



Evaluating Community Approaches to Preventing or Mitigating Toxic Stress

## Research Brief 2

### Implementing DULCE and I-SCRN

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*This brief, the second in a series, describes perceptions of how implementing DULCE and I-SCRN have contributed to strengthening family, clinic, and community relationships and identifies factors expected to influence the sustainability of these systems changes.*

#### Overview

Healthcare in the U.S. is increasingly moving “upstream” to address the risk of chronic physical and mental health conditions by providing preventive, parent-child-focused healthcare services. Early detection using screening for social determinants of health is a common approach. Research documents the negative effects of unbuffered stress on children’s long-term well-being, highlighting significant costs to the health and well-being of communities.<sup>1</sup> However, there has been limited attention given to how healthcare and community service systems can be intertwined to reduce barriers, engage and empower families, and improve outcomes for children at risk for or exposed to toxic stress.<sup>2</sup>

#### Context

In partnership with the Center for the Study of Social Policy and the American Academy of Pediatrics, pediatric primary care clinics in the United States are implementing systems innovations to address toxic stress.

#### What is Toxic Stress?

Not all stress is toxic. Experiencing and learning how to manage stress is a normal part of child development. But when children experience stress for prolonged periods, without the supportive response of an adult to mitigate the experience, that stress can be toxic.<sup>2</sup>



#### Toxic

Prolonged activation of stress response systems in the absence of protective relationships.

#### Tolerable

Serious, temporary stress responses, buffered by supportive relationships.

#### Positive

Brief increases in heart rate, mild elevations in stress hormone levels.

Adapted from: <https://developingchild.harvard.edu/science/key-concepts/toxic-stress/>

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Chapin Hall at the University of Chicago is conducting a 3-year study at 9 clinics to describe experiences of families, healthcare and community providers, and early childhood leaders with systems change to promote healthy child development and mitigate stress impacts.<sup>3</sup> Seven participating clinics are implementing *Developmental Understanding and Legal Collaboration for Everyone* (DULCE). DULCE offers families of newborns information on healthy child development, parenting support, and connections to community resources and concrete support through a trained family specialist. Two clinics are implementing *Improving Screening, Connections with Families, and Referral Networks* (I-SCRN). I-SCRN utilizes a quality improvement collaborative to support pediatric primary care teams with effective processes for screening, referral, and follow-up with a focus on child development, postpartum depression, and concrete supports.

### Methods

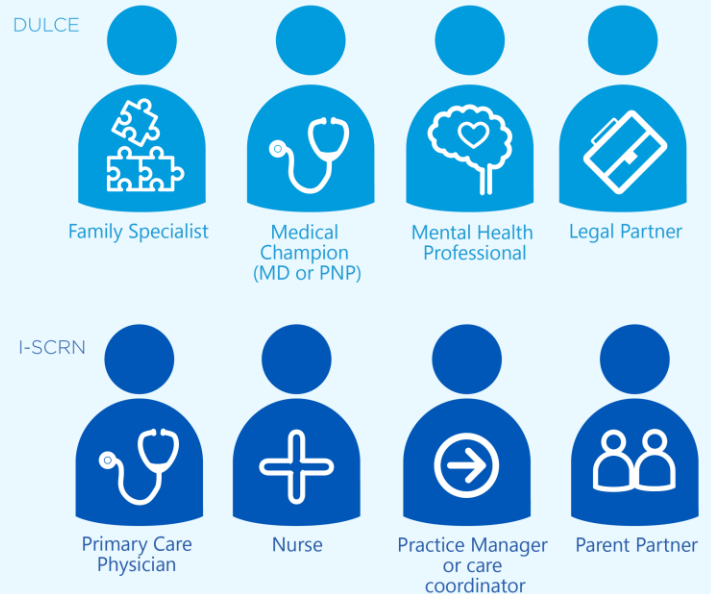
We conducted 51 30-minute interviews with team members implementing the systems innovations in 2018 (44 with DULCE team members, 7 with I-SCRN team members). Participants included clinicians, family specialists, behavioral health specialists, clinic administrators, legal partners, and chief medical officers. The interviews explored: implementation experiences; local adaptations to align the innovation with clinic and community context; barriers to family participation in screening, referral, and linkage practices; lessons learned about addressing social determinants of health in the pediatric setting; and factors expected to influence the sustainability of the innovations. We co-interpreted emergent themes with DULCE/I-SCRN team members at each participating clinic to validate and refine findings.

### Findings

Interview participants reported multiple successes in integrating new practices for social determinants of health into their clinics' workflows, consistent with the goals of the systems innovation. In the sections to follow, we highlight findings about how DULCE and I-SCRN have strengthened connections: with families, with community systems, and among the clinic staff needed to integrate the new practice into everyday clinic workflow.

## DULCE and I-SCRN Team Members

Both DULCE and I-SCRN encourage a multi-disciplinary team approach to implementing change in the clinic.



These interdisciplinary team members work together to support families, complete screening and referral, and engage in continuous quality improvement efforts.

### Findings: Strengthening Relationships with Families

DULCE/I-SCRN team members reported that implementing new screeners and new approaches to screening helped them strengthen families' connections to the clinic as a medical home. Clinics began to interview or survey all families about concrete support and behavioral health needs. DULCE/I-SCRN team members reported that these two types of screening were critical to providing a medical home for families of young children. "[Families are] here for a medical visit. . . . They don't realize that . . . hunger and housing, and everything else would be something that we're interested in," explained one team member. Universal screening for concrete support was new at all participating clinics; clinics also introduced or refined screening practice for postpartum depression and child development.

