to encompass each state's ECS maturity (described in the ECCS CoIIN Systems Maturity Brief), as well as encourage cross-state comparability.

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Broaden Measurement Strategies

Many ECCS CoIIN participants understood the importance of infusing equity into the ECCS CoIIN activities; as such, incorporating equity principles into project conceptualization could support participants in being better able to measure and address issues of disparities, access, and reach in systems building initiatives.

Further, when discussing challenges with progress and outcome measurement, participants noted that the strategy chosen for the overall CoIIN may not have been relevant for all. Some participants suggested allowing states and communities to select indicators relevant to their population needs, constituency, process, and project goals. Incorporating individualized measurement activities could enhance future iterations of the ECCS project by better assessing and quantifying systems building activities within individual community and state contexts.

Finally, to minimize the burden of primary data collection among ECCS CoIIN participants, future ECCS iterations may consider focusing more on secondary national data sources to track progress in key indicators related to ECS building and growth. Technical assistance focused on building and supporting state-level capacity to obtain, analyze, and utilize secondary data sources as a key driver of ECCS implementation could be beneficial. This work could be supported by national data sources through increased timeliness of national data releases and expanded sampling strategies to disaggregate data by sub-state geographies and race/ethnicity.

For more information and recommendations about system-level measurement strategies, please refer to the System Level Performance Measurement Brief.

Invest in Family Leadership and Family Engagement

Another method to support equity in ECS capacity building is continued investment in community engagement. Reframing community and family investment to a strengths-based approach could shift the ECS paradigm to harness the wisdom inherent in lived experiences to better support community-level assets. Giving communities the opportunity to define the terms of their ECS building would require a fundamental shift in how outside stakeholders often view systems building work but could offer circumstances to better develop equitable ECS specifically tailored to unique and diverse population needs.

Strengthen Service Delivery Infrastructure Building in Pursuit of System Maturity

Service delivery infrastructure creation was shared in evaluation activities as a facilitator to partnership on the state level. To achieve state-level system infrastructure goals, other areas of the evaluation identified placing more emphasis on smaller scale processes such as service delivery, workforce capacity building, and partnership cultivation. Emphasizing concrete process oriented and local-level activities in service of state-level system infrastructure development could be a key area to further support ECS maturity.

Increase Staffing, Time, and Capacity in Support of Partnership Development

Time, capacity, and staffing constraints were a common reported barrier on both the local and state levels in the ECCS CoIIN project. Expanding staffing opportunities to specifically support cross-sector relationship development and partnership could help avoid a breakdown of ECS implementation.

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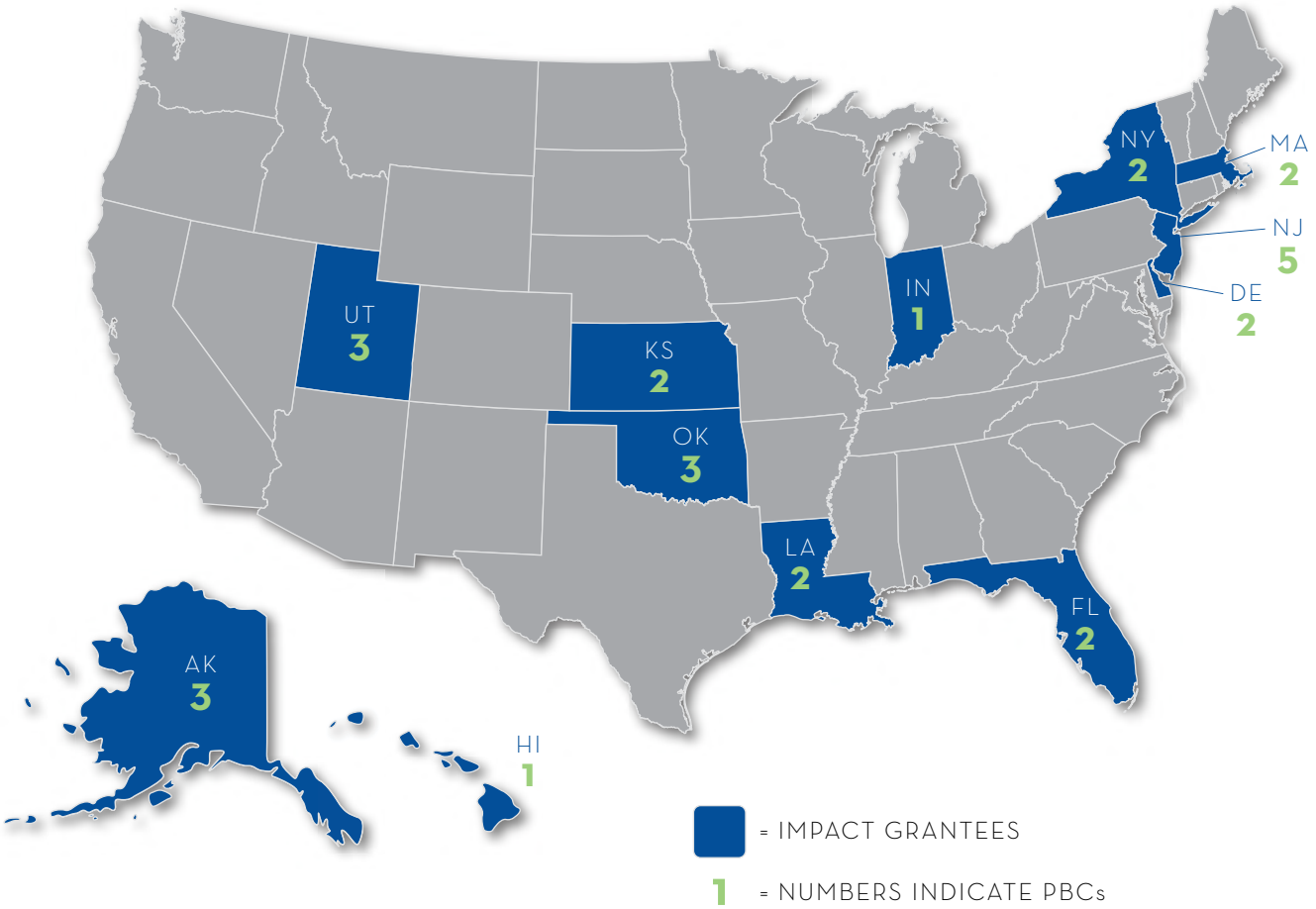
PROJECT BACKGROUND

The Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) was a five-year nationwide effort to improve outcomes in population-based children's developmental health and family well-being, funded by the Health Resources & Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). Early Childhood Comprehensive Systems (ECCS) are partnerships between interrelated and interdependent agencies and organizations (representing physical and mental health, social services, families and caregivers, and early childhood care and education) striving to develop seamless systems of care for children from birth to kindergarten entry. The current iteration of the ECCS grant program built upon prior work to enhance early childhood systems at the national, state, and community levels using a Collaborative Improvement and Innovation Network (CoIIN) approach. The purpose of ECCS CoIIN was to assist ECCS CoIIN participants (12 state-level Impact Grantees [IG] and their corresponding 28 Place-Based Community [PBC teams]; see Figure 1). As lead of the ECCS CoIIN Coordinating Center (CC), The National Institute for Children's Health Quality (NICHQ) and its partners supported these efforts by serving as the backbone organization providing capacity building technical assistance (TA) to the ECCS CoIIN participants.

Figure 1. ECCS CoIIN Impact Grantee States and Place Based Communities



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The ECCS CoIIN utilized a Collective Impact framework and Continuous Quality Improvement (CQI) methodologies to support IG and PBC teams in achieving the overall goal of the ECCS project to improve outcomes in population-based children's developmental health and family well-being indicators. The global aim, as conceived from project inception, stated that ECCS CoIIN participants would show a 25 percent increase from baseline in age-appropriate developmental skills of their communities' three-year-old children and reduce disparities in these skills among these children. In addition, the project aimed to utilize CQI methods combined with the Collective Impact framework, defined as a CoIIN. Accordingly, the ECCS CoIIN was originally conceived as a three-cohort model, utilizing an adapted Breakthrough Series (BTS) Learning Collaborative model as the vehicle for refining and spreading changes and using quality improvement methodologies. In the BTS model, improvement teams gather regularly via webinars and learning sessions to share success and challenges around attaining project goals. With the assistance of experts in the science of improvement and early childhood, participating teams share data, learn about essential improvement techniques, and prioritize possible innovative strategies to test. During Year 1 of the project, the state teams focused on developing capacity, infrastructure, and partnerships to lay the groundwork for future activities. In this process, the Coordinating Center recognized the importance of the time needed to build infrastructure and in partnership with HRSA/MCHB, decided that the project would no longer be divided into cohorts to best support teams in transforming early childhood systems.

The goals of the ECCS CoIIN Coordinating Center were to work with ECCS IGs and their corresponding PBC partners to:

1. **Strengthen leadership in Continuous Quality Improvement and Innovation**
2. **Strengthen knowledge and skill level in using the Collective Impact framework**
3. **Assist with the development of two-generation approaches (parent-child dyad) to drive integration of early childhood services vertically (i.e., within a sector) and horizontally (i.e., across sectors)**
4. **Facilitate the development and adoption of core sets of early childhood indicators**
5. **Facilitate the testing of innovative early childhood systems change ideas, development of spread strategies, and adoption of new early childhood policies for sustaining the systems at the state/territory, county, and community levels**

In order to meet the needs of the project and capture the work that grantees were conducting, a program wide logic model was developed with broad input from experts and grantees and finalized in Year 4 (See Appendix A).

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During Year 4 of the project, the ECCS CoIIN Coordinating Center worked to align the technical assistance strategy with the newly created overall ECCS CoIIN Logic Model. Along with a realignment of activities, several new enhancements were implemented to continue to strengthen the alignment of the Coordinating Center's activities with the goals of HRSA leadership and accelerate the impact of ECCS CoIIN at the state and community levels. These enhancements focused on broader capacity building technical assistance, including "wrap around" of the original approach with more tailored technical assistance for states and communities paired with broader universal technical assistance for the full network.

Evaluation Plan

To align with the newly created logic model and project evolution, the ECCS CoIIN Coordinating Center worked to adjust the overall evaluation of the project. As a result, the final evaluation focused on the following key areas:

Overall Evaluation Questions

1. **STATE AND LOCAL CONNECTIONS:** How did participants approach the connections between state- and community-level systems to strengthen Early Childhood Systems (ECS) implementation? What factors supported this work? What specific outcomes emerged from this connectivity? What future capacity would be needed to further strengthen this work?

2. **STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS:** To what extent did ECCS CoIIN lead to new and/or diversified early childhood focused funding and capacity building at the state and community level? What were the barriers and facilitators to this work?

3. **POLICY TRANSFORMATION:** What policy changes (at the state and community level) were enacted, or demonstrated inroads to becoming enacted, as part of the work of ECCS CoIIN initiative? What were the barriers and facilitators to policy changes?

4. **PARTNERSHIP DEVELOPMENT:** To what extent did ECCS CoIIN result in new and/or more engaged partners at the state and community level? What were the barriers and facilitators to partner engagement? What outcomes resulted from partnerships established as part of ECCS CoIIN?

5. **ECS IMPROVEMENT AND SUSTAINABILITY:** (a) How was success and improvement measured at the state and community level? What successful changes are participants sustaining across community and state infrastructure, service integration (e.g., centralized access, care coordination, service referral), and data systems (b) What improvements and changes (at a state and community level) can be evidenced from the ECCS CoIIN project?

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In addition, the Coordinating Center also created guiding principles to situate the overall evaluation within the context it was created (i.e., at Year 4) and for the ECCS CoIIN participants (i.e., to build upon and support individual ECCS CoIIN participants' evaluation plans). The guiding principles were as follows:

1. **Acknowledge the variability in participants' capacity, focus, and ECCS efforts. Success for participants should be framed in relation to their own work and efforts.**
2. **Highlight participants' evaluation efforts and activities. Share and spread stories of the ECCS CoIIN successes.**
3. **Prioritize and align current and future evaluation activities based on feasibility, staffing, and allocation of resources.**
4. **Intentionally limit data burden for participants by utilizing existing data and data collection whenever possible.**
5. **Focus on key areas of the ECCS CoIIN initiative to inform future program planning and the Early Childhood Systems Field.**

The remaining sections of this final report delve into key findings, lessons learned, and recommendations based off the aforementioned areas of the overall evaluation of ECCS CoIIN.

METHODS

Following the guiding principles of the overall evaluation plan, the Coordinating Center utilized seven data collection streams to inform the evaluation. These areas were chosen to maximize data collected prior to the changes in the evaluation in Year 4, as well as areas to intentionally limit the constraint on participants. Additional detail on each data stream is provided within this section.

Bimonthly Narrative Reports

The ECCS CoIIN bimonthly reports were implemented in Summer 2019. Every two months, IG and PBC teams responded through the NICHQ Collaboratory (CoLab) platform to a series of open-ended qualitative questions that focused on project implementation. CoLab is a web-based platform that offers a secure space for sharing of resources, best practices, and challenges. The bimonthly reports served a variety of functions, including providing information to Core Faculty, HRSA, and the Coordinating Center to support participants through tailored TA and to highlight themes across the ECCS CoIIN work of the ECCS CoIIN participants. In addition, the ECCS CoIIN Coordinating Center began to utilize the reports as a mechanism to capture additional evaluation information from all IG and PBC teams starting in Spring 2020. Questions were organized based on the key areas of the overall evaluation plan (Table1).

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Table 1. Bimonthly Report Topics and Questions

REPORT TOPIC	BIMONTHLY REPORT QUESTION
State and Local Connections	Please share the systems you have created, as part of ECCS, to ensure connections between state-level and local-level early childhood work. In addition, please share any outcomes related to the ECCS aims that may have resulted from these connections.
Improvement and Sustainability	Please share successful improvements that you are planning to sustain in any (or all) of the following areas: › Community and State Infrastructure › Service Integration › Data Systems
Strengthening Developmental Promotion, Early Screening, and Service Connections	Please share any additional funding opportunities or capacity building that was leveraged from the ECCS CoIIN vision and collective impact approach.
Policies	Considering 2016 to present, please share any policy changes that were enacted (or are making progress toward being enacted) resulting from your ECCS CoIIN work, focusing only on your community or state, respectively.

Response rates for the bimonthly reports can be found in Table 2. Thematic analysis was employed to analyze all responses. All text was reviewed and categorized based on the domains of the ECCS CoIIN Logic Model, followed by goals and activities. Text was coded by two analysts who overlapped on 25 percent of (3) cases and achieved a reliability of .83. Subsequently, the remaining cases were split between the two analysts and reviewed separately. Key themes were discussed and identified by the entire coding team.

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Table 2. Response Rates for Bimonthly Reports

REPORT TOPIC	RESPONSE RATE
State and Local Connections	Overall: 63% (83% IG; 53% PBC)
Improvement and Sustainability	Overall: 73% (100% IG; 61% PBC)
Strengthening Developmental Promotion, Early Screening, and Service Connections	Overall: 65% (75% IG; 61% PBC)
Policies	Overall: 65% (91% IG; 54% PBC)

Contextual Factors Survey

To capture facilitators (i.e., enabling factors) and barriers to ECCS work across the core areas of the evaluation plan, the Contextual Factors Survey was utilized. The survey was fielded at two time points: first during Year 3 and again during Year 5. The Year 3 version of the survey asked ECCS CoIIN participants to self-identify facilitators and barriers across a variety of domains, along with rating the influence of these factors on a 5-point Likert scale (1=not at all influential; 2=a little influential; 3=somewhat influential; 4=very influential; 5=extremely influential). The 2018 survey was fielded to all attendees of Learning Session 7, leading to an overall response rate of 7 percent (17/227). Among IGs participating in Learning Session 7, the response rate was 83 percent. The Year 5 version of the survey was revised with input from MCHB, Subject Matter Experts (SMEs) as well as IG and PBC teams. The intent of these revisions was to better align with and address the current activities of the ECCS project. Accordingly, ECCS CoIIN participants were asked to rate their perceptions of facilitators and barriers to their ECCS implementation across four domains: Policy, Early Childhood Systems, State/Local Connections, and Improvement and Sustainability. Table 3 includes all prepopulated facilitators and barriers within each of the four domains. The overall response rate to this survey was 68 percent (92 percent of IGs and 57 percent of PBCs). Eleven out of the 12 ECCS states were represented. Full results of the Contextual Factors Survey can be found in Appendix D.

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Table 3. Facilitators and Barriers of Contextual Factors Survey by Domain

TOPIC	FACILITATORS	BARRIERS
Policy	Relationship building and engagement of partners, stakeholders and/or policymakers	Limited buy-in from community members, state/local leadership, and/or other stakeholders
	Opportunities to coordinate and develop activities and/or a shared understanding of ECCS work and vision	Competing or misaligned priorities
	Alignment with the priorities of other constituencies	Resource constraints
	Engagement of families/community around SDOH and other needs	Political will
Strengthening Developmental Promotion, Early Screening, and Service Connections	Relationship building and engagement of partners, including non-traditional and cross-sector partners	Lack of funding to support early childhood systems building
	Alignment with existing funding sources/initiatives or funding opportunities	Political will
	Availability of funding to support early childhood system building	Competing initiatives, priorities, and other siloed efforts
	Clear strategic direction	Time constraints
State and Local Connections	Preexisting relationships and partnerships	Siloed systems/departments and misaligned priorities
	Alignment of goals and/or alignment with existing initiatives	Lack of resources/funding
	Opportunities for open communication between state and community, as well as an intentional inclusion of the community voice	Power dynamics between partners
	Funding opportunities and support from state/federal leadership	Lack of buy-in at community, state, and/or local level
Improvement and Sustainability	Integrated data systems	Lack of resources
	Cross-sector participation and enthusiasm, including at the state and local level	Lack of buy-in at community, state, and/or local level
	Trainings and opportunities to network and collaborate to support knowledge of CQI	Competing goals and/or misaligned priorities
	Aligned priorities and strategies	Institutional and organizational culture/practices

Note: Each topic also contained an open-ended category under facilitators and barriers for respondents to self-populate.

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Partnership Survey

The purpose of the Partnership Survey was to quantify the experiences of IG and PBC teams in interacting and linking with state and local partnerships in pursuit of the ECCS CoIIN project goals. The Partnership Survey was fielded during Years 3 and 4 of ECCS CoIIN to capture partnership building activities and cross-sector collaboration. Quantitative data were analyzed with descriptive and bivariate analyses.

During Year 4, the Partnership Survey was revised to better align with and remain relevant to the direction of the ECCS CoIIN. The review processes included input from MCHB, SMEs, and IG and PBC teams. The revisions included a more thorough list of partners and sectors, open-ended responses focusing on facilitators and barriers to engagement, and the addition of an action domain (influencing).

The survey was fielded again in Year 5 (Winter 2020-2021). As with prior survey years, quantitative data were analyzed with descriptive and bivariate analyses. In addition, open-ended survey responses were analyzed using inductive thematic qualitative coding methods (i.e., codes were determined as themes arose in the analysis).

Response rates for all three survey years are detailed in Table 4.

Table 4. Partnership Survey Response Rates by Year

YEAR	RESPONSE RATE
2018	Overall: 36% (33% IG; 37% PBC)
2020	Overall: 63% (67% IG; 61% PBC)
2021	Overall: 70% (75% IG; 68% PBC)

In each survey year, ECCS CoIIN participants rated how they linked, interacted, and influenced with different partners in pursuit of project goals on both state and local levels.[1] Each variable was grouped into sectors, also referred to as composite variables, listed here:

- **Academic/Non-Profit**
- **Business/Private Sector**
- **Child Welfare/Criminal Justice**
- **Early Care and Education Leadership**
- **Early Childhood Initiatives or Coalitions**
- **Executive/Legislative Leadership**
- **Health Care**
- **Parents/Community Leadership**
- **Public Health and Human Service and Supports**
- **Social Services and Family Infrastructure Supports**

This resulted in 57 composite variables in the 2020 and 2021 survey, and 26 composite variables in the 2018 survey. The scale of each variable is seen in Table 5. Once composite variables were generated, the mean score of each respective linking, influencing, and interacting variable describes partnerships within each sector and geography. For instance, in 2021, the mean response for IG/PBC interactions with state-level academic/non-profits was 3.29, in which case the partnerships are described as "coordinating."

[1] Exceptions: Business partnerships were only rated on the local level, and the 2018 survey did not have contain the influencing domain.

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Table 5. Partnership Survey Composite Variable Scales

SCALE	LINKING VARIABLES	INFLUENCING VARIABLES	INTERACTING VARIABLES
1	Not at all easy	Not at all easy	Networking
2	A little	A little	Cooperating
3	Somewhat	Somewhat	Coordinating
4	Very	Very	Collaborating
5	Extremely	Extremely	Partnering
-9	N/A	N/A	I am a member of this organization

As the data between the 2021 and 2020 Partnership Survey were directly comparable, t-tests were used to determine significance across years for each variable. Data in the 2020 and 2018 Partnership Surveys that were directly comparable (i.e., interacting and linking variables only) were also examined to determine significance across years with t-tests. Full results of the partnership survey analysis can be found in Appendix E.

Key Informant Interviews

The ECCS CoIIN Coordinating Center led a series of 12 key informant interviews with each of the state IG and PBC teams during Year 5 of the project. All interviews ran between 60-75 minutes and focused on sharing successes and challenges in ECCS implementation across the key areas of the ECCS evaluation plan, as well as opportunities for ECCS CoIIN participants reflect on their ECCS CoIIN work. All interviews were transcribed and analyzed using the Dedoose platform. Interviews were coded using a deductive coding strategy (i.e., predetermined codes were applied to text) based off the ECCS CoIIN Logic Model. Cases were coded concurrently by two analysts. Once appropriate reliability was achieved (Pooled K >.80), the remaining cases were divided and coded separately. Key themes were discussed and identified by the entire coding team. The interview protocol and code structure can be found in Appendix B.

Family Partner Focus Groups

The ECCS CoIIN Coordinating Center led two focus groups with family partners during Year 5 of the project. A total of five individuals participated in the first focus group and three individuals participated in the second focus group. Each focus group lasted 60 minutes and participants shared their key accomplishments as ECCS family partners, along with lessons learned on engaging family leaders in systems building work. Both focus groups were transcribed and analyzed using the NVivo platform. The text was coded using a combination of inductive (i.e., codes were identified from text) and deductive (i.e., predetermined codes were applied to text) strategies. Cases were coded concurrently by two analysts. Once appropriate reliability was achieved (Pooled K >.80), the remaining cases were divided and coded separately. Key themes were discussed and identified by the entire coding team. The interview protocol, code structure, and themes can be found in Appendix C.

BACKGROUND AND METHODS

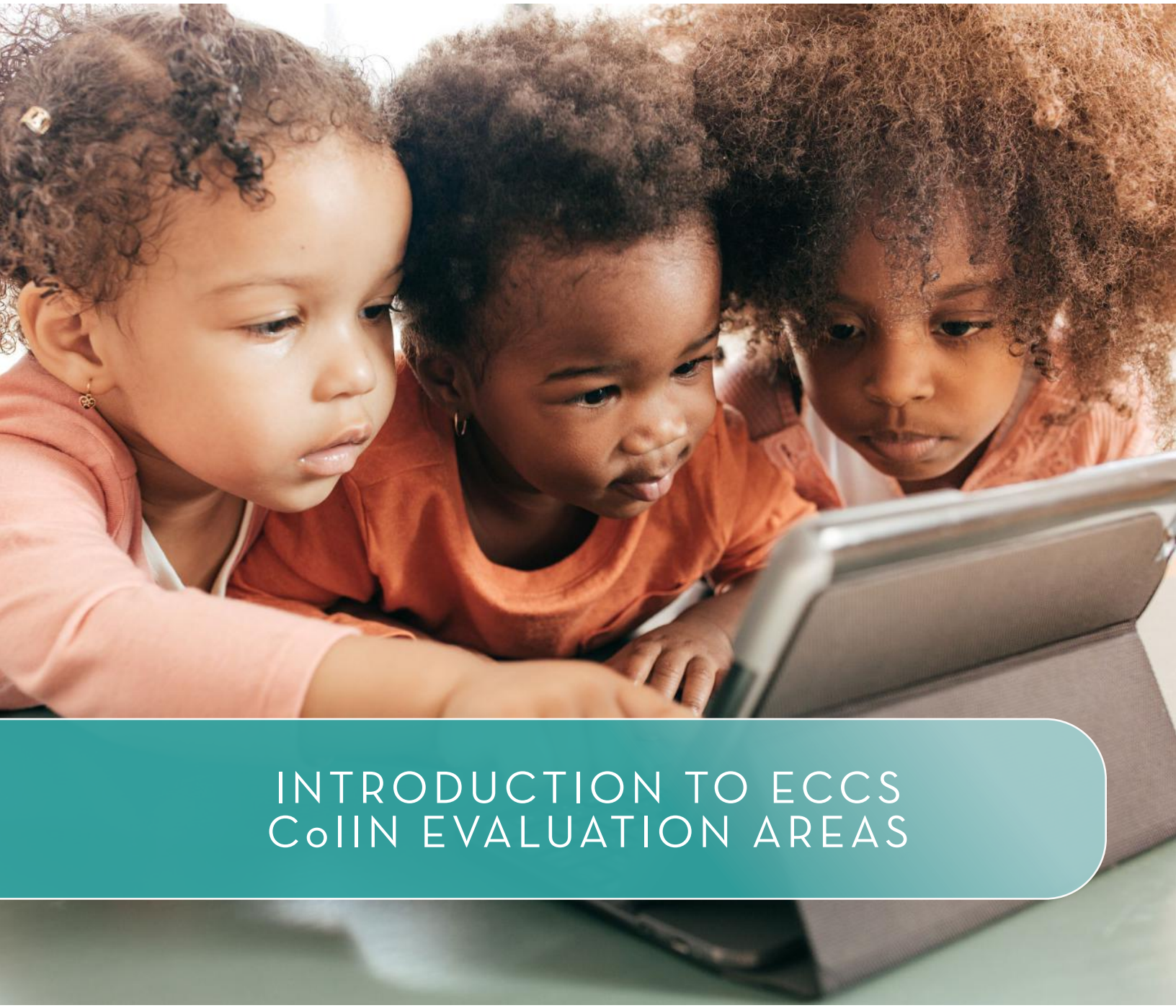
Midpoint Evaluation Synthesis

In order to better understand the kinds of evaluations ECCS CoIIN participants were conducting (including type and areas of focus), to cull preliminary findings, and to identify priority areas to focus on as part of the realignment of the overall evaluation plan, the Coordinating Center collected and synthesized ECCS CoIIN participants' evaluation work as of Year 4 of the project. To undertake this task, the ECCS CoIIN Coordinating Center conducted semi-structed interviews with all 12 ECCS state teams (i.e., IG team leads as well as IG/PBC data leads and evaluators, where applicable) to learn more about the evaluation work each state was conducting. Along with semi-structured interviews, participants provided the ECCS CoIIN Coordinating Center with relevant evaluation products (including plans, presentations, and reports) completed as of February 2020. The ECCS CoIIN Coordinating Center reviewed these products to derive key findings and overall themes across all evaluations.

Key questions that guided this process were as follows:

1. **How are each IG's evaluation plans structured?**
2. **Based on the core domains of the ECCS CoIIN Logic Model, what is/are the evaluation focus(es) for each participant?**
3. **To what extent do participants have preliminary findings from their evaluation work? Where applicable, what are the preliminary findings/impact areas from each participant evaluation?**

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts



INTRODUCTION TO ECCS CoIIN EVALUATION AREAS

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INTRODUCTION TO ECCS CoIIN EVALUATION AREAS

The following chapters of this report discuss findings from each Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) evaluation topic area. The evaluation focused primarily on ECCS CoIIN participants' processes and implementation along with short-term outcomes resulting from ECCS CoIIN activities. The areas of evaluation were selected in partnership with the Health Resources & Services Administration (HRSA) and aimed to both map onto HRSA's ECCS CoIIN Logic Model as well as capture the strategies, activities, and individual focuses of Impact Grantee (IG) and Place-Based Communities' (PBCs) Early Childhood Comprehensive System (ECCS) work. More specifically, the following key strategies to support ECCS implementation were examined:

- **Building connections between state and local level Early Childhood Systems (ECS) (STATE AND LOCAL CONNECTIONS)**
- **Expand ECS by building capacity through infrastructure, services, and personnel (STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING AND SERVICE CONNECTIONS)**
- **Policy implementation through programmatic, regulatory, and legislative changes in support of ECS (POLICY TRANSFORMATION)**
- **Developing and strengthening partnerships to support ECS activities (PARTNERSHIP DEVELOPMENT)**

As ECCS CoIIN participants differed in their areas of focus for individual ECCS implementation, not all strategies were universally adopted by all participants. Thus, this report aims to highlight commonalities among ECCS CoIIN participant efforts. This report also explores participants' efforts to **improve, strengthen, and sustain their ECS (ECS IMPROVEMENT AND SUSTAINABILITY)**. This latter activity was central to ECCS CoIIN activities; in fact, the other strategies discussed in this report (i.e., state and local connections, strengthening developmental promotion, screening, and service connections, policy transformation, and partnership development) often served as strategies to ultimately support ECS improvement and sustainability. As ECS improvement and sustainability was the heart of ECCS implementation for all participants, our discussion of this area focuses primarily on resulting outcomes from ECCS CoIIN participant efforts.

Within key informant interviews (see Appendix B), ECCS CoIIN participants discussed all the evaluation areas in terms of their successes and challenges within these areas as part of their ECCS activities and implementation (see Table 1). As the ECS improvement and sustainability domain was central to ECCS implementation, it was unsurprisingly ranked by participants as the area yielding both the most successes as well as the most challenges. Similarly, partnership development was a strategy that underlaid and supported all other work to build and strengthen ECS, and it was rated as the third highest success and challenge. Strengthening Developmental Promotion, Early Screening, and Service Connections was discussed as the second highest ranked success, while measurement in general was referred to as the second highest rated challenge.

Table 1: Ranked Successes and Challenges of ECCS Implementation from Key Informant Interviews

RANKING	SUCCESSES	CHALLENGE
#1	ECS Improvement and Sustainability	ECS Improvement and Sustainability
#2	Strengthening Developmental Promotion, Early Screening, and Service Connections	Measurement
#3	Partnership Development	Partnership Development
#4	State and Local Connections	Policy Transformation
#5	Policy Transformation	Strengthening Developmental Promotion, Early Screening, and Service Connections
#6	Measurement	State and Local Connections

INTRODUCTION TO ECCS CoIIN EVALUATION AREAS

The remainder of this report is broken out by each evaluation area and question. Key findings are summarized, success and challenges are discussed, and recommendations to support each area in future work are included. The overall evaluation areas and questions are as follows:

1. STATE AND LOCAL CONNECTIONS

- **How did participants approach the connections between state- and community-level systems to strengthen ECS implementation?**
- **What factors supported this work?**
- **What specific outcomes emerged from this connectivity?**
- **What future capacity would be needed to further strengthen this work?**

2. STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

- **To what extent did ECCS CoIIN lead to new and/or diversified early childhood focused funding and capacity building at the state and community level?**
- **What were the barriers and facilitators to this work?**

3. POLICY TRANSFORMATION

- **What policy changes (at the state and community level) were enacted, or demonstrated inroads to becoming enacted, as part of the work of ECCS CoIIN initiative?**
- **What were the barriers and facilitators to policy changes?**

4. PARTNERSHIP DEVELOPMENT

- **To what extent did ECCS CoIIN result in new and/or more engaged partners at the state and community level?**
- **What were the barriers and facilitators to partner engagement?**
- **What outcomes resulted from partnerships established as part of ECCS CoIIN?**

5. ECS IMPROVEMENT AND SUSTAINABILITY

- **How was success and improvement measured at the state and community level?**
- **What successful changes are participants sustaining across community and state infrastructure, service integration (e.g., centralized access, care coordination, service referral), and data systems?**
- **What improvements and changes (at a state and community level) can be evidenced from the ECCS CoIIN project?**

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

STATE AND LOCAL CONNECTIONS

MAIN FINDINGS

- State and local connections were a key component of the Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN), with nearly all participants discussing these as a strategy to support their project implementations. Of the five key areas of the ECCS CoIIN evaluation, state and local connections were referenced the least as a challenge.
- Most Impact Grantees (IGs) and Place-Based Communities (PBCs) used community-based and cross-sector approaches in building state and local connections. Examples include state support and resources to facilitate systems goals on a community level, integrating local voice into state-level policies and programs, and supporting cross-sector communication in communities.
    - As a result, many outcomes also related to community integration and partnerships: there was increased coordination to implement strategic planning and a larger vision to guide systems building efforts with the addition of the community voice. In some cases, this led to the establishment of state-level policies and strengthened cross-sector partnerships within constituencies.
- Facilitators for building state and local connections emphasized relationship building and local partnerships. Examples included preexisting relationships and partnerships, alignment of goals and/or alignment with existing initiatives, opportunities for open communication and intentional inclusion of community voice, and funding opportunities and support.
- Barriers in building state and local connections work were more specific to state contexts. Some IGs and PBCs reported challenges with state leadership.
- Recommendations include increased funding opportunities specifically for systems building work, and policies and structures to guard against turnover at both state and local levels.

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STATE AND LOCAL CONNECTIONS

INTRODUCTION

Approaches to create pathways between state and local Early Childhood Systems (ECS) were primarily situated in the Core Domain of **Collective Impact** (see Appendix A and Table 1 below). Accordingly, ECCS CoIIN participant activities were categorized in the following goal areas:

- **Create a Common Agenda/Shared Vision and Strategies**
- **Promote Aligned and Mutually Reinforcing Activities**
- **Develop Shared Data Systems**
- **Provide Backbone Support and Mechanisms for Continuous Communication between State**

While the above activities were primary strategies to drive state and local connections, the actual implementation strategies often incorporated **Systems Development and Improvement** goal areas:

- **Develop and Maintain Partnerships and Networks**
- **Family Leadership**
- **Build Public Will**

In addition, state and local connections tended not to be discussed alone as a primary success of ECCS implementation in key informant interviews; instead, it was often described as a facilitator of successes in several of the other goal areas of ECCS (e.g., Strengthening Developmental Promotion, Early Screening, and Service Connections and ECS Improvement and Sustainability). Notably, of the five key areas of the ECCS CoIIN evaluation, state and local connections were referenced the least as a challenge.

Accordingly, the following section discusses the various approaches IGs and PBCs took in creating connections between state- and local-level systems to strengthen the implementation of their ECS. Further, outcomes are shared resulting from this connectivity, along with factors that both enabled and hindered these connections. This section ends with conclusions and recommendations of future capacity needed to further strengthen connections between state and local ECS.

It is important to note that due to the centrality of building state and local connections to ECCS implementation, activities related to this strategy are also represented throughout the remaining sections of this report.

Colored bolded text refers to the Logic Model.
Green = Core Domain
Blue = Goal Area
Purple = Activity

STATE AND LOCAL CONNECTIONS

Table 1. ECCS Logic Model Core Domains, Goals, and Activities Referenced in State and Local Connections

CORE DOMAIN	GOALS	ACTIVITIES
Collective Impact	Create a Common Agenda/Shared Vision and Strategies	• Create a strategic plan for the collaborative that represents the shared vision and collaborative/common agenda • Facilitate collaborative decision-making and strategic planning across stakeholders
	Develop Shared Data Systems	• Assess/inventory community and state cross-sector data systems collecting data on children ages 0-3 • Identify research and data questions to assess gaps in data collection, analysis, and management infrastructure • Develop strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems • Facilitate data sharing agreements among partners to promote the use of shared/coordinated data systems
	Promote Aligned and Mutually Reinforcing Activities	• Identify how partners implement and support EC activities • Develop shared EC messaging content and tools among partners • Communicate and coordinate activities with partners toward common goals
	Provide Backbone Support and Mechanisms for Continuous Communication Between State and Community	• Support cross-sector communication in communities • Develop communication plans for outreach to cross-sector stakeholders • Integrate community voice and leadership in state-level EC developmental approaches, policies, and practices • Provide state support and resources to communities to facilitate EC systems goals • Identify community best practices for statewide spread

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STATE AND LOCAL CONNECTIONS

APPROACHES TO BUILDING STATE AND LOCAL CONNECTIONS

While not discussed as one of the main successful outcomes of ECCS CoIIN during participant key informant interviews, state and local connections were identified by a majority of ECCS CoIIN participants (11 of 12 states total) as a strategy supporting their ECCS implementation. The following section discusses the various approaches participants took to create connections between state- and local-level ECS. As described earlier, strategies to support state and local level connections were primarily focused within the Core Domain of **Collective Impact**. Therefore, the approaches and strategies we describe in this section map onto the primary goals within the domain of **Collective Impact**.

Providing Backbone Support and Mechanisms for Continuous Communication Between State and Community

Within ECCS CoIIN participant submitted bimonthly reports (see Background and Methods), 92 percent of strategies to build connections between state- and local-level early childhood work reported by states were categorized as **Providing Backbone Support and Mechanisms for Continuous Communication between State and Community**. Related to this goal, IGs shared several activities to achieve connections between the state and local level. The majority (75 percent) of activities within this domain were classified as **Providing State Support and Resources to Communities to Facilitate Early Childhood (EC) Systems Goals**. For instance, in key informant interviews, four participants discussed activities such as having the state help coordinate child developmental policies and programs between state- and local-level implementation. Further, several states discussed funneling state resources into developing and leveraging community champions to promote ECCS work. Kansas described leveraging federal funding to support the development of community champions to both promote and sustain ECCS work:

> **"Through the Preschool Development Grant (PDG) funding, we're able to offer what we're deeming adaptive Technical Assistance (TA) to other communities. This includes the ability to develop those community champions and help to provide technical assistance to communities around specific topics and around collaboration. Then, they can utilize resources that they already have to do some of this early childhood work that we were able to do in both of the PBCs during our time with ECCS. That is also one of the really big sustainability points."**

Further, 66 percent of grantees discussed work to **Integrate Community Voice and Leadership in State-Level EC Developmental Approaches and Policies**. Along with aligning state and community goals (discussed in greater detail within the following section), the main activities shared within this category included integrating both the state and local perspective in decision making activities. New Jersey described their ECCS state and local connections as a reciprocal relationship:

> **"The structure of ECCS, in terms of having the state and local communities working together to implement this work in their states, really helped to infuse…an even stronger partnership between our state and local partners because we couldn't do this work without them. We really operated as a team. I depended on them, they depended on me. As a state team, we depended on each other. And I think that was very key in terms of us really being able to learn from each other and influence in that way."**

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STATE AND LOCAL CONNECTIONS

Finally, another activity shared by ECCS CoIIN participants included **Supporting Cross-Sector Communication in Communities** (discussed in 67 percent of references categorized in the goal area). Activities discussed here primarily included opportunities for state- and local-level programs and policymakers to interface, through activities such as standing meetings, newsletters, listservs, etc. Primarily, activities shared within this category included opportunities for stakeholders to report out and share the work occurring within their constituencies. Massachusetts described one of these opportunities for state leaders to hear the local perspective:

> **"At our state impact team meetings, we've set up this process where Chelsea PBC and Springfield PBC and some of their partners will come. They'll talk about a project or an activity or a challenge that they're working on in their community and engage with our state partners in a conversation about that, trying to help the state partners make connections with their work to what's happening at the community level. Before COVID-19, annually we would bring together our state and community teams for a Massachusetts ECCS learning session. And now, post-COVID-19, we've had to change up that plan a little bit to hold. We're now doing quarterly virtual convenings with our state and community teams to focus on shared grant priorities. In this last year, we've been embedding this lens of sustainability."**

Other Strategies to Build State and Local Connections

The secondary area shared in bimonthly reports where successful strategies to build state and local connections were discussed was in **Creating a Common Agenda and/or Shared Vision and Strategies**. Activities shared in this area overlapped significantly with those described earlier as most activities were classified as **Facilitating Collaborative Decision Making and Strategic Planning Across Stakeholders**. ECCS CoIIN participants shared actions such as coordinated regular meetings (i.e., monthly, bimonthly, quarterly) with state and local stakeholders, along with the inclusion of community partners as part of meetings and advisory councils, described by the Florida team:

> **"We've been intentional, at the state and community levels, to not only engage partners but also to engage parents in both our state and community work. Our advisory group, for instance, has remained consistent from the beginning and it's still growing – there are still people even though the project itself is wrapping up."**

While about 67 percent of ECCS CoIIN participants specifically referenced **Promoting Aligned and Mutually Reinforcing Activities** as a strategy to build state and local connections, activities within this area were the second most common discussed in bimonthly reports. Within this goal area, the most reported activity supporting state and local connections was **Communicating and Coordinating Activities with Partners Toward Common Goals**. There was substantial overlap with previously described activities in this domain, such as how two states discussed committing state-level personnel to help serve as the conduit between organizations working on child developmental policy and program implementation. In addition, four states discussed targeted efforts to coordinate work between state- and local-level parties to facilitate policy change and implementation. For instance, in key informant interviews, Utah discussed investing efforts to scale participation in statewide partnerships, ensuring the integration of the local experience and voice in the development and implementation of statewide efforts to drive ECS change:

> **"We've gone from creating the Ages & Stages Questionnaire® (ASQ®) Enterprise account with just a few people participating – Help Me Grow and a few others. Over time, we've had 180 different programs participating. We have about 60 active programs right now. And with this latest iteration of the grant really zeroing in on targeted communities, they've done an incredible job running with the developmental screening efforts."**

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STATE AND LOCAL CONNECTIONS

The final approach ECCS CoIIN participants reported to build connections between state- and local-level ECS building was **Developing Shared Data Systems**. This approach was discussed by less than half (42 percent) of participants in the bimonthly reports and was also discussed the least overall within key informant interviews. The primary activity participants discussed within **Developing Shared Data Systems** was **Developing Strategies to Coordinate Existing Data Collection Systems**, **Establish Long-Term Governance, and/or Build Infrastructure for New Shared Data Systems**. ECCS CoIIN participants shared a variety of activities here, including exploring alternative data collection systems to support the screening and developmental surveillance goals of ECCS and developing centralized databases and resources through the state to increase screening capacities. In key informant interviews, ECCS CoIIN participants primarily shared work to increase data sharing between state and local partners in service of this goal, as described by one of Alaska's PBCs below:

> **"We've been able to bring on board new screening partners – providers in our community who are providing developmental screenings. The data component that we're receiving by our relationship with the state partners and the other PBCs has been really helpful to us."**

OUTCOMES RESULTING FROM STATE AND LOCAL CONNECTIVITY

As discussed earlier, the work ECCS CoIIN participants shared around building state and local connections often overlapped and helped facilitate success in other ECCS implementation areas, such as in building capacity for and developing ECS (see the Strengthening Developmental Promotion, Early Screening, and Service Connections and ECS Improvement and Sustainability sections). However, there were several standalone positive outcomes shared by participants in relation to their investments on building state and local connections.

