

# COVID-19 Research, Evaluation, and Data Agenda for Child Care and Early Education

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## Overview and Purpose

The context for child care and early education (CCEE) changed rapidly in March 2020 as the global pandemic caused the closure of child care programs and schools, widespread job loss, and negative impacts on the broader economy and family life. Black and Latino families and families with lower income experienced disproportionately negative effects of the COVID-19 pandemic as a result of structural racism and a history of inequitable systems. Many of the negative impacts of the pandemic have directly impacted families' access to high-quality CCEE. For example, the pandemic created a drastic decline in the supply of licensed child care,<sup>a</sup> which disproportionately impacted Black and Latino people who were more likely to be working as essential workers in frontline jobs (and in need of child care) than White or Asian people.<sup>b</sup> Data from the U.S. Census Bureau's Pulse Survey conducted in spring 2021 indicated that more than one five Black and Latino families with young children had experienced a child care disruption within the past four weeks due to COVID-19.<sup>c</sup> Furthermore, Black and Latino families and families with lower incomes<sup>d</sup> experienced the negative financial impacts of the pandemic (e.g., having trouble paying bills, lost wages due to being laid off from a job, etc.) at disproportionately higher rates compared to the overall population.<sup>e</sup> As a result, many families have had reduced income to cover child care costs.

As leaders in CCEE consider the implications of COVID-19 for children, families, policies, and programs, a research, evaluation, and data agenda that identifies key questions, research methods, and data needs will be a critical tool. **This research, evaluation, and data agenda can (1) alert decision makers to racial and economic inequities in outcomes and promote tracking of key equity indicators, (2) encourage the development of new projects and data initiatives, (3) support the synthesis of information across projects, (4) identify key topics for consideration that may be otherwise overlooked, and (5) promote the application of knowledge to planning and development.**

Through the Child Care and Early Education Policy Research and Analysis (CCEEPRA) project with the Office of Planning, Research, and Evaluation (OPRE), Child Trends engaged CCEE experts and stakeholders to support development of a research agenda for the CCEE field in response to COVID-19. The goal of this engagement was to get input on high priority questions that can inform the field's understanding of the pandemic's impact on the CCEE landscape, including children, families, CCEE programs (licensed child care centers, licensed family child care programs, license exempt but legally operating center- and home-based programs, home-based care provided by family, friend, and

<sup>a</sup> Child Care Aware (2021). *Analysis shows child care supply an attendance better, but still suffering*. <https://info.childcareaware.org/blog/analysis-shows-child-care-supply-attendance-better-but-waivering>

<sup>b</sup> Smith, L & Tracey, S. (2020). *What will parents choose? Parent preferences and a disrupted child care system*. Bipartisan Policy Center. <https://bipartisanpolicy.org/blog/what-will-parents-choose-parent-preferences-and-a-disrupted-child-care-system/>

<sup>c</sup> Chen, Y., Ferreira van Leer, K., & Guzman, L. (2021). *Many Latino and Black Households Made Costly Work Adjustments in Spring 2021 to Accommodate COVID-Related Child Care Disruptions*. Child Trends.

<sup>d</sup> The Pew Research study noted "Family incomes are based on 2019 earnings and adjusted for differences in purchasing power by geographic region and for household sizes. Middle income is defined here as two-thirds to double the median annual family income for all panelists the American Trends Panel. Lower income falls below that range; upper income falls above it."

<sup>e</sup> Parker, K., Minkin, R., & Bennett, J. (2020). *Economic Fallout from COVID-19 Continues to Hit Lower-Income Americans the Hardest*. Pew Research Center. <https://www.pewresearch.org/social-trends/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/#:~:text=Fully%20of%20adults%20report,they%20are%20currently%20not%20employed.>

neighbors, Head Start, and state pre-kindergarten), the CCEE workforce, and the broader system of agencies, local organizations, and institutes of higher education that support CCEE.<sup>f</sup>

The purpose of this work is to develop and revise a research, evaluation, and data agenda that can be used by a wide range of stakeholders (state administrators, policymakers, advocates, funders, etc.) to prioritize research questions that need to be addressed and identify potential data sources to answer these questions (the following section provides further details about the purpose and value of the research agenda). While the agenda emerged from needs identified during the pandemic, it has broader use and applicability for the field, as it calls attention to the need to address longstanding challenges and inequities in CCEE.

## The Value of a Research Agenda

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Understanding the immediate and enduring impact of COVID-19 on the CCEE landscape is a priority for decision makers and for analysts and evaluators who provide actionable data to support key decisions. Actionable data can help leaders better prepare for future crises and develop targeted solutions to meet current needs. A shared research, evaluation, and data agenda can support the process of generating actionable data and play a valuable role across CCEE stakeholders in the following ways:

- 1. Alert decision makers to racial and economic inequities in outcomes and promote tracking of key equity indicators.** The COVID-19 pandemic demonstrated how existing racial and economic disparities caused by structural barriers can be exacerbated under increased system stress and limited opportunities for support. For example, a study of infection rates among child care providers early in the pandemic showed no increased risk overall but did show increased rates for early educators who are Black, Hispanic, Latinx, and Native American (who experienced disproportionate rates of COVID-19 illness and death overall).<sup>g</sup> A research agenda can highlight key questions across and within racial, ethnic, and income subgroups and recommend warning indicators that can alert decision makers to emerging inequities that negatively impact outcomes.
- 2. Encourage the development of new projects and data initiatives.** A shared research agenda can be a discussion starter with states/localities facing similar contexts that may benefit from peer learning or from directly working together to launch a survey or other data collection strategy. The agenda can also recommend data elements or constructs not already available in some or all state data systems. For example, the RAPID-EC<sup>h</sup> project was created to support regular, timely data collection from households with young children to provide data to decision makers. The project also launched a child care provider survey that states/localities can choose to participate in to obtain data about their own communities. These collaborations encourage data collection based on common questions and interests.
- 3. Support the synthesis of information across projects.** Early in the COVID-19 pandemic, many states launched surveys to gather information across CCEE programs and/or families. A shared research, evaluation, and data agenda can provide a framework for synthesizing findings from multiple locations and encourage coordination in the future. Analysis of common questions across different economic and policy contexts and with different responses to the crisis can help generate lessons learned and new hypotheses to be tested.
- 4. Identify key topics for consideration that may be otherwise overlooked.** In a crisis, many needs and priorities emerge. Decision makers are faced with addressing urgent needs based in part on how they have been elevated on the long list of priorities. A research agenda can help decision makers focus on issues and questions that may not have had vocal advocates previously. For

<sup>f</sup> The first phase of the research agenda project did not explicitly address school-age care. The next phase of the project will focus on early care and education and school-age care.

