Overview
The patient-centered medical home model organizes healthcare around patient needs. Its goal is to promote care that is more integrated, efficient, and equitable.¹ This model emphasizes access to community and early childhood services as critical components of holistic healthcare for young children. Yet few pediatric providers routinely screen for non-medical factors such as access to food and housing instability—often called social determinants of health—that influence health inequities.² Pediatric providers also may not know what community services are available to their families.³ In parallel, early childhood organizations are exploring ways to increase family access to community services, including through healthcare partnerships.⁴

This brief outlines key areas of knowledge and capacity needed to support healthcare and early childhood systems integration efforts. It draws on the experiences of early childhood organization leaders in five communities supporting the DULCE model in pediatric primary care clinics. DULCE, supported by the Center for the Study of Social Policy (CSSP), is designed to help pediatric providers deliver family-centered, comprehensive health care for very young children (birth through 6 months). This brief identifies critical opportunities for early childhood organizations and healthcare partners to more effectively collaborate to promote family protective factors and mitigate toxic stress through pediatric innovations like DULCE.

Methods
The five communities participating in the study are members of CSSP’s Early Childhood Learning and Innovation Network for Communities (EC-LINC). EC-LINC is centered in a lead early childhood organization in each community. These organizations are: Children’s Services Council of Palm Beach County (FL); First5 Alameda County (CA); First5 Los Angeles County (CA); First5 Orange County (CA); and Lamoille Family Center (VT). These funding organizations support early childhood initiatives, including those supporting child health. The
Our interviews explored:

- How early childhood organizations integrate toxic stress, trauma, adverse childhood experiences, and protective factors into their work
- The early childhood organization’s vision for healthcare partnerships and family engagement
- Strategies to coordinate screening, referral, and linkage practices with health care systems
- Strategies to integrate family perspectives into system decision making
- Lessons learned from DULCE about supporting health care partners to address SDOH in the pediatric setting

Communities launched DULCE in 2016. We conducted 90-minute interviews with the early childhood leaders overseeing DULCE implementation in 2018 (n = 10). For our analysis, we created a thematic coding scheme drawn from interview topics, then reviewed interview transcripts to develop additional relevant codes. We then systematically recoded the data and summarized emergent themes.

**Findings**

Early childhood leaders described multiple successes and challenges in developing healthcare partnerships.

Early childhood leaders reported that implementing DULCE had helped them strengthen existing relationships with their healthcare partners at multiple levels—clinic, hospital system, and policymaking and payment systems. “DULCE was really the driving factor in strengthening those relationships with the medical providers and the healthcare system. . . . We were doing it a little bit before, but not to the depth that we all wanted,” explained one leader. Below, we highlight findings describing what these leaders have learned about how to use their influence, knowledge, and relationships to collaborate more effectively with pediatric providers to improve family outcomes.

**Finding 1:** “Toxic stress” language helps with forging relationships and establishing shared priorities between early childhood and healthcare partners.

Early childhood leaders said when they used terms like “toxic stress” they got a better response from potential healthcare partners. After starting DULCE, early childhood leaders used this term more frequently. Previously, they had avoided this language. They felt that terms like “toxic stress” blamed families for their experiences and were at odds with the strengths-based, protective factors framework that they used to guide their work.

With healthcare partners, early childhood leaders reported that the current salience of the term toxic stress helped them make the case for investing in efforts to connect families to community services. As one leader explained, “I’ve always struggled a little bit with that term.” The value, she saw, was that “For funders and people in leadership. . . giving it a name and then showing how it helps health outcomes. . . is very helpful.” Leaders cited the increasing attention to the risk of toxic stress, including recent policy statements by the American Academy of Pediatrics, as an asset in their efforts to promote collaboration.
Figure 2: Opportunities to increase family access to services

New data flows between early childhood programs and pediatric primary care settings

Increased integration of early childhood entry points into well-child visits

More social needs screening to identify family strengths and common stressors

screening and techniques for relationship building with families. These practices informed their thinking about how to strengthen implementation of screening procedures with the community services they fund.