In key informant interviews (see Background and Methods for more details), all but one state shared how work to build state and local connections led to better coordination of community programs, systems, and policies. Several states were also able to leverage this increased coordination to implement strategic planning and a larger vision to further increase and guide their systems building efforts. In addition, several ECCS CoIIN participants shared how increased state and local connections led to the establishment of collaboratives, networks, and coalitions aiming to support systems growth. For example, Alaska discussed how through their strengthened relationships from state and local connections, they were able to create a more robust network that positioned them to bring in both the state and local perspectives when presented with new opportunities:

> **"Through these relationships, we have been better able to look for and leverage funding opportunities as a network and funnel those resources into our PBCs. I think about all the work that happened with our Preschool Development Grant, but I know that so many of the partnerships and work that happened were also because of the relationships and networks that the ECCS project had already built throughout the system. Being able to take advantage of new opportunities, I see a much stronger team and network that's been built over the years of this project that has really positioned the state to bring in that local and state perspective when we have new opportunities."**

As described with the example of the Alaska team, in many instances, participation in these coalitions and networks served as the vehicle to integrate the community voice within state-level policy and practice. Moreover, states were able to use these networks to improve communication between state and local-level stakeholders as well as to conduct outreach to local communities.

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STATE AND LOCAL CONNECTIONS

An important outcome resulting from work to strengthen state and local connections was an improved shared understanding of system priorities between state- and local-level stakeholders. For example, several states discussed an increased focus on early childhood from state leadership, resulting from the connections ECCS provided between state and local level work. New Jersey's PBCs highlighted this increased leadership, crediting the guidance of state leaders as a unique component that has supported people in their assessment of successes and challenges and how to bring partners together:

> **"The guidance in the leadership from our state has been amazing. They've really been clear with expectations, they've been supportive, they've created a space of sharing and for discussing challenges and successes and bringing us together. So that has been very unique for me in my role on this project."**

Additionally, eight ECCS CoIIN states shared examples of how the project's focus on state and local connections helped increase or strengthen partnerships within their constituencies. Indeed, partnership development was another key area and focus of ECCS implementation. The work and investment ECCS CoIIN participants conducted in strengthening state and local connections often served as the mediator of successful outcomes within partnership building (see Partnership Development for more details).

FACILITATORS AND BARRIERS OF STATE AND LOCAL CONNECTIONS

Though ECCS CoIIN participants shared facilitators and barriers in building state and local connections through the previously discussed qualitative data sources discussed earlier in this section (i.e., key informant interviews; bimonthly reports), participants also completed a Contextual Factors Survey that specifically examined enabling and challenging factors related to their ECCS implementation (see Appendix D). Accordingly, in the following section, we discuss factors that promoted as well as hindered participants abilities to achieve success in state and local connections. Full results of the Contextual Factors Survey for state and local connections are seen in Table 2 and Figure 1.

Table 2. Contextual Factors Survey Average Ratings for State and Local Connections by Participant

QUESTION	IG MEAN	PBC MEAN
State/Local Connections	**3.6**	**3.5**
Facilitators	3.9	4.2
Preexisting relationships and partnerships	4.2	4.4
Alignment of goals and/or alignment with existing initiatives	4.0	4.2
Opportunities for open communication; intentional inclusion of community voice	4.0	4.1
Funding opportunities and support	3.4	4.1
Barriers	3.3	2.9
Siloed systems/departments and misaligned priorities	3.4	3.4
Lack of resources/funding	3.4	3.1
Power Dynamics	3.2	3.4
Lack of buy-in at community, state, and/or local level	3.0	2.6

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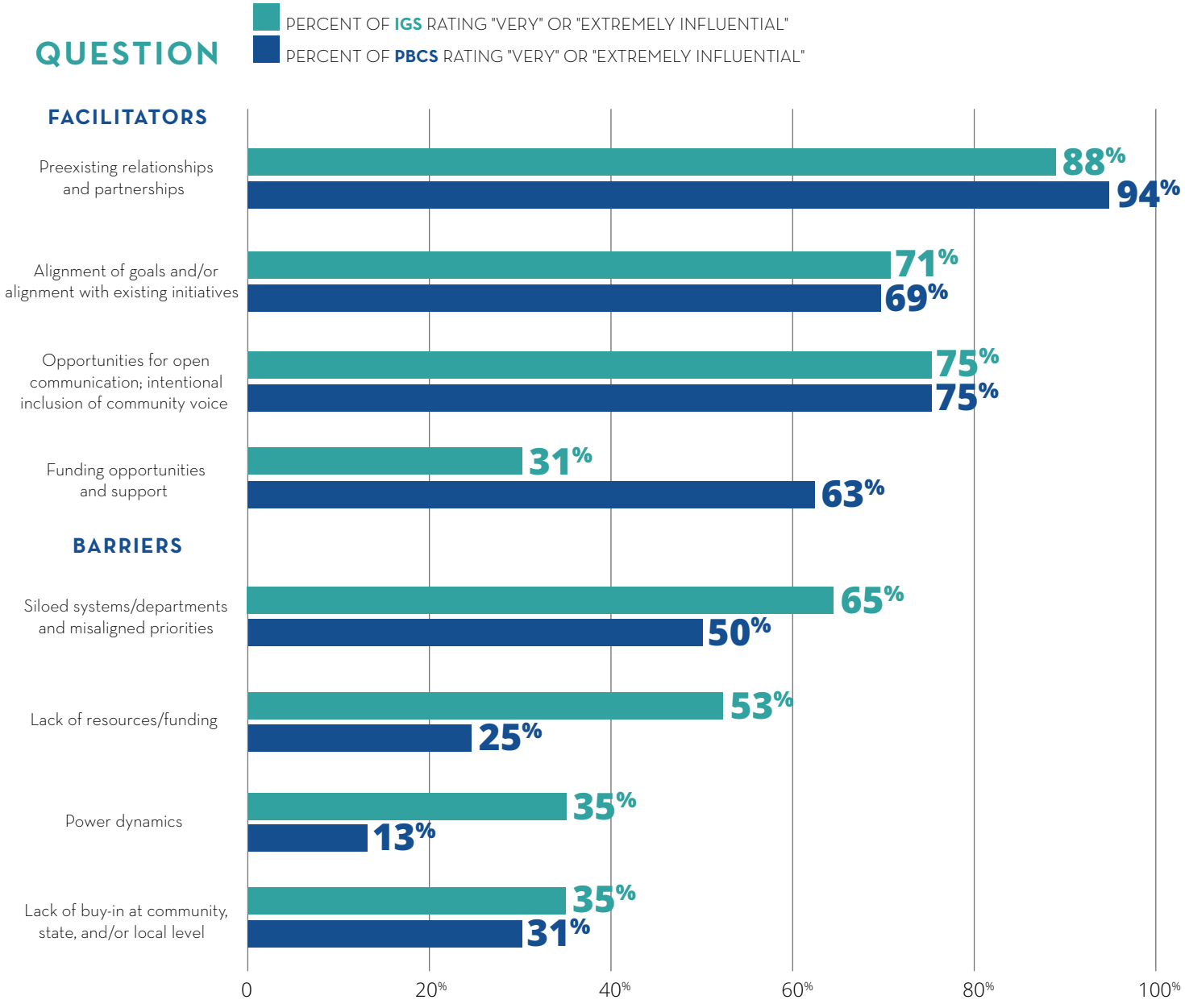
STATE AND LOCAL CONNECTIONS

Figure 1. Contextual Factors Survey Ratings of "Very" or "Extremely Influential" for State and Local Connections by Participant



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STATE AND LOCAL CONNECTIONS

Facilitators of State and Local Connections

The primary facilitators of state and local connections ECCS CoIIN participants responded to within the Contextual Factors Survey included:

- **Preexisting relationships and partnerships**
- **Alignment of goals and/or alignment with existing initiatives**
- **Opportunities for open communication and intentional inclusion of community voice; and**
- **Funding opportunities and support.**

Unsurprisingly, both partnerships and the inclusion of the community voice served as "very" or "extremely influential" facilitators at both the IG and PBC level, speaking to how several of the facilitators aligned with the approaches and successes participants shared in relation to their work building state and local connections. This ranking of facilitators was similar to those shared in key informant interviews, in which many of the state and local connection facilitators shared were often discussed as successful approaches themselves.

At the IG level, preexisting relationships and partnerships were considered a "very" or "extremely influential" facilitator by the vast majority (88 percent). Similarly, most (75 percent) of IG respondents also discussed the opportunities for open communication and inclusion of community voice as a "very" or "extremely influential" facilitator, again aligning with the key successes and strategies taken by IGs to strengthen state and local connections. Moreover, a majority (71 percent) of IG level respondents also found alignment of goals an important facilitator, potentially speaking to focused participant work around creating clear strategic planning and visions for engagement. The following quote from the Indiana IG team, also discussed as a strategy in Partnership Development, demonstrates how all the above facilitators (partnerships, inclusion of community voice, aligning goals) led to successful implementation of state and local ECS connections:

> **"A lot of the early childhood systems improvements [were through] partnership development. Through Project LAUNCH, we had a state advisory committee, but really, we leveraged ECCS to combine our Indiana Home Visiting Board meeting with other early childhood meetings to have a larger quarterly meeting where all our partners from various state agencies and local agencies, physicians, and the Family Voices programs, ASQ®, things like that, could all come together to meet."**

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STATE AND LOCAL CONNECTIONS

At the PBC level, all categories of facilitators were noted as "very" or "extremely influential" to their work in strengthening state and local connections. Moreover, compared to IG respondents, PBC respondents found state and local facilitators more influential, potentially speaking to the fact that greater supports were needed for communities to meaningfully connect with and engage in state-level work. Importantly, PBC respondents ordered their ranking of facilitators similarly to IGs, with the majority finding preexisting relationships and partnerships as a "very" or "extremely influential" facilitator, followed by opportunities for open communication and inclusion with alignment of goals and initiatives trailing. The following quote by a Delaware PBC exemplifies the importance of partnership development in concert with funding to support the focus on building state and local connections:

> **"What New Castle County PBC's got up north versus what we have in [Sussex County PBC is] totally different, but we've used each other's best practices and scaled it from a capacity standpoint. I'm just saying that partnership is the key there. Everything else would not happen without it, and yet …it's the one thing nobody wants to pay for, [what] gives you those outcomes."**

In addition, more than half (63 percent) of PBC respondents found funding opportunities and support to be a "very" or "extremely influential" facilitator, potentially speaking to the importance of the key strategy taken by teams to build connections: **Providing Backbone Support and Mechanisms for Continuous Communication between State and Community**.

Barriers to State and Local Connections

Neither IG nor PBC teams rated any of the barriers within the Contextual Factors Survey as "very" or "extremely influential" to their work to build connections between state- and local-level ECS. Even within ECCS CoIIN participant key informant interviews, work to build state and local connections was discussed minimally as a challenge. Specific barriers discussed within key informant interviews were more unique to state circumstances and were less generalizable than the facilitators or approaches for success. For instance, New York shared several challenges within this domain, whereas most states expressed successes and positive outcomes. Some of New York's challenges were specifically related to the COVID-19 pandemic, where they found partners managing the crisis by turning inward and focusing on their own groups rather than taking a collaborative approach. In addition, New York highlighted challenges with poor and non-engaged state leadership, funding interruptions due to the pandemic, and related concerns about the growth and sustainability of state and local ECS development due to funding disruption:

> **"For me, at the state level, COVID-19 really affected our spending. We had additional spending controls at the state. We already have a lengthy procurement process, but with COVID-19, everything stopped and there was only procurement and spending [for] COVID-19 related activities. And that…slowed down payments for the community, payments to vendors. That was really a big challenge."**

More broadly, several states also expressed challenges with state leadership. For instance, Indiana discussed issues with state and legislative leadership following the COVID-19 pandemic. Indiana also identified challenges resulting from the top-down approach to leadership within the state, specifically how it inhibited their ability to focus on building state and local connections. Turnover also contributed to the loss of leadership and partners who could focus on strengthening connections.

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STATE AND LOCAL CONNECTIONS

While ECCS CoIIN participants often shared successes in relation to the outcomes from strengthening state and local connections, several participants shared where such successes may have broken down in the continuum between the state- and local-level ECS. For example, Kansas noted success in in building local partnerships that contributed to policy implementation at the local level; however, they noted challenges in then translating that success to the state level and engaging legislative support to expand on the success. Similarly, Delaware noted success in building local partnerships within their PBCs but expressed difficulty in spreading and replicating success within other communities. Moreover, Oklahoma discussed the inherent barrier of how time consuming the development of state and local relationships can be in relation to the other areas of ECCS implementation:

> **"Being on the community level and new to this work in general, it's taken our team a few years to really build those relationships on the state level, because we are down here in southeastern rural Oklahoma. Building those partnerships in the metropolitan area [without] any previous connection with them was challenging at first."**

In addition, several states discussed the barrier of local-level policy implementation despite the strong connections to state-level work. In most instances, these difficulties were related in part to a lack of local-level leadership.

RECOMMENDATIONS AND CONCLUSIONS

The work ECCS CoIIN participants conducted in creating connections between state- and local-level ECS was crucial to success in strengthening the capacity, development, and improvement of ECS systems. Participants adopted a variety of strategies to build state and local connections between state- and local-level ECS; however, most approaches fell into the logic model goal area of **Providing Backbone Support and Mechanisms for Continuous Communication Between State and Community**, including activities such as directly providing state support to communities in service of ECS goals, integrating community perspective into state-level decision making processes, and supporting cross-sector communication. Speaking to the fact that state and local connections undergirded most ECCS implementation, all but one state shared improved outcomes such as better coordination of community programs, systems, and policies resulting from the state-local structure.

Key factors that enabled and strengthened state and local connections included developing and strengthening partnerships, alignment of goals between the state and community, opportunities to include the community voice, and funding to support state and local connections. These facilitators were shared by both IGs and PBCs. Barriers to building state and local connectivity tended to be specific to each state context; however, barriers such as lack of state or local leadership support, time, and COVID-19 disrupting processes were shared by several participants.

Several recommendations to further strengthen ECS through state- and local-level connections can be evidenced through the work of ECCS CoIIN participants. One recommendation shared by participants was developing funding opportunities dedicated specifically to systems building. For instance, both developing partnerships and allowing time for systems growth were referenced by participants as important in strengthening the state to local level ECS; however, funding opportunities to specifically support these activities remain limited. Another recommendation was to increase coordination between ECS to implement strategic planning and further guide systems building and coordination. Indeed, several ECCS CoIIN participants shared successful leveraging of funding opportunities through the enhanced connection of state- and local-level stakeholders. Further, speaking to the relational nature of systems building, policies and structures should be put into place to guard against turnover at both state and local levels. With partnership building and developing community champions both serving as important activities and strategies in building state and local connections, turnover of key individuals can lead to a breakdown of successful ECS implementation.

Colored bolded text refers to the Logic Model.
Green = Core Domain
Blue = Goal Area
Purple = Activity

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

MAIN FINDINGS

- All Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) states and communities were able to enhance and strengthen their capacity in Early Childhood Systems (ECS) through the five years of participating in ECCS CoIIN; however, specific capacity building efforts varied based on the goals of each constituency.
- Many Impact Grantees (IGs) and Place-Based Communities (PBCs) developed, improved, or strengthened partnerships in pediatric health settings to build capacity for developmental screenings. Some leveraged partnerships and networks to help integrate developmental screenings into existing programs and to increase promotion of developmental health among community providers.
- Several IGs and PBCs used developmental screening data to identify partnerships to support capacity building activities, such as locating service gaps within communities and targeting messages about early childhood, developmental health, and developmental promotion.
- Around half of IGs and PBCs discussed the importance of obtaining diverse funding to further efforts to strengthen developmental promotion, screening, and service connections. Half reported that funding directly affected their ability to implement high quality and coordinated developmental services.
- PBC respondents ranked facilitators and clear strategic direction as more influential to their ECCS work compared to IG respondents, speaking to the influence of community-level work on building capacity around service delivery, referral, and access. Most PBCs and IGs rated relationship building with partners and funding as a "very" or "extremely influential" facilitator.
- Common barriers included a lack of funding to support systems building, political will, competing initiatives, priorities and other siloed efforts, and time constraints.
- Overall, efforts to strengthening developmental promotion, screening, and service connections were more keenly experienced at state levels compared to community levels.

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

INTRODUCTION

This section details the extent to which Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) participation supported states and communities to strengthen their efforts around developmental promotion, screening, and service referrals to support population-level developmental health outcomes in children 0-3. This section also details factors that supported and hindered ECS capacity building work as shared by ECCS CoIIN participants.

Denoting the centrality of strengthening developmental promotion, screening, and referrals, within the key informant interviews conducted at the end of the project, capacity building was ranked as the second most successful area of ECCS implementation. To better grasp activities to strengthen developmental promotion, screening, and referrals, all activities were mapped onto the ECCS CoIIN Logic Model (Appendix A) and primarily encompassed goals within the ECCS logic model core domains of **High Quality and Coordinated Developmental Services** and, to a lesser extent, **Systems Development and Improvement** as well as **Collective Impact**. Table 1 presents the core domains and goals related to strengthening developmental promotion, screening, and service connections. Within the core domain of **High Quality and Coordinated Developmental Services**, the following goal areas are represented in this discussion:

- **Disseminate Early Childhood Development/ Systems Information**
- **Build Care Coordination Capacity**
- **Integrate Early Developmental Promotion, Screening, Referral, Linkage, and Developmental Processes Across and Within Sectors and Communities**

Though the majority of the activities to strengthen developmental promotion, screening, and service connections were categorized under the ECCS CoIIN Logic Model Core Domain of **High Quality and Coordinated Developmental Services**, the following goal areas from **Systems Development and Improvement** were often referenced by ECCS CoIIN participants in relation to their activities to strengthen developmental promotion, screening, and service connections:

- **Develop and Maintain Partnerships and Networks**
- **Advance Policies and Mobilize Funding to Sustain Systems Improvements**
- **Build Public Will**

In relation to **Collective Impact**, the relevant goal area referenced by ECCS CoIIN participants in relation to their work :

- **Promote Aligned and Mutually Reinforcing Activities**

Therefore, this section also discusses how states were able to diversify their sources of early childhood funding along with their efforts to build capacity at both the state and community level.

This section first begins by discussing progress toward the goals of strengthening developmental promotion, screening, and service connections through the lens of the goals and activities of the ECCS CoIIN logic model. Next, it shares facilitators and barriers ECCS CoIIN participants faced in relation to their work to strengthen developmental promotion, screening, and service connections, ending with conclusions and recommendations to strengthen this work in the future.

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Table 1. ECCS Logic Model Core Domains, Goals, and Activities Referenced in Strengthening Developmental Promotion, Early Screening, and Service Connections

CORE DOMAIN	GOALS	ACTIVITIES
Collective Impact	Promote Aligned and Mutually Reinforcing Activities	> Identify how partners implement and support EC activities > Develop shared EC messaging content and tools among partners > Communicate and coordinate activities with partners toward common goals
High Quality and Coordinated Developmental Services	Disseminate EC Development/ Systems Information	> Disseminate developmental promotion materials and campaign messages across communities > Integrate EC campaign messages with partner organizations > Explore, test, and evaluate nontraditional venues and innovative partnerships for dissemination and community engagement
	Integrate Early Developmental Promotion, Screening, Referral, Linkage, and Developmental Processes Across and Within Sectors and Communities	Through training and technical assistance: > Support providers and community organizations to integrate evidence-based and two-generation developmental promotion practices and approaches into daily operations > Facilitate integration of standardized early identification and screening for developmental risk, developmental delay, and SDOH into existing community and state provider practices and structures > Disseminate guidelines or policies to providers and community organizations related to state-level developmental screening, effective referral and linkage processes, and promotion practices > Support community platforms to integrate early developmental promotion materials and activities
	Build Care Coordination Capacity	> Identify and compile information about relevant community service providers/programs and resources (including nontraditional partners) > Continually update resources > Develop or enhance community and state platforms (online/telephonic) to facilitate effective service referrals > Develop or enhance workforce care coordination skills, competencies, and capacity

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Table 1 (continued). ECCS Logic Model Core Domains, Goals, and Activities Referenced in Strengthening Developmental Promotion, Early Screening, and Service Connections

CORE DOMAIN	GOALS	ACTIVITIES
Systems Development and Improvement	Develop and Maintain Partnerships and Networks	• Conduct outreach activities with cross-sector stakeholders (e.g., EC healthcare providers, community-based organizations) • Develop and maintain partnerships/collaborations with EC healthcare providers, community-based organizations, and other cross-sector stakeholders to advance EC policies and systems development • Develop and maintain partnerships/collaborations with family members and family leaders (e.g., navigators, ambassadors, advocates, coaches, and family engagement specialists) • Develop and expand statewide networks
	Build Public Will	• Disseminate public messaging around the science of early development, resilience, and adversity • Conduct outreach to healthcare providers, cross-sector partners, leaders, and the public, including via innovative delivery methods to raise awareness of EC priorities • Build EC workforce capacity to effectively reach and engage parents and families • Promote EC messaging and visibility at community and state levels
	Advance Policies and Mobilize Funding to Sustain System Improvements	• Identify policy levers and goals to advance EC system • Assess Medicaid and health transformation and financing landscape • Recommend/develop/revise policies to support statewide EC program and systems development • Advance discussions and planning around re-alignment or repurposing of existing public funding to serve children and families more effectively • Develop and implement programmatic/financial sustainability plans to promote or replicate promising practices and policies • Seek and obtain diverse and alternative funding to support community and state EC program initiatives

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PROGRESS IN STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, & SERVICE CONNECTIONS

All ECCS states and communities reported that they were able to strengthen the capacities of their ECS systems in service of developmental promotion, early screening, and service connections during the five years of ECCS CoIIN. Importantly, efforts to build developmental promotion, screening, and referral pathways were varied depending on the goals of each state and community. From information shared in bimonthly report submissions (see Background and Methods section for more details), primary efforts overlapped and covered almost all Core Domains of the ECCS Logic Model (100 percent responses categorized in **High Quality and Coordinated Developmental Services** and **Systems Development and Improvement**; 89 percent of responses categorized in **Collective Impact**). However, most successful efforts discussed by ECCS CoIIN participants were categorized under **High Quality and Coordinated Developmental Services**, underscoring the importance of service delivery, coordination, and dissemination to strengthen developmental promotion, early screening, and service connections.

Progress in Strengthening Developmental Promotion, Early Screening, and Service Connections Through High Quality and Coordinated Developmental Services

The majority of progress discussed in key informant interviews (see Background and Methods section for more details) related to activities to strengthen developmental promotion, early screening, and service connections at the state and community level focused on **High Quality and Coordinated Developmental Services**. Within bimonthly reports and key informant interviews, all goal areas of **High Quality and Coordinated Developmental Services** were discussed by ECCS CoIIN participants as areas where they made progress. Importantly, though partnership development was a standalone and important goal of ECCS CoIIN implementation (for greater detail, refer to the Partnership Development section), it was also an important conduit for facilitating successful activities to build developmental promotion, screening, and service connection pathways. For example, several states worked to develop, improve, or strengthen partnerships in pediatric health settings to facilitate developmental screening. A New York PBC details the strategy of building partnerships to enhance referral processes:

> **"Specifically, we've been able to form a relationship with our Erie County and Niagara County early intervention and develop a tracking system for referrals. And I think that we've made a lot of headway in sustainability, forming the Buffalo Best Partnership with other community leaders and pediatric practices to continue our work that we've been doing within ECCS."**

In addition, leveraging partnerships and networks helped facilitate and integrate developmental health promotion and screenings among community providers and programs. For instance, one Indiana PBC was able to engage librarians in spreading information about developmental health:

> **"[At] the Indianapolis Marion County Public Library, we have a great Learn the Signs. Act Early. champion with our ECCS team. And they provided a full training to all the children's librarians within the system. And those librarians just soaked it all up. We're so excited about it because they don't typically get that sort of developmental aspect of training."**

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Progress in Key Activities of High Quality and Coordinated Developmental Services

Progress in **Building Care Coordination Capacity** was discussed by most ECCS CoIIN participants in both bimonthly reports and key informant interviews. For instance, several participants demonstrated a strong emphasis on increasing workforce capacity and knowledge. Four states discussed success in increasing the capacity and knowledge of childcare and early childhood education providers about developmental health and two-generation approaches. Similarly, two states discussed building knowledge of developmental health among non-traditional partners such as providing training for library staff and resource and referral staff.

Disseminating Early Childhood Development and Systems Information was an area discussed by most ECCS CoIIN participants in both bimonthly reports and key informant interviews. Unsurprisingly, building partnerships often directly benefited this work. Toward this end, several states and communities innovated and tested non-traditional partnerships and tools to reach a greater number of families. For example, an Oklahoma PBC described using a Facebook group to engage families in developmental health promotion, while a Delaware PBC developed an Instagram account to enhance family engagement.

> **"We were contacted by Education Trust and [our ECCS work is] going to be on an Instagram TV episode, a two-minute episode on Delaware. That family voice really started out with…a grandparent who said, 'You know, I just got custody of my grandson. His mother was incarcerated. I think there's some developmental delays. What can I do [for him]?' We gave her some different suggestions of places and she said, 'I'm not really comfortable discussing this with these people. Is there some place that I can go to fill something out so I can [gather information] and then talk [to someone] if I need to seek further resources?' There really wasn't. That's how the whole project grew from there. Our partners at [the] Department of [Education] are helping to show the continuum of how the system change happened, from a grassroots [to] a system change."**

Regarding non-traditional partners and activities, at least three states worked with partners to promote developmental health through events such as book or diaper drives. Several states discussed high demand for these activities, especially in the context of the COVID-19 pandemic, as well as how these activities were an important tool to increase family engagement and education. States shared activities to **Disseminate Early Childhood Development and Systems Information** led to increased capacity among families as an increased number of families were educated about child development and participated in developmental screenings through ECCS activities.

Moreover, success in building capacity around **Integrating Screening, Linkage, Referral, and Developmental Processes Across and Within Sectors and Communities** was discussed by a majority of ECCS CoIIN participants in both bimonthly reports and key informant interviews. For example, seven states were able to improve or enhance resource and referral pathways to facilitate families' ease of access to services. Key examples included Oklahoma's creation of a virtual resource guide and New Jersey's centralized developmental screening hub. Oklahoma elaborated:

> **"We published our Early Childhood and Family Resource Bundle online so it'll be there forever, and families can go and access that from our Little Dixie website. A lot of our parents have mentioned to me personally that they didn't even know some of these toys existed, and just how amazed and pleased that they were to be getting these things. You can almost feel the relief and excitement coming from these parents, so what we're doing here has had a significant impact."**

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Several states also discussed work to enhance preexisting systems or create sustainable infrastructure to coordinate developmental screening across organizations. Important to the issue of service delivery and access, several states also worked to infuse equity and support families within their processes. For example, New Jersey described the creation of a developmental specialist position that helped to both facilitate systems growth and developmental promotion:

> **"We've had two of [the early childhood specialist] positions added to our team, and it's been really great to see how much more we can do while having those two people specifically dedicated to child development and promotion of the Ages & Stages Questionnaire® (ASQ®) and being the experts on those things for our county."**

Progress in Strengthening Developmental Promotion, Early Screening, and Service Connections through Systems Development and Improvement/Collective Impact

Though most efforts to strengthen developmental promotion, early screening, and service connections were categorized as supporting **High Quality and Coordinated Developmental Services**, several activities within **Systems Development and Improvement** as well as **Collective Impact** directly supported and influenced building activities. As discussed earlier, Partnership Development, which is a goal area of **Systems Development and Improvement**, was often the mediator for advancing **High Quality and Coordinated Developmental Services**. Nonetheless, this section discusses the progress made in other aspects of **Systems Development and Improvement** as well as **Collective Impact** related to activities to strengthen developmental promotion, screening, and service connections.

Advancing Policies and Mobilizing Funding to Sustain Systems Improvements within **Systems Development and Improvement** was an important aspect of building pathways to strengthen developmental promotion, early screening, and service connections and as such, is discussed in greater detail in the section following. Notably, a positive outcome was the ability of states and communities to leverage and align with the successful implementation of other early childhood initiatives and programs to promote sustainability of ECCS activities and increase funding for efforts to build capacity for developmental promotion, early screening, and service connections. An area related to the Core Domain goal of **Collective Impact** that served to facilitate developmental promotion, screening, and service connection activities was **Developing Shared Data Systems**, specifically in relation to assessing and improving capacity around screening and developmental health data. Within key informant interviews, ECCS CoIIN participants discussed using data to help inform efforts such as:

- **Identifying partnerships to support capacity building activities**
- **Locating service gaps within communities**
- **Targeting messaging about early childhood systems, developmental health, and early developmental promotion**

States discussed using tools such as a landscape analysis to view capacity building work, specifically in relation to where efforts could be taken to strengthen systems to support developmental promotion, screening, and referrals. Further, one state described work to align data collection efforts between developmental screening sources and the K-12 education data collection systems. Taking this data-based approach to capacity building, four states made progress in identifying best practices to "scale and spread" effective programs.

> **"We've been able to provide these services in four of the [non-ECCS] counties under my management. I love the term 'scale and spread' because that's what we've seen when it comes to our ASQ® and our Parent Portal. Working with everyone on the call has been wonderful. There's a core section of expertise and we work very well as a group. We're very cohesive, even though we live in so many different regions of the state."**

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Diversification of Funding Sources to Support Strengthening Developmental Promotion, Early Screening, and Service Connections

To make improvements to further support developmental promotion, early screening, and service connections, the attainment of diverse funding sources was imperative. About half of all ECCS CoIIN participants discussed efforts within bimonthly report submissions to strengthen the capacity of systems to undertake developmental promotion, screening, and service connection activities were categorized as efforts to **Advance Policies and Mobilize Funding to Sustain Systems Improvements** underscoring the importance of achieving funding to further developmental promotion, screening, and service connections. While most funding sources received directly supported goals around **High Quality and Coordinated Developmental Services**, there were varied outcomes and uses of funding sources to support other goals. Refer to the Policy Transformation section for detail on funding and policies to support ECCS implementation.

Related to diversifying funding sources, more than half (58 percent) of the topic of funding discussed in key informant interviews was connected to increasing ECCS CoIIN participants' abilities to implement and deliver **High Quality and Coordinated Developmental Services**. As such, the majority (56 percent) of funding sources obtained aimed to support **Building Care Coordination Capacity** such as through enhancing staff skills, workforce capacity, and referral process. A Louisiana PBC detailed the impact of the Second Step program, a professional development teacher training:

> **"The Vermilion Parish School Board recently had a year of the Second Step program incorporated by Project LAUNCH. They had already received the gains and all the data that it really strengthened the school board. It strengthened the classroom teachers, and they saw the decrease in behaviors of the preschoolers from the Second Step program. That built capacity within the program, and the developmental screening coordinator did the professional development training in 2019 for the teachers. From that, we saw an increase [in capacity building]. This year, I met with the preschool developmental coordinator, and she said that they saw an increase in teacher interventions on children with developmental concerns. They have 86 interventions this year so far, and the clinic started in August. So, we're seeing some real capacity building with our developmental screening coordinator putting in those professional development trainings for the teachers."**

Half of all funding sources discussed in the bimonthly reports also related to work to **Integrate Early Developmental Promotion, Screening, Referral, Linkage, and Developmental Processes Across and Within Sectors and Communities.** These activities were primarily achieved by building and strengthening referral and data collection platforms to track developmental health, such as the ASQ® Enterprise system, as discussed by Kansas:

> **"When we started this work, developmental screening was piecemeal. We were saying, 'Here's the tool we want everybody to use,' but everybody really had to figure it out. And now we don't have it fully implemented yet. But we have the investment in a statewide infrastructure. And I think we haven't even begun to see the impacts of that yet. It is, in my mind, the most significant change that's happened over the course of the project. There have been a lot of other great things, but statewide at the state level, that's a huge, huge thing."**

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

To a lesser extent, less than half (44 percent) of funding sources were specifically reported to support participants' ability to **Disseminate Early Childhood Development and Systems** Information within communities. A Delaware PBC detailed a literacy-based funding opportunity:

> **"As far as the libraries, we just received a grant from Wilmington Rotary to use the Dolly Parton Imagination Library to create some literacy kits that go with the first book that every child will receive. The Little Engine that Could is the first one and so these kits are going to go right along with that out to the families in the Wilmington area. We're using the ASQ® data that we get from [the Delaware IG Data Lead] to be able to pinpoint some of those developmental areas so we're not just focusing in on literacy."**

Less than half of the bimonthly reports that discussed funding sources successfully received supported work in the core domains of **Collective Impact** and **Systems Development and Improvement** (42 and 30 percent, respectively). Of the areas discussed, the majority (62 percent) discussed using funding sources to **Promote Aligned and Mutually Reinforcing Activities**, such as collaborating with organizations to apply for funding or to align goals across organizations and initiatives to further support ECCS activities. Alaska discussed leveraging the strategic planning from ECCS work to strengthen program implementation:

> **"We were able to use this project as a starting point to pilot Help Me Grow Alaska. That really helped inform the statewide rollout for the All Alaska Pediatric Partnership on lessons learned and best practices. I think these three communities really helped lay the foundation for getting that started. Help Me Grow has been something people had wanted in Alaska for a long time. This gave us a place to start."**

The latter activity of aligning goals across organizations and initiatives was also discussed within half of the key informant interviews as a strategy to increase funding (e.g., such as leveraging successful implementation of organizations/initiatives like Help Me Grow, Title V, Project LAUNCH). To a lesser extent, ECS funding sources were utilized in service of **Collective Impact** goals of creating a common agenda (e.g., through strategic and sustainability planning) as well as providing backbone support for communities such as by directing funds to communities in service of ECCS implementation. Specifically, within key informant interviews, five states discussed how the community-level focus of ECCS implementation was leveraged as a framework for community-driven systems change and expansion within their constituencies. One of the Massachusetts PBCs describes this **Collective Impact** approach supporting their ability to fund ECCS implementation:

> **"We work to define our aim of increasing five-domain developmental health for children by 25 percent, but what does that mean in practice? And where are children starting from? Because a 25 percent increase is a little unclear if you don't know where you're starting. We're very guided by the pillars of Collective Impact: setting Healthy Chelsea up as the backbone agency; the primary focus within the other pillars of Collective Impact really being around continuous communication; bringing partners together to share about early childhood work in a variety of different ways. We also have done a lot of work to bring community member voices and setting the agendas for the Collective Impact initiative… A big accomplishment was around launching an integrated referral system, which falls into the mutually reinforcing piece of things. We have a lot of tremendous resources for families in our two square miles in Chelsea, but families don't always make it there. So, it's truly reinforcing to all partners when families can make it to those resources. The integrated referral system has been a huge piece of our work."**

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FACILITATORS AND BARRIERS OF STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Though ECCS CoIIN participants shared facilitators and barriers of strengthening developmental promotion, early screening, and service connections through the qualitative data sources discussed earlier in this section (i.e., key informant interviews; bimonthly reports), participants also completed a Contextual Factors Survey that specifically examined enabling and challenging factors related to their ECCS implementation (see Appendix D and Background and Methods section for more details). Accordingly, the following section discusses factors that promoted as well as hindered ECCS CoIIN participants' abilities to achieve success in strengthening developmental promotion, early screening, and service connections. Results of the Contextual Factors Survey as they pertain to ECS are seen below in Table 2 and Figure 1.