<sup>g</sup> Gilliam WS, Malik AA, Shafiq M, et al. COVID-19 transmission in US child care programs. *Pediatrics*. 2020; doi: 10.1542/peds.2020-031971

<sup>h</sup> <https://www.uorapidresponse.com/>

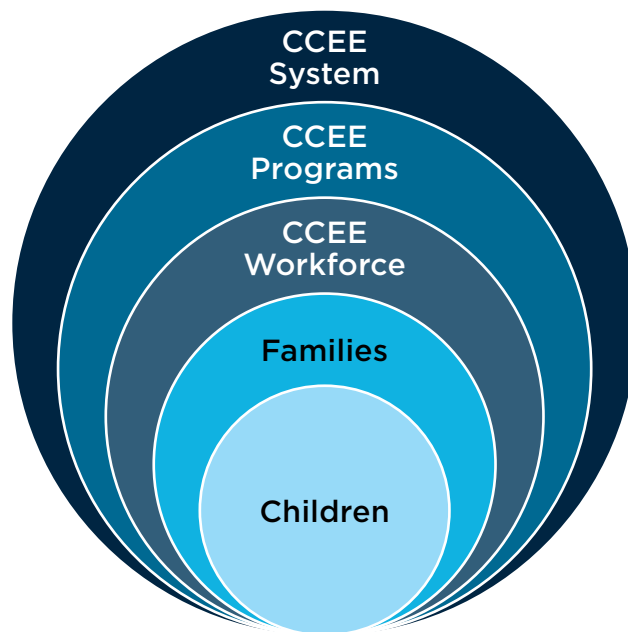
example, the financial needs of child care programs are a critical item on the policy agenda. Yet, questions about how child care programs are supporting children’s social and emotional development during the pandemic are also important to consider. A research agenda can set these priority areas and ensure that data are available to track and monitor areas that might appear less urgent but that could result in unintended consequences if not identified.

- 5. **Promote the application of knowledge to planning and development.** A research, evaluation, and data agenda can outline a comprehensive set of outcomes and help decision makers articulate the policies and supports that can promote the outcomes. These intentional efforts of drawing conclusions and generating hypotheses can be helpful for analyzing immediate effects and for considering effects that may emerge in the future or in response to a new crisis.

## Process

**Drafting the research, evaluation, and data agenda.** In May 2020, the Child Trends team developed a draft agenda outlining key questions organized by five domains: 1) children, 2) families, 3) CCEE workforce, 4) CCEE programs, and 5) CCEE system. Each domain included various topics and sub-topics of interest to better understand the effects of the COVID-19 pandemic on the CCEE landscape. Figure 1 depicts the interconnection across the domains.

**Figure 1.** Visual depiction of the interconnection across domains in the research agenda



**Engaging experts and stakeholders.** Child Trends reached out to research experts and stakeholders to provide input on the research, evaluation, and data agenda. Research experts and stakeholders (which included practitioners, advocates, and representatives from national CCEE organizations) were identified based on four broad areas of expertise: 1) CCEE programs, 2) CCEE workforce, 3) the CCEE system, and 4) children and families using CCEE. Each research expert and stakeholder had a primary area of expertise though many could provide input across the four areas. Of the 25 research experts and 17 stakeholders invited, 24 research experts and 14 stakeholders participated in small group<sup>i</sup> consultations with Child Trends to provide input on the research questions for the research agenda. Research experts and stakeholders participated in small group discussions with the Child Trends team based on their areas of expertise. Child Trends also consulted with Child Care and Development Fund (CCDF) administrators from five states to hear their feedback. Discussion prompts and topics for each small group discussion were generated based on the topical expertise and interest of each group.

<sup>i</sup> Each small group discussion included no more than three experts.

Child Trends sent a draft copy of the research, evaluation, and data agenda to each expert before the discussions. During the discussions, research experts and stakeholders shared feedback on the questions and topics in the research agenda, ideas about which questions or topics should be prioritized, and potential data sources and data gaps. Child Trends also invited experts to submit revisions to the research questions or suggestions for additional questions. Twenty-four experts provided written feedback. Child Trends reviewed experts' written feedback as well as notes from discussions with experts and identified priorities, proposed revisions, and potential additions to make to the research agenda.

On October 30, 2020, Child Trends facilitated a virtual presentation and discussion with the research experts and stakeholders who had provided input on the research agenda. The purpose of this meeting was to 1) provide updates on the COVID-19 research agenda, including proposed revisions and next steps, and 2) hear additional feedback from research experts and stakeholders.

**Revising the research agenda.** Child Trends reviewed the feedback from experts and stakeholders and revised the research agenda. Please see Appendix A for the revised research agenda.