Early childhood leaders also identified broader opportunities to integrate screening and referral for social determinants of health into well-child visits. For example, in one community, standing DULCE team meetings helped early childhood leaders rethink the flow of data from a major hospital-based newborn screening initiative. They realized that, during well-child visits, pediatric providers could not integrate or follow up on needs previously identified because they never received screening results from the hospital program. As one leader explained, “Helping to think about the integration of the two systems by being literally in the pediatric office is like no other experience you could have.” Leaders expressed the value of co-located staff for generating practical approaches to better integrate access to community services into well-child visits.

Finding 3: Healthcare and early childhood goals and service approaches can conflict in ways that slow efforts to reorganize care around family needs.

Early childhood and healthcare decision makers have different goals. Early childhood leaders typically focus on longer-term goals, such as school readiness and well-being. Healthcare partners, in contrast, focus more on the short term. One early childhood leader reflected, “The struggle with the healthcare field is that they are problem solvers, which makes them great partners when there’s a problem with your program. They’re like, ‘We’re going to fix it. And then we’ll see if it gets fixed. And if it doesn’t, we’re going to try something else.’” She felt this orientation, while helpful in some contexts, also made it challenging for clinics to put family goals first when developing care plans. However, early childhood and other community providers are accustomed to talking with families about sensitive topics. They can help healthcare partners talk more sensitively about toxic stress and common stressors with families and in the workplace.

Healthcare and early childhood staff were better able to meet families’ needs when policies and practices were aligned across the two systems. Leaders articulated concerns that poor communication between healthcare and community partners contribute to delays in referral follow-up, which could result in families giving up on community services. Leaders also described ways to streamline referral processes so they do not overwhelm pediatric providers. Supporting DULCE also helped them see the importance of continuing to build pediatric providers’ familiarity with available community services to ensure that they were able to provide accurate information to families.

Funding a cross-sector approach to addressing social determinants of health is challenging. According to early childhood leaders, even as pediatric providers begin to embrace screening for social determinants of health,
there are no clear financial incentives to support this work. One early childhood leader reflected on how her healthcare partners “embrace the idea of social determinants of health. But it’s hard to actually put that into practice when there isn’t a funding mechanism.”

**Finding 4: Family voice adds critical insights that can improve the design of healthcare partnerships.** Early childhood leaders recognized DULCE as an opportunity to pilot and refine how they brought family voice into the design of their healthcare partnerships. Across the five communities, leaders were particularly eager to engage families experiencing multiple stressors. However, they found that their typical approaches to family engagement—surveys, focus groups, and interviews—were not very effective for reaching these families. Leaders described having an expanded vision for family voice in healthcare partnerships as a result of testing DULCE parent engagement strategies. Examples included hosting family events at the clinic on a regular basis and asking families to contribute to the continuous quality improvement process.

Leaders discussed two principles for incorporating family voice into their healthcare partnerships going forward. First, leaders emphasized the importance of systematically engaging multiple families. As one leader reflected, “If we have 240 parents and I have one or two parents at the table... do those two voices represent the other 238?” Second, they emphasized the importance of empowering families to contribute in meaningful ways to decision making. As next steps toward implementing this vision, leaders wanted to invest in leadership training for families and pilot new ways of involving families in the decision making of their organizations. Further, leaders acknowledged the importance of also preparing early childhood staff to respond to family feedback.

Leaders also wanted to move beyond their current approaches to family engagement, which were largely grant-funded. One leader emphasized the value of family engagement that is “authentic, long-term, well-supported, and well-resourced” to learn where current early childhood initiatives are out of sync with family interests and needs. To do so, they noted that early childhood organizations—and their healthcare partners—will need to allocate funding, time, and other resources toward developing this deeper, ongoing collaboration with the families they serve.