Table 2. Contextual Factors Survey Average Ratings for Strengthening Developmental Promotion, Early Screening, and Service Connections by Participant

QUESTION	IG MEAN	PBC MEAN
Early Childhood Systems	**3.5**	**3.5**
Facilitators	3.5	3.9
Relationship building/engagement of partners	3.6	3.9
Alignment with existing funding sources/initiatives	3.5	4.0
Availability of funding to support system building	3.5	3.7
Clear strategic direction	3.4	4.0
Barriers	3.5	3.2
Lack of funding to support systems building	3.6	3.2
Political will	3.7	3.1
Competing initiatives, priorities, and other siloed efforts	3.5	3.2
Time constraints	3.2	3.2

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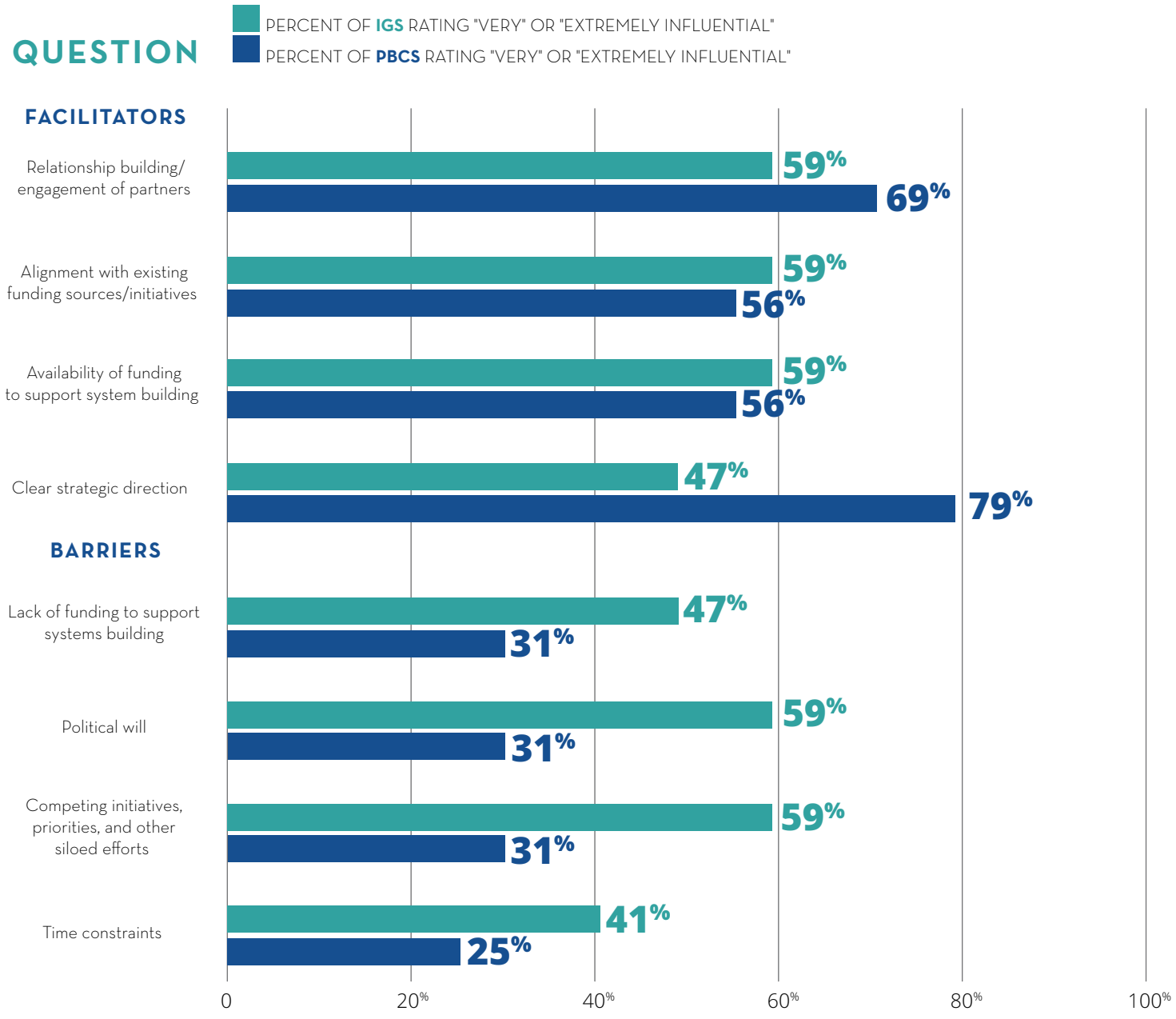
STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Figure 1. Contextual Factors Survey Ratings of "Very" or "Extremely Influential" for Strengthening Developmental Promotion, Early Screening, and Service Connections



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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Facilitators of Strengthening Developmental Promotion, Early Screening, and Service Connections

Key facilitators ECCS CoIIN participants responded to within the Contextual Factors Survey included relationship building/engagement of partners, alignment with existing funding sources/initiatives, availability of funding to support systems building, and clear strategic direction. Notably, PBC respondents ranked ECS facilitators as more influential to their ECCS work compared to IG respondents. The influential nature of facilitators on community-level work potentially speaks to the fact that the majority of efforts to strengthen developmental promotion, early screening, and service connections were situated in service delivery, referral, and access (i.e., **High Quality and Coordinated Developmental Services**), which primarily occurred at the community level due to the structure of ECCS CoIIN. In addition, the vast majority (approximately 80 percent) of PBC respondents rated clear strategic direction as a "very" or "extremely influential" facilitator in driving ECS work. A New Jersey PBC discussed the importance of having clear strategic guidance:

> **"I think the infrastructure that the Department of Children and Families (DCF) brought… we already had that with DCF, for the Infant Child Health committee, different things that they already had in place in terms of us communicating, but their insight into bringing in funding from other things to make sure it supports all of this work that we're doing. It wasn't randomly out in left field. Everything that was coming in was very thoughtful in terms of, 'How do we leverage what we have and bring in new things to support making it bigger and better?'"**

These findings align with ECCS CoIIN participant discussion in key informant interviews wherein five states shared both the importance of the community-driven approach within ECCS as well as how the clear strategic guidance offered by this approach was leveraged as a framework for locally driven program expansion within their constituencies. Further, a majority (56 percent) of PBC respondents rated relationship building with partners as a "very" or "extremely influential" ECS facilitator. These findings were further supported in the key informant interviews, where partnership building efforts were often discussed as coincident with efforts to strengthen developmental promotion, early screening, and service connections (see discussion earlier in this section) as well as the mediator of success.

From an IG perspective, the most influential facilitators to ECCS program implementation were those related to strengthening developmental promotion, early screening, and service connections. Again, these seemingly underscore the importance of the community-level structure of ECCS CoIIN, where states focused work on supporting communities to drive activities. Like the PBC response, a majority (56 percent) of IG respondents described relationship building and engagement of partners as a key facilitator. In alignment with results from the key informant interviews, the majority (56 percent) of respondents noted facilitators related to funding (i.e., availability of funding to support systems building and alignment with existing funding sources/initiatives) as "very" or "extremely influential." For example, the Louisiana team shared how the structure created by ECCS allowed them to align the project aims with other funding opportunities, such as the Preschool Development Grant (PDG):

> **"Another thing that ECCS gave us was the opportunity to extend community funding. Because of the foundation from ECCS, developmental screening was written into the Preschool Development Block Grant, which provides childcare seats in Morehouse Parish. Providers have to complete developmental screenings with families to maintain the funding. Without the pathway and training set forth by ECCS work, the community would not have been ready for this opportunity."**

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Purple = Activity

STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

BARRIERS TO Strengthening Developmental Promotion, Early Screening, and Service Connections

In general, barriers to efforts to strengthen developmental promotion, early screening, and service connections were more keenly experienced at the state level compared to the community level, with PBCs ranking barriers as not particularly influential to their ECCS implementation. Key barriers from the Contextual Factors Survey included:

- **Lack of funding to support systems building**
- **Political will**
- **Competing initiatives**
- **Priorities and other siloed efforts**
- **Time constraints**

Again, the importance of facilitators and barriers from a state-level perspective highlights the role of community-level implementation and the state's supportive role. For instance, most IG respondents (59 percent) found both political will and competing initiatives as well as other siloed efforts as a hindrance to their work to strengthen developmental promotion, early screening, and service connections. Moreover, a little less than half (47 percent) rated lack of systems building specific funding as a "very" or "extremely influential" barrier. Utah described both the struggles of a lack of political will along with limited systems building funding sources:

> **"We're a low-tax, low-investment state. While many people think [systems building] work is important, it's often hard to get them to back that up with funding. And this is not a service we can charge for. So it's been hard to get state money and other funding. It's very competitive – all the different states all need funding. They're in the same type of situation."**

As discussed above, findings from ECCS CoIIN participant responses on the Contextual Factors Survey were supported by key informant interviews; however, specific challenges and barriers were highlighted as both broad challenges as well as those specific to each state and community. For instance, turnover was noted as a primary barrier. Turnover was seen within state- and community-level systems, but also with both medical and early childhood education providers. Several communities discussed the impacts of medical provider turnover, especially in the context of smaller and more isolated communities. For instance, Kansas highlighted their time investment in developing local champions and then the cost of losing those champions and having to start over with new providers:

> **"One of the historic challenges we've experienced, especially in our rural communities like the place-based communities in this grant, is that their turnover of medical providers is pretty high. And so, you make a connection, and they do their time to pay their student loans and then they leave. And, knock on wood, it seems like we've got people that are in place so hopefully that will continue to benefit the communities."**

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Similarly, a handful of states also discussed ECS barriers in relation to partnership engagement, specifically in relation to building partnerships with medical providers and child care providers. Some states, such as Hawaii, discussed the tensions of promoting screening within healthcare and early childhood education settings, specifically in relationship to ownership and oversight over screening:

> **"It's hard for Department of Health to implement a policy or to mandate the screening's done when it's being done in another system. And they have no accountability to us, and we don't have any resources for them. We work with our partners and we cajole. And we try to make sure that we provide training opportunities, we provide resources for families."**

Though some states were able to scale and spread successful efforts, others found substantial barriers in implementation and program scaling. In these cases, coordinating data collection around screening referral and assessment tended to be challenging.

> **"Everybody is keeping or has their ASQ® data in different places. Having to compile data from multiple different systems, and then also knowing that there's a whole bunch of data that are sitting in filing cabinets, really getting a full picture of what developmental screening looks like across the state of Kansas has been difficult."**

Similarly, resource and referral program pathways presented a variety of challenges for states with one state noting issues connecting screenings with prevention or intervention strategies. Two other states found difficulty in developing referral and follow up pathways for families after screenings, and a third mentioned difficulties in developing resource and referral systems. In addition, families' challenges with navigating systems to access services was also noted as a challenge. For example, one state discussed challenges in developing culturally relevant communication about child development and programs for families.

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STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

RECOMMENDATIONS AND CONCLUSIONS

All ECCS states and communities were able to enhance and strengthen their individual ECS's capacity to engage in developmental promotion, early screening, and service connections through the five years of participating in ECCS CoIIN; however, efforts varied based on the goals of each constituency. Most of the successes shared occurred in service of activities to support **High Quality and Coordinated Developmental Services** (i.e., building workforce capacity to support developmental health; disseminating early childhood developmental health information and resources within communities; integrating screening, linkage, and referral processes both across sectors and within communities). Notably, developing and expanding partnerships within communities and across sectors appeared to be the major catalyst for successful efforts.

Another primary strategy for strengthening developmental promotion, screening, and service connections included attaining and pursuing diverse funding sources. Though most funding sources obtained by ECCS CoIIN participants primarily supported activities in service of **High Quality and Coordinated Developmental Services**, a little less than half of all participants discussed achieving funding to support diverse ECS goals, such as furthering alignment between early childhood organizations and initiatives and advancing the community-centered approach to systems growth. Indeed, the community-centered approach of ECCS appeared to be a major facilitator, along with work to enhance partnerships and the successful pursuit of funding sources.

On the other hand, state teams, rather than community-level teams, more acutely experienced barriers as they often served to facilitate work within communities. Issues around political will, competing priorities, and lack of systems specific funding were noted as main barriers. Further, difficulties with engaging partners, as well as partner and staff turnover were also shared as barriers. In addition, managing data systems was also described as a primary barrier to strengthening developmental promotion, screening, and service connections, specifically around resource and referral pathways.

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Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

POLICY TRANSFORMATION

MAIN FINDINGS

- Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) participants considered programmatic and regulatory changes within the umbrella of policy implementation, in addition to formal legislative and political processes.
- Most states and localities transformed their policies through goal alignment, process coordination, and connecting with their communities on both the state and the local level. A key part of enabling these changes was the alignment of different funding streams, including federal, state, and philanthropic dollars.
    - Some concrete examples of common policy changes included strengthening referral systems, data sharing, and streamlining communication processes.
- Key facilitators reported for policy transformation included relationship building and engagement. Goal alignment was discussed as both a barrier and a facilitator. While ECCS CoIIN participants were less aligned in their perception of policy barriers, several found leadership and capacity limitations as influential to their work.
- Due to the collaborative nature of the policy changes implemented during ECCS CoIIN, braiding and aligning different funding streams was an enabler to policy transformation.
    - As such, ECCS CoIIN participants recommended expanding the availability of funding sources that encourage cross-sector work to build Early Childhood Systems (ECS) in support of policy implementation.

ECCS CoIIN

NICHQ
National Institute for Children's Health Quality

POLICY TRANSFORMATION

INTRODUCTION

Policy transformation, one of the six guiding principles of the ECCS CoIIN Logic Model (see Appendix A), is key to supporting, accelerating, and sustaining an Early Childhood System (ECS) at the state/territory, county, and community levels. This section discusses policy transformation outcomes, facilitators, and barriers in relation to Early Childhood Comprehensive Systems (ECCS) implementation.

In evaluation activities, ECCS CoIIN participants were directed to define "policy transformation" in broad terms. Specifically, the ECCS CoIIN Coordinating Center (CC) provided the following definition for participants to reference in their CoIIN activities:

A broad definition of "ECCS policy" includes any written document that includes "actionable steps" or dedicated support that helps promote, solidify, or institutionalize a practice or procedure for the intention of formalizing, enhancing, and/or sustaining the effort. Policy development or changes influenced by the ECCS work can be in the form of laws, regulations, funding mechanisms, assigned staff tasks, procedures, administrative actions, or practices by or influencing any of the partner agencies or organizations or supporting any of the population involved in the ECCS effort.

With this broad working definition, Impact Grantees (IGs) and Place-Based Communities (PBCs) considered programmatic and regulatory changes within the umbrella of policy implementation as well as formal legislative and political processes. Because policy work typically occurred in partnership with other entities and underscored the importance of common agendas, missions, and systems, policy pathways were mostly integrated into the ECCS CoIIN Logic Model Core Domain of **Collective Impact**, with the following goal areas represented:

Create a Common Agenda/Shared Vision and Strategies

Promote Aligned and Mutually Reinforcing Activities

Develop Shared Data Systems

Though referenced to a lesser extent, ECCS CoIIN participants also discussed policy transformation in the Core Domain of **High Quality and Coordinated Developmental Services**, mostly related to project coordination among the goal area of:

Integrate Early Developmental Promotion, Screening, Referral Linkage, and Developmental Processes Across and Within Sectors and Communities

Systems Development and Improvement was also discussed as a Core Domain, with emphasis on the goal area of:

Building Public Will

Therefore, this section also discusses how IGs and PBCs were able to transform policies through goal alignment, process coordination, and connecting to their communities at both the state and the local level. First discussed are progress and outcomes in policy transformation in the Core Domains of **Collective Impact**, **High Quality and Coordinated Developmental Services**, and **Systems Development and Improvement**, followed by a discussion of facilitators and barriers to participants' policy implementation work. The section closes with conclusions and recommendations.

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POLICY TRANSFORMATION PROGRESS AND OUTCOMES

IGs and PBCs reported in key informant interviews (see Background and Methods and Appendix B) that they did not view policy transformation as a primary area of investment during the ECCS CoIIN project; therefore, they did not engage in systems building using policy-related strategies to the same extent as some of the other evaluation areas highlighted. However, PBCs did implement policies on the local level that emphasized programmatic and regulatory changes to directly support their communities. IGs focused human resources and collaborative efforts on aligning goals, partnerships, and initiatives – both with different federal funding streams as well as by leveraging state and philanthropic dollars.

As such, progress through policy change reported by ECCS CoIIN participants in key informant interviews often focused on either funding or on the elements that bolster and strengthen ECS and contribute to sustainability. Consequently, many primary policy outcomes were discussed in key informant interviews in conjunction with seeking and leveraging diverse funding. For example, two states reported leveraging their partnerships to increase funding or align goals of different funding streams to maximize systems coverage and sustain system goals. Similarly, six states were able to leverage some successes in other evaluation areas to help support long-term sustainability by securing other federal funding streams (e.g., Title V; Preschool Development Grant (PDG); Maternal, Infant, and Early Childhood Home Visiting (MIECHV); etc.), or in some cases, private funding opportunities. For greater detail on funding and policies from a programmatic improvement and sustainability perspective, please refer to the ECS Improvement and Sustainability section.

From information shared in ECCS CoIIN participant bimonthly report submissions (see Background and Methods), primary policy efforts overlapped and covered almost all Core Domains of the ECCS Logic Model (10 out of 12 states responses categorized in **Collective Impact**, 8 out of 12 states responses referenced policy work in **High Quality and Coordinated Developmental Services**, and 7 out of 12 states discussed **Systems Development and Improvement**). However, most successful efforts discussed by participants were categorized under **Collective Impact**, underscoring the importance common agendas, missions, and systems in policy transformation.

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POLICY TRANSFORMATION

Table 1. ECCS Logic Model Core Domains, Goals, and Activities Referenced in Policy Transformation

CORE DOMAIN	GOALS	ACTIVITIES
Collective Impact	Create a Common Agenda/Shared Vision and Strategies	• Create a strategic plan (for the collaborative) that represents the shared vision and collaborative/common agenda • Facilitate collaborative decision-making and strategic planning across stakeholders
	Develop Shared Data Systems	• Assess/inventory community and state cross-sector data systems collecting data on children ages 0-3 • Identify research and data questions to assess gaps in data collection, analysis, and management infrastructure • Develop strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems • Facilitate data sharing agreements among partners to promote the use of shared/coordinated data systems
	Promote Aligned and Mutually Reinforcing Activities	• Identify how partners implement and support EC activities • Develop shared EC messaging content and tools among partners • Communicate and coordinate activities with partners toward common goals
High Quality and Coordinated Developmental Services	Integrate Early Developmental Promotion, Screening, Referral Linkage, and Developmental Processes Across and Within Sectors and Communities	Through training and technical assistance: • Support providers and community organizations to integrate evidence-based and two-generation developmental promotion practices and approaches into daily operations • Facilitate integration of standardized early identification and screening for developmental risk, developmental delay, and SDOH into existing community and state provider practices and structures • Disseminate guidelines or policies to providers and community organizations related to state-level developmental screening, effective referral and linkage processes, and promotion practices • Support community platforms to integrate early developmental promotion materials and activities
Systems Development and Improvement	Build Public Will	• Disseminate public messaging around the science of early development, resilience, and adversity • Conduct outreach to healthcare providers, cross-sector partners, leaders, and the public, including through innovative delivery methods to raise awareness of EC priorities • Build EC workforce capacity to effectively reach and engage parents and families • Promote early childhood messaging and visibility at community and state levels

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POLICY TRANSFORMATION

Progress and Outcomes in Policy Transformation through Collective Impact

Policy activities situated under **Collective Impact** were the most reported by participants among the all the Core Domains in bimonthly reports, and mainly related to the goal of **Creating a Common Agenda** (referenced by three-quarters of ECCS CoIIN participants). Some concrete examples of this work included **Creating Strategic Plans** embedded with policy priorities for states and communities and **Facilitating Collaborative Decision-Making** through strengthened coalitions, committees, and workgroups committed to early childhood development. In key informant interviews, Utah detailed how their state accomplished a legislative policy goal of establishing the Early Childhood Utah Advisory Council and the Early Childhood Governor's Commission, which included representation from state agencies like the Department of Education and Department of Health. In Kansas, the state developed an action plan for early childhood work that included a wide variety of stakeholders on the federal, state, and local levels. A concrete outcome of this work was unbundling Medicaid coding in support of developmental screenings:

> **"Two years ago, we were able to unbundle the well-child check here in Kansas, and that really has aided in the medical provider involvement because it clearly lays out that [at the] 9-, 18- and 24-month appointment, there needs to be a developmental screen. We know that through qualitative data and our environmental scan, [before this change] there was kind of a differing view as to what that all meant by following the Bright Futures guidelines. And this really helped to lay it out specifically for medical providers, showing them that they need to be doing these developmental screens."**

Some ECCS CoIIN participants used collaboration as an opportunity to mutually support the related policy activities of stakeholders, with half of participants citing policy work in the goal area of **Promoting Aligned and Mutually Reinforcing Activities** in bimonthly reports. These efforts were mostly focused around **Communicating and Coordinating Activities with Partners Towards Common Policy Goals**. In key informant interviews, four states mentioned the shifting of responsibilities for implementation or oversight among different state agencies, departments, and divisions to better align with system goals. Others worked on aligning systems across sectors and their respective governing agencies (e.g., health, early childhood education). Utah specifically found success in developing public partnerships to leverage funding for broader system development goals like data integration. They developed ongoing leadership among public and private partners within Early Childhood Utah (ECU), which facilitated coordination and collaboration on systems change across the state related to investments in health, mental health, and early childhood education.

As previously mentioned, another topic often discussed in key informant interviews connecting to **Communicating and Coordinating Activities with Partners Towards Common Policy Goals** was braiding and leveraging funding streams to support activity coordination from cross-sector stakeholders around policy transformation. Louisiana, for example, discussed updating Memorandums of Understanding (MOUs) with their Title IX and Title XIX funding, as well as writing and securing grant monies from the Pritzker Foundation. Other states prioritized their funding to emphasize infrastructure and systems development, including supporting goals like data collection and family engagement. As noted earlier, two states, Louisiana and Kansas, were able to emphasize state Medicaid relationships as a part of their funding and policy focus. Louisiana shared how they were able to deepen their relationship with Medicaid, and Kansas discussed their continual effort to address Medicaid changes. In key informant interviews, a Delaware PBC lead noted how they utilized additional funding to communicate the inequitable distribution of developmental screenings to state agencies and legislators, engendering a common policy goal:

> **"We actually leveraged funding through Highmark's Blueprints for the Community grant. We've really found out that families that had access to screening was in certain pockets. We were able to, through that grant, get a portal that any family could have access to. We were able to show some of the districts and Department of Education, and [we] had all of these people get on board with [developmental screenings]."**

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POLICY TRANSFORMATION

Related to data infrastructure, five states discussed policy work related to **Developing Shared Data Systems** in bimonthly reports, primarily situated around **Developing Strategies to Coordinate Existing Data Collection Systems** (such as Ages & Stages Questionnaire® [ASQ®] Enterprise accounts) as well as **Facilitating Data Sharing Agreements** to view screening data and smooth the referral process between organizations (see ECS Improvement and Sustainability section for more discussion about data systems and sustainability). States that prioritized systems building around data collection and sharing often discussed these topics in the context of funding and long-term sustainability. While Massachusetts used the opportunity of the ECCS CoIIN project to develop a "skeleton" for a scalable data dashboard, Alaska found that the question of sustainability on the state level was a barrier to buy-in for new data system infrastructure:

> **"Policy implementation has been difficult, particularly because our collaborative speaks for 30+ organizations – also because the state budgeting process doesn't support dreaming big or long-term. Data collection is difficult because our particular collaborative doesn't provide direct services, so data collection typically requires additional steps from partners not otherwise obligated to contribute."**

Progress and Outcomes in Policy Transformation though High Quality and Coordinated Developmental Services

In bimonthly reports, the most referenced policy implementation work under the Core Domain of **High Quality, Coordinated Developmental Services** was focused on **Integrate Early Developmental Promotion, Screening, Referral Linkage, and Developmental Processes Across and Within Sectors and Communities** (two-thirds of states), and most references discussed under building care coordination capacity included **Referrals and Linkage Processes**. In key informant interviews, five states discussed how they developed or strengthened the referral process. Participants in Kansas, New York, and Massachusetts elaborated that expanding their referral systems connected to goals around equity and community-level care access. For instance, a Massachusetts PBC detailed how integrating their referral system during the ECCS CoIIN project helped partners find care for families that previously were geographically isolated, potentially leading to more diverse care environments:

> **"We also have done a lot of work to bring community member voices. We've adopted the tenants of diversity… and a big accomplishment was also around launching an integrated referral system, which really falls into the mutually reinforcing piece of things. We have a lot of tremendous resources for families in our two square miles in Chelsea, but families don't always make it there. It's truly reinforcing to all partners when families can make it to those resources. The integrated referral system has been a huge piece of that work."**

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POLICY TRANSFORMATION

Progress and Outcomes in Policy Transformation through Systems Development and Improvement

From bimonthly reports, under **Systems Development and Improvement** half of the ECCS CoIIN participants dedicated their policy implementation work on **Building Public Will**. In key informant interviews, several states discussed focusing efforts on **Building Public Will** in terms of community outreach or developing partnerships with medical providers. A grantee in Indiana also highlighted **Building Public Will** with legislators through interactions in a state commission. Specific activities within this Core Domain focused on **Building the Early Childhood Workforce Capacity** and **Promoting Early Childhood Messaging and Visibility Within the Community**. In Delaware, a PBC made progress in both activities simultaneously by strengthening their relationship with librarians and hospitals while implementing a developmental milestone and reading program. The PBC Lead reported that due to these collaborative systems building efforts, they believe the program will sustain after the ECCS CoIIN project:

> **"We've judiciously taken the library relationship and then moved it up to a higher scale – [they're] using our model and they're going to integrate giving the first books into all of the hospital bags for all the hospitals in Sussex County. We're able to take that idea, continue to go with it, but now leverage it…that will be able to sustain this process long after if this grant is not renewed. Then, we were able to take that concept and scale it to the private industry, from the hospitals. [Our team is] working at the University of Delaware, helping us to get into Purdue and hard-risk companies and organizations with at-risk families. Now, we're trying to take that further with another group and look."**

FACILITATORS AND BARRIERS OF POLICY TRANSFORMATION

Though ECCS CoIIN participants shared facilitators and barriers of policy transformation through the qualitative data sources discussed earlier in this section (i.e., key informant interviews; bimonthly reports), participants also completed the Contextual Factors Survey, which examined enabling and challenging factors related to their ECCS implementation (see Appendix D). Accordingly, the following section discusses factors that promoted as well as hindered participants' abilities to achieve success in policy transformation. Full results of the Contextual Factors Survey as they pertain to policy transformation are shown below in Table 2 and Figure 1.

Table 2. Contextual Factors Survey Average Ratings for Policy Transformation by Participant

QUESTION	IG MEAN	PBC MEAN
Policy	**3.4**	**3.6**
Facilitators	3.9	3.9
Relationship building/engagement of stakeholders	4.3	4.3
Opportunities to coordinate/develop activities on shared understanding of ECCS	4.0	4.1
Priority alignment of other constituencies	3.9	3.9
Engagement of families/community around SDOH	3.4	3.3
Barriers	3.0	3.3
Limited buy-in from stakeholders	3.3	3.2
Competing or misaligned priorities	2.9	3.1
Resource constraints	3.1	3.8
Political will	2.8	3.3

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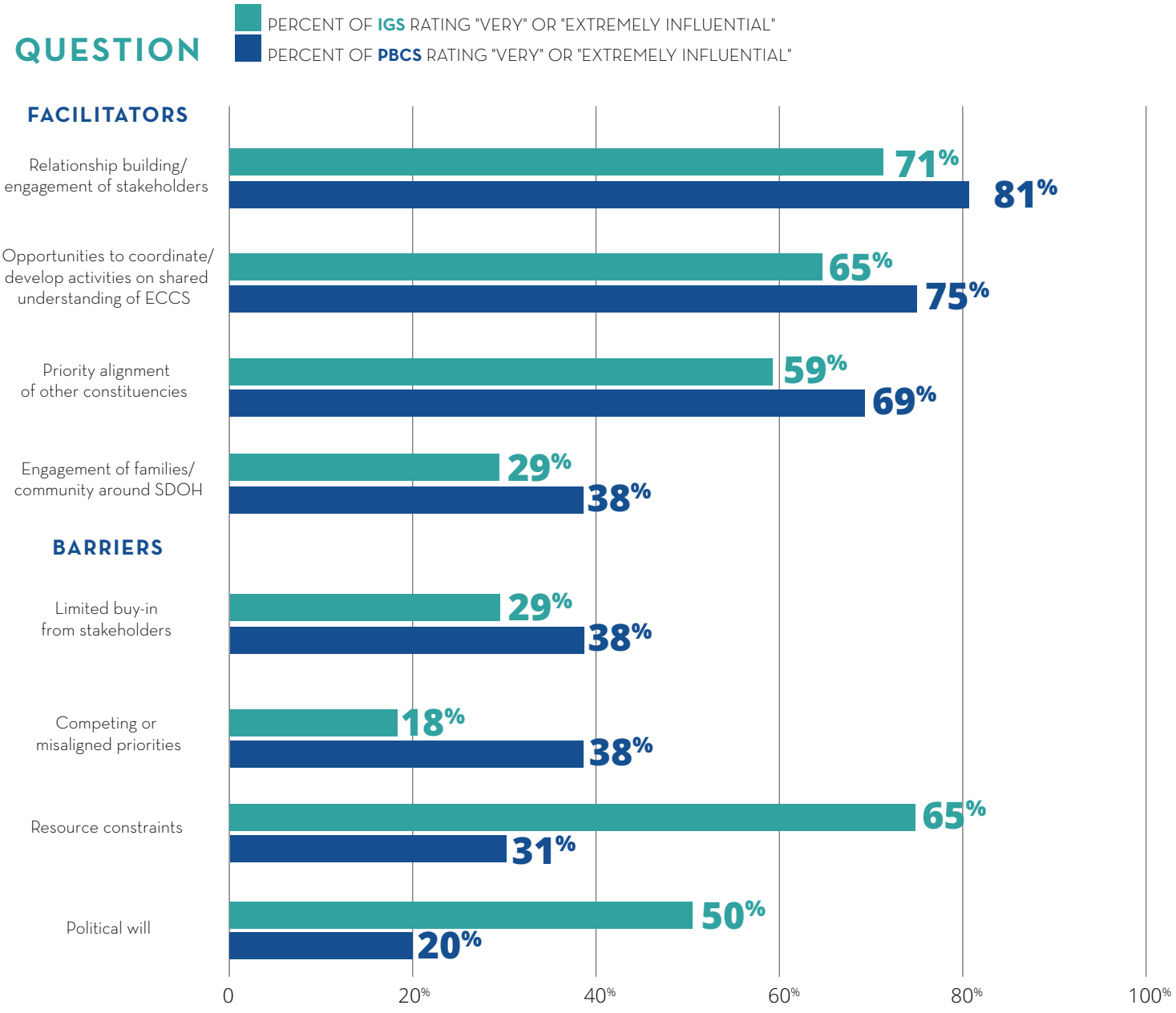
POLICY TRANSFORMATION

Figure 1. Contextual Factors Survey Ratings of "Very" or "Extremely Influential" for Policy Transformation by Participant



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POLICY TRANSFORMATION

Facilitators of Policy Transformation

Overall, the Contextual Factors Survey found that IGs and PBCs were aligned in their perception of policy facilitators, with an overall average rating of "very influential" over the four policy facilitator questions. However, family and community engagement was rated the lowest of the four policy indicators, with its average rounding to "somewhat influential" for both IGs and PBCs. Relationship building and engagement was considered an influential policy transformation facilitator, and there were mixed perceptions of the influence of goal alignment, which is discussed in greater detail in a subsequent section.

Engagement and Partnership Building

Relationship building and engagement had the highest average rating of the policy facilitators in the Contextual Factors Survey, as well as the highest share of respondents reporting it as a "very" or "extremely influential" policy facilitator, though more PBC respondents reported this (81 percent) over IG respondents (71 percent). In key informant interviews, ECCS CoIIN participants explained how strong foundational relationships enabled systems building in policy transformation at various maturity levels. Many participants recognized the advantage that partnerships provided for policy development, leveraging them to enhance coalition building for the purpose of engaging in policy development. Further, a few participants saw opportunity in developing public/private partnerships to accomplish their system goals. As previously mentioned, Utah found success in developing public/partnerships to leverage funding for broader system development goals like data integration and long-term funding sustainability. In key informant interviews, a Delaware PBC Lead shared how they expected relationship building could pave the way for policy transformation to expand from one-generation to two-generation approaches:

> **"We've been able to use [ECCS CoIIN] to really think about our Collective Impact. How do we also do the other concentric circles around the family, not just the children? To go for other grants, to demonstrate our relationships, that we've been able to build through this network and use that to leverage other networks for more funding for wraparound services…Then how do we also think about long-range sustainability? Who might be our anchor organizations that can use some of this creative, innovative work? If we get funded again, we'll innovate, and we'll build on that and get somebody else to fund us. But right now, we have some vertical that [is] going to sustain some of the really great work we've already started."**

In contrast, Oklahoma noted in key informant interviews that while relationship building grew and systems matured during the ECCS CoIIN project, state and local capacity building efforts were not quite at a point where they could successfully spearhead policy transformation (for more information, refer to State and Local Connections). The Oklahoma team shared,

> **"I'm going to be very honest – policy implementation has been really hard for us. Being on the community level and being new to this work in general, it's taken our team a few years to really build those relationships on the state level because we are down here in southeastern rural Oklahoma. Building those partnerships in the metropolitan area and never [having] any previous connection with them was challenging at first. But I will say we've come a long way since 2016. Even though our program isn't directly involved with policy change, what we have seen in the last year and a half is our program being involved in those conversations."**

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Mixed Perceptions of Facilitators and Barriers to Policy Transformation

IGs and PBCs had mixed perceptions of the influence of goal alignment and misalignment on policy transformation in the Contextual Factors Survey, reporting it as both a facilitator and a barrier. Therefore, this section discusses the holistic influence of goal alignment and misalignment on state and local policy implementation.

Goal Alignment and Misalignment

PBCs were more apt to find alignment with constituency priorities and opportunities to coordinate activities on a shared vision as influential to their policy work, though the scores for both indicators were similar to IGs'. For instance, 75 percent of PBC respondents rated opportunity to coordinate and develop activities on a shared vision as a "very" or "extremely influential" policy facilitator while the same was true for 65 percent of IGs, though both had nearly identical means. For priority alignment of other constituencies, 69 percent of PBC respondents found this to be a "very" or "extremely influential" policy facilitator, whereas 59 percent of IGs reported the same, though both had the same average rating. This may speak to the community-based nature of the ECCS policy work that PBCs completed, engaging with many different and diverse stakeholders. However, it ultimately seems that both IGs and PBC found these relationships of similar value.

While PBCs did not find any of the barriers outlined in the policy domain particularly influential to their work in the Contextual Factors Survey, there were some notable write-in responses from PBCs on policy barriers related to goal alignment and misalignment. Two PBCs described the difficulty of getting IGs to work toward goals together despite clear priority alignment. This is consistent with findings between PBCs and IGs on competing or misaligned priorities, in which PBCs were significantly more likely to report as "very influential" to their ECCS work than IGs. Additionally, in key informant interviews, several states discussed how goal alignment alone does not create conditions for policy transformation. For instance, two states saw legislation halted by the onset of the COVID-19 pandemic. State budgeting process timelines were seen as prohibitive for several states, and others noted generally the time-consuming nature of the policy development process. In key informant interviews, a PBC Lead in Delaware illustrated what barriers to policy implementation were like in their state, despite aligned goals:

"We actually had [a] bill in place. We talked to the districts. We talked to the families. We had all of these data collected. [Legislators] were like, 'Oh yes, we need to do that.' It was Senate Bill 150. It passed in the Senate and went to the House, and then COVID-19 hit. We already had the Department of Education on board and they said, 'Yes, we're doing this system, it's going to happen.' But we still felt like with talking to the legislators, that this bill would be put a [long] timeline… we [need to] make it happen quicker for families. It really just shows, given the state of the world, how much it would help to have it in place right now."

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POLICY TRANSFORMATION

Barriers of Policy Transformation

While ECCS CoIIN participants were generally aligned in their perception of policy facilitators in the Contextual Factors Survey, there was less agreement for policy barriers, and only one indicator (resource constraints) was considered particularly influential to ECCS CoIIN work around policy transformation. As discussed above, PBCs were significantly more likely than IGs to consider competing or misaligned priorities as "very influential" to their ECCS policy implementation work.

Leadership and Capacity

In the Contextual Factors Survey, IGs ranked more policy barriers as "very" or "extremely influential" than their PBC counterparts. The policy barriers that IGs noted were mostly related to topics around leadership and capacity, speaking to their work directing the implementation of ECCS CoIIN goals. Resource constraints were the main policy barrier reported in the Contextual Factors Survey, with 65 percent of state respondents saying that turnover, not enough staff, and lack of staff time/capacity was a "very" or "extremely influential" policy barrier. The same was true for less than one-third of PBCs, though there were write-in responses noting high staff turnover and capacity limitations as a policy barrier in communities. A grantee in Louisiana noted that while leadership buy-in and mission alignment was important, competing priorities and resource constraints can ultimately negate those facilitators:

> **"Resource constraints and competing priorities have created the biggest policy barriers, [though] I feel there is a consensus among key partners around the importance of strengthening the early childhood system in the state. Coordination and collaboration are definitely advancing, slowly in some areas, but overall – a positive trend."**

In key informant interviews, IGs and PBCs expanded that turnover in leadership led to delays, stalling, or even halting policy development from occurring. A grantee in Indiana shared that their state Maternal and Child Health agency was in the process of restructuring, which lent to resource constraints as a barrier to policy implementation. Others noted how the inexperience of leadership could inhibit policy development and implementation.

ECCS CoIIN participants further reflected in key informant interviews how, in some cases, there was simply a lack of leadership in policy transformation. Indeed, half of state respondents in the Contextual Factors Survey reported a lack of political will as a "very" or "extremely influential" policy barrier; only 20 percent of PBCs reported the same, though the average rating for both partner groups was similar. The finding that half of state respondents considered political will to be an influential policy barrier while the average rating of political will was mid-range suggests that political will was a polarizing topic for IGs; many respondents rated it as either an "extremely influential" or "not at all influential" policy barrier. An example shared in key informant interviews by a grantee in Kansas was the difficulty of working with their legislator and how the lack of partnership impacted their ability to enable large-scale policy transformation, which was similarly discussed as a barrier in the Partnership Development section:

> **"Our legislature has been pretty tough to work through. So… legislative-level policy changes? We're not there and it doesn't look like we're going to be there for a little while. I think the significance of that is that the state-level early childhood teams have been talking about things that probably will require [a high] level of policy. For instance, the sustainability of this ASQ® infrastructure division is…not a huge dollar amount, but that there would be a line item in the state budget for developmental screening. And that's probably not going to happen soon."**

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POLICY TRANSFORMATION

RECOMMENDATIONS AND CONCLUSIONS

Policy transformation in the ECCS CoIIN project was defined in broad terms, and correspondingly, many policy changes focused on programmatic and regulatory changes rather than formal legislative processes. Most IGs and PBCs transformed their policies through goal alignment, process coordination, and connecting to their communities on both the state and local level. Some concrete examples of common policy changes reported in the ECCS CoIIN project included strengthening referral systems, data sharing, and communication processes.

Key facilitators to policy transformation were in the realm of relationship building and engagement. While ECCS CoIIN participants were less aligned in their perception of policy barriers, several referred to leadership and capacity limitations as "very" or "extremely influential" to their work. Goal alignment was discussed by IGs and PBCs as both a barrier and a facilitator – as one grantee shared, goal alignment must also be accompanied with buy-in from those with political power.

Due to the collaborative nature of these policy changes, a reported enabling factor to policy transformation was braiding and aligning different funding streams, including federal, state, and philanthropic dollars. As such, one recommendation is to expand the availability of funding sources that encourage cross-sector work to build early childhood systems and capacity among diverse stakeholders. Funding opportunities that require collaborative work could also encourage more buy-in and political will from state agencies.

Colored bolded text refers to the Logic Model.
Green = Core Domain
Blue = Goal Area
Purple = Activity

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

PARTNERSHIP DEVELOPMENT

MAIN FINDINGS

- During the five years of the Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN), partnerships were strengthened at both the state and local levels as well as between the state and local levels.
- Partnerships served as a key strategy to improve, develop, and strengthen Early Childhood Systems (ECS) and policy implementation.
- Partnerships with early care and education leadership, early childhood initiatives and coalitions, and public health and human service agencies grew throughout ECCS CoIIN. Toward the end of the five-year ECCS CoIIN project, partnerships with executive and legislative leadership also grew, while partnerships with academia/nonprofits and businesses modestly regressed.
- On the local level, participant reported facilitators and barriers emphasized community-based work and communication (i.e., community leadership, aligning missions). State-level facilitators and barriers focused on systems, priorities, and leadership (i.e., infrastructure development, stakeholder education, funding, and resources).
    - Common barriers to partnerships discussed among both Impact Grantees (IGs) and Place-Based Communities (PBCs) were related to developing relationships and aligning priorities.
- Key outcomes resulting from strengthened partnerships included progress in ECS building and coordination, accountability, sustainability and spread of successful policies and programs, greater incorporation of the family and community voice in ECS and policies, aligned policy priorities and implementation, and cross-sector capacity building.

ECCS CoIIN

NICHQ National Institute for Children's Health Quality

PARTNERSHIP DEVELOPMENT

INTRODUCTION

This section shares activities and outcomes resulting from Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) participants' work in:

Developing and Maintaining Partnerships and Networks

Despite its classification as a single goal area under the ECCS CoIIN Logic Model Core Domain of **Systems Development and Improvement**, **Developing and Maintaining Partnerships and Networks** was a key strategy undertaken by all IGs and PBCs as part of their ECCS CoIIN implementation. Indeed, partnership development activities supported all the other strategies to build ECS utilized by ECCS CoIIN participants (i.e., building state and local connections, Strengthening Developmental Promotion, Early Screening, and Service Connections, and policy transformation). Speaking to the centrality of **Developing and Maintaining Partnerships and Networks**, within key informant interviews (see Background and Methods and Appendix B for more information), partnership development was both discussed as one of the top three successes and challenges during ECCS CoIIN. Because **Developing and Maintaining Partnerships and Networks** activities were more broadly applied by all ECCS CoIIN participants in service of project implementation, discussion of this strategy spans all Core Domains of the ECCS CoIIN Logic Model and incorporates multiple goal areas.