## Key Themes

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Child Trends reviewed feedback from research experts and stakeholders to inform revisions to the research agenda. High-level themes from the feedback included:

- **Focus on racial equity.** The pandemic has and continues to affect children, families, and the CCEE workforce in inequitable ways. A focus on racial equity should be incorporated throughout the research agenda to uncover how the pandemic has exacerbated long existing racial disparities and inequities in CCEE and across the country.
- **Tailor the research agenda for different audiences.** State administrators, policymakers, advocates, researchers, and funders have different questions and areas of interest. Shifting the agenda to be organized by different types of audiences instead of by domain will be helpful in identifying priority questions that align most to their interests. The research agenda will identify a small set of high priority questions relevant to each audience.
- **Identify lessons learned and innovative strategies.** As the pandemic continues, there is growing interest in identifying lessons learned, including success stories and innovative strategies states and communities used to respond to the pandemic that can improve the CCEE system moving forward. For example, states and communities were initially in “crisis mode” and realized an urgent need for real-time information on their CCEE programs and families with young children, information to which many states did not have access. The importance of states identifying ways to collect this real-time data moving forward is a key lesson learned during the pandemic.
- **Coordinated effort.** The field will benefit from a workgroup of researchers studying the impact of COVID-19 on the CCEE landscape to facilitate resource sharing, sharing of best practices and data collection tools, troubleshooting challenges, and ensuring that data collection efforts related to COVID-19 and CCEE are streamlined. This workgroup would help ensure that research on COVID-19 and CCEE is coordinated, non-duplicative, and answers questions of greatest need and highest priority to the field.

## Data Gaps

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While developing and gathering feedback on the COVID-19 research, evaluation, and data agenda, known data gaps became even more pronounced when basic questions about the impact of COVID-19 on the CCEE system could not be answered. Awareness of these gaps can inform next steps in developing data capacity, such as identifying data elements that could be added to existing administrative data sets or data that could be gathered through targeted, time-limited data collection efforts. Data gaps identified in this process include:

- Detailed, real-time data to inform rapid response efforts, such as data on attendance and enrollment in CCEE programs, data on program closures, and data on CCEE workforce staffing needs.
- Information about how the CCEE workforce’s employment and access to services and benefits changed during the pandemic or affected their well-being. This information includes understanding the racial and economic disparities in access to services and benefits among the CCEE workforce.
- Measures to estimate real-time “demand” for child care among families with young children, including the different types of care needed and how that changed throughout the pandemic.
- Qualitative and quantitative information directly from families with young children detailing how they were impacted by the COVID-19 pandemic, including the strategies they used to cope with child care needs and issues with access to care. New data collection is needed for a more in-depth examination of the disparities in how families were impacted by the COVID-19 pandemic, especially families of color and families with lower income.
- Measures of well-being, health, and mental health among children, families, and the CCEE workforce.

## Key Audiences and High Priority Questions/ Topics

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As part of this work, research experts and stakeholders provided input on which questions from the draft research agenda were of highest priority to various audiences. Table 1 identifies examples of high priority questions focused on equity and tailored for different audiences, including 1) state agency leaders, 2) local and state policymakers, 3) federal policymakers, 4) funders, 5) advocates and national early childhood thought leaders, and 6) researchers (please see Appendix A for the full research agenda). The questions represent the information needed for immediate coping and service needs during a crisis and information needed to plan and build long term equitable systems to better support children, families, the CCEE workforce, CCEE programs, and the CCEE system as a whole.

**Table 1. Research agenda to support equitable child care and early education**

Audience	Examples of high priority questions
<p><b>State agency leaders</b></p>	<p>How did the pandemic affect racial and economic inequities in access to child care? What differences were documented by children’s race/ethnicity, family income, and geographic location?</p> <p>What historical systems have contributed to an inequitable CCEE system over time? How have these systems created inequities in the CCEE system? In what ways did the COVID-19 pandemic exacerbate these inequities? How has this impacted children and families of color? What are the next steps to addressing these inequities in the CCEE system?</p> <p>Which type of care did children attend, and how did child care attendance change during the pandemic? Which child care arrangements were less stable, offered lower quality care, or were less likely to promote health and safety? Which children and families were served by these programs?</p> <p>What factors impacted families’ decision making and choices about child care arrangements? What racial and economic inequities were documented in the supports and barriers families experienced when making decisions about child care arrangements?</p> <p>What were the impacts of the COVID-19 pandemic on the CCEE workforce (e.g., job loss, lack of benefits, reduced salary/hours, health issues) and how did those impacts differ by demographic characteristics (e.g., race/ethnicity, age, income) and type of care?</p> <p>How did professional development use and opportunities change during the COVID-19 pandemic, and what was the impact of those changes on the workforce?</p>
<p><b>Local and state policymakers</b></p>	<p>How effective was states’ messaging to local communities about new policy changes, regulations, and guidelines related to COVID-19?</p> <p>What program features and resources were associated with programs remaining financially viable? How did state/federal funding and policies impact program viability?</p> <p>What mechanisms and resources (e.g., data systems, data sources, infrastructure to collect surveys, research partnerships) are needed to understand the changes in supply and demand of child care?</p> <p>What lessons can be learned from examples of collaboration and resource sharing during the pandemic?</p>
<p><b>Federal policymakers</b></p>	<p>What were the impacts of funding provided to CCEE programs under the Coronavirus Aid, Relief, and Economic Security Act, the Coronavirus Response and Relief Supplemental Appropriations Act, and the American Rescue Plan Act?</p> <p>What changes were made to state CCDF subsidy policy during the COVID-19 pandemic? How did those policy changes support different types of care (center- and home-based, Family, Friend, and Neighbor), the CCEE workforce, and different age groups of children (infants and toddlers, preschool, school-age)? How did those policy changes affect which families, and under which conditions, were eligible to receive subsidies and had access to subsidies and care?</p> <p>Which states made changes to licensing/regulations for CCEE programs? Did these changes affect center- and home-based providers differently?</p>