**Conclusion**

Early childhood and healthcare stakeholders both recognize how more systems integration could improve family outcomes related to social determinants of health and toxic stress. Across the five communities, early childhood leaders highlighted critical opportunities to strengthen existing healthcare partnerships and increase family access to community services. Findings suggest that the strategic use of the language of toxic stress can help foster relationships and develop shared priorities and practices across early childhood and healthcare stakeholders. Further, streamlining and aligning practices and policies across the healthcare and early childhood sectors, informed by family voice, represents a critical opportunity to create more seamless referral experiences for families.
The Mitigating Toxic Stress study is investigating family engagement with pediatric care during their infant’s first year of life. This multi-year developmental evaluation documents family, clinic, and community experiences with three pediatric health innovations created to mitigate and prevent downstream conditions related to early childhood adversity:

- Developmental Understanding and Legal Collaboration for Everyone (DULCE) model
- Improving Screening, Connections with Families, and Referral Networks (I-SCRN) model
- Help Me Grow system model

The study includes five communities: Alameda County (CA), Los Angeles County (CA), Orange County (CA), Lamoille County (VT), and Palm Beach County (FL).

The main study components are:

- **Family longitudinal surveys.** In-person surveys with 908 families of infants about risk, resilience, and pediatric care experiences. Surveys are conducted at three time points: when their baby was newborn–6 months, 8–10 months, and 12–15 months.

- **Pediatric health innovation interviews and focus groups.** Qualitative interviews with clinic staff and partner agencies collaborating on the pediatric health innovations and family focus groups. Ten clinics are participating in the study.

- **Rapid-cycle feedback and co-interpretation.** Point-in-time feedback and review of emergent themes with pediatric health innovation team members and families.

- **Community systems interviews and focus groups.** Qualitative interviews with early childhood organization leaders and focus groups with community providers and families receiving early childhood services.

- **Administrative data analysis.** Analysis of healthcare quality and utilization using clinic electronic health record and Medicaid data.

The Center for the Study of Social Policy, American Academy of Pediatrics, and Help Me Grow National Center provide leadership and technical assistance to the communities and clinics implementing the pediatric health innovations and are national partners in this evaluation.
Chapin Hall at the University of Chicago is committed to delivering actionable recommendations from our research to inform our partners, policymakers, and the early childhood field, broadly. Figure 3, below, outlines the timeline for a series of research briefs tailored to clinics, families, and national partners that highlight our key study findings.

**Figure 3. Evaluating Community Approaches to Preventing or Mitigating Toxic Stress: Research Brief Series**

- **Healthcare Innovation Implementation**
  - Research Brief 2
  - Implementing DULCE and I-SCRN

- **Early Childhood & Healthcare Integration**
  - Research Brief 4
  - Healthcare and Early Childhood Systems Integration in Practice

- **Family Resilience and Risk**
  - Research Brief 6
  - Family Profiles of Resilience and Risk in Five Communities

- **EHR Capacity**
  - Research Brief 3
  - Clinic Capacity to Assess Pediatric Health Care Quality using Electronic Health Records

- **Family Engagement**
  - Research Brief 5
  - Family Engagement in the Pediatric Primary Care Setting

- **Referral Pathways**
  - Research Brief 7
  - Community-Based Referral Systems in Practice
Glossary

**Screening:** The practice of asking families a set of standardized questions to identify unmet needs (e.g., housing assistance, nutrition supplements, mental health services). In the context of this study, screening includes concrete support, postpartum depression, child development, and lead exposure.

**Referral:** The practice of providing direction to families about securing services to address unmet needs identified during screening.

**Systems integration:** The reorganization of care around patient needs, with the goal of delivering the right care to families at the right time. For example, the patient-centered medical home model is intended to help pediatric providers deliver care that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective.

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The opinions, findings, and recommendations expressed in this publication are solely those of the authors and do not necessarily reflect those of The JPB Foundation, The Center for the Study of Social Policy, the American Academy of Pediatrics, or our clinic partners.

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5. We conducted two interviews each with four early childhood organizations and one interview with the fifth early childhood organization, for a total of 9 interviews with 10 individuals.
7. DULCE incorporates the Touchpoints approach, a strengths-based, relational framework for collaboration between providers and caregivers.

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