First discussed in this section is whether and how ECCS CoIIN participants developed and strengthened new partnerships at the state and local levels. Then, this section examines facilitators and barriers to engaging and strengthening partnerships, followed by ECS outcomes that resulted from ECCS participants' efforts to **Develop and Maintain Partnerships and Networks**. This section concludes with recommendations to support future efforts to **Developing and Maintaining Partnerships and Networks** to support ECS.

NEW AND ENGAGED PARTNERSHIPS

ECCS CoIIN participants shared their perceptions of state and local partnerships in the Partnership Survey fielded in 2018, 2020, and 2021 (see Appendix E for full methodology details and results). In each survey year, IGs and PBCs rated how they linked with, interacted with, and influenced different partners in pursuit of project goals on both state and local levels.[1] Each variable was grouped into sectors, also referred to as composite variables, listed here:

- **Academia/Nonprofit**
- **Business/Private Sector**
- **Child Welfare/Criminal Justice**
- **Early Care and Education Leadership**
- **Early Childhood Initiatives or Coalitions**
- **Executive/Legislative Leadership**
- **Health Care**
- **Parents/Community Leadership**
- **Public Health and Human Service and Supports**
- **Social Services and Family Infrastructure Supports**

The rounded mean score of each respective linking, influencing, and interacting variable depicts partnerships within each sector and geography. The scale of each variable is shown below in Table 1. For instance, in 2021, the mean response for ECCS CoIIN participant interactions with state-level academia/nonprofits was 3.29, which when rounded, would classify this partnership as "coordinating."

[1] Exceptions: Business partnerships were only rated on the local level, and the 2018 survey did not have contain the influencing domain.

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PARTNERSHIP DEVELOPMENT

Table 1. Partnership Survey Composite Variable Scales

SCALE	LINKING VARIABLES	INFLUENCING VARIABLES	INTERACTING VARIABLES
1	Not at all easy	Not at all easy	Netwroking
2	A little	A little	Cooperating
3	Somewhat	Somewhat	Coordinating
4	Very	Very	Collaborating
5	Extremely	Extremely	Parenting
-9	N/A	N/A	I am a member of this organization

Overall Findings for New and Engaged Partnerships

Between the 2018 and 2020 Partnership Survey, half of the significant sector partnerships were on the local level, likely speaking to the community-based work that ECCS CoIIN participants engaged in throughout the project. However, none of the local-level findings remained significantly influential between the 2020 and 2021 survey. Ultimately, the sectors in the Partnership Survey that remained significantly influential through the three survey years were on the state level (see results of significant findings across years in Table 2).

Table 2. Directionality of State-Level Composite Sector Variables Significant in Both the 2018-2020 and 2020-2021 Partnership Survey Analysis

COMPOSITE VARIABLE	2018 MEAN	SIG 2018-2020 DIRECTIONALITY	2020 MEAN	SIG 2020-2021 DIRECTIONALITY	2021 MEAN
INTERACTING					
Early Care and Education Leadership	3.29	Decrease	2.78	Increase	3.38
LINKING					
Early Care and Education Leadership	2.51	Increase	3.34	Increase	3.78
Public Health and Human Service and Supports	2.69	Increase	3.62	Increase	3.97
Academia/Nonprofit	2.57	Increase	3.94	Decrease	3.23

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PARTNERSHIP DEVELOPMENT

In key informant interviews, ECCS CoIIN participants perceived strengthened partnerships not only on the state and local level, but also between the state and the local levels. Progress was seen in the development of new partnerships, deeper engagement of existing relationships, and coordination of state and local partnerships to build ongoing collaboration, coalitions, and networks for the purpose of systems building and policy development (see related sections for more information on partnership building within Strengthening Developmental Promotion, Early Screening, and Service Connections and Policy Transformation). An IG in Indiana shared how ECS building, policy transformation, and state and local partnership went hand in hand to innovate several home visiting, data partnership, and family engagement programs during the project, a strategy also discussed in the State and Local Connections section:

> **"We leveraged ECCS to combine our Indiana Home Visiting Board meeting that we have separately with other early childhood meetings. We combined in 2016 to have a larger quarterly meeting, where all of our partners from various state agencies, local agencies, physicians, and the Family Voices programs, Ages & Stages Questionnaire® (ASQ®), could all come together to meet."**

Significant State-Level Findings

Early Care and Education Leadership and Initiatives/Coalitions

Between 2018 and 2021, Partnership Survey respondents reported significantly interacting and linking with state-level early care and education leadership. Between 2020 and 2021, respondents were also influenced more by state-level early care and education leadership. Of note, IGs and PBCs found linking, ($M=3.78$, $p<.05$), and being influenced, ($M=3.67$, $p<.05$), by state-level early care and education leaders rise from "somewhat easy" to "very easy" between 2020 and 2021. Further, IGs and PBCs found state-level early childhood initiatives and coalitions significantly increased their influence between 2020 and 2021, ($M=4.04$, $p<.01$), with their partnerships rising from "somewhat easy" to "very easy." In key informant interviews, an IG Lead in Alaska shared how partnership in these two sectors were connected. This IG's expansion of partnerships among state-level early care and education leadership led to opportunities to expand partnerships in early childhood initiatives and coalitions as well:

> **"Coming into the position and partnering with the Help Me Grow outreach coordinator and saying, 'Hey, what can we do?' [has helped us] make some policy changes…we've established the early childhood network. We're expanding the scope of the project to other communities in the state, which is super exciting. They help inform the Universal Developmental Screening Advisory Committee, which I facilitate. It's because of the project that we're able to move work forward through our strong partnerships."**

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PARTNERSHIP DEVELOPMENT

Public Health and Human Services

State-level public health and human services had significantly more linking partnerships, (M=3.97, p<.05), and influential partnerships, (M=3.91, p<.01), in the 2021 survey when compared to the 2020 survey. Most notably, according to respondents, public health and human service agencies increased their partnership from "coordinating" to "collaborating" between the two survey years. Some examples of increased partnership with public health and human service agencies demonstrated in key informant interviews included an increased ability to support ECCS CoIIN participants as they responded to the COVID-19 pandemic (Louisiana) and expanded central intake systems (New Jersey). An IG in Louisiana noted how expanding partnership with public health and human service agencies translated to an increase of alignment across systems, including identifying additional funding opportunities:

> **"I see the benefit at the state level – that council just came into its own, a much deeper relationship with Medicaid… Our Bureau of Family Health (BFH) director updated the Title XIX and the Title V Memorandum of Understanding (MOU)… all of these mutually reinforcing activities were really great. We also had the Louisiana Mental Health Perinatal Partnership. We wrote for the Pritzker grant and were funded."**

Academia and Nonprofits

While ECCS CoIIN participants reported a significant increase in state-level linking with academia and nonprofits between 2018 to 2020, this was followed by a significant decrease in partnership with these groups between 2020 and 2021. State-level linking was rated as "somewhat easy" in 2018, which increased to "very easy" in 2020 and later dropped back to "somewhat easy" in the subsequent year, (M=3.23, p<.05). Local-level partnerships with academia and nonprofits had a similar regression, discussed in the following section. Using context provided in key informant interviews, both Florida and Utah grantees shared that nonprofits were not a primary focus for partnership, and this lack of intentionality could explain the partnership regression over the years. A Florida IG noted challenges on the state level:

> **"Many of us in state agencies and even nonprofits were not familiar with Collective Impact. We [only] knew collaboration or co-BLAB-oration, as people say. So, we're getting together and just talking, but not really having a strategy for how we move things forward in a unified way."**

Significant Local-Level Findings

Academia and Nonprofits

IGs and PBCs also reported a significant decrease in their partnerships with academia and nonprofits between 2020 and 2021 in local-level interactions. Respondents rated their local-level interactions as "coordinating" in 2021, in comparison to "collaborating" in 2020, (M=3.31, p<.05). As noted earlier, both Florida and Utah grantees shared that nonprofits were not a primary emphasis of partnership development and, as such, this could explain the partnership regression. This tertiary focus was demonstrated in discussion shared by a Utah IG of how nonprofits were incorporated into local-level partnership development:

> **"The more that we're on the same page, the stronger it is. We're already working with this agency and this agency and this agency, and working with these nonprofits that are working with the communities. [We know more about] what families want and parents want… We're broadening the case out for a much more unified and comprehensive early childhood system. There's been a lot of [asking], 'How do we do this?"**

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PARTNERSHIP DEVELOPMENT

Businesses

ECCS CoIIN participants reported a significant decrease in their local-level linking with businesses among the private sector, (M=2.88, p<.05), dropping from "very easy" partnerships in 2020 to "somewhat easy" partnerships in 2021, though this finding should be interpreted with caution due to small sample sizes. Some ECCS CoIIN participants discussed how it was difficult to partner with the business sector due to uncertainty of how to engage with them most effectively, as a grantee in Delaware shared:

> **"I'm really looking forward to continuing this work and hope that we can expand our partners. There are plenty other partners and people that we hope to reach out to – including the business sector, which I don't think that any of us have tapped into in the correct manner for them to understand the importance of child development and their part that they play in this."**

Executives and Legislative Leadership

Between 2020 and 2021, ECCS CoIIN participants found linking with local-level executives and legislative leadership to significantly rise from "a little" to "somewhat easy" (M=2.54, p<.01), though this should be interpreted with caution due small sample sizes. Thus, while there was progress with local-level executive and legislative leadership on mission alignment, context from key informant interviews demonstrated that there was still much work to be done. A Kansas IG noted the different barriers to legislative partnership, which is also discussed as a key limitation in the Policy Transformation section:

> **"Our legislator has been pretty tough to work through. So… legislative-level policy changes? We're not there and it doesn't look like we're going to be there for a little while. I think the significance of that is that the state-level early childhood teams have been talking about things that probably will require [a high] level of policy. For instance, the sustainability of this ASQ® infrastructure division is…not a huge dollar amount, but that there would be a line item in the state budget for developmental screening. And that's probably not going to happen in the near future."**

Facilitators and Barriers to Partnership Building

Key informant interviews, qualitative responses to the Partnership Survey, and the Contextual Factors Survey offer insights to the facilitators and barriers to partnership building that ECCS CoIIN participants faced on both the state and local level during the ECCS CoIIN project. For more details on the qualitative aspects of the Partnership Survey, please see Appendix C and overall state- and local-level results below in Table 3. Extended information on the Contextual Factors Survey can be found in Appendix D.

Barriers around developing relationships and aligning priorities were discussed among both IGs and PBCs, though the specific underlying dynamics and nature of the barriers varied on the state and local level. On the local level, overall reported facilitators and barriers emphasized community-based work and communication, while on the state level, facilitators and barriers had more of a focus on systems, priorities, and leadership.

While there were several facilitators to partnership development, partnership development itself often served as a facilitator for other strategies to improve, develop, and strengthen early childhood systems and policy implementation, discussed in greater detail below. Please refer to the Strengthening Developmental Promotion, Early Screening, and Service Connections and Policy Transformation sections for more information.

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Table 3. Overall Qualitative Partnership Survey Findings for State- and Local-level Barriers and Enablers (i.e., Facilitators)

STATE LEVEL			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	27	system/mission misalignment	67
capacity limitations	28	time limitations	57
competing priorities	26	funding limitations	51
time limitations	15	capacity limitations	45
communication and messaging	10	competing priorities	33
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	52	willingness to collaborate	166
system/mission alignment	48	support from higher ups	93
support from higher ups	38	system/mission alignment	48
communication and messaging	19	communication and messaging	48
connecting to community	16	funding opportunities	29
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	34	capacity limitations	79
capacity limitations	26	time limitations	64
time limitations	21	system/mission misalignment	61
unwillingness to collaborate	15	funding limitations	33
competing priorities	14	lack of understanding about/ connection to community	32
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	53	willingness to collaborate	155
communication and messaging	44	system/mission alignment	111
system/mission alignment	43	connecting to community	93
connecting to community	39	project management, research, implementation	29
project management, research, implementation	25	support from higher ups	23

Note: "Instances" refers to the number of times the respective enabler (i.e., facilitator) or barrier was mentioned in qualitative data across all sectors. As qualitative data can be coded for multiple themes, the number of instances can exceed the number of overall survey responses for each survey year. Please see the Background and Methods for more detail about response rates to the Partnership Survey.

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PARTNERSHIP DEVELOPMENT

State Level

Facilitators

Family Partnership

In key informant interviews, family engagement was discussed at length as a facilitator to the overall partnership development strategy on the state level. States like Delaware and New York used several mechanisms to promote engagement with families such as holding different kinds of community events aimed to educate and facilitate connection. These community events were seen by some states as a method to promote equity and partnership in the larger community. Florida provided leadership opportunities for families as a part of their engagement strategy, and discussed the paradigm shift for stakeholders once they started including parents in early childhood systems change:

> **"For us, partnership development is one of the strongest areas, because we've been intentional to not only engage partners but also to engage parents in both our state and community work. We've shifted focus to have really direct conversations around racial equity and really getting to the root of the issues around policy as it relates to early childhood."**

Some states, like Massachusetts, enhanced this approach further by providing opportunities for family partners to participate in state and local decision making, while others showed value for parents' contribution by offering payment for their time.

Infrastructure Development and Coalition Building

In key informant interviews, several states discussed infrastructure development and specific methods of how partnership building was supported in communities, such as the creation of processes to support partnership and systems building (e.g., regular meeting schedules, use of MOUs, etc.). Related to this, states outlined how coalition building within infrastructure development was also a facilitator to partnership development. Specifically, six states mentioned collaboration and coalition building as an integral aspect to their ability to develop and implement programs and policies related to those collaborations. In key informant interviews, Alaska demonstrated how collaboration and coalition building translated to infrastructure development around data collection and pediatric care:

> **"It was because of the ECCS grant that we started our early childhood coalition within our community, and it services the 15 villages in the region…We spent a lot of time in this past calendar year improving our collaboration with that [and] providing a better structure to sustain the coalition beyond this grant. Also, because of the ECCS work, ASQs® were brought to our region. We've started doing those with Norton Sound Health Corporation and the pediatric team with all of our well-child visits. I know that they fully to carry those on beyond the script. Those are two really beneficial things that were brought to our community."**

The connection between coalition building and infrastructure development was corroborated in the Contextual Factors Survey, in which partnerships and stakeholders were consistently reported as an influential facilitator for IGs across both survey years and across all domains (policy, strengthening developmental promotion, early screening, and service connections, state and local connections, and improvement and sustainability).

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PARTNERSHIP DEVELOPMENT

Opportunities for Stakeholder Education

In key informant interviews, partnership development was reported as a primary vehicle for some states to educate influential stakeholders about early childhood education and early child development. New Jersey discussed many benefits to partnership development and noted how they were able to educate partners about child development and then partners, in turn, would use that knowledge and expertise in their own implementation and practice. Many states were committed to increasing outreach and partnership in this way, particularly the medical community, as an IG in Kansas shared in key informant interviews:

> **"The relationship building and the community champion development that we have seen [is] so integral on this work, so I provided the backbone support to our local communities. Over the five years, I've seen community members [like medical providers and people in early childhood] really step up, be those champions, and take on moving the work forward in their sectors. [The idea is to foster] the ability to develop those community champions and help to provide technical assistance to communities around specific topics and around collaboration, so that they can utilize existing resources."**

Further, based on their experience during the project, the Oklahoma team recommended that the next round of the ECCS project focus on these cross-systems partnerships. The importance of stakeholder education and engagement was also demonstrated in qualitative responses to the 2020 and 2021 Partnership Survey – on the state level, support from sector leadership was reported as a top enabling factor to partnership in both the 2020 and 2021 surveys.

Barriers

Aligning Priorities

Barriers discussed in key informant interviews related to aligned priorities on the state level emphasized concrete examples of action or inaction. For instance, conflicting priorities/interests and difficulty aligning with local partners were mentioned in the context of developing MOUs and obtaining or aligning funding streams.

Funding was a top barrier to achieving aligned priorities throughout ECCS CoIIN, and especially toward the end of the project, as exhibited in both the Contextual Factors Survey and the Partnership Survey. For instance, in the 2020 Partnership Survey, mission misalignment and competing priorities were often discussed as barriers to partnership, and in the 2021 survey, funding limitations were added to this list – these three themes were discussed as intertwined barriers to partnership. One participant in New Jersey described how "the timing of aligned priorities based on funding opportunities" was a barrier to state partnership among academia and the nonprofit sector. When prompted on state-level partnership in the early care and education leadership sector, a grantee in Utah noted how "time and ability to meet the demands of program work and collaboration efforts and funding [within a] program/agency's own guidelines, procedures and requirements" were a barrier to partnership.

Furthermore, while funding and resources were an influential barrier in the 2018 Contextual Factors Survey, this trend continued in the 2020 survey, and particularly so for IGs, who noted that funding and resources were barriers across the four domains measured. These themes speak to the structural duties of IGs in ECCS implementation and give insight to potentially increased pressure to obtain new funding to sustain partnerships and priorities developed during the ECCS CoIIN project.

PARTNERSHIP DEVELOPMENT

Developing Relationships

Although developing strong and connected relationships was noted as a barrier on the local level, on the state level, IGs remarked on barriers around relationship development primarily related to time and capacity limitations. Of note, time and personnel capacity limitations as they pertained to state-level relationship development were the top barriers shared in the 2020 and 2021 Partnership Survey. Within key informant interviews, participants mentioned how turnover was a barrier to developing relationships with depth and shared understanding. A Utah IG lead illustrated this tension:

> **"There was a lot of change at the state – there were three different managers with ECU during the course of this grant and it's only a five-year grant. It took [the other IG lead] and I, from the state level, probably at least a year before people were like, 'OK, they are sticking around,' because it's really hard to build those partnerships back up if someone doesn't see your entity as dependable. That's a big part – it's like every time someone switches, it takes another six months to get going. You lose a lot of time."**

Local Level

Facilitators

Community Leadership and Partnership

On the local level, the main partnership facilitator shared in key informant interviews was developing platforms for leaders at both state and local levels. Several participants spoke of supporting local champions to facilitate partnership; some participants specifically aimed these efforts among the medical community and early childhood providers. Connecting to communities was also noted as a top local-level enabler in both years of the Partnership Survey. Another related theme discussed in key informant interviews was building and leveraging grassroots partnerships, including relationship development with non-traditional partners, leading to overall greater opportunities to connect on local initiatives, leverage resources, and build capacity. A PBC lead in New Jersey reflected on these wide-ranging partnerships in key informant interviews:

> **"There's been training on keeping babies and children in mind…Central intake is able to engage in conversation around developmental health promotion as well as the importance of screening. Additionally, we strengthened our relationships with our community partners like libraries, [Department of Child Protection and Permanency], Family Success Centers and childcare centers and supported their work around early childhood development."**

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Barriers

Aligning Priorities

While aligning priorities was also mentioned as a state-level barrier, on the local level, this barrier was discussed more in relation to capacity. For instance, PBCs discussed in key informant interviews how aligning priorities was a barrier to partnership due to underlying issues of the time investment and capacity required to invest in relationships. The Delaware team noted that time consideration is not funded or incentivized in systems building work, demonstrating fundamentally misaligned priorities:

> **"In terms of federally qualified healthcare centers, I think there is more room for improvement [in] relationship building…in writing our next grant, we put in something that would incentivize the federally qualified healthcare centers to be involved, because I think the nature of their mandate, didn't really incentivize them to play…They already receive federal funding, so why should they [partner]? So I think it's important to look at [incentivizing] when we are thinking about bringing in partners and writing grants."**

Another area where misaligned priorities were represented was in funding and sustainability concerns. In the 2020 and 2021 Partnership Survey, the most cited local-level barrier to partnership was system misalignment and capacity and time limitations. In 2021, funding limitations were added to this list; several responses raised concerns of the near ECCS CoIIN funding close and the difficulty of finding alternative funding streams when partner priorities are not aligned. When discussing local-level barriers of partnering with the health care sector, a grantee in Kansas noted that "high turnover rates and medical provider engagement can take a long time [and they are] always thinking about [the] bottom line of keeping [the] hospital running."

Developing Relationships

Developing relationships was also noted as a barrier on the state level; however, on the local level, PBCs remarked on barriers around relationship development primarily related to missions and strategic visions. Some states reported challenges in developing relationships, particularly with the pediatric community, and in one case, with early intervention stakeholders. Further, in the 2021 Partnership Survey, a lack of community-based relationships was a top barrier on the local level. An IG in Louisiana noted that, when referring to local-level business partners, "engaging with EC [early childhood] issues and priorities [creates] competing priorities in a community." They elaborated on this more in key informant interviews, noting that progress is not linear:

> **"It just takes so much time to cultivate those relationships and do it right – they're not all the same and you can't do the same thing, even in the same sector. We could experience success in one healthcare practice and plan to bring the exact model to the next practice, but that may not always work. They bring different ideas and baggage and ways of thinking and serve different families. I think that is a huge challenge, to stay the course and know that, even though you're not seeing immediate results, that there's a purpose to that development."**

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OUTCOMES RESULTING FROM PARTNERSHIP DEVELOPMENT

As discussed earlier, ECCS CoIIN participants made substantial progress in developing partnerships within their respective constituencies. This work to develop, coordinate, and strengthen partnerships led to numerous positive outcomes crossing several areas of the ECCS CoIIN Logic Model. However, a common thread among all outcomes resulting from activities to **Develop and Maintain Partnerships and Networks** was in the improved quality of ECS collaborations. Within key informant interviews, half of all ECCS CoIIN participants discussed how their partnerships and networks both strengthened and deepened over the course of their participation. From their efforts to strengthen relationships, several states began to place greater importance on activities within the Core Domain of **Collective Impact**. Specifically, states shared a focus on activities that build trust among partnerships and strengthen relationships in support of ECS building and coordination, as is elaborated by a PBC Lead in Florida below:

> **"My focus is really building trust and relationships. I have known many of the agencies for years now, but people come and go, and we all kind of change positions and agencies and I wanted to go fast. So, I have to confess that I wanted to be rolling by now, but I had to learn that you have to go slow [in order] to go fast. In [our] county, there are a lot of agencies doing a lot of great things but also serving a lot of the same ages, the same population. So I had to make sure that in my delivery…it's all about us, we're a team, we're not competing against each other, there's plenty of people to go around, everybody can meet their outcomes, and really build that trust…We want to build something that is the betterment of the community, so I've been working [messaging] a lot."**

Moreover, states also found that formalizing partnerships served to **Promote Aligned and Mutually Reinforcing Activities** by providing accountability among partners. Accordingly, seven states shared that their partnership-building work resulted in the sustainability of ECS initiatives and programs developed as part of ECCS CoIIN. One of the New Jersey PBC teams shared how their efforts to develop partnerships allowed for pathways for sustaining ECCS CoIIN activities across their county:

> **"The CoIIN is so collaborative with other communities – I'm able to access the PDSAs from other communities and take a look at what they're doing, especially if I know that community might be similar to mine. That's been really helpful to troubleshoot different ideas – see what has worked for others, what hasn't worked for others. In addition to that, we've had a lot of support from our New Jersey state team when I have had questions or maybe needed to talk through different ideas or challenges"**

Furthermore, within the goal area of **Providing Backbone Support and Mechanisms for Continuous Communication Between State and Community**, states shared how the connections developed between the state and local ECS as part of ECCS CoIIN served as the basis for spreading and replicating similar promising collaborations within other communities. One Delaware PBC shared how they were able to replicate successful practices from another PBC within their own community:

> **"What New Castle County PBC's got up north, versus what we have in the south – totally different – but we've used each other's best practices and scaled it, from a capacity standpoint. Partnership is the key there. Everything else would not happen without it."**

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PARTNERSHIP DEVELOPMENT

Developing and Maintain Partnerships and Networks led to several other promising outcomes among states and communities. For instance, related to the Core Domain of **Systems Development and Improvement** goal area of **Family Leadership**, three states were able to better design their systems and activities to address family needs. A New Jersey family engagement leader shared their process and thinking about transforming their ECS by engaging directly with families:

> **"It's being open to family engagement and letting family leaders know that it doesn't matter if I'm in the middle of writing a grant – I'm here for you. Through the years, and through the relationship and systems building, they understand that. We've built that trust. [Sometimes] someone gets burned out and I've had conversations with some parent leaders that they do not need to say yes to everything, because when you're a parent leader, there's a lot of people that are coming to you for things."**

Within the same Core Domain, five states shared positive outcomes within **Advancing Policies and Mobilizing Funding to Sustain System Improvements** around creating aligned policy agendas. For example, three states shared that they were able to better align state and local partnerships to ultimately support policy implementation. Oklahoma discussed their efforts to engage in the state conversation as a primarily local team, and how they were better able to inform policymaking that impacted their own communities:

> **"Being on the community level and being new to this work in general, it's taken our team a few years to build those relationships on the state level because we are down here in southeastern rural Oklahoma. Building those partnerships in the metropolitan area was challenging at first. But I feel like we've come a long way since 2016. Even though our program isn't directly involved with policy change, what we have seen in the last year and a half is our program being involved in those conversations – state advisory team members reaching out to us and including us to be part of their meetings and their teams. They hear about the work that we're doing and everything going on within our Place-Based Communities."**

Two other states found that strengthened partnerships facilitated collective agreement on policy development. The Florida team spoke about how aligning policy priorities among all their numerous partners was ultimately a success:

> **"We still have a long way to go with policy, but the fact that we've been able to get policy priorities that all of our 30-plus partners agree on – making progress in that area is a success."**

Several states also made progress in outcomes within the Core Domain of **High Quality and Coordinated Developmental Services**, specifically within the goal area of **Building Care Coordination Capacity**. For example, five states shared increased alignment and coordination of family-serving providers and systems because of their partnership development activities. One New Jersey PBC team discussed how they were able to build a partnership with community health workers, who as trusted individuals, were able to support the dissemination of developmental screening information to families in their communities:

> **"Our Community Health Workers have been an invaluable partner in supporting our work around developmental promotion and screening. They develop long term relationships with the families they serve and become a trusted resource. When they talk about the importance of screening, the families are a lot more receptive and willing to complete the ASQ®."**

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Purple = Activity

PARTNERSHIP DEVELOPMENT

Similarly, four states shared how partnership development activities translated to overall increased capacity and capacity building of both the early care and education workforce as well as among ECS partners and stakeholders as a whole. Within their key informant interview, the Louisiana team elaborated on how this increased ECS capacity among partners supported their ability to manage the COVID-19 pandemic:

> **"I want to give kudos to both the Place-Based Communities. They have done an amazing job in light of COVID-19. For every sector, it's just been a huge challenge. How do we continue to serve families [and] work with our partners in this environment? Vermillion Parish PBC had to start from ground zero, like where Morehouse PBC had to start building their original coalition. They were, in Morehouse, better suited for virtual activities, because they had a web page and Facebook and Vermillion Parish PBC had to build and find those opportunities."**

RECOMMENDATIONS AND CONCLUSIONS

During the five years of ECCS CoIIN, partnerships were strengthened not only at the state and local level, but also between the state and the local levels. Partnerships often served as a key strategy supporting all areas of the ECCS project. Specifically, partnerships with early care and education leadership, early childhood initiatives and coalitions, and public health and human service agencies grew consistently on the state level during ECCS CoIIN. This consistency could speak to partnership efforts becoming engrained into state systems and policies toward the end of the ECCS CoIIN project, and/or a greater reliance of ECCS CoIIN participants on state-level partnerships and guidance to navigate the public health crisis of the COVID-19 pandemic and its effect on early childhood systems.

Barriers to partnerships discussed among both IGs and PBCs were around developing relationships and aligning priorities, though the underlying nature of the barriers varied. On the local level, reported facilitators and barriers emphasized community-based work and communication, while on the state level, facilitators and barriers discussed had more of a focus on systems, priorities, and leadership.

Key outcomes shared by ECCS CoIIN participants included:

- **Strengthened ECS building and coordination**
- **Accountability in partnerships**
- **Sustainability and spread of successful policies and programs**
- **Greater incorporation of family and community voice in ECS and policies**
- **Aligned policy priorities and implementation**
- **Cross-sector capacity building**

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PARTNERSHIP DEVELOPMENT

During evaluation activities, ECCS CoIIN participants shared several recommendations to better support partnership in ECS building. A common suggestion was expanding the availability of funding sources that explicitly encourage cross-sector collaboration, thereby better engendering system and capacity alignment across stakeholders. Specific sectors where challenges to partnership were mentioned (medical community, academia/nonprofits, executives/ legislative leadership) may be key areas to promote ECS policy and systems building and could benefit from greater support to facilitate partnership connections.

Another recommendation shared by ECCS CoIIN participants was to offer more opportunities for local-level partners to participate in the intermediary activities involved in state-level infrastructure building. While community leadership and partnership were reported as an important facilitator to partnership on both the state and local level, our findings suggest that these efforts were incorporated into infrastructure development primarily on the state level. Creating more occasions to involve local partners in state infrastructure building could also aid in relationship development and aligned missions, potentially strengthening ECS.

Finally, time and capacity constraints were a common reported barrier to partnership on both the state and local level. Increasing staffing to specifically support relationship and partnership development could help address these barriers.

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Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

MAIN FINDINGS

- All Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) participants shared substantial progress within Early Childhood Systems (ECS) improvement and sustainability as it was central to ECCS CoIIN activities, and often referred to other evaluation areas (state and local connections, Strengthening Developmental Promotion, Early Screening, and Service Connections, policy transformation, and partnership development) as facilitators to ultimately improve, strengthen, and sustain their systems building.
- Strategies to support ECS improvement and sustainability mostly followed the Collective Impact approach (such as creating a shared vision, promoting aligned activities and funding streams, and developing shared data systems). While family leadership, Continuous Quality Improvement (CQI) approaches, and building public will were referenced less often, those that did use these strategies centered them as part of their Early Childhood Comprehensive Systems (ECCS) implementation.
- Challenges tended to be specific for each state and community and were often related to issues of coordination and collaboration among stakeholders.
- ECCS CoIIN participants in general reported sustainable outcomes related to community and state infrastructure and service integration. A little less than half of participants are sustaining outcomes related to data systems but among those that are, participants noted that these outcomes were important in driving systems improvements.

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

INTRODUCTION

Compared to the other areas of the ECCS CoIIN evaluation discussed earlier in this report (State and Local Connections, Strengthening Developmental Promotion, Early Screening, and Service Connections, Partnership Development, and Policy Transformation), all Impact Grantees (IGs) and Place-Based Communities (PBCs) engaged in work to support improvement and sustainability in Early Childhood Systems (ECS), regardless of the goals of their individual implementations. Due to the nature of this iteration of the ECCS program as a CoIIN, ECS improvement and sustainability was central to the ECCS activities for participants. During key informant interviews, participants discussed ECS improvement and sustainability activities the most compared to the other evaluation areas and identified these activities as both successes and challenges in their ECCS implementations. The main strategies participants discussed for ECS improvement and sustainability covered several Logic Model goal areas within **Collective Impact** and **Systems Development and Improvement**:

COLLECTIVE IMAPCT

- **Create a Common Agenda/Shared Vision and Strategies**
- **Develop Shared Data Systems**
- **Promote Aligned and Mutually Reinforcing Activities**

SYSTEMS DEVELOPMENT AND IMPROVEMENT

- **Support Continuous Learning and Improvement Efforts**
- **Family Leadership**
- **Build Public Will**
- **Advance Policies and Mobilize Funding to Sustain Systems Improvement**

From the analysis of key informant interviews, one additional strategy was identified that would be best situated in the Logic Model goal area of **Advance Policies and Mobilize Funding to Sustain Systems Improvement** (under **Systems Development and Improvement**) related to their ECS improvement and sustainability activities: **Aligning or Leveraging Existing or New Funding to Support Systems Development**. Therefore, this activity is included as a strategy in and of itself in this discussion.

Unlike the other areas of ECCS CoIIN activities that served as enabling factors to ultimately support ECS improvement and sustainability, due to the specificity of approaching ECS improvement and sustainability, the combined seven strategies presented above remained consistent across participants and thus serve as the core discussion within the following chapter. As ECS improvement and sustainability primarily focuses on infrastructure and served as the heart of ECCS implementation, the discussion in the following section differs slightly from that of prior sections. First, the seven strategies ECCS CoIIN participants adopted for ECS improvement and sustainability are discussed, with particular attention to similarities across participants' ECCS implementations. Following, common challenges IGs and PBCs encountered in ECS improvement and sustainability are shared, noting that challenges tended to be more specific to each state and community compared to the successes. This section ends with recommendations and a discussion of the outcomes participants aimed to sustain over the following areas: community and state infrastructure, service integration, and data systems.

The ultimate goal of the ECCS CoIIN project was ECS improvement and sustainability. Therefore, the domains in the other sections of this report were often described by ECCS CoIIN participants as factors that enabled or prohibited success in terms of the overall improvement and sustainability of a state's ECS program. The seven strategies listed above were consistent across all 12 IGs, offering a framework for the discussion of improvement and sustainability here, along with challenges and recommendations. This section ends with discussion of outcomes that participants aimed to sustain in three specific areas: community and state infrastructure, service integration, and data systems.

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Table 1. ECCS Logic Model Core Domains, Goals, and Activities Referenced Strategies to Support ECS Improvement and Sustainability

CORE DOMAIN	GOALS	ACTIVITIES
Collective Impact	Create a Common Agenda/Shared Vision and Strategies	➢ Create a strategic plan for the collaborative that represents the shared vision and collaborative/common agenda ➢ Facilitate collaborative decision-making and strategic planning across stakeholders
	Develop Shared Data Systems	➢ Assess/inventory community and state cross-sector data systems collecting data on children ages 0-3 ➢ Identify research and data questions to assess gaps in data collection, analysis, and management infrastructure ➢ Develop strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems ➢ Facilitate data sharing agreements among partners to promote the use of shared/coordinated data systems
	Promote Aligned and Mutually Reinforcing Activities	➢ Identify how partners implement and support EC activities ➢ Develop shared EC messaging content and tools among partners ➢ Communicate and coordinate activities with partners toward common goals
Systems Development and Improvement	Support Continuous Learning and Improvement Efforts	➢ Develop Continuous Quality Improvement (CQI) plans to consistently improve efforts and results ➢ Apply CQI methods to regularly review program data to inform programmatic decisions and test strategies for improvement ➢ Participate in regular opportunities for peer-to-peer learning and professional development activities ➢ Train and engage community partners in CQI to build capacity for data-driven quality improvement
	Family Leadership	➢ Conduct outreach to pregnant women and birthing people, parents, and families of young children to inform families of EC priorities and recruit family leaders ➢ Train family members to be navigators, ambassadors, advocates, coaches, and family engagement specialists ➢ Consistently include pregnant women and birthing people, parents, and family members that reflect the diversity of the populations served on state/community advisory groups or service organizations ➢ Engage families in system design and decision making

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Table 1 (continued). ECCS Logic Model Core Domains, Goals, and Activities Referenced Strategies to Support ECS Improvement and Sustainability

CORE DOMAIN	GOALS	ACTIVITIES
Systems Development and Improvement	Build Public Will	> Disseminate public messaging around the science of early development, resilience, and adversity > Conduct outreach to healthcare providers, cross-sector partners, leaders, and the public, including through innovative delivery methods to raise awareness of EC priorities > Build EC workforce capacity to effectively reach and engage parents and families > Promote early childhood messaging and visibility at community and state levels
	Advance Policies and Mobilize Funding to Sustain System Improvements	> Align or leverage existing or new funding to support systems development[1]

[1] This activity was not directly referenced in the ECCS Logic Model but was added based on participants' discussion of this topic.

STRATEGIES FOR ECS IMPROVEMENT AND SUSTAINABILITY

ECCS CoIIN participants utilized several common strategies in relation to improving and sustaining their ECS. Several of these strategies related to the Core Domain of **Collective Impact**, including three strategies in particular:

Creating a Common Agenda/Shared Vision and Strategies

Developing Shared Data Systems

Promote Aligned and Mutually Reinforcing Activities

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These three strategies all related to supporting and facilitating ECCS implementation through a Collective Impact Model Framework. From key informant interviews (see Background and Methods and Appendix B), together these three strategies comprised a majority of the activities related to ECS improvement and sustainability. Participants discussed four additional strategies from the core domain of **Systems Development and Improvement**, with the latter emerging from analyses of the key informant interviews (**Aligning or Leveraging Existing or New Funding to Support Systems Development**):

Support Continuous Learning and Improvement Efforts

Family Leadership

Build Public Will

Aligning or Leveraging Existing or New Funding to Support Systems Development

The following section discusses each strategy in greater detail and where applicable, draws connections across ECCS CoIIN participants' work. Examples are supported by quantitative findings from the Contextual Factors Survey (see Background and Methods and Appendix D for more details). Full results of the Contextual Factors Survey as they pertain to ECS improvement and sustainability are seen below in Table 2 and Figure 1.

Table 2. Contextual Factors Survey Average Ratings for ECS Improvement and Sustainability by Participant

QUESTION	IG MEAN	PBC MEAN
Improvement and sustainability	**3.5**	**3.5**
Facilitators	3.7	3.8
Integrated data systems	3.5	3.4
Cross-sector participation and enthusiasm	3.9	3.9
Trainings and networking to support knowledge of CQI	3.3	3.7
Aligned priorities and strategies	3.9	4.2
Barriers	3.3	3.3
Lack of resources	3.9	3.3
Lack of buy-in at community, state, and/or local level	3.1	3.3
Competing goals/and or misaligned priorities	3.4	3.3
Institutional and organizational culture/practices	3.3	3.2

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Figure 1. Contextual Factors Survey Ratings of "Very" or "Extremely Influential" for ECS Improvement and Sustainability by Participant

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Create a Common Agenda/Shared Vision and Strategies

Unsurprisingly, due to the Collective Impact nature of ECCS CoIIN implementation, **Creating a Common Agenda/Shared Vision and Strategies** served as a crucial strategy to further ECS improvement and sustainability by aligning priorities across stakeholders. As evidenced by both Impact Grantee (IG) and Place Based Community (PBC) responses to the Contextual Factors Survey, aligned priorities were rated highly as a "very" or "extremely important" facilitator to ECCS implementation by 71 percent and 88 percent of IGs and PBCs, respectively, speaking to its importance in ECS improvement and sustainability. Within key informant interviews, several states discussed work to align priorities to sustain infrastructure development, such as by supporting and facilitating collaborative decision making. Specifically, Massachusetts discussed creating "letters of agreement" between partners at the local level to facilitate systems sustainability:

> **"We're focusing this last year of the ECCS funding on documenting all of the ways we built infrastructure and are setting up meetings locally to get some more local investment of resources to obtain letter of agreements with partners. While it's a little early to know how that will turn out, we feel a lot of momentum and optimism."**

In addition, five states leaned heavily on the **Collective Impact** approach to guide their work in **Creating a Common Agenda/Shared Vision and Strategies**. For instance, several states focused on the growth and development of the backbone organization, a critical component of the Collective Impact Model, to oversee their infrastructure development. The Kansas IG team elaborated on how creating an advisory council helped lay the groundwork for sustaining ECS activities:

> **"Creating our Early Childhood Advisory Council has really set up the sustainability of the work ECCS has been doing, especially now that there is a new structure. We did not have an [Early Childhood Advisory Council], and now there is an organization serving as our Early Childhood Advisory Council, and there [are] various groups that are working on different early childhood issues – that really wasn't in place at the beginning of ECCS. While it wasn't solely the result of ECCS, I think that the foundation that was laid out during ECCS helped out a lot"**

Develop Shared Data Systems

While data and measurement were referenced as one of the top challenges by ECCS CoIIN participants, work to **Develop Shared Data Systems** served as an important strategy undertaken by all participants to some extent. Indeed, around 40 percent of IGs shared that integrated data systems were an important facilitator in their work to improve and sustain their ECS. Further, all states committed time and resources to either collecting shared data or developing shared data systems in some regard. In key informant interviews, 50 percent of all states discussed their use of data to identify systems issues, share data, conduct mapping, answer systemic questions, and establish a baseline for future assessment.