Audience	Examples of high priority questions
<b>Funders</b>	<p>What are the short- and long-term impacts of the COVID-19 pandemic on children using CCEE, and how do those impacts differ by race/ethnicity and income levels?</p> <p>What innovative strategies related to CCEE did communities and states use to respond to the COVID-19 pandemic?</p> <p>What racial and economic inequities were documented in outcomes for families (employment, income, housing) that impact families' access to child care? What long-term implications might these inequities have on the CCEE system?</p> <p>What supports and services for CCEE providers led to positive short- and long-term impacts? What disparities were documented in who had access to those supports?</p> <p>What are the short- and long-term impacts of COVID-19 on CCEE programs and the CCEE system overall, and how do those impacts differ based on type of care and demographic characteristics of the population being served?</p>
<b>Advocates</b>	<p>How effective were various strategies put in place by states to mitigate the impacts of the COVID-19 pandemic on CCEE programs and the CCEE system, and how did they address racial and ethnic inequities in the system?</p> <p>How did COVID-19 restrictions and guidelines impact the quality of CCEE programs?</p> <p>What strategies were used to gain insights into the needs and preferences of families during the pandemic? What family needs were not met? What challenges arose when trying to implement these strategies? Which engagement strategies were most effective and for which families? Were there gaps in the strategies and approaches used to better understand families' needs and preferences?</p>
<b>Researchers</b>	<p>What are the long-term impacts of the COVID-19 pandemic on the CCEE system?</p> <p>What are the long-term impacts of COVID-19 on school readiness, including inequitable access to care and services for children and families of color?</p> <p>Which families relied on informal family/friend/neighbor care during the pandemic? What lessons learned can be applied to better support family/friend/neighbor care providers moving forward?</p> <p>What program features and resources were associated with programs remaining financially viable? How did state/federal funding and local, state, and/or federal policies impact program financial viability?</p>

## Conclusion

As the CCEE field continues to respond to the short- and long-term impacts of COVID-19 on children, families, the CCEE workforce, CCEE programs, and the CCEE system overall, a research, evaluation, and data agenda can encourage the development of new products and initiatives, synthesize information across the field, promote the application of knowledge needed for better planning and development, as well as promote the tracking of key equity indicators, and alert decision makers to racial and economic inequities. CCEE stakeholders and other audiences can use the research, evaluation, and data agenda to respond to the ongoing challenges of the COVID-19 pandemic and develop ways to implement better processes, systems, and data collection to re-build and enhance the CCEE field. To continue revising and updating this agenda, Child Trends, through the CCEEPR contract, will establish a Technical Advisory Panel to add depth and detail to the questions posed in this paper. This panel will meet periodically to review the agenda and related data and research to identify potential revisions and additions to include in the agenda to continue monitoring the impacts of COVID-19 on children, families, the CCEE workforce, CCEE programs, and the broader CCEE system.

# Appendix A

## Purpose of the research agenda

The following tables contain a set of research questions that national, state and local decision-makers and research partners can use to track the impact of COVID 19 on child care and early education (CCEE). The questions are divided into five domains - children, families, the CCEE workforce, CCEE programs and the CCEE system and a set of sub-topics within each domain.

## Decisions to make when using the research agenda

### Reference period

Across the research questions, the reference period is the beginning of restrictions due to the pandemic (March 2020) through September 2021. For some questions, it may be useful to specify a different time period or to compare multiple time periods.

### Characteristics of children, families, workforce and programs

Across all domains, the recommendation is to incorporate analyses disaggregated by race/ethnicity, child age, language status, geography (urban/rural) and U.S. region to identify how children, families, and CCEE staff/providers were differently impacted.

With questions referencing “which children”, the recommendation is to conduct analyses by age group - infants (0-15 months), toddlers (16-35 months), preschoolers (36-59 months), school age (5 years - 8 years)- to identify age groups that may have been more vulnerable or impacted differently during the pandemic.

For questions referencing “which CCEE staff/provider” or “which programs”, the recommendation is to conduct analyses by provider or program type when possible - licensed child care centers, licensed family child care providers, Head Start/Early Head Start, state prekindergarten programs - to gain insights about differential experiences and outcomes.

## Children

Topic	Sub-topic	Question
<b>Experiences in CCEE setting</b>	Overarching impacts of COVID-19	What are the short- and long-term impacts of the COVID-19 pandemic on children using CCEE, and how do those impacts differ by race/ethnicity and income levels?
<b>Experiences in CCEE setting</b>	Attendance	Which children attended child care (including center-based, home-based, and informal family/friend/neighbor care) during the pandemic?



Topic	Sub-topic	Question
<b>Experiences in CCEE setting</b>	Attendance	Which type(s) of care did children attend? How many hours per week did children attend each type of child care? to Did parents change their child care arrangements during the pandemic?
<b>Experiences in CCEE setting</b>	Disruption/instability	Which children experienced a disruption in use of their child care arrangement during the pandemic? For how long? What was the reason for the disruption (e.g., program closure, cost, parent preference, etc.)? Which children returned to any child care arrangement after experiencing a disruption? Which arrangement did they use after they returned (e.g., previous arrangement, new arrangement)?
<b>Experiences in CCEE setting</b>	Disruption/instability	[For children who attended child care during the pandemic, either virtually or in person] Which children experienced a change in their child care provider (e.g., teacher, teacher assistant, home-based child care provider, etc.) within their CCEE arrangement as a result of staffing changes during the COVID-19 pandemic? How many staffing changes did children experience?
<b>Experiences in CCEE setting</b>	Daily activities	Which children experienced an increase in educational screen time (e.g., remote learning on a tablet or computer, online learning programs, etc.) during the pandemic? Which children experienced an increase in recreational screen time (e.g., watching television) during the pandemic?
<b>Experiences in CCEE setting</b>	Daily activities	Which children participated in virtual learning activities provided through their child care arrangement (e.g., virtual learning via Zoom)? Did these virtual learning opportunities take place in the child's home or at the child care setting? Who provided the instruction for the virtual learning opportunities? If children did not participate, why not?
<b>Child Development</b>	Health	What were the characteristics of children using CCEE who tested positive for COVID-19?
<b>Child Development</b>	Health	What were the characteristics of children using CCEE who were hospitalized for COVID-19? What were the characteristics of children who experienced ongoing health challenges related to COVID-19?
<b>Child Development</b>	Mental health	Which children exhibited an increase in symptoms indicating mental health challenges (e.g., behaviors perceived as challenging, dysregulation, changes in eating or sleeping patterns, changes in peer interactions, etc.) during the pandemic? What symptoms did children experience? Which children accessed mental health supports?
<b>Child Development</b>	Social and emotional	What types of activities that promote peer interactions were available to children in CCEE settings during the pandemic (e.g., indoor play, outdoor play, virtual/online activities, small group activities, etc.)? What did these activities look like? What were the challenges to providing opportunities for peer interaction?
<b>Child Development</b>	Social and emotional	What opportunities did children in CCEE settings have to interact with adults (e.g., teachers, providers, etc.)? How did changes to staffing or ratios impact these opportunities? How did personal protective equipment (PPE) (e.g., masks) influence these interactions?
<b>Child Development</b>	Social and emotional	What were the impacts of the pandemic on young children's relationships with their caregivers (e.g., parent-child relationships; child care provider-child relationships)?