In relation to data sharing, Indiana, New York, and Massachusetts all discussed how they were able to use data discussions as a means for collaboration. In particular, New York spoke of the value of using data to drive conversations with partners:

> **"The best thing for us was being able to go to folks and say, 'Here's what's we're doing.' Because what I've discovered is there's been a lot of little- and sometimes medium-sized efforts to try to address issues related to early childhood, but to have something that went on for five years with state and federal support made a difference. Again, bringing partners to the table, particularly since we could come to them with results and data."**

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Four states, including Oklahoma, highlighted their success with simplifying, streamlining, or aligning data collection into one system, most commonly the Enterprise system that houses screening data from the Ages & Stages Questionnaires® (ASQ®). Alaska discussed several ways that developing data systems served their project, including beginning to see how data collection and analysis could help align systems:

> **"We have two major entities doing ASQ® screening. We have the hospital here, and then we have our Early Head Start and Head Start programs. Something that we've struggled with in our community is data sharing among those two programs. It's something that we've wanted to do. It's been expressed by both sides. We really see the benefit in being able to communicate our information back and forth."**

In addition, both Alaska and Utah discussed the role of partners in collecting data from the community. Finally, related to using data to address systems improvements, Alaska and Indiana discussed how they linked data to system activities to promote improvements. A few states saw individual advancements within this strategy, with Louisiana using their data to promote initiatives, New Jersey developing shared data measures, Massachusetts connecting their ASQ® data to K-12 public data to better understand school readiness, and Utah using data to assess the impact of their interventions and programming, discussed below:

> **"We're doing a deep dive with one of the screening agencies right now to look at repeat screens and screens over time to see whether children improved or not. We're able to capture some of the data – when [a] family's been served by Help Me Grow, they could keep good track of [whether] the family's been connected to services or not. Ultimately that's exactly what we want to get at – how many children improved over time? Or didn't improve? And then – did they arrive at kindergarten ready to learn or not? And then – how to go from there?"**

Promote Aligned and Mutually Reinforcing Activities

Promoting Aligned and Mutually Reinforcing Activities is a core component of the **Collective Impact** approach in which any one entity can accomplish more together than they could alone. Indeed, responses to the Contextual Factors Survey showed that nearly all IGs (82 percent) and most PBCs (67 percent) rated cross-sector coordination and participation as a "very" or "extremely important" facilitator to support ECS improvement and sustainability. This collaborative approach was evident in the commonality of the strategies discussed by states in key informant interviews and was central to the work and structure of PBC ECCS implementation. For example, all ECCS CoIIN states (except for Oklahoma) mentioned their focus on coordinating and collaborating around a shared goal or vision. Louisiana emphasized the role of their PBC in building that collaboration and promoting the growth of alignment across sectors:

> **"We did not have LAUNCH in our Place-Based Community, but we did have a strong Lead Agency, which is a local early childhood management and governance under the Department of Education. We had the connection with the education piece, and used that to then fan out into the health care and the social determinants of health (SDOH) piece and community and family engagement. We built it from an existing piece, but then grew it into so much more. That is the core. We wouldn't have been able to move any kind of needles if we didn't have a good, true partnership connection with everyone [across the PBC]."**

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Five other states expanded on their collaborative efforts across sectors by working to build a network of stakeholders who would be able to respond to opportunities, often finding success with the leveraging of new funds, including both private and public funding sources. Hawaii shared how they were able to leverage their partnerships to apply for the Preschool Development Grant (PDG) in 2019:

> **"We were fortunate that through our partnership development and really trying to dig deeper in those relationships, we were able to look for other resources and to apply for grants together. One of them was the Preschool Development Grant in 2019, which most states got at least that first initial chunk of monies for that. Because of the work that we'd already been doing with Maui (PBC) and the ECCS Impact Grant looking at child development and some of the trauma-informed care pieces, those are things that Department of Health was already working on, so we could add that too. We were a value-added partner. We didn't have enough resources to share with them, but luckily the resources came to us. And we were actually able to scoop some of those resources."**

Five states characterized their ability to increase alignment across systems, including early childhood, health, and education systems. Utah discussed this strength of collaboration when one PBC lead noted that their participation brought them out of their education silo to meet regularly with health and human services stakeholders:

> **"I'm largely in the education space. I talk to the state board and school districts – those are mostly who I talk to. [The ECCS CoIIN] group was so great because I get the opportunity to work with a lot of the people in health and human services…There's just this divide – we're about something over here and we're talking about something over here. So, the more we talk – the more of us talk – I think the more we can build a solid base to keep us all on the same page."**

Three states discussed increased alignment between state and local governments, and three other states noted their increased partnerships with non-traditional ECS partners. As states worked on mutually reinforcing activities, four states found success by communicating common messages and bringing more unified perspectives to their approaches. Inherent in this work was an effort states to build trust as a facilitator for creating alignment. In order to focus on partnership, build trust, and be more inclusive and representative of the populations they served, seven states worked to coordinate and collaborate to integrate families, equity, and social determinants of health into their activities. Hawaii discussed this level of coordination when they shared their desire to consider social determinants of health from the beginning of their grant cycle with a goal of aligning their work with their Department of Human Services, as well as with other partners supporting families:

> **"What we recognized way back in the beginning was that we actually wanted to address social determinants of health, mostly because our Department of Human Services is working on a multi-generation model…so it would be a nice partnership. We wanted to do a survey to parents asking about if their needs are being met. But before doing the survey to parents, we thought, 'Oh, we should check in with our partners to make sure that they know where to go.' So, if a parent needs something like transportation or food, they know where to go to get resources for their families. We didn't want to catch them off guard by telling families, 'Oh, you can talk to your provider,' without them realizing where to go for resources."**

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Support Continuous Learning and Improvement Efforts

Though several states did focus explicitly on **Supporting Continuous Learning and Improvement Efforts**, within key informant interviews, the discussions on this strategy were much less robust compared to other strategies related to ECS improvement and sustainability. For instance, within the Contextual Factors Survey, a little more than half of PBCs (63 percent) rated trainings and networking to support CQI efforts as a "very" or "extremely important" facilitator for ECS improvement and sustainability, while only 41 percent of IGs reported the same. In key informant interviews, only seven states discussed anything specifically related to CQI. Alaska, Delaware, and Oklahoma all invested in developing CQI for process improvement. New Jersey mentioned their gains with increasing their capacity to conduct CQI as well as an increased culture of CQI among the stakeholders – an adoption they will sustain particularly because it supports their ability to experiment and innovate:

> **"I found the CQI focus extremely beneficial and it's something we are going to continue to focus on. It allows the opportunity for a lot of experimentation and innovation. Completing Plan-Do-Study-Act (PDSA) cycles provided us with the evidence we needed to see if our efforts were successful. And, if our efforts were not successful, we were able to quickly change course."**

Kansas highlighted how using CQI provided the ability to compare and define across strategies:

> **"I think that was a really successful piece of the Continuous Quality Improvement PDSA cycle work that we were doing at the beginning. Because everybody was able to speak the same language in terms of the partners utilizing the data. Now with the enhancements from the actual system, partners are able to see their own data and pull reports for that Continuous Quality Improvement work. That will be a really wonderful sustainability portion going forward."**

Further, six states discussed how the culture of CQI benefited their ECS improvement and sustainability actions. For example, three spoke positively about the use of the PDSA cycles, and Louisiana noted how the CQI process helped to identify when to stop a program that was not working. Moreover, three states specifically found value in CQI due to the emphasis on continuous learning, and three other states noted how CQI was beneficial in improving or innovating programming, here described by Delaware in their approach to developing new programs and activities:

> **"For me, it was a learning experience. Now, when I'm thinking about a pilot, I know why I'm doing a pilot – because I want to test it out first. The ideal test and activity has become inherent in our thinking. When we think about something, we want to test it out, see how it works, figure it out, and then tweak it. It has built capacity in that area, and I can imagine that will be the case moving forward."**

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Family Leadership

Within the strategy of **Family Leadership**, analysis from key informant interviews revealed several commonalities on how states approached this strategy in service of ECS improvement and sustainability, though only seven states explicitly implemented strategies to support **Family Leadership**. In general, states tended to share the success of ECS work to support **Family Leadership** in systems building and the integration of family leadership/engagement approaches in their ECCS implementations. Four states shared how their ECS investments resulted in the elevation of family voices within ECS decision-making processes. Massachusetts further mentioned how they were able to develop family leaders within their communities with a **Family Leadership** council:

> **"We're learning a lot from the Family Leadership work that's been happening in the communities and the work that Springfield PBC has been leading with their parent leaders and their Family Leadership Council."**

New Jersey and Louisiana also worked to train parents for leadership, and New Jersey highlighted how they integrated parent leaders into their ECCS work:

> **"Our parent leadership piece, although there have been some challenges in some of the counties, is key to our work. We have the state parent lead, and then we work down to the parent leaders. It's always a piece of making sure that we are incorporating them into the work – that's just a huge success in New Jersey."**

Some of the strategies that ultimately supported **Family Leadership** development started with steps to increase family engagement in systems activities. This strategy was discussed in several ways. For instance, three states broadened their ECCS focus to include improving family engagement, and three other states conducted family engagement and outreach activities. A New Jersey family engagement leader discussed their state's efforts to incorporate family partners in decision making and systems building:

> **"I think that the leadership both at the state and even the PBC side has that passion to engage parent leaders, and they trust us. They try to build that relationship with us and not just bringing me as a state parent lead, but they make every effort to support and engage with each and every parent leader that we have. So, sometimes they would say, can you touch base and share this information, sometimes they would directly interact with [us] and say, here's an opportunity, or here's a resource. Flexibility and trust in the relationship is key. So, we know from whoever is sharing whatever information that it's with the intention that we're all here together in this and family leaders are a part of that team."**

Concentrating more on leadership, Florida and Massachusetts saw **Family Leadership** activities as an opportunity to increase equity, including providing payment to families for their leadership activities. Massachusetts also mentioned how emphasis on **Family Leadership** supported the improvement of agency partnerships. Finally, Louisiana and New Jersey talked about the role of families in designing the system and contributing to decision making. For example, Louisiana discussed plans to embed **Family Leadership** and engagement into their work in the future:

> **"Our goal for the next five years, as far as Title V, is to embed family engagement, or family partnership and Family Leadership, into every Bureau of Family Health (BFH) program. We're really taking it apart and starting from ground zero as to how we can have families build programs that are meaningful to them with us, rather us coming to them and saying, 'What do you think about this program we developed? Give us your feedback.' So having that family engagement or family partnership from the get-go."**

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EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

Build Public Will

While **Building Public Will** was discussed by seven states in key informant interviews, it was not discussed in as much detail compared to the other strategies to support ECS improvement and sustainability. Related to the earlier discussion about **Family Leadership**, seven states focused on families as a conduit for building public will as well as a key component supporting ECCS implementation. This approach was achieved by hosting activities and events for families that built awareness and increased demand for developmental programming. Oklahoma exemplified this by discussing how families valued the resources they provided:

> **"We send out these resource bundles, and though all of these people are receiving this community resource… Often, especially in a community as small as ours, when you send out all of these materials, you tend to sometimes see them in the trash, or laying around in the community; I don't ever see them there. It tells me that these are making it to the home, to the people – they find them valuable, they're keeping them, and hopefully they're using them. Again, it's just a measure of success based on all this work that we're doing."**

Moreover, states discussed both relationship building and educating families as important means to **Building Public Will**. For instance, three states noted the importance in beginning relationships with families starting at birth. Delaware spoke about how implementing universal programs for young children offers an opportunity to increase their reach:

> **"I think one thing that we're finding now, with some of the birthday celebrations and when we followed up with families, they're like, 'Well, we just never had anything for one- and two-year-olds before.' There really haven't been these programs unless you're a child [who] has been diagnosed with a disability. They're just not out there for these families. With 51 percent of the kids in Delaware not being in any type of childcare setting – and now that number, I'm sure, is way higher than that – families don't even realize that they have access to it, if they don't have a child [who] has already a disability."**

In addition, six states focused on the education of families and providers. Some states did more public relations work to build will, including four states who developed public health campaigns. Oklahoma specifically mentioned their Best Babies Zone (BBZ) initiative as a successful strategy. And while they did not mention campaigns, four states did generally speak to their use of messaging to generate public will for alignment.

Aligning or Leveraging Existing or New Funding to Support Systems Development

The desire, effort, and ability to **Align or Leverage Existing or New Funding** to support systems development quickly arose as a key strategy to support ECS improvement and sustainability within key informant interviews. Several states repeatedly mentioned the idea that sustainability and funding are inextricably linked. As such, states concentrated some of their work on ways to leverage funding for additional longer-term sustainability solutions. Leveraging different funding streams in pursuit of sustainability and improvement was also a technique used by ECCS CoIIN participants to develop and transform policy implementation. For greater detail on this topic, please refer to the Policy Transformation section.

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States used several strategies to further these efforts, including five states who leveraged and braided different resources and funding streams to accomplish goals for the ECCS CoIIN project. Specifically, eight states were able to leverage success from ECCS CoIIN to acquire more funds, including from Title V, Learn the Signs Act Early, Preschool Development Grant, and more. True to a Collective Impact Model, five states also worked to leverage or link resources across different funding streams to expand programs. Delaware epitomized the **Collective Impact** approach when they linked some of their Title V funds to increase developmental screenings and fund some of their early childhood development promotional efforts:

> **"We've been able to leverage Title V funds for our developmental screening initiatives. It's always been the case, that we do so, but more so this past fiscal year, we were really able to work with Title V and use some of the funds to do promotions. The other thing that we also got was from the Help Me Grow national office, which is a Help Me Grow and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) partnership, more like a community of practice. We had to apply for that and we had about $4,500 given to us to improve the relationship between Help Me Grow and WIC."**

Five states discussed how they coordinated initiative goals with the aim of leveraging their collective work, ultimately building and sustaining their system infrastructure. Related to this point, Indiana discussed how doing so led to their contribution to a report published for Medicaid's Child Health Insurance Program (MCHIP):

> **"Indiana participated with MCHIP in the early childhood coordination technical assistance meeting, tying ECCS, Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Innovations, and Title V work together. Indiana is one of the states that contributed to that. We're very proud of that."**

CHALLENGES FOR ECS IMPROVEMENT AND SUSTAINABILITY

While there was commonality in strategies that ECCS CoIIN participants took to support ECS improvement and sustainability, the challenges related to implementing these strategies were more specific to each state context. In addition, challenges were more acutely experienced at the IG level compared to the PBC level, as evidenced both in responses to the Contextual Factors Survey (Appendix D) as well as discussed during key informant interviews. Nonetheless, most participants shared challenges from within the domain of **Collective Impact**:

- **Create a Common Agenda/Shared Vision and Strategies**
- **Promote Aligned and Mutually Reinforcing Activities**
- **Develop Shared Data Systems**

As discussed earlier, not all ECCS CoIIN participants utilized the strategies of:

- **Support Continuous Learning and Improvement Efforts**
- **Aligning or Leveraging Existing or New Funding to Support Systems Development**
- **Build Public Will**

Therefore, these areas were not as frequently discussed as barriers. Accordingly, the following section discusses both barriers and challenges in the strategies that participants took to improve and sustain their ECS.

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Create a Common Agenda/Shared Vision and Strategies

Despite its centrality to ECCS activities, states did note several challenges related to **Creating a Common Agenda/Shared Vision and Strategies**. For instance, five states discussed challenges with developing and maintaining a shared vision and strategy throughout the course of the ECCS CoIIN project. Alaska and Indiana explicitly stated that ECCS implementation may have been easier had they developed a strategic plan from the start to guide their work:

> **"I had hoped that we would be farther along with a statewide plan for early childhood in the fifth year [of the ECCS program], and we're not, but I'm hoping. We're turning the corner right now and getting some momentum on that. COVID-19 did not help, from a public health or health or education side – that's taken a lot of resources this year. But I hoped we would have been a little farther along with our statewide plan in using the lessons learned here. It's going to be a few years slower than I thought, but I think we're starting to head in the right direction."**

In addition, Utah noted the difficulty of keeping their original goals and objectives the same as the ECCS project unfolded, due to factors such as a change in state-level leadership and a resulting shift of priorities. Indiana discussed the tension of simultaneously trying to build a shared understanding and implement activities. Further, Indiana shared difficulties in building trust and collaboration to support the development of a common vision and the challenges in alignment across partners due to competing interests. Similarly, Alaska mentioned several challenges within this strategy, including trouble with the integration of a plan across different systems (i.e., health, early care and education). Finally, both Alaska and Delaware spoke of their challenges prioritizing grant time to focus on a creation of a plan.

Develop Shared Data Systems

Compared to some of the more nuanced and specific challenges discussed by states in key informant interviews across other domains and strategies, there were more commonalities in the challenges shared around **Developing Shared Data Systems**. For example, five states brought up struggles with data sharing among partners, with Kansas specifically noting sustainability challenges associated with a partner who had a monopoly on the data system they were working to implement:

> **"It's a bit of a challenge that Brookes has a monopoly [on the ASQ® Enterprise tool]. They're good partners on one hand, and then on the other hand, we get nickeled-and-dimed a lot. We were able to get a good deal on the state system, but then everybody has to buy a kit for $300. We're working through it. It's not a roadblock, but definitely not a great success of the work."**

Collaborating with partners on data collection presented other barriers. Four states shared their challenges with getting data collection and/or data sharing agreements in place. Under the umbrella of creating shared data plans, three states brought up difficulties with selecting shared measures for data collection, while Massachusetts struggled with knowing what to measure. Hawaii found data governance and the question of who owns data to be an obstacle:

> **"Part of that also comes with a data governance. Data has been one of the areas that has been the most challenging. The most [data] that we can get is from our Medicaid population, which services about 40 percent of the children. That's still a good 60 percent of children that we just don't know what's happening. Originally, the state had these grand plans for having a statewide data system for our programs, but as all great plans happen, unless you have somebody able to chip away at it, it's really hard to do. We were hoping that the ECCS project would lead us toward that end."**

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Alaska indicated some hesitancy with having the state mandate data collection from partners, which was a point raised by both Massachusetts and Utah. In addition, Alaska elaborated on this hesitancy by sharing that data collection required some additional steps from the partners to accomplish. Finally, Florida noted their challenges with obtaining data from their partners. Several states discussed challenges specifically related to implementation of infrastructure to support shared data systems. For example, five states shared challenges with streamlining and integrating differing existing data systems, as described by one of Alaska's PBCs in relation to collecting screening data from ASQ®.

"We only have two medical homes here in Kodiak. Kodiak Community Health Center does do developmental screenings. They were excited in the beginning regarding the developmental stipend, but when they learned that ASQ® online and their Electronic Health Records (EHR) couldn't interface, that really turned them off. That's been a struggle. What we're reporting for our screenings from our two partners looks great, but for the community as a whole, it doesn't look that great because we have this whole other medical organization that does these screenings and we're not able to get those numbers."

Seven states shared challenges with developing universal data collection strategies and systems, including issues with implementation of strategies a well as an infrastructure to collect data. Relatedly, four states discussed challenges with coordinating data collection among partners. Moreover, three states elaborated on the challenges of how time consuming it was to develop relationships for data collection and to coordinate data collection strategies. Massachusetts shared time and facilitating data sharing as part of their struggles in building an integrated data system:

"I think the data work has really been the biggest challenge. Both in terms of the metrics for the CoIIN, but also in building an early childhood data system. We had several false starts in terms of working within the Department of Public Health (DPH). I think we've been able to be agile, and if the door closed, we have another door. And the PDG certainly has taken us on... added whole different level. But I think it's been challenging and frustrating and requires a lot of patience. And we were grateful that we had four years, because if it was a shorter grant, we would not have been able to power through and get the data sharing agreements done and start on the status sharing."

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Promote Aligned and Mutually Reinforcing Activities

About half of all states raised challenges in key informant interviews related to the strategy of **Promoting Aligned and Mutually Reinforcing Activities** (for more details on partnership building, please refer to the Partnership Development section). However, the specific partnership building challenges tended to be specific to each state context. Many of the challenges discussed by states related to getting partners to align their goals and activities when their interests were not originally aligned or appreciating the utility of aligned messaging. For example, New Jersey spoke about competition between partners and how that was a barrier to collaboration, with investment needing to be made to get past the inherent conflict:

> **"In our county we have different people working on developmental screening. I think there's some confusion by some people, especially the ground-level people trying to figure out the role, the scope, and how it all fits together. We just had a call the other day, and somebody asked another person [if they] could share their contact person and they were like, 'Well, if it's not going to compete with what we're doing.' They literally said that. But that can be addressed by additional training and information, helping people see how all the pieces fit together. It's not just with screening – that's with home visiting and all different things. There [are] always people that feel like we're competing, but just kind of getting past that in terms of screening and serving children, in terms of developmental health promotion – just trying to figure how everybody can work together and benefit the greatest number of families."**

In a similar regard, both Florida and New Jersey discussed their difficulties with gaining trust among partners and the time constraints of grant funding that challenged relationship building. Three states struggled with figuring out how to get partners to work together, and two states expressed frustration with trying to coordinate alignment among partners while simultaneously creating the vision for statewide ECCS implementation. Delaware elaborated on the challenges of coordinating alignment across partners:

> **"When we first started this work, there were so many silos. It was definitely a barrier and a challenge trying to get people out of their mindset of, 'This is what I do,' and to try to see the larger picture. It was really helpful, even in the beginning, when we did some of the swim lanes. [We] really took that landscape and – even throughout this process – it's like, 'Okay, we got new swim lanes.'"**

Support Continuous Learning and Improvement Efforts

While several states discussed CQI as a key strategy to support ECS improvement and sustainability, only Massachusetts, Alaska, and Hawaii described challenges with this strategy and difficulty in developing CQI processes. Alaska noted the inherent barrier of how small numbers made it hard to understand or improve anything measurably, and related, found it difficult to develop indicators that were useful in measuring the process:

> **"One of the things we struggled with is really getting a good CQI process going on, once that was no longer mandatory. Because of our small numbers, that had always been a little bit of a tricky process, but I think that that's not necessarily collecting the data that's most impactful. Everyone's been very interested in CQI and we talk about it, but really building the momentum with the types of data that we're collecting has been hard to find."**

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Massachusetts raised some questions about who was responsible for CQI, as well as the feeling among some that the data collection was an imposition and took away from other aspects of ECCS implementation:

> **"Using PDSAs might have been more effective if it was introduced after that first year and a half, when we're all kind of getting settled finding our direction, finding our partners. Because it was a little confusing, and because there's so much focus on CQI and PDSAs, I felt like a number of partners disengaged a bit, because they didn't quite see the connection. There's so much focus being put on measurement and CQI, and not the relationship building and not creating the shared vision. So, it felt [like] the cart before the horse."**

Hawaii appreciated the structure CQI provided but found it challenging to apply within the early childhood setting:

> **"I never thought the CoIIN model was going to work for screening, which is why we weren't going to apply for this grant. But we needed the money, so we had to apply, right? I mean, you can do a CoIIN model in a hospital setting, where if you just put a hand sanitizer, of course you're going to reduce the number of infections and all of those pieces. You can do it for safe sleep, where if you just distribute all these materials – you're going to get that information and hopefully reduce the number of deaths, right? But for screening, which is a little bit more personal – where you're really tapping into family values and kind of bridging that narrow pathway between child development and saying, 'We know what's best for your child,' versus really listening to the families – I think that's going to be one of the pieces."**

Family Leadership

In key informant interviews, only four states discussed barriers they experienced under **Family Leadership**, with several directly related to the COVID-19 pandemic. Alaska and Florida provided examples where they struggled to measure family engagement activities. For Alaska, that struggle translated to difficulty determining if family engagement activities were meeting family needs. Florida found challenges in the amount of time it took to meaningfully engage families, noting the need to develop trust, and that families not trusting their providers inhibits relationship building:

> **"Engagement with new parents – and still, parents are really hesitant because of COVID-19 – to come out and participate in things that we're trying to still do. The engagement for me, it's one of the most challenging parts right now. Even though we have built that trust, I think it's the overall commitment to say, 'You know what? We truly are in this together.' I think that because of COVID-19, people are concerned about their outcomes, which is a valid concern. Those are the areas that I wish could be different right now."**

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Additionally, Florida, along with Delaware, noted the difficulty in finding funds to pay parents for their leadership as well as the constraints around ECCS funding to do so:

> **"Although we've had some successes, [family engagement] has been challenging. First of all – and I need to say this in anything we say, because it's been a challenge since the beginning and I know that the Delaware IG Lead has voiced it in the past – is the fact that we can't use ECCS funding for food or childcare, which is a major barrier for those who work in parent engagement. Thank God we can braid other funding to be able to accomplish those things, from other partners that work along with us. But it has been a large challenge to be able to take away all the barriers so that parents can be there and can participate."**

Furthermore, several states noted barriers related to participation in **Family Leadership** activities such as time, transportation, and funding.

Build Public Will and Aligning or Leveraging Existing or New Funding to Support Systems Development

Challenges related to both the strategies of **Building Public Will** and **Aligning or Leveraging Existing or New Funding to Support Systems Development** were minimally discussed in key informant interviews with IGs and PBCs. Related to **Building Public Will**, Delaware found implementation of this type of work difficult without funds to directly support it, and even mentioned a need to incentivize participation of partners with activities:

> **"I think that [getting buy-in] should be in the federal landscape and should be working at the federal level with the federal overarching umbrella to say, 'We're getting ready to go in your state with this initiative. We need you to be on board, to support it as a partner at the table,' and push that agenda down, versus us, from the bottom, trying to with some of our local providers. My local provider in southern Delaware, if that organization doesn't want to do it, [it's] because there's no money attached. They're not doing it just because they want to be a good partner."**

Moreover, Utah discussed challenges with creating messaging that resonated universally:

> **"In every space in early childhood, there's a very technical language when we talk about ASQ®, we talk about all these things. We use a bazillion acronyms and those don't play out [for] a parent, right? They're just like, 'Why are you so worried about this technical thing? How does that impact me as a parent? How does that impact my kid?' We've talked about that in our South Salt Lake group over the past couple of months, and we still haven't figured out that. Something we're working on is, 'How do we talk about this in a way that resonates with everybody?'"**

Related to **Aligning or Leveraging Existing or New Funding to Support Systems Development**, Oklahoma acknowledged the challenges of leveraging more funding in the absence of partnership, speaking to the unique nature of their ECCS implementation being a community-based organization as opposed to a state-based entity.

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SUSTAINED OUTCOMES

The strategies ECCS CoIIN participants took to develop, improve, and strengthen their ECS led to several successful outcomes that spanned multiple areas of the ECCS CoIIN Logic Model. Specifically, outcomes participants discussed sustaining past their ECCS implementation were categorized into three areas:

1. **Community and State Infrastructure**
2. **Service Integration (including centralized access systems, care coordination, service linkage and referral)**
3. **Data Systems**

From bimonthly reports (refer to Background and Methods for methodology), most participants shared improvements sustained within the domain of community and state infrastructure (75 percent of states, n=9) as well as service integration (67 percent of states, n=8). While less than half (42 percent of states, n=5) of participants shared outcomes being sustained related to data systems, outcomes sustained were particularly impactful in relation to strengthening ECS. The following section discusses these outcomes in greater detail, including examples from participants related to innovations and other positive results they planned to sustain. In addition, many participants shared sustaining outcomes related to developmental promotion and screening throughout their key informant interviews. For greater detail, refer to the Strengthening Developmental Promotion, Early Screening, and Service Connections section.

COMMUNITY AND STATE INFRASTRUCTURE

In bimonthly report submissions, most of the improvements that ECCS CoIIN participants aimed to sustain within the realm of community and state infrastructure were classified in the Logic Model Core Domain of **Collective Impact**. Specifically, the most reported improvements were in the goal areas of **Creating a Common Agenda/Shared Vision and Strategies** and **Provide Backbone Support and Mechanisms for Continuous Communication between State and Community**. Within **Creating a Common Agenda/Shared Vision and Strategies** participants shared in their bimonthly reports work to create committees, coalitions, and advisory groups to support early developmental health as a direct result of ECCS activities. Moreover, ECCS CoIIN participants also discussed embedding ECCS principles and visioning within their strategic planning. In key informant interviews, half (n=6) of all states highlighted positive outcomes resulting from the ability to embed ECCS activities into strategic planning. Florida and Hawaii attributed positive opportunities from creating a mission and vision for ECCS work, described by Florida:

> **"They gave me breath, they breathe into what we had, and we're trying to establish. Now, people have – even if it's a small lens – but they do have a lens on important issues and concerns. We all should be sitting around knowing that the common denominator for us is the children, our partners, our parents, and this collaboration – even on a state level. I'm grateful to be a part of something that has really made sense to me in so many ways but actually [has] done a lot of work. Still, there's much to do, but seeing how we've been able to evolve around ECCS and the mission and the vision… I'm in a winner's circle when it comes to Florida, relishing in what we've been able to do through this project has been so rewarding to me because we've really touched some people."**

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Kansas found value in having a state strategic plan to govern their work and highlighted their achievement of goals articulated in the plan, including the development and implementation of a statewide data system (ASQ® Enterprise system, discussed further in Data Systems). Another success both Massachusetts and New Jersey found from having shared vision around **Family Leadership** was their ability to increase investment to directly support family participation. Both states shared how they aimed to sustain investments for **Family Leadership**, particularly as they worked to build equitable systems. Moreover, Massachusetts attributed their focus on alignment in part to the transformation of more equitable systems and an expansion to represent prenatal through five-year-olds in their systems development—a characterization they felt best encapsulated their early childhood system. To achieve that vision, Massachusetts articulated and pursued four primary strategies for the state, including **Family Leadership**:

> **"One [strategy is] to promote alignment and coordination of state early childhood and multi-generation initiatives. That happens through our Preschool Development Grant, Title V, the Centers for Disease Control- (CDC-) funded grant called Essentials for Childhood, and collaboration with our National Institute of Child Health and Human Development (NIHCD) grant in Massachusetts. Secondly, to develop an infrastructure to connect our community of state early childhood systems improvement activities to share resources, skill innovations, and align measurement strategies. And thirdly, we've been spending a lot of attention and focus on this particular strategy – to elevate diverse family voices and sustainable platforms for family leaders [who] inform our early childhood and family health services and supports. And then to support the sustainable Collective Impact initiatives in our partnering communities, [like] in Chelsea in Springfield."**

Related to **Providing Backbone Support and Mechanisms for Continuous Communication between State and Community**, states shared several outcomes they planned to sustain, including supporting relationship building at the local level, providing physical and financial support to communities in service of systems-level goals, and actively including community members in state-level decision making. Within key informant interviews, three states shared an example that combined both providing backbone support as well as creating a shared vision by instituting a committed person/ambassador/advocate in each of their initiatives to promote collaborative work. Louisiana exemplified this outcome through their institution of a health systems strategy manager to examine and coordinate partnerships:

> **"It occurred to leadership that we really needed a designated policy person [who] was focused on early childhood policy. We had already started a position a few years prior that was overall health systems strategy manager. In 2019, we implemented a full-time position for an early childhood health systems strategy manager, and she was designated as the new lead of this council, which really brought it to a whole new level. We had someone totally focused on building those foundational partnerships and relationships with key early childhood stakeholders. We've done a lot of work there."**

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Related to financial supports, three states discussed how the alignment supported their sustainability goals. Indiana, for example, mentioned how their alignment evolved into a commitment they will weave into all grant applications and funding requests moving forward to promote sustainability of community-level activities:

> **"With [our public health department] having a section really devoted on this infrastructure building, those types of pieces, capacity building, us putting it into our Title V action plan, that's a really tying the strings along. Certainly, MIECHV had to do a needs assessment this year, just like we had to do for Title V. So, making sure that there's a common thread, no matter of what we do. We have a commitment as a team, that no matter what new grant application or opportunity becomes available, we're going to always include a common thread in there to really keep and sustain what we're trying to do."**

In addition, Indiana, along with Hawaii, found the alignment to be helpful in securing increased funding for ECCS implementation.

SERVICE INTEGRATION

Within bimonthly reports, improvements that ECCS CoIIN participants planned to sustain related to service integration were categorized among all Core Domains of the Logic Model, with most split between **Systems Development and Improvement** and **High Quality, Coordinated Developmental Services**. Related to **Systems Development and Improvement**, the work that participants planned to sustain was categorized in the corresponding goal area of **Developing and Maintaining Partnerships and Networks**. Participants shared their plans to focus on sustaining and strengthening community partnerships as the main strategy to spread and sustain work. In key informant interviews, six states highlighted how deeper relationships with partners supported the pursuit of common activities. Alaska, for example, talked about decision making between partners that might not have been possible without the groundwork laid from developing deeper relationships through participation in ECCS CoIIN. They further expanded on how some of their early childhood coalition building strategies will live beyond this project, supporting their efforts to replicate the success found in their PBCs:

> **"There are some big picture decisions that are being talked about that will really help with some of these [efforts]. I don't think those would have been possible without some of this groundwork – really thinking about early childhood systems governance at a statewide level. I don't even know if we'd be talking about what community/state integration should look like in a reframing without some of the work and relationships that have been built in this project."**

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This alignment also supported four states in scaling successful initiatives, either across communities or even across the state. Related to the core domain of **High Quality, Coordinated Developmental Services**, participants shared many sustained improvements in the goal area of **Build Care Coordination Capacity** in bimonthly reports. Specifically, participants shared plans to continue work related to screening, such as building or enhancing online platforms to help facilitate effective service referrals, continuing to track and share developmental screening results, and providing developmental health resources to families. Delaware elaborated on this coordination with their Department of Education:

> **"We've really found out that families that had access to screening [were] in certain pockets. We were able to get a portal that any family could have access to. With all of the work being done at the state, we were able to really show some of the districts and Department of Education and had all of these people to get on board with, 'Why are you doing this? This doesn't make sense.' It's, 'Yes, it doesn't make sense that we're doing this. We're not the state agency that should be doing this, but it's not right that all families don't have access to this.' So, through that work, now there is an ASQ® portal at the Department of Education that is our one central piece, and we continue to have conversations... on what those next steps are."**

In key informant interviews, states such as Hawaii and Delaware remarked on how their sustainability planning allowed for greater flexibility and adaptation to provide for families during the COVID-19 pandemic.

Another area related to **Building Care Coordination Capacity** shared by ECCS CoIIN participants was supporting the early childhood workforce by either creating new positions to support early childhood goals or by a commitment to providing training, resources, and supports to employees. In key informant interviews, five states shared concerted efforts to coordinate early childhood activities by creating additional workforce positions or, in some cases, reorganizing departments to better support early childhood goals, as described by Indiana in relation to sustainability in systems building:

> **"Through these efforts and work, we are restructuring some things in our Maternal and Child Health Division to really support that sustainability, to leverage us to understand that this is systems building work. This is not just to what Indiana IG said, top down. We're not a bank account, how are we building systems in order for everyone to benefit right on all levels."**

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DATA SYSTEMS

In bimonthly reports, of the five states that shared sustaining improvements in **Develop Shared Data Systems**, work was referenced within the following goal areas:

- **Develop Strategies to Coordinate Existing Data Collection Systems**
- **Establish Long-Term Governance, and/or Build Infrastructure for New Shared Data Systems**
- **Identify Research and Data Questions to Assess Gaps in Data Collection, Analysis, and Management Infrastructure**

Related to **Developing Strategies to Coordinate Existing Data Collection Systems** and **Establish Long-Term Governance, and/or Build Infrastructure for New Shared Data Systems**, several states shared important outcomes in key informant interviews. Most notably, three states highlighted the improved access to programs or to the ability of families to navigate through the system as a result of the state's effort to streamline data. Utah, who noted success in securing funds to integrate data, integrated early childhood data into their Early Childhood Integrated Data System (ECIDS) to better track impact and school readiness. Similarly, Massachusetts discussed work building their ECIDS with ASQ® data to gain a better snapshot of a child's development before entering kindergarten.

Related to **Identifying Research and Data Questions to Assess Gaps in Data Collection, Analysis, and Management Infrastructure**, in bimonthly reports, several states shared related innovative methods they planned to sustain. These included having parents, community members, and other stakeholders lead the agenda for research question design and data collection strategies, as well as regularly reporting and reviewing data to directly inform the direction of their work. Delaware shared how having a centralized system for their screening data allowed them to regularly review screening data to inform programmatic activities:

> **"The ECCS work has really shed a light on this, and I think it's almost renewed our passion to say, 'Wait, we really need this system to work better.' With now having one data system for ASQ®, we can actually say, 'If I look in Wilmington, what are the biggest needs, what are the biggest developmental needs and which areas do we need to improve on?' We actually have that now, which has never been done before. Then, taking systems, we've been working on a Kindergarten Academy Model with the Office of Early Learnings Department of Education – we have taken that and we're scaling it down. It's this first transition piece for families that they can have to say, 'Oh, this is what the expectation is for kindergarten,' because we've done the research before."**

In addition, within key informant interviews, several states shared how data collection helped to identify gaps in ECCS implementation and inform the direction of activities – something they planned to sustain. For example, both Kansas and Louisiana mentioned how data collection supported the state to better target access to programming for families that addressed their specific needs. Louisiana described the process of how data collection informed their work with families:

> **"In family engagement, instead of building blindly, they were able to ask families, through parent card surveys and activity evaluations, what parents really wanted from their community leaders, whether it be training, how to access resources, information on child development, or services around navigating school system programs. We also used our parent card surveys to identify our parent advocates through our family-focused events and conversations. It was able to identify those people in the community [who] may be interested in working alongside and with the ECCS work."**

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Blue = Goal Area
Purple = Activity

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY

RECOMMENDATIONS AND CONCLUSIONS

ECS improvement and sustainability was at the heart of ECCS activities. In key informant interviews, it was ranked by ECCS CoIIN participants as the area yielding both the most successes as well as challenges as part of ECCS implementation. All ECCS CoIIN participants shared progress within ECS improvement and sustainability and often referred to the other areas of the ECCS evaluation (State and Local Connections, Strengthening Developmental Promotion, Early Screening, and Service Connections, Policy Transformation, and Partnership Development) as facilitators to ultimately improve, strengthen, and sustain their ECS. In key informant interviews, the strategies that participants took in service of improving and sustaining their ECS crosscut the Logic Model and primarily focused on **Collective Impact** methods such as:

- **Create a Common Agenda/Shared Vision and Strategies**
- **Promote Aligned and Mutually Reinforcing Activities**
- **Develop Shared Data Systems**
- **Aligning/Leveraging New or Existing Funding Sources in Service of Sustainability**

While not mentioned by as many participants, several other strategies were discussed as key in improving and sustaining systems, including supporting Continuous Quality Improvement, **Building Public Will**, and developing **Family Leadership**. Of the states that did discuss these strategies, they were referenced as central to the systems work undergone by those participants and often were combined with other strategies, such as **Creating a Common Agenda Across Stakeholders** or **Promoting Aligned and Mutually Reinforcing Activities**.

While challenges in ECS improvement and sustainability tended to vary both from state to state as well as between state and community, IGs rated challenges more impactful to their ECCS implementation compared to PBCs. Moreover, challenges tended to focus on **Collective Impact** methods (i.e., **Creating a Common Agenda**, **Developing Shared Data Systems**, **Promoting Aligned and Mutually Reinforcing Activities**) and often focused on issues around collaboration and coordination across stakeholders. Approaches to improve, develop, and strengthen ECS led to several successful outcomes across participants that were generally categorized in three domains: community and state infrastructure, service integration (including centralized access systems, care coordination, service linkage and referral), and data systems. Most successful outcomes being sustained were related to community and state infrastructure (reported by 75 percent of states) and service integration (reported by 67 percent of states). While data systems outcomes were reported by less than half of states (42 percent), those that did report successful outcomes in this area noted that they were particularly impactful in strengthening their systems. While participants made substantial progress in developing, improving, and sustaining their ECS, the strategies described earlier in this report including building State and Local Connections and Partnership Development along with other intangible resources such as time to develop networks and relationships as foundational to success in ECS improvement and sustainability. Future work to develop, improve, and strengthen ECS should consider placing more emphasis on supporting intermediary activities and processes.

Colored bolded text refers to the Logic Model.
Green = Core Domain
Blue = Goal Area
Purple = Activity

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY: MEASUREMENT

ECCS CoIIN

NICHQ
National Institute for Children's Health Quality

MEASUREMENT: LESSONS LEARNED

Measurement is a key component of cataloging success and improvement within systems change initiatives. However, quantifying and measuring systems-level change was an area that Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) participants found particularly challenging. Of the areas of Early Childhood Comprehensive Systems (ECCS) implementation discussed in key informant interviews, measurement was brought up as the second most common challenge (the first being Early Childhood System (ECS) improvement and sustainability). These discussions of measurement challenges referred to global measurements of systems success as well as those measures that guided state and community ECCS CoIIN implementation. Next, conditions the ECCS CoIIN participants identified as supporting measurement and the data sources they found useful are described. This section concludes with recommendations to support measurement work in service of improving early childhood systems.

Global Measurement Challenges

Most of the overall systems building measurement challenges discussed by ECCS CoIIN participants were generally associated with data infrastructure, particularly around the coordination and collection of data. For instance, about one-third of all measurement-related challenges shared by participants in key informant interviews were directly connected to database creation and data infrastructure. New York discussed how lacking a centralized data system made it challenging to collect certain kinds of information:

> **“One of the parts where we never really got off the ground as much was [in] family service and family reports. That’s harder because that entailed a certain number of data collection infrastructure that we had a hard time keeping up with because we had talked about surveys. We talked about iPhones and iPads, and that just never really got off the ground. I just want to point out that’s a challenge.”**

Participants also had difficulty accessing data sources to use for program improvement and reporting. Data governance was often challenging, as many participants needed to coordinate with partners to access data. Further, related to the place-based structure of ECCS, about one-third of state level teams voiced challenges with accessing community-level data. Kansas described this tension:

> **“One of the things that we’ve struggled with is the Place-Based Community versus the state. And certainly, there’s focus on both. But from a data perspective, it’s a lot harder to wrangle data [from] across the state.”**

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY: MEASUREMENT

Conditions to Support Measurement

Despite the challenges voiced by ECCS CoIIN participants both regarding global systems measurement and ECCS CoIIN implementation measurement, participants shared several conditions that supported their measurement capacities. Most of these conditions supporting measurement were related to Early Childhood Systems (ECS) improvement and sustainability. Particularly, the ability to develop shared data systems such as strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems all supported successful measurement activities. Massachusetts described their work to build shared data systems through the course of the ECCS project:

> **"The data work has really been the biggest challenge, both in terms of the metrics for the CoIIN, but also in building an early childhood data system. We had several false starts in terms of working within [the Department of Public Health]. I think we've been able to be agile, and if the door closed, we have another door. And [the Preschool Development Grant (PDG)] certainly has taken us on. [It] added whole different level, but it's been challenging and frustrating and requires a lot of patience. We were grateful that we had four years, because if it was a shorter grant, we would not have been able to power through and get the data sharing agreements done and start on the status sharing."**

Moreover, the incorporation of Continuous Quality Improvement (CQI) methods and techniques, such as regularly reviewing program data and testing strategies for improvement, also supported measurement activities. Alaska discussed their sustaining CQI process in relation to collection of indicator data with the support of their local evaluator:

> **"We're going to have a team discussion about CQI and different ways to approach it in the last few months in January. Sometimes the team just needs to have a sit down and say, 'Hey, where are we at? And what can we do? Yes, we only have a few months left.' I'm of the perspective that we work up to the very end, and we get the biggest impact we can."**

Utility of Data Sources for Participants

Recognizing the importance of measurement in situating and driving ECCS implementation, ECCS CoIIN participants collected, tracked, and reported on a variety of data sources. The following section discusses data sources participants utilized to support their ECCS activities.

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY: MEASUREMENT

Participants discussed several data sources that were beneficial to the assessment of their systems growth outside of those collected for ECCS CoIIN. About one-third mentioned intake and program referral data from local Early Childhood (EC) programs as useful to implementation, which included areas above and beyond what was collected for ECCS. One New York PBC discussed taking one of the ECCS CoIIN measures further than what was reported to support their program activities:

> **"The only ECCS CoIIN reported measure that really relates to our work asks about connection to social determinants of health services. I use a part of our report for that. I've got connection rates and I can do that overall, or I could break it out by types of referrals that are related to social determinants of health (SDOH). It's an aspect of that larger thing. The connection rates are what drive our work more than anything else – and barriers for services. Those are the things that we're looking at."**

Similarly, participants created or commissioned additional surveys or instruments to support their ECCS activities. Oklahoma shared additional surveys they fielded, along with surveys to collect the indicator data itself:

> **"In addition to the ECCS CoIIN measure surveys, we also have our childcare center surveys, which are a parent survey asking about their knowledge of developmental health, have they had a parent conference that talks about their Ages & Stages Questionnaire® (ASQ®) screening etc.? We also did a teacher and facility survey within our childcare centers. And for our early literacy corners [we] did an observation evaluation for all of those locations as well."**

To a lesser extent, qualitative data sources such as open-ended reflection questions and focus groups, as well as secondary data sources including national dashboards, were both referenced by about 20 percent of ECCS CoIIN participants as useful to guide ECCS implementation. For example, Florida remarked on how useful qualitative data sources were for their ECCS activities:

> **"A lot of it was anecdotal, and a lot of it was from the surveys and feedback and focus groups, and our partners' surveys from what our evaluation team did. That proved to be more of a resource to us than the annual and biannual [indicators]."**

One Massachusetts PBC shared secondary data sources that were helpful for them in their ECCS activities:

> **"We also were motivated by the Child Opportunity Index… [which] comes out of Brandeis University and analyzes child opportunity according to three domains. The structuring of those three domains, educational, number two being health and environmental, and third being social and economic, was helpful in just creating a framework for all of the domains that could be tackled within this work."**

In addition, 20 percent of ECCS CoIIN participants also discussed work to create new measures specific to their states and communities to track and utilize in a CQI manner that provided more specificity than was available with the ECCS indicators. A Delaware team member elaborated,

> **"In Delaware in 2019, we did develop some of our own measures that were aligned, to an extent, to show how our efforts were part of improving an overall system. We can share this with other grantees and will likely carry these measures as we sustain these efforts into the future."**

Recommendations and Conclusions

Resulting from the work of ECCS CoIIN, ECCS CoIIN participants shared several recommendations to inform both future iterations of the ECCS program as well as other systems-change initiatives.

First, due to the different focuses of participant ECCS implementation, a common measurement strategy may not have been relevant for all. Accordingly, ECCS CoIIN participants suggested allowing states and communities to select relevant measures related to their ECCS focuses. Second, participants also suggested considering different measures both for constituency (e.g., state versus community), as well as a framework to assess and measure maturity of their systems. Third, participants suggested focusing more on process-related indicators, such as partnership development and agenda setting, compared to more global measures of impact.

An additional recommendation stemming from the measurement work itself was to provide stronger support, coordination, and technical assistance for state-level measurement in future ECCS evaluations from funding and technical assistance entities.

Given the differences in the approaches, measures, and focuses for the state-led evaluation work, future iterations of ECCS would be best supported by increased coordination of the state evaluations from funding and technical assistance entities. A separate tract of work specifically looking to prospectively align participants' state-level and internal evaluation measures would allow for better comparability at project end.

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY: STRATEGIES TO SUPPORT EQUITY

ECCS CoIIN

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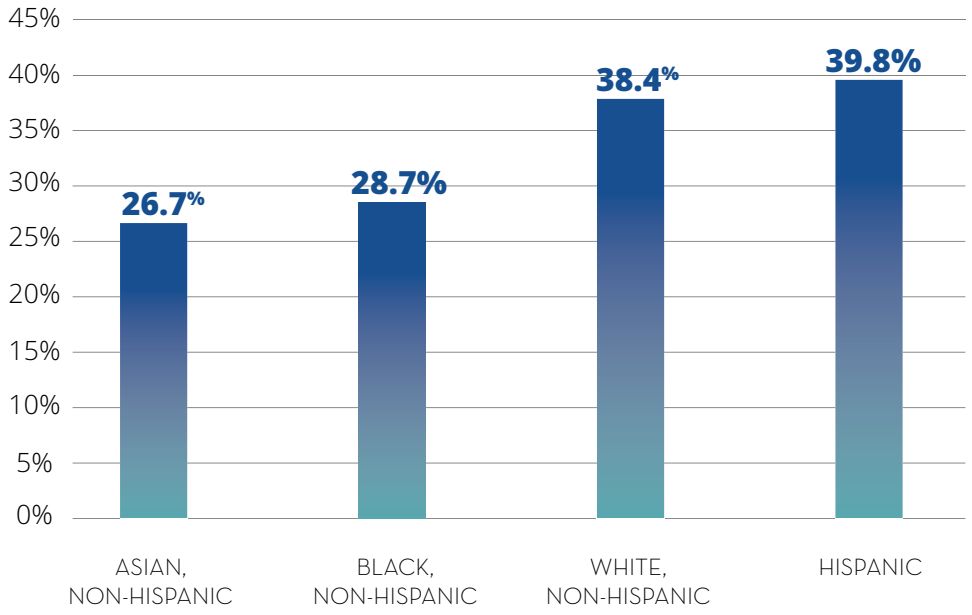
STRATEGIES TO SUPPORT EQUITY: LESSONS LEARNED

Equity was a guiding principle for the Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) initiative as Impact Grantees (IGs) and Place Based Communities (PBCs) aimed to reduce disparities in developmental screening rates (Figure 1). As ECCS CoIIN participants understood the importance of infusing equity into their systems building activities, several common strategies to support emerged across the ECCS CoIIN evaluation. Therefore, the following section highlights key strategies participants took to integrate equity into their ECCS CoIIN activities across the core areas of the ECCS CoIIN evaluation.

Figure 1. National Developmental Screening Completion Within the Past 12 Months for Children Aged 9-35 Months by Race and Ethnicity, 2019



Source: National Survey of Children's Health, 2019.

STATE AND LOCAL CONNECTIONS

Strategies to support equity within State and Local Connections tended to be those that provided assets to center the community voice in systems building and decision making. For instance, seven states shared how they funneled state resources into communities with the purposes of identifying, developing, and supporting community champions to support Early Childhood System (ECS) work, described by the Kansas team:

> **"The community champion development we have seen is so integral in this work. I provided the backbone support to our local communities. Over the five years, I've seen community members really step up, be those champions, and take on a lot of moving the work forward."**

Further, more than half (n=7) of ECCS CoIIN states shared activities around integrating the community perspective in state-level policy and decision making as a strategy to support equity. One such activity was the intentional involvement of community partners and families as part of meetings and advisory councils. The Florida team discussed how this inclusion of the community and family voice in decision making was a completely different approach to systems building work that was both challenging and engaging:

> **"That really shifted the conversation and partners really appreciated that. When they came to ECCS, we were talking about a paradigm shift that included looking at equity, including parents, and changing the early childhood system. People stayed engaged because it was different – despite the challenges, it was a really good starting point."**

STRENGTHENING DEVELOPMENTAL PROMOTION, EARLY SCREENING, AND SERVICE CONNECTIONS

Within Strengthening Developmental Promotion, Early Screening, and Service Connections, ECCS CoIIN participants' strategies to build equity focused on supporting and advocating for families as well as increasing family knowledge of early developmental health. While all IGs disseminated information to support families, seven shared work testing and innovating with non-traditional platforms and partners to increase their reach with families. For instance, Oklahoma, Delaware, and Louisiana discussed how disseminating information on social media expanded their reach, while Florida and Indiana shared how they were able to distribute information in areas such as libraries, ice cream shops and on the sides of trucks. In addition, four states noted work to promote developmental health and address social determinants of health by working with partners through events such as books and diaper drives. These activities became acutely impactful during COVID-19, described by the Hawaii team:

> **"In May and June, when the pandemic was really hitting us hard and the shutdowns were happening, we recognized that families were not concerned as much about their child's development as they were about making sure that their concrete needs are being met. That's where we were trying to really focus our efforts on some of those pieces. Also, I think other partners were recognizing this – our Department of Human Services was still working on those concrete supports, and they're actually the ones who provide more of the services to children and families. That was our original intent, trying to address those areas."**

Finally, five states also worked to create equitable access to developmental health and screening information and services in communities by developing, enhancing, and strengthening the resource and referral processes. Kansas, New York, and Massachusetts all communicated how creating integrated referral systems allowed for better coordination among their partners and service providers, particularly for families that may have been previously isolated or hard to reach. In key informant interviews, a Kansas participant shared how the project offered them the opportunity to identify new referral networks to meet diverse family needs:

> **"The [success we had] would be the access to other communities, utilizing...the best referral network for that particular community – that is up and running. We'll be hoping to utilize marketing for that soon, so that families feel that they have that support where they don't know where to turn to."**

POLICY TRANSFORMATION

One strategy to address equity discussed by IGs and PBCs related to Policy Transformation was their ability to leverage funding to address inequitable service gaps. Five states utilized this approach and discussed searching for, applying for, and attaining funding sources that allowed them to address systems infrastructure to support equity and service access. For instance, participants shared being able to utilize funding to make changes to their data systems to support the identification of disparities or to support cross-sector coordination in communities to expand service reach. Utah discussed utilizing various funding streams to build out their Early Childhood Integrated Data System (ECIDS) to examine service access at a more granular level:

> **"We received some funding to enhance our Early Childhood Integrated Data System, as well as our Community Assessment Tool. The enhancements have to do with being able to break down, so our reports are all for children under six… And so those reports are for children under six, but with the Department of Ed funding, we can break down the ages zero to one, one to two, two to three, and gender, and race, ethnicity, and add frequency and dosage data, which was just huge for this project. Originally, we just had an enrollment and exit data. And so that gives us an idea of children that are receiving services from various programs."**

PARTNERSHIP DEVELOPMENT

While building partnerships with families, community champions, and other community members was often a strategy to address equity in other areas of ECCS, there were unique strategies present around Partnership Development that ECCS CoIIN participants adopted in service of equity goals. One such strategy was embedding family engagement work on the state level as an enabling factor for strategic and equitable partnership building. For instance, this included work discussed by several states, including Indiana, Hawaii, Delaware, and New York, to promote partnership with families by holding community events aiming to educate and facilitate connections. Other states, such as Florida, New Jersey, and Massachusetts, included opportunities to build leadership among families as part of the engagement strategy (shared in greater detail in the next section). Massachusetts discussed how the paradigm shift that occurred with their work to engage with families influenced all aspects of their systems building work:

> **"I think we've gone through quite an evolution in how we think about partnering, engaging with families in systems-level work. Our values now are quite different than they were in the beginning – families are central to everything we do and should be part of systems-level decision making. We've gone through this process of trying to reconfigure our stakeholder groups since former stakeholder groups break down some of those hierarchies that we know exist when you convene families and the providers at a table together – to really try to practice what we preach about families being the drivers of our work. Any decisions that we as state agency staff make and how we develop programs has an impact on families, and families need to be part of that decision making."**

Though not always explicitly linked to equity, almost all participants shared activities around developing cross-sector partnerships within communities; however, at least three states clearly articulated this strategy to inform equitable program and policy implementation. For instance, connecting with and supporting community champions to facilitate partnership (as discussed earlier in state and local connections strategies) was an approach shared by several states. However, building relationships with non-traditional and cross-sector partnerships to expand reach was an approach taken by nearly all (n=9) states, which inherently addressed issues of service access. For example, Hawaii shared how building the capacity of community providers ultimately facilitated partnerships to ultimately expand service reach and coordination:

> **"We've gotten good partnerships built with [our childcare centers] in order to help build capacity of how to get the developmental screens reaching further places than just the partners that are at the table."**

ECS IMPROVEMENT AND SUSTAINABILITY

ECCS CoIIN participants' strategies to address equity and social determinants of health (SDOH) in ECS Improvement and Sustainability tended to focus primarily on integrating the community perspective as part of their work to build and strengthen ECS. For instance, seven states collaborated with partners around integrating equity, SDOH, and family support into their activities. The Kansas team shared how their PBCs were able to work with partners around addressing family needs and supports:

> **"The communities have done an amazing job with reaching out to partners that can respond and provide services with social determinants of health, really looking at the whole community and see how they can be a part of supporting these families, of supporting development. Surrounding these families with services through referrals through the partnerships that they've developed through this process is making the communities better and making the family stronger."**

In addition, four IGs shared activities to develop, support, and enhance family leaders to bolster their efforts to address equity. Participants utilized several strategies, such as directly investing in family leadership and engagement activities and providing training and support for family leaders. The New Jersey team shared how the work they were able to put into strengthening and developing family leaders enhanced their ability to strengthen their ECS by having parents be key stakeholders in decision making:

> **"ECCS has really allowed us to work with our parents – not just as someone at the table, but true team members – and really be a part of that process from beginning to end. Having the parent leaders that we had involved in this initiative really be a part of the team, give their feedback, and us utilize that and adjust our policies thinking about our outreach strategies has really been helpful. I know that even in the next iteration, I don't want to get away from how we work as state and local teams, along with our parent leaders. It really was a team effort, so I think that's important in any systems building work."**

EARLY CHILDHOOD SYSTEMS IMPROVEMENT AND SUSTAINABILITY: STRATEGIES TO SUPPORT EQUITY

Some states worked on educating families in early developmental health as a strategy to ultimately engage families in systems building activities, described by the Delaware team:

> **"We have a constant set of parents, who visit in and visit out, who now are being educated about the developmental milestones and about other issues. What I'm hoping will happen next is they'll grow into advocacy once they become educated and be able to move and assist all these other local and individual efforts, giving the parent input and cause impact on the early childhood systems and connections and all of those other things that come along with growing into advocacy. It's in its beginning stages."**

While states understood the importance of recognizing and respecting parent time and capacity, states struggled with being able to reimburse parents' time and involvement with funding limitations, with only two states achieving success in doing so. Florida discussed elevating parent interests and time by advocating for compensation for parent involvement in ECCS work.

> **"We really understand our parent time is valued. We consider everyone to be a valued contributor. When we're engaging them, we want them to feel as holistic in our approach as we can. We always try to make sure that we have some type of incentive. We're getting paid when we're at the table to do this job, so we feel that we should bring our parents' interest as well. Also, because we want to have everybody at the table, [we try] to ensure that our parents [are] diverse overall."**

In the Family Engagement Focus Groups, parent leaders discussed how the responsive and equity-focused nature of their IG/PBC family leadership activities was a key factor for their engagement. For instance, parent leaders were encouraged to set their own schedules, champion a particular cause in early childhood that interested them, and referred to their ECCS partnerships as a safe space. A parent leader in New Jersey shared that this process was iterative to their needs and interests, and how as they improved and sustained leadership capacity, their advocacy reached partners at the national level:

> **"It's really finding out where you're at, what resources do you need and where do you want to go? Where is your passion? Where is your heart? What do you want to advocate? What do you want to change? What will affect change? What is the story and how can we help? And I think it's amazing through the years [that we] went from doing smaller presentations to doing national presentations, just watching them grow through this process."**

RECOMMENDATIONS AND CONCLUSIONS

IGs and PBCs recognized the important role of equity work in improving their ECS; as such, ECCS CoIIN participants developed strategies to build and support equitable systems of care for their various constituencies. Commonly discussed approaches to build equity included:

- **Developing and enhancing data and referral systems to address issues of service disparity and access**
- **Strategies to achieve universal developmental screening and promotion in communities**
- **Leveraging funding to address and identify service gaps**
- **Integrating the community and family voice into state-level decision making platforms**

To best support strategies to address equity and SDOH, future grantmaking opportunities and technical assistance (TA) entities should support and center equity into their program theories, expected activities, and measurement strategies. By doing so, programs would be better able to assess and quantify activities that they may already be doing around supporting equity, as well as provide conditions for innovation around strategies.

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

RECOMMENDATIONS AND CONCLUSIONS

ECCS CoIIN

NICHQ
National Institute for Children's Health Quality

RECOMMENDATIONS AND CONCLUSIONS

The Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) was a five-year nationwide effort to improve outcomes in population-based children's developmental health and family well-being, funded by the Health Resources & Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB). The National Institute for Children's Health Quality (NICHQ) and its partners served as the Coordinating Center (CC) for the project, providing capacity-building technical assistance (TA) to the ECCS CoIIN participants. Early Childhood Comprehensive Systems (ECCS) are partnerships between interrelated and interdependent agencies and organizations striving to develop seamless systems of care for children from birth to kindergarten entry at the national, state, and community levels. As such, recommendations span many stakeholders involved in Early Childhood Systems (ECS) building efforts. Recommendations summarized here were shared directly by project teams in evaluation activities or identified by the evaluation team during analysis of different evaluation activities. Recommendations are organized by the overarching theme as it pertained to ECCS CoIIN.

EXPAND, BRAID AND ALIGN CROSS-SECTOR FUNDING STREAMS

Due to the collaborative nature of developing and implementing program and policy changes across different stakeholders, a reported enabling factor to several evaluation areas of the ECCS CoIIN project implementation (Policy Transformation, Partnership Development, State and Local Connections, Strengthening Developmental Promotion, Early Screening, and Service Connections) was braiding and aligning different funding streams, including federal, state, and philanthropic dollars. Expanding availability of funding sources that encourage collaborative cross-sector work building ECS could engender better circumstances for partnership, capacity building, and policy and program implementation. An expansion of funding sources that promote collaboration could also encourage more buy-in and political will from state agencies and sectors such as the medical community, academia/nonprofits, and executives/legislative leadership, all areas in which ECCS CoIIN participants reported partnership barriers around funding limitations (Partnership Development, Strengthening Developmental Promotion, Early Screening, and Service Connections).

COORDINATE NATIONAL AND STATE EVALUATION

Though ECCS CoIIN participants demonstrated progress in their efforts to build and strengthen ECS, not all participants focused their ECS building efforts in the same areas. Moreover, some participants' ECS were more developed at baseline compared to others (evidenced through examples such as some participants already having an integrated data system or preexisting collaborative groups and partnerships). Further, even among participants who focused and measured ECCS progress in the same areas, participants' individual evaluation strategies were not standardized. As a result, state-level evaluation work from the ECCS CoIIN participants could not be aggregated and compared with one another due to differences in systems maturity, measure collection, and areas of focus.

To support coordinated evaluation of systems building work and examine aggregate results at project end, a coordinated state level and national evaluation strategy around systems maturity could be beneficial. Given differences in the approaches, measures, and focuses for the state-led implementation, technical assistance to align and coordinate state-level evaluations as well as developing a comprehensive national evaluation strategy could allow for better comparability at project end. Specifically, a guiding framework should include flexibility to encompass each state's ECS maturity, as well as engender cross-state comparability (one such framework is summarized in the ECCS CoIIN Systems Maturity Brief). A coordinated state and national evaluation strategy would allow for results to interpreted and understood within the context of each state's ECS maturity.

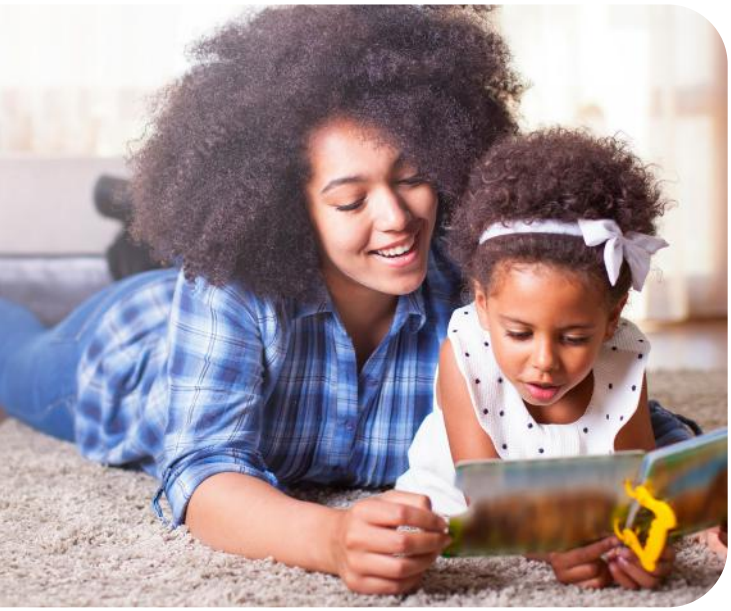
RECOMMENDATIONS AND CONCLUSIONS

BROADEN MEASUREMENT STRATEGIES

While addressing equity was acknowledged in the new ECCS CoIIN Logic model as a guiding principle and was evident in participants' ECCS activities, participants did not consistently quantify or measure progress in addressing equity and social determinants of health (SDOH) standardly. Thus, while participants understood the importance of infusing equity into ECCS CoIIN implementation and utilized several strategies to support and build equitable systems of care for their constituencies, there were limited opportunities to formally measure and assess equity work in the project (ECS Improvement and Sustainability). Incorporating equity principles into project conceptualization could enhance measurement and addressing diverse issues of disparities, access, and reach in ECS-building initiatives.

Further, when discussing challenges with progress and outcome measurement, participants noted that the overarching measurement strategy chosen for the project was not relevant for all states and communities. Some ECCS CoIIN participants suggested allowing states and communities to select measures relevant to their population needs, constituency, process, and project goals (ECS Improvement and Sustainability). Incorporating individualized measurement activities could enhance future iterations of the ECCS project and other systems-change initiatives by better assessing and quantifying systems building activities within unique contexts.

Finally, future ECCS iterations may consider focusing on secondary national data sources (i.e., the National Survey of Children's Health) to track progress at a population level in key indicators related to ECS building and growth (i.e., developmental screenings for children aged 9-35 months, kindergarten readiness, etc.). In addition, technical assistance focused on building and supporting state-level capacity to obtain, analyze, and utilize secondary data sources to drive ECCS implementation could be beneficial. This work could be supported by national data sources in several ways. Because current national data releases often lag by two or three years, which hinders states' abilities to utilize data to track real-time progress, increased timeliness of national data releases could help address these barriers. Moreover, national data sources could consider increasing sampling strategies to disaggregate data by sub-state geographies and race/ethnicity. Increased data stratification could serve states and localities in better addressing system-level disparities in key outcomes. For more information and recommendations about system-level measurement strategies, please refer to the System Level Performance Measurement Brief.



INVEST IN FAMILY LEADERSHIP AND FAMILY ENGAGEMENT

Another method to support equity in strengthening developmental promotion, early screening, and service connections is through continued investment in family leadership and family engagement. States that reframed community and family investment from a deficit-based approach to a strengths-based approach shifted their ECS paradigm to harness the wisdom inherent in lived experience to better support community-level assets. As evidenced by the evaluation, many states made a concerted effort to move from family engagement to family leadership, with some expanding their systems building strategies to encompass the active role of families in ECS. Giving communities the opportunity to define the terms of their ECS building would require a fundamental shift in how outside stakeholders often view systems building work but could offer circumstances to better develop equitable ECS that are specifically tailored to unique and diverse population needs.

RECOMMENDATIONS AND CONCLUSIONS

STRENGTHEN SERVICE DELIVERY INFRASTRUCTURE BUILDING IN PURSUIT OF SYSTEM MATURITY

Throughout several areas of the ECCS CoIIN project, service delivery infrastructure building was discussed as a facilitator to further partnership on the state level, but not on the community level (Partnership Development, Strengthening Developmental Promotion, Early Screening, and Service Connections). As such, creating more opportunities for local-level partners to participate in service delivery infrastructure building was reported as an area for potential partnership development and mission alignment. Other areas of the evaluation (ECS Improvement and Sustainability, State and Local Connections) discussed placing more emphasis on small scale, local-level activities and processes in pursuit of larger state infrastructure goals. Some concrete examples shared included growing the early childhood workforce to expand service coordination, the inclusion of community members in policy and program decision making and supporting cross-sector communication in data system development. Thus, emphasizing concrete local-level activities in pursuit of larger service delivery infrastructure goals could be a key area for state agencies to support ECS maturity. Refer to the ECCS CoIIN Systems Maturity brief for a summary of the framework for systems growth developed by NICHQ as informed by the ECCS CoIIN implementation.

INCREASE STAFFING, TIME, AND CAPACITY IN SUPPORT OF PARTNERSHIP DEVELOPMENT

Staffing, time, and capacity constraints were a common reported barrier on both the community and state level within several areas of the ECCS CoIIN project (Partnership Development, ECS Improvement and Sustainability, State and Local Connections, Strengthening Developmental Promotion, Early Screening, and Service Connections). With partnership building and developing community champions both serving as important activities and strategies in building state and local connections, turnover of key individuals could lead to a breakdown of successful ECS implementation. Expanding staffing opportunities to specifically support cross-sector relationship development and partnership could help address these barriers and guard against turnover of key parties to systems building efforts.

Lessons Learned from the ECCS CoIIN Coordinating Center's Evaluative Efforts

APPENDICES

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National Institute for Children's Health Quality

APPENDIX A

Early Childhood Comprehensive Systems (ECCS) Collaborative Improvement and Innovation Network (CoIIN) Logic Model

AIM: The ECCS CoIIN aims to improve population-level developmental health outcomes in children ages 0-3.

The ECCS CoIIN is guided by six principles based on the primary drivers of the initiative. These guiding principles include:

1. **Equity and Identifying Social Determinants of Health (SDOH);**

2. **Family Engagement, Partnership, and Leadership;**

3. **Community Capacity;**

4. **Universal Developmental Promotion;**

5. **Systems Building and Maturity; and**

6. **Policy Transformation.***

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CORE DOMAIN	GOALS	ACTIVITIES	OUPUTS	OUTCOMES
Collective Impact	Create a Common Agenda/Shared Vision and Strategies	➢ Create a strategic plan (for the collaborative) that represents the shared vision and collaborative/ common agenda ➢ Facilitate collaborative decision-making and strategic planning across stakeholders	➢ Number of meetings/ discussions convened for community/state stakeholders ➢ Collaborative strategic plan is developed ➢ Number of shared EC strategies that are included in community/state plans	➢ Community and state partners understand and working towards a shared vision ➢ Community/state partners adapt program goals and activities to address EC developmental needs ➢ Community/state partners implement EC strategies (that are aligned with vision)
	Develop Shared Data Systems	➢ Assess/inventory community and state cross-sector data systems collecting data on children ages 0-3 ➢ Identify research and data questions to assess gaps in data collection, analysis, and management infrastructure ➢ Develop strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems ➢ Facilitate data sharing agreements among partners to promote the use of shared/coordinated data systems	➢ Community and state data system inventory assessments ➢ Number of data sharing agreements among grantees and their respective partners ➢ Number of community data dashboards developed	➢ Increased community and state knowledge and awareness of data collection and infrastructure opportunities, challenges, and available data sources ➢ New and/or coordinated data collection systems at the state level ➢ Improved capacity at the community and state levels to collect, track, and report data using coordinated/shared data systems
	Promote Aligned and Mutually Reinforcing Activities	➢ Identify how partners implement and support EC activities ➢ Develop shared EC messaging content and tools among partners ➢ Communicate and coordinate activities with partners toward common goals	➢ Number of shared EC messages and tools developed and shared with partners ➢ Number of partners disseminating common EC development materials ➢ Number of partners integrating aligned and coordinated EC activities	➢ Increased community and state knowledge and awareness of each partners' specific role in EC system ➢ Aligned and reinforced messaging around EC development in community/ state materials ➢ System efficiencies and coordinated activities
	Provide Backbone Support and Mechanisms for Continuous Communication between State and Community	➢ Support cross-sector communication in communities ➢ Develop communication plans for outreach to cross-sector stakeholders ➢ Integrate community voice and leadership in state-level EC developmental approaches, policies, and practices ➢ Provide state support and resources to communities to facilitate EC systems goals ➢ Identify community best practices for statewide spread	➢ Number of meetings between state and community teams ➢ Number of communication plans that describe routine communication practices and mechanisms between states, communities, and cross-sector partners ➢ Number of community partners/members serving on ECCS CoIIN teams and state-level groups	➢ Increased number of community partners/members engaged in EC development initiatives in the community and at the state-level ➢ State policies informed by community need and vision ➢ Statewide spread of best practices and innovations

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CORE DOMAIN	GOALS	ACTIVITIES	OUPUTS	OUTCOMES
High Quality and Coordinated Developmental Services	**ECCS COIIN DRIVER 4 -COORDINATED SYSTEMS FOR DEVELOPMENTAL PROMOTION**			
	Disseminate EC Development/ Systems Information	➢ Disseminate developmental promotion materials and campaign messages across communities ➢ Integrate EC campaign messages with partner organizations ➢ Explore, test, and evaluate non-traditional venues and innovative partnerships for dissemination and community engagement	➢ Number of developmental promotion materials provided to communities ➢ Number of campaign messages integrated with partner organizations ➢ Number of events (i.e., trainings, outreach activities) conducted at non-traditional venues and with non-traditional partners that build community knowledge and capacity to promote healthy EC development ➢ Evaluation of non-traditional venues and innovative partnerships	➢ Increased family and provider awareness of and familiarity with community/state resources and support services ➢ Increased family knowledge of child developmental health, and how to support healthy child development ➢ Increased knowledge about non-traditional venues and innovative partnerships proven effective for dissemination of EC developmental information
	ECCS COIIN DRIVER 2 – UNIVERSAL DEVELOPMENTAL PROMOTION			
	Integrate Early Developmental Promotion, Screening, Referral Linkage, and Developmental Processes Across and Within Sectors and Communities	Through training and technical assistance: ➢ Support providers and community organizations to integrate evidence-based and two-generation developmental promotion practices and approaches into daily operations ➢ Facilitate integration of standardized early identification and screening for developmental risk, developmental delay, and SDoH into existing community and state provider practices and structures ➢ Disseminate guidelines or policies to providers and community organizations related to state-level developmental screening, effective referral and linkage processes, and promotion practices ➢ Support community platforms to integrate early developmental promotion materials and activities	➢ Number of trainings or other targeted technical assistance conducted with providers on evidence-based and two-generation developmental promotion practices and approaches ➢ Number of providers/ community organizations routinely using standardized screening instruments and effective referral and linkage processes ➢ Number of providers/ community organizations disseminating developmental promotion materials (e.g., ASQ, Bright Futures), books	➢ Increased proportion of children and families receiving regular developmental health screenings, especially among highest-risk populations ➢ Increased number of children and families receiving timely referrals to services, when needed ➢ Increased family adoption of healthy developmental promotion practices
	ECCS COIIN DRIVER 3: SOCIAL DETERMINANTS OF HEALTH (EQUITABLE ACCESS TO SUPPORTS)			
	Build Care Coordination Capacity	➢ Identify and compile information about relevant community service providers/programs and resources (including non-traditional partners) ➢ Continually update resources ➢ Develop or enhance community and state platforms (online/ telephonic) to facilitate effective service referrals ➢ Develop or enhance workforce care-coordination skills, competencies and and capacity	➢ Number of service providers and programs represented in centralized resource lists or service access points ➢ Community and workforce awareness of care-coordination plafforms ➢ Improved knowledge skills and capacities of care-coordination workforce	➢ Increased rates of completed referrals to needed services ➢ Increased retention of families in community services/ programs until treatment and/or follow-up is completed ➢ Reduced gaps, overlaps, and redundancy in developmental health services provided ➢ Improved communication and care coordination across family-serving providers

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CORE DOMAIN	GOALS	ACTIVITIES	OUPUTS	OUTCOMES
Systems Development and Improvement	Support Continuous Learning and Improvement Efforts	➢ Develop continuous quality improvement (CQI) plans to consistently improve efforts and results ➢ Apply CQI methods to regularly review program data to inform programmatic decisions and test strategies for improvement ➢ Participate in regular opportunities for peer-to-peer learning and professional development activities ➢ Train and engage community partners in CQI to build capacity for data-driven quality improvement	➢ Number of CQI plans developed ➢ Number of strategies tested ➢ Number of meetings or materials developed to support data driven decision making ➢ Number of individuals attending or making presentations on CQI methods, strategies, and results at EC meetings, conferences, and networking events	➢ Increased knowledge of CQI among grantees ➢ Increased awareness among partners of the importance of CQI to achieve common goals ➢ Increased community/state capacity to apply CQI methods to improve programs ➢ Number of CQI-tested strategies adopted at the community and state levels ➢ Systems improvements
	Develop and Maintain Partnerships and Networks	➢ Conduct outreach activities with cross-sector stakeholders (e.g., EC healthcare providers, community-based organizations,) ➢ Develop and maintain partnerships/ collaborations with EC healthcare providers, community-based organizations, and other cross-sector) stakeholders to advance EC policies and systems development ➢ Develop and maintain partnerships/collaborations with family members and family leaders (e.g., navigators, ambassadors, advocates, coaches, and family engagement specialists) ➢ Develop and expand statewide networks	➢ Number of partnership/ network outreach activities conducted (e.g., meetings) ➢ Number of professional development events held ➢ Number of joint partner meetings/events held ➢ Number of new partners/ entities on state/community teams ➢ Number of partnership/ networks that formally (i.e., MOUs) share resources and work together to reduce duplication of efforts or to streamline information shared and services provided	➢ Improved EC systems integration, alignment, and coordination at community/ state levels ➢ Increased number and strength of community and state partnerships contributing to EC system ➢ Increased number of stakeholders serving pre-natal to age 3 population that receive EC messages and are partnered with in EC and systems-building activities ➢ Increased collaboration between grantees and partners to integrate and develop best practices and new approaches
	ECCS COIIN DRIVER 1 – FAMILY PARTNERSHIP GROUNDED IN SUPPORTIVE, TRUSTING RELATIONSHIPS AND MUTUAL RESPECT.			
	Family Leadership	➢ Conduct outreach to pregnant women, parents, and families of young children to inform families of EC priorities and recruit family leaders ➢ Train family members to be navigators, ambassadors, advocates, coaches, and family engagement specialists ➢ Consistently include pregnant women, parents, and family members that reflect the diversity of the populations served on state/ community advisory groups or service organizations ➢ Engage families is system design and decision making	➢ Number of outreach events/ activities targeted to pregnant women, parents, and families ➢ Number of leadership (e.g., navigators, ambassadors, advocates, coaches, and family engagement specialists) trainings targeted to pregnant women, parents, and families ➢ Number of advisory groups or service organizations that include parents/family members in leadership roles ➢ Number of family members that become navigators, ambassadors, advocates, coaches, and family engagement specialists	➢ Increased community and state capacity to reach pregnant women, parents, and families ➢ Increased child/family connections to EC resources ➢ Increased family leadership at the community/state levels (e.g., increase in family representatives on advisory boards) ➢ Infrastructure for sustained family input ➢ System designed to meet family needs

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CORE DOMAIN	GOALS	ACTIVITIES	OUPUTS	OUTCOMES
Systems Development and Improvement (Continued)	Build Public Will	➢ Dissemminate public messaging around the science of early development, resilience and adversity ➢ Conduct outreach to healthcare providers, cross-sector partners, leaders and the public, including through innovative delivery methods to raise awareness of EC priorities ➢ Build EC workforce capacity to effectively reach and engage parents and families ➢ Promote early childhood messaging and visibility at community and state levels	➢ Number of outreach events/ activities targeted to healthcare providers, cross-sector partners, leaders and the public ➢ Number of trainings targeted to healthcare providers and other EC workforce partners	➢ Increased understanding of the science of early development, resilience and adversity ➢ Increased commitment to early childhood ➢ Increased public support for EC investments and initiatives ➢ Increased integration of the science of early development and EC priorities into state and local initiatives, , policies and practices ➢ Increased proposed EC state/ community initiatives by policymakers
	ECCS COIIN DRIVER 5 – POLICY			
	Advance Policies and Mobilize Funding to Sustain System Improvements	➢ Identify policy levers and goals to advance EC system ➢ Assess Medicaid and health transformation and financing landscape ➢ Recommend/ Develop/revise policies to support statewide EC program and systems development, ➢ Advance discussions and planning around re-alignment or repurposing of existing public funding to more effectively serve children and families ➢ Develop and implement programmatic/financial sustainability plans to promote/ replicate promising practices and policies ➢ Seek and obtain diverse and alternative funding to support community/state EC program initiatives	➢ Number of partner development or engagement activities focused on EC policy development ➢ Number of alternative funding strategies including pooling/blending/braiding of public dollars, repurposing of existing funding streams, alternative payment models for Medicaid funding ➢ Number of proposals (i.e., grant, contract) submitted to funders that are the result of a shared/collaborative approach to EC development	➢ Policy changes aligned with community/state EC system goals are adopted and sustained ➢ Increased amount of funding to support community/state EC initiatives ➢ EC development initiatives and state and community systems are sustained

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*ECCS CoIIN Guiding Principles

The ECCS CoIIN is guided by the following principles based on the primary drivers of the initiative.

Equity and Identifying Social Determinants of Health

We strive to attain the highest level of health and well-being for all people by removing all differences (disparities) in health that are avoidable, unfair, and unjust. We aim to provide protective factors, equitable access to services, and to strengthen families against risk factors to optimize developmental health.

https://cssp.org/wp-content/uploads/2019/03/Community-Action-Brief-Equity-FINAL.pdf

https://cssp.org/wp-content/uploads/2019/04/Early-Childhood-Systems-Performance-Assessment-Toolkit-4-Equity.pdf

Family Engagement, Partnership, and Leadership

In order to build strong early childhood systems that realize developmental health outcomes for all, work must be done **TOGETHER** with families as true partners and leaders in the design, service delivery, and continual improvement of the system.