Topic	Sub-topic	Question
<b>Child Development</b>	Developmental delays	What were the impacts of the COVID-19 pandemic on the development of young children? Which children experienced developmental delays? Which children experienced learning loss?
<b>Child Development</b>	School readiness	What are the long-term impacts of the COVID-19 pandemic on school readiness, including inequitable access to care and services for children and families of color?
<b>Child Development</b>	Children with Disabilities	How did CCEE settings meet the needs of children with disabilities during the COVID-19 pandemic?

## Family

Topic	Sub-topic	Question
<b>Use of care</b>	Availability	Which families had CCEE available to them that met their needs during the COVID-19 pandemic? Which types of CCEE were available (e.g., center-based, Head Start, home-based child care, informal family/friend/neighbor care, etc.)? Which families did not have CCEE that met their needs? Why not?
<b>Use of care</b>	Availability	Which families experienced changes to their CCEE arrangements during the COVID-19 pandemic? What were the changes? What were the reasons for the changes?
<b>Use of care</b>	Decision-making	What factors impacted families' decision making and choices about CCEE arrangements? What racial and economic inequities were documented in the supports and barriers families experienced when making decisions about child care arrangements?
<b>Experiences in CCEE setting</b>	Engagement	What supports did CCEE settings provide to parents and caregivers during the COVID-19 pandemic?
<b>Experiences in CCEE setting</b>	Engagement	How satisfied are parents and caregivers with the amount and types of interaction they had with their CCEE providers (including teachers, home-based care providers, directors, etc.) during the COVID-19 pandemic? How satisfied are parents and caregivers with the communication from their CCEE providers regarding the COVID-19 pandemic?
<b>Experiences in CCEE setting</b>	Engagement	What recommendations do parents and caregivers have for how family engagement could have been improved during the COVID-19 pandemic? What lessons were learned about family engagement that can be applied moving forward?
<b>Experiences at home</b>	Daily activities	What activities did CCEE providers encourage parents and caregivers to use to support their children's development at home during the COVID-19 pandemic? What additional supports did parents and caregivers need to support their children's development at home?

Topic	Sub-topic	Question
<b>Experiences at home</b>	Daily activities	How often did parents and caregivers engage in the following activities with their children during the COVID-19 pandemic: reading, singing, telling stories, playing outside, games/puzzles? Did the amount of time and types of activities change during the COVID-19 pandemic?
<b>Well-being</b>	Parenting stress	What was the level of stress parents and caregivers experienced during the COVID-19 pandemic? What were the sources of stress and how did it differ depending on parents'/caregivers' jobs or family characteristics? How did stress levels change throughout the COVID-19 pandemic?
<b>Well-being</b>	Mental health	What symptoms of mental health challenges did parents and caregivers experience (e.g., depression, anxiety, substance use, challenges with relationships, etc.)?
<b>Employment</b>	Job characteristics	Which parents and caregivers changed their work schedule (e.g., worked fewer hours or worked different hours) or location (e.g., switched from working in an office to working remotely from home) to accommodate caregiving responsibilities? Which jobs/careers did or did not allow employees to change their work schedules or locations to accommodate caregiving needs?
<b>Employment</b>	Job characteristics	Which parents and caregivers took paid leave to accommodate caregiving responsibilities? What type of paid leave did they use? Which parents and caregivers took unpaid leave to accommodate caregiving responsibilities?
<b>Employment</b>	Job loss	Which parents and caregivers lost their job? Temporarily or permanently?
<b>Employment</b>	Job loss	Which parents and caregivers searched for a new job after losing their job? Which parents and caregivers were successful in finding a new job?
<b>Economic stability</b>	Income	Which families had challenges making ends meet (e.g., struggled to pay rent/mortgage, struggled to pay bills, etc.)?
<b>Economic stability</b>	Income	What changes in income did families experience? How did income changes affect the use of CCEE arrangements?
<b>Economic stability</b>	Income/employment/housing	What racial and economic inequities were documented in outcomes for families (employment, income, housing) that impact families' access to CCEE? What long-term implications might these inequities have on the CCEE system?
<b>Employment</b>	Benefits	Which families lost access to benefits (e.g., health insurance) due to a family member being furloughed, laid off, or reducing their work hours to part-time?
<b>Economic stability</b>	Food security	Which families experienced food insecurity?
<b>Economic stability</b>	Housing	Which families had to move or change their housing situation during the pandemic?
<b>Use of care</b>	Family/friend/neighbor care	Which families relied on informal family/friend/neighbor care during the pandemic? What lessons learned can be applied to better support family/friend/neighbor care providers moving forward?
<b>Experiences at home</b>	Virtual learning	Which families had reliable, consistent access to broadband internet? Which families had access to a smart phone, laptop, or tablet?

Topic	Sub-topic	Question
<b>Experiences at home</b>	Virtual learning	Which families were able to access virtual learning? Were virtual learning opportunities available in multiple languages?
<b>Use of care</b>	Consumer preferences	How did families' preferences about use of CCEE, including different types of child care settings, change as a result of the COVID-19 pandemic?