Community Capacity

Through our place-based community initiative, we aim to build and sustain community capacity to improve systems around children's development health and family wellbeing,

Universal Developmental Promotion

Recognizing that the earliest foundations of developmental health begin prenatally and are influenced by community, social determinants, and many other contextual factors, our efforts seek to build developmental well-being through **UPSTREAM** approaches. We address developmental risk and ensure that we systematically reach families with developmental promotion resources far before a developmental delay is present.

Systems Building and Maturity

Systems coordination, improvement, and maturity is necessary to improve outcomes in population-based children's developmental health and family wellbeing. Our work supports the development and maturity of systems using a collective impact approach to implement and sustain efforts at the state and community levels.

Policy Transformation

Policy development and improvement are key to support, **ACCELERATE**, and sustain an early childhood system.

APPENDIX B

KEY INFORMANT INTERVIEW PROTOCOL AND CODEBOOK

This Appendix details the interview protocol for the ECCS CoIIN Key Informant Interviews as well as the analytic codebook at the end of this section.

Interview Protocol for ECCS CoIIN Key Informant Interviews

Introduction:

Thank you for taking time out of your day to speak with me. My name is [name] and I am a member of NICHQ's Department of Applied Research and Evaluation (DARE). As you know, NICHQ is leading the overall evaluation of the Early Childhood Comprehensive Systems CoIIN Initiative. Our evaluation is focusing on understanding your progress, successes, and challenges as part of the ECCS CoIIN project across the following areas: partnerships, policies, early childhood systems capacity, state and local connections, measurement, and improvement and sustainability. Your perspective will help us evaluate, suggest changes, and make recommendations to strengthen the efforts to enhance early childhood systems and increase age-appropriate developmental skills among three-year-old children during and after the initiative. The results from this study will be shared in a report and used to teach others.

Procedures:

We are interested in learning about your experiences participating in ECCS CoIIN. You are being asked to participate in a 45 minute to one-hour interview to share your experiences and perceptions of activities in the ECCS CoIIN. All interviews will be conducted virtually on the Zoom platform. With your permission, we will audio-record and take notes during this interview.

Risks:

We do not anticipate any risks associated with participating in the study. If any question asked makes you uncomfortable, you are always free to decline to answer or discontinue participation at any time.

Benefits:

Participating in this study will give you an opportunity to add your ideas and opinions to recommendations around improving Early Childhood Comprehensive Systems.

Confidentiality:

The researchers for this study will protect the confidentiality of whatever you share with them, and no identifying information will be released to anyone. Outside of NICHQ staff, only the Allendale Investigational Review Board of RTA Inc. or the FDA can access this confidential information. Information from this study will be used for research purposes and may be published; however, your name will not be used in any publications. Any interview audio-recordings will be destroyed after the final report is written. The IRB may decide to review the records made during this study.

Compensation:

There is no compensation for participating in this study.

Alternatives:

Your participation is voluntary. You may choose not to participate. You can stop participation at any time during the study without negative consequences. You do not have to answer any questions you do not want to.

Contact Information:

If you have any questions regarding your rights as a participant in this study, please contact the Allendale Institutional Review Board (860-434-5872). For any general inquiries or to report any harm from the study, please contact Rebecca Russell, Senior Director, Department of Applied Research and Evaluation at NICHQ (617-391-2700).

Consent Questions

Do you have any questions before we get started?

Do I have your consent to proceed with the interview?

- If yes, proceed to the next question
- If no, thank you for your time.

Thank you! As I mentioned, I would like to record our call today to ensure we capture your responses correctly in our notes and to help us correctly analyze and report your responses as part of our qualitative analysis. I will be deleting the recording as soon as we write up our final report. Do I have your consent to record the interview?

- If yes, Thank you!
- If no, Certainly. We will not record the interview

As promised in the confidentiality statement, none of the information you provide will be linked to your name. Would you feel comfortable with the information you share being associated with your state? This may better enable ECCS CoIIN to better share the story of your state work as part of the ECCS CoIIN and your state and/or provide a better understanding of your state circumstances.

- If yes, Thank you!
- If no, Certainly. We will not use your state name

Overall Evaluation Questions

This first set of questions specifically asks about your participation in ECCS CoIIN overall. Specifically, we are curious about your successes and challenges from your ECCS CoIIN work as well as your overall perceptions of participating in the ECCS CoIIN.

1. Across the following areas, where have you had the most measurable successes as part of your state's ECCS implementation (note, you can choose more than one area): partnership development, policy implementation, capacity-building efforts to support early childhood, state and local connections, and early childhood systems improvement and sustainability? For each area, please describe where you started out, in 2016, to where you are now, in 2020.

- Probes:
  - Can you elaborate on the areas that you have mentioned?
  - What infrastructure (either preexisting or created during the ECCS grant period) helped your achieve success in these areas?

2. Across the following areas, where have you had the most challenges during your state's ECCS implementation (note, you can choose more than one area): partnership development, policy implementation, capacity-building efforts to support early childhood, state and local connections, and early childhood systems improvement and sustainability? For each area, please describe where you started out, in 2016, to where you are now, in 2020.

- Probes:
  - Can you elaborate on the areas that you have mentioned?
  - What infrastructure (either preexisting or created during the ECCS grant period) were associated with your challenges in these areas?

3. Can you elaborate on your previous responses as part of the following?

a. Bimonthly Report Submissions [refer to previous responses]

b. Partnerships Developed [refer to previous responses to partnership survey]

c. Barriers and Facilitators to your ECCS work [refer to previous responses to the Contextual Factors Survey]

4. To what extent has participating in the ECCS CoIIN been beneficial to furthering your states' early childhood systems? What would you like to see in future iterations of the ECCS Impact program?

- Probes:
  - What changes are you sustaining as part of your ECCS work?
  - Do you expect that your team will continue efforts as part of ECCS? In what areas?

Measurement Questions

This next set of questions will ask you to share your thoughts about the measurement strategy (i.e., the indicators) and the changes in the measurement strategy for the ECCS CoIIN. We are curious as to how you measured improvements as part of our work, either using the indicators or other measures.

1. Please share the extent to which you used the annual and biannual indicators to inform your ECCS work.

- Probes:
  - To what extent did the collection of the indicators help you to move your work forward?
  - What other data, quantitative or qualitative, did you use to capture the improvements evidenced within your ECCS work?

2. What conditions helped/didn't help you to use the indicators as part of your ECCS improvement work? What was missing from the ECCS CoIIN measurement strategy?

- Probes:
  - What conditions or resources did your state/community need in order to leverage the indicators as part of your ECCS CoIIN Improvement work?

Thank you again for your time and participating in this interview. If you have any questions, please do not hesitate to reach out.

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Key Informant Interview Codebook

Successes

- Partnership development
    - Conduct outreach activities with cross-sector stakeholders (e.g., EC healthcare providers, community-based organizations)
    - Develop and maintain partnerships/ collaborations with EC healthcare providers, community-based organizations, and other cross-sector) stakeholders to advance EC policies and systems development
    - Develop and maintain partnerships/collaborations with family members and family leaders (e.g., navigators, ambassadors, advocates, coaches, and family engagement specialists)
    - Develop and expand statewide networks
- Policy implementation
    - Assess Medicaid and health transformation and financing landscape
    - Recommend/ Develop/revise policies to support statewide EC program and systems development,
    - Advance discussions and planning around re-alignment or repurposing of existing public funding to more effectively serve children and families
    - Develop and implement programmatic/financial sustainability plans to promote/replicate promising practices and policies
    - Seek and obtain diverse and alternative funding to support community/state EC program initiatives
- Capacity-building efforts to support development
    - Disseminate early childhood development/systems information
        - Disseminate developmental promotion materials and campaign messages across communities
        - Integrate EC campaign messages with partner organizations
        - Explore, test, and evaluate non-traditional venues and innovative partnerships for dissemination and community engagement
    - Integrate early developmental promotion, screening, referral, linkage and developmental processes across and within sectors and communities
        - Support providers and community organizations to integrate evidence-based and two-generation developmental promotion practices and approaches into daily operations
        - Facilitate integration of standardized early identification and screening for developmental risk, developmental delay, and SDoH into existing community and state provider practices and structures
        - Disseminate guidelines or policies to providers and community organizations related to state-level developmental screening, effective referral and linkage processes, and promotion practices
        - Support community platforms to integrate early developmental promotion materials and activities

- Build care coordination capacity
  - Identify and compile information about relevant community service providers/programs and resources (including non-traditional partners)
  - Continually update resources
  - Develop or enhance community and state platforms (online/telephonic) to facilitate effective service referrals
  - Develop or enhance workforce care-coordination skills, competencies and capacity

- State and local connections
  - Support cross-sector communication in communities
  - Develop communication plans for outreach to cross-sector stakeholders
  - Integrate community voice and leadership in state-level EC developmental approaches, policies, and practices
  - Provide state support and resources to communities to facilitate EC systems goals
  - Identify community best practices for statewide spread

- Early childhood systems improvement and sustainability
  - Alignment with and leveraging existing funding
  - Create a common agenda/shared vision and strategies
    - Create a strategic plan (for the collaborative) that represents the shared vision and collaborative/common agenda
    - Facilitate collaborative decision-making and strategic planning across stakeholders
  - Develop shared data systems
    - Assess/inventory community and state cross-sector data systems collecting data on children ages 0-3
    - Identify research and data questions to assess gaps in data collection, analysis, and management infrastructure
    - Develop strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems
    - Facilitate data sharing agreements among partners to promote the use of shared/coordinated data systems
  - Promote aligned and mutually reinforcing activities
    - Communicate and coordinate activities with partners toward common goals
    - Identify how partners implement and support EC activities
    - Develop shared EC messaging content and tools among partners
  - Support continuous learning and improvement efforts
    - Develop continuous quality improvement (CQI) plans to consistently improve efforts and results
    - Apply CQI methods to regularly review program data to inform programmatic decisions and test strategies for improvement
    - Participate in regular opportunities for peer-to-peer learning and professional development activities
    - Train and engage community partners in CQI to build capacity for data-driven quality improvement

- Family leadership
  - Conduct outreach to pregnant women, parents, and families of young children to inform families of EC priorities and recruit family leaders
  - Train family members to be navigators, ambassadors, advocates, coaches, and family engagement specialists
  - Consistently include pregnant women, parents, and family members that reflect the diversity of the populations served on state/community advisory groups or service organizations
  - Engage families is system design and decision making
- Build public will
  - Disseminate public messaging around the science of early development, resilience and adversity
  - Conduct outreach to healthcare providers, cross-sector partners, leaders and the public, including through innovative delivery methods to raise awareness of EC priorities
  - Build EC workforce capacity to effectively reach and engage parents and families
  - Promote early childhood messaging and visibility at community and state levels

Challenges

- Partnership development
  - Conduct outreach activities with cross-sector stakeholders (e.g., EC healthcare providers, community-based organizations)
  - Develop and maintain partnerships/ collaborations with EC healthcare providers, community-based organizations, and other cross-sector) stakeholders to advance EC policies and systems development
  - Develop and maintain partnerships/collaborations with family members and family leaders (e.g., navigators, ambassadors, advocates, coaches, and family engagement specialists)
  - Develop and expand statewide networks
- Policy implementation
  - Assess Medicaid and health transformation and financing landscape
  - Recommend/ Develop/revise policies to support statewide EC program and systems development,
  - Advance discussions and planning around re-alignment or repurposing of existing public funding to more effectively serve children and families
  - Develop and implement programmatic/financial sustainability plans to promote/replicate promising practices and policies
  - Seek and obtain diverse and alternative funding to support community/state EC program initiatives
- Capacity-building efforts to support development
  - Disseminate early childhood development/systems information
    - Disseminate developmental promotion materials and campaign messages across communities
    - Integrate EC campaign messages with partner organizations
    - Explore, test, and evaluate non-traditional venues and innovative partnerships for dissemination and community engagement

- Integrate early developmental promotion, screening, referral, linkage and developmental processes across and within sectors and communities
  - Support providers and community organizations to integrate evidence-based and two-generation developmental promotion practices and approaches into daily operations
  - Facilitate integration of standardized early identification and screening for developmental risk, developmental delay, and SDoH into existing community and state provider practices and structures
  - Disseminate guidelines or policies to providers and community organizations related to state-level developmental screening, effective referral and linkage processes, and promotion practices
  - Support community platforms to integrate early developmental promotion materials and activities
- Build care coordination capacity
  - Identify and compile information about relevant community service providers/programs and resources (including non-traditional partners)
  - Continually update resources
  - Develop or enhance community and state platforms (online/telephonic) to facilitate effective service referrals
  - Develop or enhance workforce care-coordination skills, competencies and capacity

- State and local connections
  - Support cross-sector communication in communities
  - Develop communication plans for outreach to cross-sector stakeholders
  - Integrate community voice and leadership in state-level EC developmental approaches, policies, and practices
  - Provide state support and resources to communities to facilitate EC systems goals
  - Identify community best practices for statewide spread
- Early childhood systems improvement and sustainability
  - Alignment with and leveraging existing funding
  - Create a common agenda/shared vision and strategies
    - Create a strategic plan (for the collaborative) that represents the shared vision and collaborative/common agenda
    - Facilitate collaborative decision-making and strategic planning across stakeholders
  - Develop shared data systems
    - Assess/inventory community and state cross-sector data systems collecting data on children ages 0-3
    - Identify research and data questions to assess gaps in data collection, analysis, and management infrastructure
    - Develop strategies to coordinate existing data collection systems, establish long-term governance, and/or build infrastructure for new shared data systems
    - Facilitate data sharing agreements among partners to promote the use of shared/coordinated data systems

- Promote aligned and mutually reinforcing activities
  - Communicate and coordinate activities with partners toward common goals
  - Identify how partners implement and support EC activities
  - Develop shared EC messaging content and tools among partners
- Support continuous learning and improvement efforts
- Develop continuous quality improvement (CQI) plans to consistently improve efforts and results
  - Apply CQI methods to regularly review program data to inform programmatic decisions and test strategies for improvement
  - Participate in regular opportunities for peer-to-peer learning and professional development activities
  - Train and engage community partners in CQI to build capacity for data-driven quality improvement
- Family leadership
  - Conduct outreach to pregnant women, parents, and families of young children to inform families of EC priorities and recruit family leaders
  - Train family members to be navigators, ambassadors, advocates, coaches, and family engagement specialists
  - Consistently include pregnant women, parents, and family members that reflect the diversity of the populations served on state/community advisory groups or service organizations
  - Engage families is system design and decision making
- Build public will
  - Disseminate public messaging around the science of early development, resilience and adversity
  - Conduct outreach to healthcare providers, cross-sector partners, leaders and the public, including through innovative delivery methods to raise awareness of EC priorities
  - Build EC workforce capacity to effectively reach and engage parents and families
  - Promote early childhood messaging and visibility at community and state levels

- Measurement
  - Utility of annual and biannual indicators
  - Other data sources used
  - Conditions to support measurement
  - Recommendations for future measurement
- Participation Conclusions
  - Furthering early childhood systems
  - Sustaining ECCS work
  - Reflections on the ECCS CoIIN
  - Systems building lessons
  - Recommendations for future ECCS funding opportunities
    - Family Engagement
    - Equity
    - Covid-19

APPENDIX C

FAMILY ENGAGEMENT FOCUS GROUP CONSENT FORMS, INTERVIEW PROTOCOL, CODEBOOK, AND THEMES

This Appendix details the interview protocol for the ECCS CoIIN Family Engagement Focus Groups as well as the analytic codebook and themes at the end of this section.

Consent Form for ECCS CoIIN Family Engagement Focus Groups

Introduction

Thank you for your interest in participating in a focus group for the ECCS CoIIN project. ECCS CoIIN is a nationwide effort to improve outcomes in population-based children's developmental health and family well-being. ECCS CoIIN is led by the National Institute for Children's Health Quality (NICHQ) and funded by the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration (HRSA). The purpose of ECCS CoIIN is to support Early Childhood Comprehensive Systems (ECCS) Community Teams in 12 states through a Collaborative Improvement and Innovation Network (CoIIN) to promote early childhood developmental health and family well-being outcomes. The purpose of these focus groups are to talk about your experiences as family partners during the ECCS project. This information will help guide the evaluation team as we near the end of the project and assess the achievements of the project.

Procedures

We are interested in learning about your experiences as family partners promoting early childhood developmental health and family well-being. If interested, you are asked to participate in a 45 minute to one-hour focus group to share your key accomplishments as ECCS Impact Grantee/Place-based Community partners. There will be up to six participants in each focus group, with up to twelve participants in the total study. We will audio-record the focus groups via Zoom and take notes during this interview. If you choose not to be recorded, then you will not be able to participate in the study.

Risks

The level of risk involved in this study is minor, but could include mental fatigue or frustration. If any question asked makes you uncomfortable, you are always free to decline to answer or discontinue participation at any time.

Benefits

Participating in this study will give you an opportunity to share your ideas about what would you like to improve in terms of promoting early childhood developmental health and family well-being.

Confidentiality

The researchers for this study will protect the confidentiality of whatever you share with them, and no identifying information will be released to anyone. Outside of NICHQ staff, only the Allendale Investigational Review Board or the FDA can access this confidential information. Information from this study will be used for research purposes and may be published; however, your name will not be used in any publications. Any interview audio-recordings will be destroyed after the final report is written. The IRB may decide to review the records made during this study.

Compensation

There is no compensation for participation in this study. Your responses will help us with the evaluation of the ECCS CoIIN.

Alternatives/Withdraw

Your participation is voluntary. You may choose not to participate. You do not have to answer any questions you do not want to. You can stop participation at any time during the study without negative consequences. To withdraw at any time, you can contact Rebecca Russell, Senior Director, Department of Applied Research and Evaluation at NICHQ (617-391-2700 or rrussell@nichq.org). If you withdraw part of the way in the study, the data you provided prior to withdraw will be included in the study.

Contact Information

If you have any questions regarding your rights as a participant in the study, you may contact Allendale IRB (the body that oversees our protection of study participants) at 860-434-5872. For any general inquiries or to report any harm from the study, please contact Rebecca Russell, Senior Director, Department of Applied Research and Evaluation at NICHQ (617-391-2700 or rrussell@nichq.org).

I have carefully read the information contained above and I understand fully my rights as a potential subject in this study. I understand that my participation is completely voluntary and that I can opt out at any time.

2. Do you agree to participate in this study?

☐ Yes ☐ No

We would like to record our call today to ensure we capture your responses correctly in our notes and to help us correctly analyze and report your responses as part of our qualitative analysis. Any identifying information will be removed from any transcripts we may create and your individual identity will remain anonymous.

3. Do you consent to the recording of the focus group?

☐ Yes ☐ No

Please be advised that although the researchers will take every precaution to maintain confidentiality of the data, the nature of focus groups prevents the researchers from guaranteeing confidentiality.

4. Do you agree to respect the privacy of your fellow participants and not repeat what is said in the focus group to others?

☐ Yes ☐ No

Thank You!

Thank you for completing this electronic consent form to participate in a ECCS CoIIN family partner focus group.

APPENDIX C

Interview Protocol for ECCS CoIIN Family Engagement Focus Groups

Facilitator: Hello, everyone. Thank you for your time and agreeing to participate in this call to share your experiences as family partner during ECCS CoIIN. Before we get started, I'd like to do introductions so we can all get to know each other on this call. My name is [name] and I am a [role at NICHQ]. I will pass over to Notetaker to introduce themself.

Notetaker: Hello, my name is [name] and I am a [role at NICHQ] on the ECCS CoIIN project. I will be taking notes on today's call. I may ask a few clarifying questions.

ECCS CoIIN team members listening in: Hello, my name is [name] and I am a [role] on the ECCS CoIIN project. I will be listening in on today's call.

[Pause for remainder of participants to introduce themselves]

Facilitator: Again, I want to thank you all for your time today and agreeing to participate in this focus group. Before we begin, I want to set a few ground rules. We'll be taking notes throughout the discussion to make sure we don't miss anything you have to say. We're also recording the session and will have it transcribed, but NICHQ staff are the only ones who will listen to the recording or view the transcription. What you share today is confidential and identifying information will not be released without your permission. Additionally, we really want to hear from everyone. You have all been asked to be here because of your valuable contributions and perspectives on this work. Please feel free to share perspectives that are different from the others in the group, or to agree with what others have said. I want to encourage all of you to participate so that everyone has a chance to express their point of views. Does anyone have any questions or concerns?

[Pause for response]

Great, then we can jump right in. The purpose of this discussion is to talk about your experiences as family partners for your Impact Grantees/Place-based Communities during the ECCS project. This information will help guide the evaluation team as we near the end of the project and assess the achievements of the project. Therefore, we are hoping that you can elaborate during our discussion today on one main prompt: Please reflect on your key accomplishments as ECCS IG/PBC Family partners. As you reflect on your accomplishments, it would be helpful for you to share factors that helped and didn't help you accomplish your work.

[Allow participants to respond; if there is difficulty moving the conversation, use below prompts]

Prompts to move discussion

- What are the main ways your IG/PBC supported building family leadership? How would you suggest continuing to grow this area?
    - Based on the successes you shared, what recommendations would you have for other organizations/agencies who would like to adapt your strategies?
- How do you think your IG/PBC could better support building family leadership?
- What issues in your community stand in the way of engaging families in ECCS work? What would help them move past these barriers?
    - Based on the challenges you shared, what recommendations would you have for other organizations/agencies to avoid these roadblocks?

Facilitator: Thank you all for sharing your experiences, ideas, and learnings with us today. The information that you shared is extremely important to us as we near the end of the ECCS CoIIN project and assess our progress.

We will use your insights to evaluate the family engagement and equity achievements of the project for the participating IG/PBC community teams. This analysis will be incorporated into our ECCS final report as we consider the overarching impact of the project. When available, we will share the final report findings with you. Do not hesitate to reach out to the NICHQ team if you have any questions or thoughts following this focus group. We will include the NICHQ team's email in the chat. Once again, thank you so much for your time today!

Family Engagement Focus Group Codes, Themes, and Definitions

Specialization, capacity building, peer-to-peer spread

Individual outreach, capacity, and skillset growth as an enabler to family engagement and ultimately leadership.

- Specialization and capacity building
    - Expertise
        - Building expertise
        - Influenced career
    - Resource sharing
    - Training
- Reach
    - Recruitment

Flexibility, interactivity, and internal community building

Developmental and flexible nature within community building as an enabler to family engagement.

- Networking
    - Mentorship
    - Virtual
        - COVID-19 related
- Interactive processes for family engagement
    - Modelling and encouraging open communication
    - Affirming flexibility in family leadership expectations

Inclusivity, commitment, mutual respect

Recognition and standard of intentional mutual commitment, regard, and inclusivity or lack thereof as an enabler or barrier to family engagement.

- Commitment
    - Leadership-level
        - Payment
    - Family-partner level
    - Competing priorities and overwhelm
- Inclusive standards for family engagement
    - Partnership as a safe space
    - Community relationships and trust
    - Diversity, culture, unique population needs
        - Enabler
        - Barrier

Technical and resource capacity

Capacity for technical and/or resource innovation or lack thereof as an enabler or barrier to family engagement.

- Funding streams
    - Enabler
    - Barrier
- Virtual innovations
    - COVID-19 and virtual challenges
        - Zoom fatigue
    - Virtual opportunities and networking
        - COVID-19 related

CONTEXTUAL FACTORS SURVEY ANALYSIS

The Contextual Factors Survey was fielded during the Fall of 2020, with a previous iteration fielded in the summer 2018. The purpose of the Contextual Factors Survey was to quantify Place-based Communities (PBCs) and Impact Grantees (IGs) perceptions of facilitators and barriers to their Early Childhood Comprehensive Systems (ECCS) implementation across four domains: policy, early childhood systems (ECS), state/local connections (SL), and improvement and sustainability (IS).

There were 16 PBC respondents out of 28 PBCs, and 17 IG respondents representing 11 IGs out of 12 total. Hawaii was the only IG that did not respond to the survey. This resulted in a 68% overall response rate. Results from the survey are summarized here and in Table 1, with notable findings in bold.

Overall Trends

PBCs and IGs are aligned in their perception of policy facilitators, with an overall average rating of "very influential" (3.9) over the four policy facilitator questions.

There is a significant relationship between IGs/PBCs and competing or misaligned priorities, $\chi^2(4, N=29) = 9.746$, $p<.05$. IGs were more significantly more likely to give a rating of "somewhat influential" for this policy barrier, while PBCs were significantly more likely to report competing or misaligned priorities as "very influential."

PBCs universally rank early childhood systems (ECS) facilitators as more influential than IGs (average of 3.9 vs. 3.5 across the four ECS facilitators, respectively). Correspondingly, IGs rank ECS barriers as more influential than PBCs (mean of 3.5 vs. 3.2 across the ECS barriers, respectively).

Similarly, PBCs universally rank state/local (SL) facilitators as more influential than IGs (average of 4.2 vs. 3.9 across the four SL facilitators, respectively). Correspondingly, IGs rank SL barriers as more influential than PBCs (mean of 3.3 vs. 2.9 across the four SL barriers, respectively).

Both partnerships and engagement are a very or extremely influential state/local facilitator for both PBCs and IGs, speaking to the importance of systems building work.

Neither PBCs nor IGs reported any SL barriers as particularly impactful to their ECCS work, which could speak to the place-based structure of ECCS and the work previously completed to set up relationships within each state.

Place-Based Community Findings

Overall, PBC respondents did not find any of the barriers outlined in the four domains (policy, ECS, SL, SI) particularly influential to their work, with the mean of each domain rounding to somewhat or a little influential across all places. There were, however, some write-in responses from PBCs on policy barriers. Two respondents noted the difficulty of getting IGs to work towards goals together despite clear priority alignment, and another noted high staff turnover leading to low capacity. The former barrier is consistent with findings between PBCs and IGs on misaligned priorities, in which PBCs were more significantly likely to report as "very influential" to their ECCS work than IGs, $\chi^2(4, N=29) = 9.746$, $p<.05$.

Relationship building and strategic planning were consistently reported as influential facilitators for PBCs across several domains.

Policy

Facilitators

- Relationship building/engagement of stakeholders
- Opportunities to coordinate/develop activities on shared understanding of ECCS
- Priority alignment of other constituencies
- Engagement of families/community around SDOH

Barriers

- Limited buy-in from stakeholders
- Competing or misaligned priorities
- Resource constraints
- Political will

Of PBC respondents, 81% rate relationship building and engagement of stakeholders as a very or extremely influential policy facilitator (mean rating of 4.3).

Seventy five percent of PBC respondents rate opportunity to coordinate and develop activities on a shared vision as a very or extremely influential policy facilitator (average rating of 4.0), and 69% report that priority alignment with other constituencies is very or extremely influential as a policy facilitator (3.9 average).

Early Childhood Systems

Facilitators

- Relationship building/engagement of partners
- Alignment with existing funding sources/initiatives
- Availability of funding to support system building
- Clear strategic direction

Barriers

- Lack of funding to support systems building
- Political will
- Competing initiatives, priorities, and other siloed efforts
- Time constraints

All four ECS facilitator areas for PBCs round to very influential.

Of note, 79% of respondents rate clear strategic direction as a very or extremely influential ECS facilitator.
Further, 56% of respondents rate relationship building with partners as a very or extremely influential ECS facilitator.

State/Local Connections

Facilitators

- Preexisting relationships and partnerships
- Alignment of goals and/or alignment with existing initiatives
- Opportunities for open communication; intentional inclusion of community voice
- Funding opportunities and support

Barriers

- Siloed systems/departments and misaligned priorities
- Lack of resources/funding
- Power dynamics
- Lack of buy-in at community, state, and/or local level

PBCs found all four SL facilitators very influential to their work.

In particular, 94% of PBC respondents rated preexisting relationships and partnerships as a very or extremely influential SL facilitator, with an average rating of 4.4.

With a mean of 4.2, 69% rated alignment of goals and initiatives as a very or extremely influential SL facilitator.

Seventy five percent of PBC respondents rated opportunities for open communication and inclusion as very or extremely influential as a SL facilitator, and 63% rated funding opportunities and support also as a very or extremely influential SL facilitator, both with an average of 4.1.

Improvement and Sustainability

Facilitators

- Integrated data systems
- Cross-sector participation and enthusiasm
- Trainings and networking to support knowledge of CQI
- Aligned priorities and strategies

Barriers

- Lack of resources
- Lack of buy-in at community, state, and/or local level
- Competing goals/and or misaligned priorities
- Institutional and organizational culture/practices

Eighty eight percent of PBCs rated aligned priorities as an extremely or very influential facilitator with an average rating of 4.2.

Cross-sector participation/enthusiasm and opportunity for trainings and networking had an average rating of 3.9 and 3.7, respectively. Sixty seven percent rated the former as an extremely or very influential IS facilitator, and 63% rated the latter the same.

APPENDIX D

Impact Grantee findings

Funding and resources – both the lack thereof or the existence of – is a consistent barrier or facilitator for IGs across the four domains. This may speak to IGs holding some of the structural duties of ECCS implementation.

Policy

Facilitators

- Relationship building/engagement of stakeholders
- Opportunities to coordinate/develop activities on shared understanding of ECCS
- Priority alignment of other constituencies
- Engagement of families/community around SDOH

Barriers

- Limited buy-in from stakeholders
- Competing or misaligned priorities
- Resource constraints
- Political will

Of IG respondents, 71% rate relationship building and engagement as a very or extremely influential policy facilitator, for an average rating of 4.3, while 65% rate opportunities to coordinate activities on a shared vision as a very or extremely influential facilitator (mean of 4.1).

Fifty nine percent of IGs find alignment with constituency priorities very influential or extremely influential as a policy facilitator; the average rating was 3.9.

Resource constraints were the main policy barrier reported, with 65% of IG respondents saying that turnover, not enough staff, lack of staff time/capacity is a very or extremely influential policy barrier (average rating of 3.8).

Early Childhood Systems

Facilitators

- Relationship building/engagement of partners
- Alignment with existing funding sources/initiatives
- Availability of funding to support systems building
- Clear strategic direction

Barriers

- Lack of funding to support systems building
- Political will
- Competing initiatives, priorities, and other siloed efforts
- Time constraints

Overall, IGs report the most influential facilitators and barriers from the ECS domain.

Of respondents, 59% described that relationship building and engagement of partners (mean of 3.6), alignment funding sources and initiatives (mean of 3.5), and availability of funding to support systems building (mean of 3.5) are very or extremely influential ECS facilitators.

On the other hand, 59% of IGs found political will (3.7 average) and competing initiatives and other siloed efforts (3.5 average) to be very or extremely influential ECS barriers. Forty seven percent reported lack of funding to support systems building as a very or extremely influential barrier, with a mean rating of 3.6.

State/Local Connections

Facilitators

- Preexisting relationships and partnerships
- Alignment of goals and/or alignment with existing initiatives
- Opportunities for open communication; intentional inclusion of community voice
- Funding opportunities and support

Barriers

- Siloed systems/departments and misaligned priorities
- Lack of resources/funding
- Power dynamics
- Lack of buy-in at community, state, and/or local level

Preexisting relationships or partnerships were rated as a very or extremely influential state/local facilitator by 88% of IGs (mean rating of 4.2).

With an average rating of 4.0, 71% rated alignment of goals and existing initiatives as a very or extremely influential policy facilitator. Also with a mean of 4.0, 75% of IG respondents rated opportunities for open communication and inclusion as very or extremely influential as a facilitator.

IGs did not find any SL barriers particularly impactful to their ECCS work, with all average ratings rounding to somewhat influential.

Improvement and Sustainability

Facilitators

- Integrated data systems
- Cross-sector participation and enthusiasm
- Trainings and networking to support knowledge of CQI
- Aligned priorities and strategies

Barriers

- Lack of resources
- Lack of buy-in at community, state, and/or local level
- Competing goals/and or misaligned priorities
- Institutional and organizational culture/practices

In the improvement and sustainability domain, IGs found integrated data systems (mean = 3.5), cross-sector participation and enthusiasm (mean = 3.9), and aligned priorities/strategies (mean = 3.8) to be very influential facilitators. Forty one percent, 82%, and 71% of respondents rated these areas as either very or extremely influential, respectively.

In terms of barriers, 59% of IGs reported that lack of resources were a very or extremely influential barrier to improvement and sustainability, with an average rating of 3.9.

Comparing to the 2018 Survey

Although the Contextual Factors survey was fielded in 2018, the previous iteration of the survey is not directly comparable to the 2020 survey. The previous iteration of the survey asked Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) participants to self-identify barriers and facilitators, along with rating the influence of these factors across a variety of domains. To minimize participant burden, the 2020 iteration was revised with input from an evaluation working group (including Expert Faculty and IG/PBC members) to prepopulate facilitators and barriers based on the literature and direct experience. However, we can still compare common themes between the two cross-sections.

In the 2018 survey, partnerships and stakeholders were consistently reported as both an influential barrier and a facilitator among several domains (state environment, community environment, and ECCS-CoIIN team). We see that this holds true in 2020, particularly for PBCs, whom of which repeated that relationship building and strategic planning were influential facilitators across all domains.

Funding and resources were also influential facilitators and barriers in the 2018 survey. This trend continues in the 2020 survey and especially so for IGs, who noted that funding and resources consistently acted as barriers or facilitators across the four domains, speaking to their structural duties in ECCS implementation.

APPENDIX D

Table 1: Contextual Factors Survey average ratings by participant.

QUESTION	IG MEAN	PBC MEAN
POLICY	**3.6**	**3.4**
Facilitators	3.9	3.9
Relationship building/engagement of stakeholders	4.3	4.3
Opportunities to coordinate/develop activities on shared understanding of ECCS	4.1	4.0
Priority alignment of other constituencies	3.9	3.9
Engagement of families/community around SDOH	3.3	3.4
Barriers	3.3	3.0
Limited buy-in from stakeholders	3.2	3.3
Competing or misaligned priorities	3.1	2.9
Resource constraints	3.8	3.1
Political will	3.3	2.8
EARLY CHILDHOOD SYSTEMS	**3.5**	**3.5**
Facilitators	3.5	3.9
Relationship building/engagement of partners	3.6	3.9
Alignment with existing funding sources/initiatives	3.5	4.0
Availability of funding to support systems building	3.5	3.7
Clear strategic Direction	3.4	4.0
Barriers	3.5	3.2
Lack of funding to support systems building	3.6	3.2
Political will	3.7	3.1
Competing initiatives, priorities, and other siloed efforts	3.5	3.2
Time constraints	3.2	3.2
STATE/LOCAL CONNECTIONS	**3.6**	**3.5**
Facilitators	3.9	4.2
Preexisting relationships and partnerships	4.2	4.4
Alignment of goals and/or alignment with existing initiatives	4.0	4.2
Opportunities for open communication; intentional inclusion of community voice	4.0	4.1
Funding opportunities and support	3.4	4.1
Barriers	3.3	2.9
Siloed systems/departments and misaligned priorities	3.4	3.4
Lack of resources/funding	3.4	3.1
Power Dynamics	3.2	2.4
Lack of buy-in at community, state, and/or local level	3.0	2.6
IMPROVEMENT AND SUSTAINABILITY	**3.5**	**3.5**
Facilitators	3.7	3.8
Integrated data systems	3.5	3.4
Cross-sector participation and enthusiasm	3.9	3.9
Trainings and networking to support knowledge of CQI	3.3	3.7
Aligned priorities and strategies	3.9	4.2
Barriers	3.4	3.3
Lack of resources	3.9	3.3
Lack of buy-in at community, state, and/or local level	3.1	3.3
Competing goals/and or misaligned priorities	3.4	3.3
Institutional and organizational culture/practices	3.3	3.2

Note: Responses were rated on a scale of 1-5, with 1 being "not at all influential," 2 being "a little influential," 3 being "somewhat influential," 4 being "very influential," and 5 being "extremely influential."

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National Institute for Children's Health Quality

APPENDIX E

PARTNERSHIP SURVEY ANALYSIS

Background

The purpose of the Partnership Survey is to quantify the experiences of Impact Grantee (IG) and Place-based Community (PBC) teams in interacting and linking with state and local partnerships in pursuit of the Early Childhood Comprehensive Systems Collaborative Improvement and Innovation Network (ECCS CoIIN) project goals. The Partnership Survey was fielded during Year 3 of ECCS CoIIN to capture partnership building activities and cross-sector collaboration. During Year 4, the Partnership Survey was revised to better align with and remain relevant to the direction of the ECCS CoIIN. The review processes included input from Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB), Subject Matter Experts (SMEs), and IG and PBC teams. The revisions included a more thorough list of partners and sectors, adding open-ended qualitative responses focusing on barriers and facilitators to engagement, and the addition of an action domain (influencing). The revised survey was fielded again in Year 5 (Winter 2020-2021). Response rates for all three survey years are detailed in Table 1.

Table 1. Partnership Survey response rates by year.

YEAR	RESPONSE RATE
2018	Overall: 36% (33% IG; 37% PBC)
2020	Overall: 63% (67% IG; 61% PBC)
2021	Overall: 70% (75% IG; 68% PBC)

Comparability and Context

The 2021 and 2020 Partnership Surveys are directly comparable. Most of the quantitative aspects of the 2018 survey are comparable to the 2020 and 2021 iterations.[1] The 2018 Partnership Survey did not contain any qualitative responses.

It is important to note that the 2020 Partnership Survey was fielded shortly before the global COVID-19 pandemic began, and the 2021 Partnership Survey was fielded during the pandemic. The pandemic may have colored the partnership changes that IGs and PBCs experienced in their state and local communities in the 2021 survey.

Methods

Quantitative Methods

The data were imported into SPSS; variables were dropped that were not necessary for quantitative analysis, and any partial responses were dropped. Variables were renamed to standard conventions determined in survey conception. Missing values were cleaned and defined for all numeric variables.

Composite variables were generated. Variables were grouped into sectors, as previously determined in the survey conception. The sectors are the following:

- **Academic/Non-Profit**
- **Business/Private Sector**
- **Child Welfare/Criminal Justice**
- **Early Care and Education Leadership**
- **Early Childhood Initiatives or Coalitions**
- **Executive/Legislative Leadership**
- **Health Care**
- **Parents/Community Leadership**
- **Public Health and Human Service and Supports**
- **Social Services and Family Infrastructure Supports**

[1]For more information, see the section "Comparing quantitative findings over time."

APPENDIX E

Each composite was iterated for both state and local partnerships,[2] and iterated for linking, interacting, and influencing. This resulted in 57 total variables. The scale of each composite is seen in Table 2.

Table 2. Composite variable scales.

SCALE	LINKING VARIABLES	INFLUENCING VARIABLES	INTERACTING VARIABLES
1	Not at all easy	Not at all easy	Networking
2	A little	A little	Cooperating
3	Somewhat	Somewhat	Coordinating
4	Very	Very	Collaborating
5	Extremely	Extremely	Partnering
-9	N/A	N/A	I am a member of this organization

[2]Exception: Business partnerships were only rated on the local level.

Once composite variables were generated, the mean score of each respective linking, influencing, and interacting variable describes partnerships within each sector and geography. For instance, in 2021, the mean response for IG/PBC interactions with state-level academic/non-profits was 3.29, in which case we describe their partnerships as "coordinating."

As the data between the 2021 and 2020 Partnership Survey are directly comparable, t-tests were used to determine significance between years for each composite variable.

Qualitative Methods

Qualitative data in the 2020 and 2021 Partnership Survey were analyzed using inductive coding techniques (i.e., developed and refined themes as they emerged while reviewing text responses). Each individual response could be coded under multiple themes.

APPENDIX E

Quantitative Analysis

Significant Findings

There were 10 significant findings between the 2020 and 2021 Partnership Survey. The majority of these (70%) were among state partnerships; 60% were both state partnerships and represented an increase in partnership. This is consistent with the expectation that state-level directives may have become more valued to navigate the COVID-19 pandemic occurring when the 2021 survey was fielded.

There were no significant local-level influential findings among respondents. Findings should be interpreted with caution due to small sample sizes. Full survey findings are shown in Table 3.

Table 3. Partnership Survey findings, 2020 and 2021.