## CCEE workforce

Topic	Sub-topic	Question
<b>Employment</b>	Overarching impacts of COVID-19	What were the overarching impacts of the COVID-19 pandemic on the CCEE workforce (e.g., job loss, lack of benefits, reduced salary/hours, health issues) and how did those impacts differ by demographic characteristics (e.g., race/ethnicity, age, income) and type of care?
<b>Employment</b>	Job status	Which CCEE staff/providers kept their job during the COVID-19 pandemic? How did job responsibilities change during the COVID-19 pandemic? Who voluntarily left their job? What were the primary reasons for leaving? Among those who left voluntarily, which staff/providers returned? How have job responsibilities changed since remaining employed or returning?
<b>Employment</b>	Job status	Which CCEE staff/providers lost their job? Which employees were furloughed because a program was closing or in order prevent a program from closing? Which employees quit? What, if any, benefits did employees receive when furloughed or laid off?
<b>Employment</b>	Job characteristics	Which CCEE staff/providers began a new job within the CCEE field? For those who left the CCEE field, what was their education, experience, and prior training? What are the characteristics of the new job (type, auspice, role, salary)? How do these characteristics compare to their previous/pre-COVID job?
<b>Employment</b>	Job characteristics	Which CCEE staff/providers experienced the following changes to their job: reduced hours, reduced salary, increased salary? How did benefits change for staff/providers?
<b>Employment</b>	Job characteristics	Which CCEE staff/providers experienced the following changes to their job: decrease in the number of children cared for, increase in the number of children cared for, new space/room for child care, different schedule, different responsibilities?
<b>Experiences in CCEE setting</b>	Perceptions of quality	How did changes made to classroom environments because of health and safety requirements (e.g., environment/materials, learning activities, routines, relationships/interactions; support for families) impact the quality of care provided?
<b>Supports</b>	Supports for providers	What supports and services for CCEE staff/providers led to positive short- and long-term impacts? What disparities were documented in who had access to those supports?

<b>Topic</b>	<b>Sub-topic</b>	<b>Question</b>
<b>Professional Development</b>	Professional development opportunities	How did professional development use and opportunities change during the COVID-19 pandemic, and what was the impact of those changes on the CCEE workforce?
<b>Professional Development</b>	Participation	Which CCEE staff/providers participated in professional development (e.g., workshops, communities of practice, home visits, coaching) during the COVID-19 pandemic? To what extent did virtual professional development opportunities provide a network of support for providers?
<b>Professional Development</b>	Participation	Did CCEE staff/providers have access to professional development on topics related to the COVID-19 pandemic? What professional development opportunities were most useful?
<b>Economic stability</b>	Income	What change in income and/or benefits did lead teachers experience? Assistant teachers? Custodians/bus drivers? Administrative staff?
<b>Economic stability</b>	Making ends meet	Which CCEE staff/providers had challenges making ends meet that they would not typically struggle to meet outside of COVID-19? What worked to address challenges?
<b>Personal Well-being</b>	Stress	What is the level of stress CCEE staff/providers experienced caring for children? How did stress impact their physical and mental health?
<b>Personal Well-being</b>	Mental health	What symptoms of anxiety or depression did CCEE staff/providers experience that were caused by COVID-19? What supports were available to CCEE staff/providers to address mental health and well-being?
<b>Personal Well-being</b>	Health	Which CCEE staff/providers tested positive for COVID-19?
<b>Personal Well-being</b>	Health	Which CCEE staff/providers were hospitalized for COVID-19? Which CCEE staff/providers died due to COVID-19?

## CCEE programs

Topic	Sub-topic	Question
<b>Business status</b>	Impacts of the pandemic	What are the short- and long-term impacts of COVID-19 on CCEE programs and how do those impacts differ based on type of care and demographic characteristics of the population being served?
<b>Business status</b>	Closure	Which programs remained open during the pandemic? What were their reasons for remaining open (e.g., had the funds to do so, essential workers needed care, had staff to implement cleaning procedures)?
<b>Business status</b>	Closure	Which programs closed temporarily? Which programs closed permanently? How have CCEE programs supported families/children even when they were closed? (e.g., dropping off food, providing virtual options, lessons, etc.)? What did programs do to support staff/providers while the program was closed?
<b>Business status</b>	Closure	Which programs reopened after temporary closure? For programs that reopened, what factors did programs consider when making that decision?
<b>Business status</b>	Decision-making	What were the main reasons for CCEE program closure (e.g., government policies closing child care facilities; decline in demand from parents looking for child care; lack of workers to maintain operations; financial inability to meet social isolation requirements for operation; or other factors)? Did reasons for closures differ over the course of the COVID-19 pandemic?
<b>Business status</b>	Decision-making	What guidance did CCEE programs use to make decisions about program closures and reopening? Which sources were most helpful?
<b>Business status</b>	Longevity	Which CCEE programs were able to remain financially viable during the pandemic? What program features and resources were associated with programs remaining financially viable? How did state/federal funding and policies impact program viability?
<b>Business status</b>	Alternative learning	How did alternative learning spaces (i.e., learning pods, supervised virtual learning) impact CCEE supply for young children?
<b>Business supports</b>	Use of loans	Which programs applied for loans? Who received loans? Who received loan waivers? Did trends vary across states?
<b>Business supports</b>	Use of loans	How were loans used by programs? To what extent did the loans address programs' needs?
<b>Business supports</b>	Receipt of grants	Which programs applied for grants? Which programs received grants? Did trends vary across states?

Topic	Sub-topic	Question
<b>Business supports</b>	Receipt of grants	How were grants used by programs? To what extent did the grants address programs' needs?
<b>Business practices</b>	Funding sources	How did programs' revenue or funding sources change (e.g., reductions in CCDF funding due to families' inability to qualify for subsidy, children of essential workers were instead funded by CCDF)?
<b>Business practices</b>	Tuition	Which programs collected tuition while closed or operating reduced hours? Which programs made changes to their tuition or fees during the COVID-19 pandemic?
<b>Business practices</b>	Staffing	Which programs changed their staffing by furloughing employees? Which programs hired new employees?
<b>Business practices</b>	Staffing	What are the qualifications of newly hired staff? What were programs' experience finding candidates that met desired qualifications? Did programs have to make changes to the level of experience/ credentials/qualifications to recruit more candidates to fill open positions?
<b>Business practices</b>	Staffing	How did wages and benefits change? For which staff (e.g., teachers, custodians, bus drivers, etc.)?
<b>Business practices</b>	Enrollment	Which programs experienced changes to enrollment? In addition to children of essential workers, did programs alter or institute priority populations (i.e., prioritized siblings, family groups, ages of children)?
<b>Business practices</b>	Enrollment	What caused changes in enrollment (e.g., program budget, staffing, local demand for child care, etc.)?
<b>Business practices</b>	Health and safety	What was the cost of implementing health and safety procedures? Which were more difficult to implement? Did programs have access to PPE? If yes, how did they secure it? If no, what were the barriers to securing it?
<b>Business practices</b>	Health and safety	To what extent were changes to policies and regulations communicated clearly and in a timely way? To what extent and how are programs following CDC and state guidelines and regulations?
<b>Business practices</b>	Health and safety	What health and safety practices are the most challenging to implement? Which programs were not able to immediately comply with new regulations? Are they able to now?
<b>Business practices</b>	Networks	Did programs that were part of a bigger structure (e.g., part of an FCC network, a center-based program part of a national chain, etc.) have better access to PPE, cleaning supplies, etc.? Did this mitigate challenges?
<b>Business practices</b>	Children with disabilities	What services were available for children with disabilities during the COVID-19 pandemic?
<b>Business practices</b>	Assessments	How were child assessments conducted during the COVID-19 pandemic?

Topic	Sub-topic	Question
<b>Business practices</b>	Longevity	How does Head Start's programming compare to center and home-based care programming (i.e., how does continuous funding impact programming)?
<b>Curriculum/ learning activities</b>	Remote learning	Which CCEE programs offered remote learning activities for toddlers while they were closed or partially closed? Which activities were offered?
<b>Curriculum/ learning activities</b>	Daily activities	For programs that remained open or were able to reopen, what activities proceeded as usual? What major changes were made to activities?
<b>Quality</b>	Perceptions of quality	How did health and safety changes related to COVID-19 guidelines impact the quality of care provided?
<b>Quality</b>	Quality improvement	What system-level resources would be helpful for improving the quality of care provided (i.e., creating funding opportunities, PPE guidance)? What local supports or resources (e.g., peer-to-peer network, help with technology) would be helpful for improving quality?
<b>Quality</b>	Health and safety	What recommendations do providers have for improving health and safety procedures?
<b>Quality</b>	Health and safety	How did programs adapt to the smaller ratios?
<b>Home visiting</b>	Perceptions of quality	What are families' experiences with virtual home visits? How effective are virtual home visits?

## CCEE system

Topic	Sub-topic	Question
<b>Impacts of the pandemic</b>	Racial and economic inequities	What historical systems have contributed to an inequitable CCEE system over time? How have these systems created inequities in the CCEE system? In what ways did the COVID-19 pandemic exacerbate these inequities? How has this impacted children and families of color? What are the next steps to addressing these inequities in the CCEE system?
<b>Impacts of the pandemic</b>	Racial and economic inequities	How did the pandemic affect racial and economic inequities in access to CCEE? What differences were documented by children's race/ethnicity, family income, and geographic location?
<b>Impacts of the pandemic</b>	System impacts	What are the short-term and long-term impacts of the COVID-19 pandemic on the CCEE system?



Topic	Sub-topic	Question
<b>Impacts of the pandemic</b>	CCEE enrollment	Which type of care did children attend, and how did child care attendance change during the pandemic? Which child care arrangements were less stable, offered lower quality care, or were less likely to promote health and safety? Which children and families were served by these programs?
<b>State Policies</b>	Strategies to mitigate impacts of the pandemic	How effective were various strategies put in place by states to mitigate the impacts of the COVID-19 pandemic on CCEE programs and the CCEE system, and how did they address racial and ethnic inequities in the system?
<b>State Policies</b>	Communication	How effective was states' messaging to local communities about new policy changes, regulations, and guidelines related to COVID-19?
<b>State Policies</b>	Stay at home orders	Which states implemented stay at home orders? When were the orders implemented? How did these policies compare with other state policies related to CCEE (e.g., policies on school closures, regulations, licensing, etc.)?
<b>State Policies</b>	Stay at home orders	Did states develop new systems to track the availability of CCEE for essential workers? If so, which states? Do states have the mechanisms and resources to understand how the supply of child care is changing and how the demand for child care is changing?
<b>State Policies</b>	CCDF subsidies	What changes were made to state CCDF subsidy policy during the COVID-19 pandemic? How did those policy changes support different types of CCEE programs, the CCEE workforce, and different age groups of children (e.g., infants and toddlers, preschool, school-age)? How did those policy changes affect which families, and under which conditions, were eligible to receive subsidies and had access to subsidies and care?
<b>State Policies</b>	Consumer education	Which states developed materials for parents/caregivers to support decision-making about CCEE during the COVID-19 pandemic? What languages were these communications/outreach materials in?
<b>State Policies</b>	Licensing/regulatory changes	Which states made changes to licensing/regulations for CCEE programs? Did these changes affect center and home-based providers differently? How was adherence to licensing regulations assessed during the COVID-19 pandemic? What were the structural features of states, their Resource and Referral agencies, and their lead agencies that facilitated or hindered these changes? Which states made changes to regulations that modified workforce requirements? What motivated states to change existing regulations (e.g., concerns about public health, low supply, etc.)? Did states continue to do in-person licensing and QRIS?
<b>State Policies</b>	Licensing/regulatory changes	What strategies were used to make licensing/regulatory changes? To what extent did the process engage stakeholders (e.g., families, providers, experts)? Which states have offered licensing waivers and changes to licensing inspections? How are states making decisions about regulations and guidelines for CCEE programs?