COMPOSITE VARIABLE	2020 MEAN	2021 MEAN	SD	T-TEST	DF	CI LL	CI UL	SIG
INTERACTING								
State								
Academic/Non-Profit	3.78	3.29	1.59	-1.05	11	-1.49	0.53	
Child Welfare/Criminal Justice	3.10	3.37	1.26	0.89	16	-0.38	0.92	
Early Care and Education Leadership	2.78	3.38	1.05	2.70	21	0.14	1.07	*
Early Childhood Initiatives or Coalitions	3.78	3.89	0.96	0.48	17	-0.37	0.59	
Executive/Legislative Leadership	2.14	3.20	1.69	1.99	9	-0.15	2.27	
Health Care	2.93	2.89	1.32	-0.14	16	-0.72	0.63	
Parents/Community Leadership	3.85	4.06	1.03	0.84	16	-0.32	0.74	
Public Health and Human Service and Supports	3.59	3.70	0.95	0.53	20	-0.32	0.54	
Social Services and Family Infrastructure Supports	2.18	2.83	1.31	1.66	10	-0.22	1.53	
Local								
Academic/Non-Profit	4.08	3.31	1.45	-2.28	17	-1.50	-0.06	*
Business/Private Sector	3.00	3.13	1.81	0.20	7	-1.39	1.64	
Child Welfare/Criminal Justice	3.43	3.59	1.33	0.49	16	-0.52	0.84	
Early Care and Education Leadership	2.73	3.10	1.10	1.75	26	-0.07	0.81	
Early Childhood Initiatives or Coalitions	4.53	4.36	0.84	-0.75	13	-0.65	0.32	
Executive/Legislative Leadership	2.00	2.71	1.36	1.81	11	-0.15	1.57	
Health Care	3.01	2.98	1.23	-0.10	23	-0.54	0.49	
Parents/Community Leadership	3.59	3.65	1.05	0.27	23	-0.39	0.50	
Public Health and Human Service and Supports	3.72	3.42	1.11	-1.45	28	-0.72	0.12	
Social Services and Family Infrastructure Supports	2.92	3.19	1.37	0.96	23	-0.31	0.85	

Table 3 (cont.). Partnership Survey findings, 2020 and 2021.

COMPOSITE VARIABLE	2020 MEAN	2021 MEAN	SD	T-TEST	DF	CI LL	CI UL	SIG
LINKING								
State								
Academic/Non-Profit	3.94	3.23	0.90	-2.83	12	-1.26	-0.16	*
Child Welfare/Criminal Justice	3.17	3.47	1.09	1.18	17	-0.24	0.84	
Early Care and Education Leadership	3.34	3.78	0.98	2.17	22	0.02	0.86	*
Early Childhood Initiatives or Coalitions	3.79	4.10	0.77	1.82	20	-0.04	0.66	
Executive/Legislative Leadership	2.42	3.00	1.15	1.59	9	-0.25	1.41	
Health Care	2.98	3.25	0.85	1.31	16	-0.17	0.70	
Parents/Community Leadership	3.48	3.47	0.94	-0.04	16	-0.49	0.48	
Public Health and Human Service and Supports	3.62	3.97	0.67	2.41	21	0.05	0.64	*
Social Services and Family Infrastructure Supports	2.38	2.88	1.17	1.43	10	-0.28	1.29	
Local								
Academic/Non-Profit		3.67	3.33	0.80	-1.76	17	-0.73	0.07
Business/Private Sector	4.00	2.88	0.99	-3.21	7	-1.95	-0.30	*
Child Welfare/Criminal Justice	3.57	3.78	0.88	1.00	17	-0.23	0.64	
Early Care and Education Leadership	3.18	3.28	0.96	0.54	26	-0.28	0.48	
Early Childhood Initiatives or Coalitions	4.43	4.24	0.88	-1.04	22	-0.57	0.19	
Executive/Legislative Leadership	1.75	2.54	0.89	3.08	11	0.23	1.36	**
Health Care	2.99	2.97	0.88	-0.14	23	-0.40	0.34	
Parents/Community Leadership	3.49	3.45	0.76	-0.21	24	-0.35	0.28	
Public Health and Human Service and Supports	3.54	3.54	0.89	0.00	28	-0.34	0.34	
Social Services and Family Infrastructure Supports	3.56	3.81	1.01	1.25	23	-0.17	0.68	
INFLUENCE								
State								
Academic/Non-Profit	3.23	3.23	1.07	0.02	12	-0.64	0.65	
Child Welfare/Criminal Justice	3.10	3.56	1.00	1.94	17	-0.04	0.95	
Early Care and Education Leadership	3.20	3.67	0.95	2.40	22	0.06	0.89	*
Early Childhood Initiatives or Coalitions	3.46	4.04	0.93	3.01	22	0.18	0.98	**
Executive/Legislative Leadership	2.88	3.40	1.65	1.01	9	-0.65	1.70	
Health Care	2.84	2.94	0.87	0.46	16	-0.35	0.54	
Parents/Community Leadership	3.61	3.75	1.06	0.53	15	-0.43	0.71	
Public Health and Human Service and Supports	3.38	3.91	0.80	3.14	21	0.18	0.89	**
Social Services and Family Infrastructure Supports	2.38	2.53	1.37	0.38	10	-0.76	1.07	
Local								
Academic/Non-Profit	3.42	3.03	0.98	-1.69	17	-0.88	0.10	
Business/Private Sector	3.00	2.75	1.39	-0.51	7	-1.41	0.91	
Child Welfare/Criminal Justice	3.14	3.39	0.98	1.08	17	-0.24	0.74	
Early Care and Education Leadership	3.06	3.17	0.85	0.68	26	-0.22	0.45	
Early Childhood Initiatives or Coalitions	4.29	4.07	1.13	-0.95	22	-0.71	0.26	
Executive/Legislative Leadership	2.50	2.58	1.16	0.25	11	-0.66	0.82	
Health Care	3.09	2.84	0.90	-1.32	23	-0.62	0.14	
Parents/Community Leadership	3.57	3.52	0.95	-0.27	24	-0.45	0.34	
Public Health and Human Service and Supports	3.38	3.56	0.85	1.16	28	-0.14	0.51	
Social Services and Family Infrastructure Supports	3.14	3.21	1.36	0.25	23	-0.50	0.64	

Note: * = p<.05, ** = p<.01, *** = p<.001.

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State-Level Early Care and Education Leadership and Initiatives/Coalitions

Between 2020 and 2021, all respondents significantly interacted, linked, and were influenced more by state-level early care and education leadership. Of particular note, IGs and PBCs found linking ($M=3.78$, $SD=0.98$), $t(22)=2.17$, $p<.05$, and being influenced ($M=3.67$, $SD=0.95$), $t(22)=2.40$, $p<.05$, by state-level early care and education leaders rise from "somewhat easy" to "very easy."

Similarly, IGs and PBCs found state-level early childhood initiatives and coalitions significantly increased their influence between 2020 and 2021 ($M=4.04$, $SD=0.93$), $t(22)=3.01$, $p<.01$, with their partnerships rising from "somewhat easy" to "very easy." State-level findings for interacting and linking were not significant for this sector.

Within the context of the COVID-19 pandemic, these findings suggest that state-level guidance on early care and education leadership and coalitions may have become more valued to navigate the public health crisis safely as it was accompanied by increased rates of families working, providing care, and educating from home.

State-Level Public Health and Human Services

State-level public health and human services had significantly more linking, ($M=3.97$, $SD=0.67$), $t(21)=2.41$, $p<.05$, and influential, ($M=3.91$, $SD=0.80$), $t(21)=3.14$, $p<.01$, partnerships in the 2021 survey. Most notably, public health and human services increased their 2020 rating of "coordinating" to "collaborating" with IG/PBC partners in 2021, mirroring the partnership changes with state-level early care and education leadership and coalitions. Findings for interacting were not significant within this sector.

State- and Local-Level Academics and Non-Profits

IGs and PBCs reported a significant decrease in their partnerships with academics and non-profits, specifically in local-level interacting and state-level linking. This is consistent with expectations, as the survey year was likely marked by decreased in-person interactions and linking.

Respondents rated their local-level interactions as "coordinating" in 2021, in comparison to "collaborating" in 2020, ($M=3.31$, $SD=1.45$), $t(17)=-2.28$, $p<.05$. Findings were not significant for local-level linking nor influencing within this sector.

Similarly, state-level linking was rated as "very easy" in 2020, which dropped to "somewhat easy" in the subsequent year ($M=3.23$, $SD=0.90$), $t(12)=-2.83$, $p<.05$. Findings were not significant for state-level interacting nor influencing within this sector.

Local-Level Businesses

IGs and PBCs reported a significant decrease in their local-level linking with businesses among the private sector ($M=2.88$, $SD=0.99$), $t(7)=-3.21$, $p<.05$, dropping from "very easy" to "somewhat easy" partnerships, likely reflective of a poor economy. This finding should be interpreted with caution due to the small sample. Findings were not significant for local-level interacting nor influencing in this sector.

Local-Level Executives and Legislative Leadership

Alternatively, respondents found linking with local-level executives and legislative leadership to significantly rise from "a little" to "somewhat easy" ($M=2.54$, $SD=0.89$), $t(11)=3.08$, $p<.01$. This could speak to increased philanthropic efforts during the pandemic, and/or partnering with local policymakers in pandemic-related relief efforts but should be interpreted with caution due to the small sample size. Local-level findings were not significant for interacting nor influencing within this sector.

APPENDIX E

Comparing Quantitative Findings Over Time

Using the same methods as above, the 2018 and 2020 Partnership Surveys were analyzed in year 4 of the ECCS CoIIN project. However, the 2018 survey did not include influential composite variables, while the 2020 survey did. Therefore, we can only observe changes to the influential composite variables starting in 2020.

There were 10 significant composite variables between the 2018 and 2020 Partnership Survey. Four of these composite variables remained significant in the 2020 and 2021 Partnership Survey analysis.

The composite variables that were significant in the 2018 and 2020 Partnership Survey analysis, but were not significant in the 2020 and 2021 Partnership Survey analysis are detailed in Table 4. The composite variables that were significant in the 2018 and 2020 Partnership Survey analysis and remained significant in the 2020 and 2021 Partnership Survey analysis are detailed in Table 5.

Table 4. Directionality of composite variables with mixed significance in the 2018-2020 and 2020-2021 Partnership Survey analysis.

INDICATOR	2018 MEAN	SIG 2018-2020 DIRECTIONALITY	2020 MEAN	NOT SIG 2020-2021 DIRECTIONALITY	2021 MEAN
LOCAL					
INTERACTING					
Early Care and Education Leadership	3.83	Decrease	2.73	Increase	3.10
Social Services and Family Infrastructure Supports	3.52	Decrease	2.92	Increase	3.19
LINKING					
Early Childhood Initiatives or Coalitions	3.24	Increase	4.43	Decrease	4.24
Health Care	2.29	Increase	2.99	Decrease	2.97
Social Services and Family Infrastructure Supports	2.83	Increase	3.56	Increase	3.81
STATE					
LINKING					
Health Care	1.91	Increase	2.98	Increase	3.25

Table 5. Directionality of composite variables significant in both the 2018-2020 and 2020-2021 Partnership Survey analysis.

COMPOSITE VARIABLE	2018 MEAN	SIG 2018-2020 DIRECTIONALITY	2020 MEAN	SIG 2020-2021 DIRECTIONALITY	2021 MEAN
STATE					
INTERACTING					
Early Care and Education Leadership	3.29	Decrease	2.78	Increase	3.38
LINKING					
Early Care and Education Leadership	2.51	Increase	3.34	Increase	3.78
Public Health and Human Service and Supports	2.69	Increase	3.62	Increase	3.97
Academia/Nonprofit	2.57	Increase	3.94	Decrease	3.23

Implications of Quantitative Findings

Half of the composite variables that were significant in the 2018 and 2020 Partnership Survey analysis were on the local-level, likely speaking to the community-based work that IG/PBC leads are engaged in. However, none of these remained significant in the 2020 and 2021 Partnership Survey analysis.

Four of the five state-level composite variables remained significant between survey analysis years. However, some of the relationships switched directionality (see Table 5). The state-level academic/non-profit interaction composite variable switched from a positive to a negative significant relationship. Alternatively, the state-level early care and education leadership interaction composite variable switched from a negative to a positive significant relationship. This, in conjunction with the consistency of the significant, positive relationship of state-level linking for early care and education leadership and public health and human services, could speak to a greater reliance of IGs and PBCs on state-level public health and early childhood guidance to navigate the public health crisis and its effect on early childhood systems.

Qualitative Analysis

Overall, there were fewer qualitative responses to the 2020 Partnership Survey, and data submitted had fewer codes per response than the 2021 survey. This could be connected to the fact that respondents had more to discuss in 2021 as they reflected on the near conclusion of the 5-year project.

State-Level Findings

As expected, compared to local-level findings, findings from the state level had more emphasis on systems, priorities, and leadership (see Table 6).

Barriers

System/mission misalignment, capacity limitations, competing priorities, and time limitations were among the top five barriers to state partnership in both 2020 and 2021. Whereas communication and messaging was reported as a primary barrier in 2020, this was replaced with funding limitations in 2021, which could speak to funding concerns and sustainability as the end date of the ECCS CoIIN project neared.

Enablers

For enablers, willingness to collaborate, system/mission alignment, support from higher ups, and communication were all reported as a top five enabling factor to partnership in both 2020 and 2021, though the order shifted between years. Again, whereas connecting to community was reported as a primary enabler in 2020, this was replaced with funding limitations in 2021, which could speak to funding concerns and sustainability as the end date of the ECCS CoIIN project loomed.

Partnerships

When respondents were asked "how are you partnering?", they reported consistently partnering through a willingness to collaborate, support from higher ups, communication and messaging, and system/mission alignment between the two survey years. Similar to the enablers, connecting to community was shared as an area of partnership in 2020, though project management, research, and implementation was reported as more important for state partnerships in 2021. This could speak to a larger emphasis on implementation as the project neared its funding end.

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Table 6. Overall findings for state-level barriers, enablers, and partnerships.

STATE LEVEL			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	27	system/mission misalignment	67
capacity limitations	28	time limitations	57
competing priorities	26	funding limitations	51
time limitations	15	capacity limitations	45
communication and messaging	10	competing priorities	33
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	52	willingness to collaborate	166
system/mission alignment	48	support from higher ups	93
support from higher ups	38	system/mission alignment	48
communication and messaging	19	communication and messaging	48
connecting to community	16	funding opportunities	29
PARTNERSHIPS	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	79	willingness to collaborate	206
support from higher ups	71	support from higher ups	121
communication and messaging	50	project management, research, implementation	62
connecting to community	48	system/mission alignment	60
system/mission alignment	38	communication and messaging	42

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Table 7. Overall findings for local-level barriers, enablers, and partnerships.

LOCAL LEVEL			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	34	capacity limitations	79
capacity limitations	26	time limitations	64
time limitations	21	system/mission misalignment	61
unwillingness to collaborate	15	funding limitations	33
competing priorities	14	lack of understanding about/ connection to community	32
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	53	willingness to collaborate	155
communication and messaging	44	system/mission alignment	111
system/mission alignment	43	connecting to community	93
connecting to community	39	project management, research, implementation	29
project management, research, implementation	25	support from higher ups	23
PARTNERSHIPS	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	134	willingness to collaborate	255
project management, research, implementation	84	communication and messaging	157
connecting to community	69	connecting to community	121
communication and messaging	68	project management, research, implementation	103
support from higher ups	48	referrals	68

Local-level findings

As expected, compared to state-level findings, findings from the local level had more emphasis on community engagement, project management, and communication (see Table 7).

Barriers

Between 2020 and 2021, the top three barriers for local partnerships remained consistent (system/mission misalignment, capacity limitations, and time limitations), though the order shifted slightly. In 2021, respondents mentioned funding limitations more than in 2020, which could be connected to funding concerns and sustainability as the end date of the ECCS CoIIN project loomed. A lack of concern about/connection to community also was added as a barrier in 2021, which could be related to increased awareness and conversations around diversity, equity, and inclusion. Unwillingness to collaborate and competing priorities were among the top five barriers noted in 2020, and while this barrier remained in 2021, they were not among the main concerns of respondents.

Enablers

Between 2020 and 2021, willingness to collaborate, system/mission alignment, connecting to community, and project management, research, and implementation were all among the top five enablers reported, though the order shifted across years. In 2021, support from higher ups was added as a top five partnership enabler, which could speak to upscaling efforts as the project neared close and/or the importance of leadership during the pandemic. Communication and messaging was reported as a top five enabler in 2020, but it was not among the main areas enabling partnership in 2021.

Partnerships

When respondents were asked "how are you partnering?," they reported a willingness to collaborate, project management, research, and implementation, connecting to their community, and communication and messaging were the top five areas of partnership in both 2020 and 2021. While participants reported support from higher ups were an important area of partnership in 2020, this was replaced with referrals in 2021. This could speak to a larger emphasis on implementation as the project neared its funding end.

Findings by Sector

Two sectors included in the Partnership Survey will not be presented in this section due to small sample sizes in one or both years measured (business/private sector and other sector).

Overall Findings

As can be seen above in Table 8, in 2020, academics/non-profits were not a particularly robust area of partnership, particularly on the local level. However, this grew in 2021 both within communities and at the state level.

Between 2020 and 2021, funding opportunities and funding limitations became more influential as enablers, areas of partnership, and barriers to working with academics and non-profits on both the state and local level. This could speak to the upcoming end of the ECCS CoIIN project and a possible increased focus on identifying alternative funding to maintain partnerships and programs that grew during the project.

Barriers

On the state level, a lack of understanding or connection to served communities and mission misalignment remained a barrier in both 2020 and 2021. While mission misalignment was noted as a barrier on the local level in 2020, this did not sustain in 2021, with more concern placed on limitations related to the pandemic. Funding limitations were the top barrier in 2021 among state and local partnerships. However, data were not robust on the local level.

Enablers

Between 2020 and 2021, enablers on the state and local level looked markedly similar (willingness to collaborate, project management, system alignment), though there was more importance placed on existing relationships (state level) and leadership support (local level) in 2021. This suggest that relationship development between ECCS CoIIN participants and state and local academics/non-profits could be an area of growth throughout the project. Additionally, funding opportunities were the important enablers in 2021 among state and local partnerships.

Partnership

State and local areas of partnership are nearly identical between 2020 and 2021 (willingness to collaborate, project management, trainings, system alignment), suggesting that there were no particular innovations in approaches to academic/non-profit partnership towards the end of the ECCS CoIIN project. Additionally, funding opportunities were the important areas of partnership in 2021 among state and local levels.

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Table 8. Academic/non-profit findings for state- and local-level barriers, enablers, and partnerships.

ACADEMIC/NON-PROFIT			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
unwillingness to collaborate	3	funding limitations	6
system/mission misalignment	2	system/mission misalignment	4
lack of understanding about/ connection to community	2	time limitations	3
		lack of direction from higher ups	2
		lack of understanding about/ connection to community	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	6	willingness to collaborate	7
support from higher ups	3	funding opportunities	6
system/mission alignment	2	support from higher ups	3
project management, research, implementation	2	project management, research, implementation	3
		existing relationships	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
project management, research, implementation	9	willingness to collaborate	10
support from higher ups	8	project management, research, implementation	6
funding opportunities	5	funding opportunities	4
willingness to collaborate	4	support from higher ups	3
system/mission alignment	3	system/mission alignment	2
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	2	funding limitations	2
		COVID limitations	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	3	willingness to collaborate	9
communication and messaging	2	system/mission alignment	4
system/mission alignment	2	support from higher ups	3
		funding opportunities	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	5	willingness to collaborate	13
project management, research, implementation	4	project management, research, implementation	8
support from higher ups	3	communication and messaging	6
training/professional development opportunities	3	funding opportunities	6
funding opportunities	3	training/professional development opportunities	4

Child Welfare/Criminal Justice

Overall Findings

Child welfare/criminal justice partnerships were not robust in 2020, and particularly so on the local level, as exhibited in Table 9. However, partnerships grew in 2021 within communities and at the state level and there was slightly more emphasis on community-based work and communication in 2021.

Barriers

Funding and capacity limitations became more of a barrier on the state level in 2021, potentially speaking to the near end of the ECCS CoIIN project. Data were not robust on the local level, but system/mission misalignment, capacity limitations, and time limitations were noted as state-level barriers in both years.

Enablers

State-level enablers shifted from project focused work in 2020 (data partnership, program implementation) into more community-based work in 2021 (connecting to community, communication and messaging). There was also more of an emphasis on community-based work in 2021 on the local level.

Partnership

The child welfare/criminal justice sector partnered with ECCS CoIIN participants on the local level through more support from leadership and project implementation in 2021, which could speak to the culmination of the 5-year project. On the state level, areas of partnership are markedly similar between 2020 and 2021, though the order of importance shifted slightly, suggesting that there were no new innovations in approaches to criminal justice/child welfare partnership towards the end of the ECCS CoIIN project beyond communication and messaging.

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Table 9. Child welfare/criminal justice findings for state- and local-level barriers, enablers, and partnerships.

CHILD WELFARE/CRIMINAL JUSTICE			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	4	time limitations	6
capacity limitations	3	funding limitations	4
time limitations	2	system/mission misalignment	4
		capacity limitations	4
		competing priorities	3
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	5	willingness to collaborate	13
project management, research, implementation	4	support from higher ups	8
data partnership	4	communication and messaging	6
support from higher ups	3	connecting to community	2
system/mission alignment	3		
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
support from higher ups	5	willingness to collaborate	15
willingness to collaborate	4	support from higher ups	7
connecting to community	3	project management, research, implementation	5
project management, research, implementation	2	system/mission alignment	3
system/mission alignment	2	communication and messaging	3
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
no data		system/mission misalignment	3
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
system/mission alignment	2	willingness to collaborate	4
		system/mission alignment	4
		connecting to community	3
		good staffing	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
connecting to community	3	willingness to collaborate	14
willingness to collaborate	2	communication and messaging	6
system/mission alignment	2	connecting to community	6
		support from higher ups	4
		project management, research, implementation	2

APPENDIX E

Early Care and Education Leadership

Overall Findings

Both state and level findings for early care and education leadership were nearly identical between 2020 and 2021, and as expected, was one of the most robust sectors of partnership for ECCS CoIIN participants. There was, however, slightly less emphasis on connecting to communities and slightly more emphasis on funding limitations and opportunities in 2021 on both the state and local level. This could again speak to the near end of the ECCS CoIIN project and funding (see Table 10).

Barriers

Some commonly reported barriers across both the state and local level across both 2020 and 2021 included mission misalignment, capacity limitations, and competing priorities. On the local level, unwillingness to collaborate was also a top barrier in both years. Funding limitations were a top barrier in 2021 among state and local partnerships.

Enablers

Consistently reported enablers at the state and local level across both time periods included system alignment, support from higher ups, and willingness to collaborate. On the local level, connecting to community was shared as a top five enabler in both 2020 and 2021, speaking to the community-based work for early care and education leadership. Funding opportunities were a top enabler in 2021 among state partnerships.

Partnership

Willingness to collaborate, project management, and communication and messaging were all highly reported areas of partnership for both the state and local level between 2020 and 2021. Additionally, on the local level, there was a consistent emphasis on connecting to the community. Again, funding opportunities were a top area of state partnership in 2021.

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Table 10. Early care and education leadership findings for state- and local-level barriers, enablers, and partnerships.

EARLY CARE AND EDUCATION LEADERSHIP			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	8	funding limitations	11
competing priorities	6	system/mission misalignment	11
capacity limitations	4	capacity limitations	11
communication and messaging	4	competing priorities	10
time limitations	3	time limitations	9
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
system/mission alignment	12	willingness to collaborate	45
support from higher ups	11	support from higher ups	27
willingness to collaborate	10	communication and messaging	10
project management, research, implementation	7	funding opportunities	8
connecting to community	4	system/mission alignment	8
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
support from higher ups	22	willingness to collaborate	58
willingness to collaborate	18	support from higher ups	44
communication and messaging	17	system/mission alignment	15
system/mission alignment	15	project management, research, implementation	11
connecting to community	8	funding opportunities	8
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	12	capacity limitations	25
time limitations	12	time limitations	19
capacity limitations	6	system/mission misalignment	17
unwillingness to collaborate	5	unwillingness to collaborate	8
lack of understanding about/ connection to community	4	funding limitations	7
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	12	willingness to collaborate	36
connecting to community	12	system/mission alignment	29
training/professional development opportunities	6	connecting to community	24
system/mission alignment	5	training/professional development opportunities	9
communication and messaging	4	support from higher ups	7
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	24	willingness to collaborate	64
project management, research, implementation	18	communication and messaging	33
connecting to community	17	connecting to community	30
communication and messaging	9	project management, research, implementation	20
training/professional development opportunities	7	training/professional development opportunities	17

APPENDIX E

Early Childhood Initiatives or Coalitions

Overall findings

Much like early care and education leadership, early childhood initiative and coalitions had almost identical data between 2020 and 2021 for both state and local-level partnership and also had slightly more emphasis on funding limitations and opportunities in 2021. Again, this could again speak to the near end of the ECCS CoIIN project and funding (see Table 11).

Barriers

Data on barriers among both the state and local level had small sample sizes and therefore should be interpreted with caution. Capacity limitations were reported consistently between all years and all geography levels. System/mission misalignment was the most commonly reported barrier to partnership on the state level in both 2020 and 2021. Funding limitations were a top barrier in 2021 among local partnerships.

Enablers

Willingness to collaborate, communication and messaging, and system alignment were consistently rated as top areas enabling partnership between both years on the state and local level. Funding opportunities were a top enabler in 2021 among state and local partnerships.

Partnership

Commonly reported top areas for partnership in both years and both geography levels included willingness to collaborate, support from higher ups, project management, and communication and messaging. Funding opportunities were a top area of state and local partnership in 2021.

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Table 11. Early childhood initiatives and coalitions findings for state- and local-level barriers, enablers, and partnerships.

EARLY CHILDHOOD INITIATIVES OR COALITIONS			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	2	system/mission misalignment	4
capacity limitations	2	capacity limitations	3
time limitations	2	time limitations	3
		lack of understanding about/ connection to community	3
		communication and messaging	3
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	6	willingness to collaborate	13
system/mission alignment	3	support from higher ups	6
connecting to community	3	communication and messaging	3
communication and messaging	2	system/mission alignment	3
referrals	2	funding opportunities	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	6	willingness to collaborate	16
support from higher ups	4	support from higher ups	10
project management, research, implementation	4	project management, research, implementation	6
communication and messaging	3	system/mission alignment	4
system/mission alignment	3	funding opportunities	3
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	2	capacity limitations	3
		funding limitations	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	9	willingness to collaborate	6
communication and messaging	6	system/mission alignment	5
training/professional development opportunities	3	project management, research, implementation	2
referrals	3	funding opportunities	2
system/mission alignment	2		
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	14	willingness to collaborate	14
project management, research, implementation	10	project management, research, implementation	8
communication and messaging	9	communication and messaging	5
support from higher ups	8	support from higher ups	5
connecting to community	4	funding opportunities	4

Executive/Legislative Leadership

Executive/legislative partnership findings were not robust in 2020, and particularly on the local level, as exhibited in Table 12. Data should be interpreted with caution. However, partnerships grew in 2021 both within communities and at the state level. Overall, there was slightly more emphasis on community-based work and communication in 2021, which could speak to the influence of pandemic and potential greater need for community-level support.

Barriers

System misalignment was reported as a barrier on both the state and local level for both 2020 and 2021 (though 2020 had no barrier data available). On the state level, a lack of direction from higher ups was also a top barrier between both years. This could speak to the bureaucracy of corporate and legislative systems, and the potential need for a champion with social capital among those sectors to lead efforts. This is supported by communication and messaging becoming a barrier to partnership on the state level in 2021, though data should be interpreted with caution.

Enablers

Willingness to collaborate and support from higher ups were mentioned as enablers to executive and legislative partnership on the state and local level in 2020 and 2021. Communication (state level) and connecting to community (local level) were reported as new enablers to partnership in 2021.

Partnership

Willingness to collaborate and system alignment were mentioned as areas of partnership for executive and legislative leadership on the state and local level in 2020 and 2021. Communication (state and local level) and connecting to community (local level) were reported as new areas of partnership in 2021.

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Table 12. Executive/legislative leadership findings for state- and local-level barriers, enablers, and partnerships.

EXECUTIVE/LEGISLATIVE LEADERSHIP			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	2	system/mission misalignment	3
competing priorities	2	time limitations	2
lack of direction from higher ups	2	communication and messaging	2
		funding limitations	2
		lack of direction from higher ups	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	3	support from higher ups	7
support from higher ups	3	willingness to collaborate	6
		communication and messaging	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	4	support from higher ups	10
support from higher ups	4	willingness to collaborate	9
		project management, research, implementation	2
		system/mission alignment	2
		communication and messaging	2
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
no data		capacity limitations	4
		system/mission misalignment	2
		competing priorities	2
		unwillingness to collaborate	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
system/mission alignment	2	willingness to collaborate	3
		system/mission alignment	2
		support from higher ups	2
		connecting to community	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
support from higher ups	4	willingness to collaborate	9
system/mission alignment	4	support from higher ups	5
willingness to collaborate	2	communication and messaging	2
		connecting to community	2
		system/mission alignment	2

Health Care

Overall findings

On both the state and the local level, health care partnership responses were similar between years (see Table 13). There was slightly more emphasis on community work on the local level, adding and/or elevating the importance of lack of understanding of community as a barrier and connecting to community as an enabler and area of partnership. This could speak to a possible increased need for partnership on a community level to respond to the COVID-19 pandemic's impact on the intersection of health care and early childhood education.

Barriers

The 2020 data on health care partnership barriers were not robust. Data from 2021 on the local and state level discussed system misalignment, and time, capacity, and funding limitations as main barriers to partnership. On the state level, competing priorities were shared as a barrier, which could speak to the potential overwhelm the health care sector may have faced during the pandemic. On the local level, a lack of understanding of the community was named as an additional barrier, and could speak to the specialized community-based nature of PBC work.

Enablers

Enablers on both the state and local level were extremely similar between years. However, in 2021, there was additional discussion of project-based work (referrals, project management) on the local level and training on the state level.

Partnership

ECCS CoIIN participants partnered with the health care sector in nearly identical ways between 2020 and 2021 on both the state and the local level. On the state level, willingness to collaborate, leadership support, mission alignment, and communication and messaging were key areas of partnership between years. On the local level, willingness to collaborate, communication and messaging, connecting to communities, and support from higher ups were reported as vital areas of partnership.

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Table 13. Health care findings for state- and local-level barriers, enablers, and partnerships.

HEALTH CARE			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	3	system/mission misalignment	13
competing priorities	3	time limitations	11
communication and messaging	3	funding limitations	8
capacity limitations	2	capacity limitations	7
unwillingness to collaborate	2	competing priorities	3
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	10	willingness to collaborate	25
support from higher ups	5	support from higher ups	14
system/mission alignment	5	communication and messaging	8
communication and messaging	3	system/mission alignment	5
		training/professional development opportunities	4
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	14	willingness to collaborate	34
support from higher ups	8	support from higher ups	15
communication and messaging	7	project management, research, implementation	9
system/mission alignment	7	system/mission alignment	9
connecting to community	5	communication and messaging	7
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
competing priorities	9	time limitations	18
system/mission misalignment	6	capacity limitations	14
capacity limitations	3	system/mission misalignment	10
unwillingness to collaborate	2	funding limitations	9
		lack of understanding about/ connection to community	8
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
system/mission alignment	13	willingness to collaborate	38
communication and messaging	11	connecting to community	23
willingness to collaborate	8	system/mission alignment	19
connecting to community	4	project management, research, implementation	7
support from higher ups	3	referrals	4
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	27	willingness to collaborate	48
communication and messaging	17	communication and messaging	30
project management, research, implementation	16	connecting to community	19
support from higher ups	14	referrals	18
connecting to community	14	support from higher ups	16

Parents/Community Leadership

Overall findings

Parents/community leadership findings were not robust in 2020, and particularly so on the state level, which speaks to the community-based nature of parent leadership work (see Table 14). Findings on both the state and local level were very similar between survey years.

Barriers

In 2021, state barriers to parent/community leadership included competing priorities, an unwillingness to collaborate, system misalignment, and funding and time limitations. On the local level, barriers in 2020 and 2021 were system/mission misalignment, lack of understanding about community, and an unwillingness to collaborate, and time and capacity limitations, though the order of these themes changed slightly between years.

Enablers

On the state level, enablers shared in 2021 emphasized project and training support (leadership support, project management, and training opportunities), as well as an overall willingness to collaborate.

Local level enablers in 2020 and 2021 were communication and messaging, connecting to community, a willingness to collaborate, system/mission alignment, and project management, though the order of these themes changed slightly between years.

Partnership

On the state level, areas of partnership included willingness to collaborate and support from leadership. In 2020, while there was a focus on training opportunities and connecting to community, this was replaced by project management and communication and messaging in 2021, suggesting more of a focus on implementation as the end of the ECCS CoIIN project neared.

In both years on the local level, partnerships with parent leadership were based on a willingness to collaborate, project management, connecting to community, and communication and messaging. There was also an emphasis on training opportunities in 2020, which shifted into referrals in 2021, again suggesting a focus on implementation towards the project end.

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Table 14. Parents/community leadership findings for state- and local-level barriers, enablers, and partnerships.

PARENTS/COMMUNITY LEADERSHIP			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
competing priorities	5	competing priorities	4
capacity limitations	3	unwillingness to collaborate	3
time limitations	2	funding limitations	3
		system/mission misalignment	2
		time limitations	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
willingness to collaborate	6	willingness to collaborate	10
support from higher ups	2	support from higher ups	6
		project management, research, implementation	4
		training/professional development opportunities	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	7	willingness to collaborate	13
support from higher ups	4	support from higher ups	9
training/professional development opportunities	3	project management, research, implementation	4
connecting to community	2	communication and messaging	3
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
time limitations	6	system/mission misalignment	11
capacity limitations	5	capacity limitations	7
unwillingness to collaborate	4	lack of understanding about/ connection to community	7
system/mission misalignment	2	time limitations	4
lack of understanding about/ connection to community	2	unwillingness to collaborate	3
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
communication and messaging	9	willingness to collaborate	26
connecting to community	8	connecting to community	14
willingness to collaborate	6	system/mission alignment	9
system/mission alignment	4	communication and messaging	7
project management, research, implementation	4	project management, research, implementation	4
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	17	willingness to collaborate	29
project management, research, implementation	11	communication and messaging	24
connecting to community	11	connecting to community	21
communication and messaging	7	project management, research, implementation	13
training/professional development opportunities	7	referrals	8

Public Health and Human Service and Supports

Overall findings

Again, data on both the local and state level were markedly similar between years (Table 15). However, there was slightly more emphasis on funding on the state level and community-based work on the local level in 2021.

Barriers

Reported state and local barriers to partnership with public health in 2020 included competing priorities, system/mission misalignment, an unwillingness to collaborate, and time and capacity limitations. In 2021, on the state level, an unwillingness to collaborate was replaced with funding limitations; on the local level, competing priorities was replaced with a lack of understanding about community.

Enablers

On the state level, system/mission alignment, support from leadership, a willingness to collaborate, and communication and messaging were important enablers to partnership in 2020 and 2021. In 2020, connecting to community was also reported, but this changed to funding opportunities in 2021.

Between 2020 and 2021, local partnerships were enabled by connecting to community, a willingness to collaborate, system/mission alignment, and project management, research, implementation. In 2020, an enabler was referrals, which shifted to existing relationships in 2021, potentially speaking to the relationship building work completed in ECCS CoIIN.

Partnership

On the local level, areas of partnership between 2020 and 2021 were identical, though in slightly different ordering (a willingness to collaborate, project management, communication and messaging, connecting to community, and referrals). On the state level, consistent partnership areas between years included a willingness to collaborate, support from leadership, communication and messaging, and project management. While connecting to community was a key partnership area on the local level in 2020, this shifted to system alignment in 2021, perhaps speaking to the systems-level focus of the overall ECCS CoIIN project as it neared its end.

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Table 15. Public health and human service and support findings for state- and local-level barriers, enablers, and partnerships.

PUBLIC HEALTH AND HUMAN SERVICE AND SUPPORTS			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
capacity limitations	12	system/mission misalignment	19
competing priorities	7	time limitations	15
system/mission misalignment	7	capacity limitations	15
time limitations	5	competing priorities	9
unwillingness to collaborate	2	funding limitations	9
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
system/mission alignment	18	willingness to collaborate	36
support from higher ups	12	system/mission alignment	29
willingness to collaborate	9	communication and messaging	12
communication and messaging	8	support from higher ups	11
connecting to community	4	funding opportunities	8
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	22	willingness to collaborate	36
connecting to community	22	system/mission alignment	16
support from higher ups	21	communication and messaging	14
communication and messaging	13	support from higher ups	12
project management, research, implementation	12	project management, research, implementation	11
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
system/mission misalignment	9	system/mission misalignment	15
capacity limitations	6	capacity limitations	13
time limitations	3	time limitations	13
unwillingness to collaborate	2	lack of understanding about/ connection to community	7
competing priorities	2	unwillingness to collaborate	5
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
connecting to community	13	system/mission alignment	30
willingness to collaborate	10	willingness to collaborate	21
system/mission alignment	10	connecting to community	18
project management, research, implementation	8	project management, research, implementation	7
referrals	6	existing relationships	6
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	31	willingness to collaborate	42
project management, research, implementation	19	communication and messaging	32
communication and messaging	13	connecting to community	24
connecting to community	11	referrals	22
referrals	11	project management, research, implementation	20

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Social Services and Family Infrastructure Supports

Overall findings

Findings for the social services and family infrastructure sector should be interpreted with caution due to small sample sizes. The data that are present for comparison between 2020 and 2021 are markedly similar on both the state and local level, as shown in Table 16.

Barriers

Data collected in 2020 were not robust; however, on both the state and local level, ECCS CoIIN participants reported barriers in partnership related to COVID-19 in 2021. Funding limitations were also a greater concern in 2021 for states and communities alike.

Enablers

Data collected in 2020 and 2021 on the state level should be interpreted with caution, though there was an increased emphasis on leadership support and communication as an enabler in 2021. On the local level, there was a noted shift from communication and leadership support as enablers in 2020 onto existing relationships internally and externally in 2021.

Partnership

On the state level, areas of partnership were quite similar (willingness to collaborate, support from higher ups, communication and messaging, system/mission alignment), but with a shift from leadership support to increased importance on project management in 2021. This could suggest more focus on project implementation as the ECCS CoIIN project close drew near. Partnership between 2020 and 2021 on the local level was identical (willingness to collaborate, communication and messaging, project management, research, implementation, connecting to community, support from higher ups).

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Table 16. Social services and family infrastructure support findings for state- and local-level barriers, enablers, and partnerships.

SOCIAL SERVICES AND FAMILY INFRASTRUCTURE SUPPORTS			
TOP 5 2020 FINDINGS		TOP 5 2021 FINDINGS	
STATE LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
competing priorities	2	system/mission misalignment	4
		time limitations	4
		funding limitations	4
		COVID limitations	2
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
system/mission alignment	4	support from higher ups	9
willingness to collaborate	3	willingness to collaborate	8
connecting to community	2	communication and messaging	6
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
communication and messaging	6	willingness to collaborate	8
connecting to community	5	support from higher ups	8
willingness to collaborate	3	communication and messaging	6
system/mission alignment	3	system/mission alignment	5
support from higher ups	2	project management, research, implementation	4
LOCAL LEVEL			
BARRIERS	**INSTANCES**	**BARRIERS**	**INSTANCES**
capacity limitations	3	capacity limitations	10
		time limitations	5
		lack of understanding about/ connection to community	4
		COVID limitations	4
		funding limitations	3
ENABLERS	**INSTANCES**	**ENABLERS**	**INSTANCES**
communication and messaging	5	willingness to collaborate	8
willingness to collaborate	4	system/mission alignment	6
project management, research, implementation	4	connecting to community	6
system/mission alignment	2	project management, research, implementation	2
support from higher ups	2	existing relationships	2
PARTNERING	**INSTANCES**	**PARTNERING**	**INSTANCES**
willingness to collaborate	11	willingness to collaborate	19
communication and messaging	9	communication and messaging	13
project management, research, implementation	5	project management, research, implementation	11
connecting to community	4	connecting to community	10
support from higher ups	3	support from higher ups	2