<b>Topic</b>	<b>Sub-topic</b>	<b>Question</b>
<b>State Policies</b>	Innovations	What strategies did states implement to support the different CCEE systems (e.g., fiscal stability, health and safety, workforce, training, facilities, transportation, etc.)? Which strategies were effective?
<b>Cross system coordination</b>	Public schools	What strategies were used in states to coordinate CCEE and public schools (e.g., food distribution, care for essential workers, etc.)? Which strategies were most effective?
<b>Cross system coordination</b>	Public schools	If schools were closed or there was mixed delivery (virtual and in person), were state (and/or local) funded Pre-K programs allowed to remain open? If they were allowed to remain open, were remote learning options required or encouraged?
<b>Cross system coordination</b>	Head Start	What local strategies were used to implement Early Head Start or Head Start (e.g., remote learning opportunities) and coordinate with other CCEE efforts statewide? What strategies were most effective? Were comprehensive services sustained even if children were not reporting to a program?
<b>Cross system coordination</b>	Family child care networks	What role did Family Child Care Networks, Unions, and Child Care Resource and Referral (CCR&R) agencies play in shaping the response to the COVID-19 pandemic among home-based/family child care providers? What were some advantages or disadvantages stakeholders experienced while trying to support providers and their families during the COVID-19 pandemic?
<b>Cross system coordination</b>	Provider associations	What role did provider associations (state, national, shared services, CCR&Rs, private funders, etc.) play in shaping the response to the COVID-19 pandemic among licensed child care providers?
<b>Stakeholder engagement</b>	Integrating family voice	What strategies were used to gain insights into the needs and preferences of families during the COVID-19 pandemic? What family needs were not met? What challenges arose when trying to implement these strategies? Which engagement strategies were most effective and for which families? Were there gaps in the strategies and approaches used to better understand families' needs and preferences?
<b>Stakeholder engagement</b>	Integrating provider voice	What strategies were used to gain insights into the needs and preferences of CCEE programs and providers during the COVID-19 pandemic? What program and provider needs were not met? What were the challenges experienced in trying to implement these strategies? Which engagement strategies were most effective?
<b>Quality and Professional Development</b>	Services	What type of new professional development activities were implemented or offered during the COVID-19 pandemic? What was participation in these activities like? Did participants receive any recognition (e.g., continuing education credits, etc.)?
<b>Quality and Professional Development</b>	Services	What quality improvement activities were suspended during the COVID-19 pandemic? Which activities continued? Were any new quality improvement activities initiated because of the pandemic (e.g., health and mental health consultation).

Topic	Sub-topic	Question
<b>CCEE Workforce</b>	Trends	What changes (e.g., overall numbers, type of program, qualifications, salary, benefits) were observed in the CCEE workforce (e.g., changes with specific age ranges, demographic backgrounds, etc.)? Which policies and state contexts were associated with workforce changes? What new data collection or data systems were established or re-oriented?
<b>Stakeholder engagement</b>	Integrating family voice	What strategies were used to understand families' needs for school-age child care during school hours? How did subsidy policies respond to this need?
<b>State Policies</b>	Supports for families	What are state policies related to moratoriums on rent, utilities payments, etc.?
<b>State Policies</b>	Monitoring	How did states monitor the COVID-19 requirements and guidelines?
<b>State Policies</b>	Subsidies	How did states handle subsidies during the COVID-19 pandemic? Did they make changes to subsidy policies? What have states learned while implementing these changes?
<b>State Policies</b>	Impacts	How did stay-at-home orders impact families, programs, and state policies?
<b>State Policies</b>	Strategies for adaptation	What policy innovations or modifications were made during the COVID-19 pandemic? Are there short- or long-term strategies?
<b>State Policies</b>	Budgets	How are state budget issues impacting the CCEE system(s)?
<b>State Policies</b>	Existing systems	Did states have CCEE systems in place that helped respond to the COVID-19 pandemic? Were there new data systems built during the COVID-19 pandemic? If so, how were they helpful. If not, how would they have been helpful?
<b>State Policies</b>	Decision-making	What factors weighed into decisions state leaders made about closing and reopening (e.g., state's PPE availability, states testing capacity, availability of workforce, hesitation of parents, impacts to child development, etc.)?
<b>Cross system coordination</b>	Philanthropy	How are private funders and foundations supporting the CCEE field? What has been their role during the COVID-19 pandemic?
<b>Quality</b>	Strategies for adaptation	How have states adapted their QRIS during the COVID-19 pandemic?
<b>Quality</b>	Monitoring	How did QRIS monitoring happening during the COVID-19 pandemic?
<b>Innovations</b>	Positive lessons learned	What innovative strategies related to CCEE did communities and states use to respond to the COVID-19 pandemic? What are some ways that these successes can be shared with relevant stakeholders?
<b>Cross system coordination</b>	Advocacy groups	What role did CCEE advocacy groups play during the COVID-19 pandemic? What issues and needs did they prioritize?
<b>Quality and Professional Development</b>	Strategies for adaptation	What COVID-19 related trainings were offered to the CCEE workforce and how were they delivered?

<b>Topic</b>	<b>Sub-topic</b>	<b>Question</b>
<b>Quality and Professional Development</b>	Change in perceptions	In what ways did perceptions shift about professional development with the switch to virtual learning and technology?
<b>Quality and Professional Development</b>	Perceptions of quality	Did systems or providers shift or change how they defined or thought about quality and quality improvement?
<b>State shifts</b>	Innovations	To what extent did states test and implement major reforms in the CCEE systems during the COVID-19 pandemic? Who was involved in reviewing and providing feedback to inform revisions prior to the release of policies?
<b>State shifts</b>	Change in perceptions	How did COVID-19 shift public and policy makers' understandings of the costs of CCEE and state funding levels and strategies?
<b>State shifts</b>	Trauma-informed care	Are supports for families, ECE workforce, and programs being delivered using a trauma-informed approach?
<b>State Policies</b>	Measure effectiveness	How do/did states measure the effectiveness of their CCEE system in responding to the pandemic?
<b>State systems</b>	Supply and demand	What mechanisms and resources (e.g., data systems, data sources, infrastructure to collect surveys, research partnerships) are needed to understand the changes in supply and demand of child care?
<b>State systems</b>	Collaboration	What lessons can be learned from examples of collaboration and resource sharing during the COVID-19 pandemic?
<b>Federal Policies</b>	Impacts of COVID-19 relief funding	What were the impacts of funding provided to CCEE programs under the Coronavirus Aid, Relief, and Economic Security Act, the Coronavirus Response and Relief Supplemental Appropriations Act, and the American Rescue Plan Act?

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