DULCE team members emphasized the importance of having a near-peer staff member screen, and to do so conversationally, to build trust as part of identifying needs. DULCE's trained family specialist was noted as a

“Working with families that had their act together was intimidating to me, because I didn’t know what I had to offer them. But just because they have all of this together, it doesn’t mean that they don’t have their own level of needs.”

trusted confidant. “After the doctor leaves, and I have a conversation with them, they’ll start crying and telling us like, ‘This A, B, and C is going on.’” The results of this conversational approach also positioned the clinic to identify and support families to address emergent needs before they became crises. I-SCRN team members reported that the electronic administration of screeners helped streamline their screening practice and facilitated providers’ timely access to results as part of well-child visits.

Across the board, DULCE/I-SCRN team members reported that changes to how they screened families prompted greater family willingness to disclose needs and provide more accurate information. The key changes included screening of all families and integrating a conversation about the purpose into screening practice. Team members reported that seeing the results of these approaches yielded new understanding of the strengths and needs of their pediatric populations.

At the same time, team members prioritized two areas for ongoing training related to the new approaches: strengthening clinic staff comfort and skill in asking some of the sensitive questions included in screeners and increasing the timeliness of provider access to screener results. They also cited reimbursement rates for screening and limited time to support referral and linkage following positive screenings as two factors affecting the sustainability of screening changes.

### **Findings: Strengthening Relationships with Community Systems**

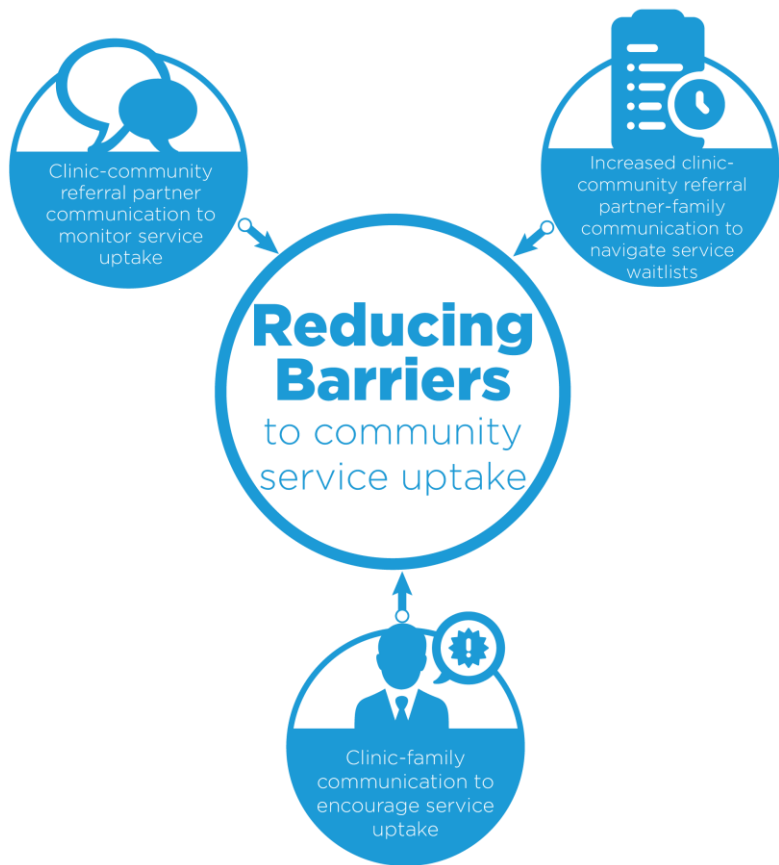
DULCE/I-SCRN team members reported developing new and stronger clinic relationships with local community systems through their implementation activities. They described developing referral relationships with a range of community partners, such as local multiservice agencies and providers offering help with accessing concrete supports. For some types of referrals, clinic–community partner relationships already existed. In these cases, team members deepened their connections with provider staff that handled referrals through attending

community meetings and inviting partners to visit the clinic. For other types of referrals, staff sought out community providers that offered services aligned with the enhanced screening for behavioral health and concrete supports. For DULCE specifically, having a multidisciplinary team participate in weekly case reviews added deep knowledge about local community and legal resources for care planning. The goal, as one team member described, was “when we provide that information to the families, it’s a true connection. We’re just not getting you a resource and hoping for the best.”

In DULCE, legal partners contributed significant value to referral practice by supporting the integration of legal information into well-child visits. A team member said, “I actually have an attorney sitting in the room with me. . . offering her perspective in real time as issues are coming up with families. It’s a completely different experience from just being able to make a referral.” With the legal partner’s explicit training on topics such as housing rights and eligibility for public assistance the family specialist was able to provide information to families more quickly than through a traditional legal referral. Team members also reported that being able to discuss needs with a familiar individual based at the clinic was important to linking families to legal remedies.

Team members described how learning about legal issues influenced how they worked with the broader pediatric populations they served. “I come from a mental health background, so there’s a lot of things I didn’t know could even be helped by a lawyer. . . that’s been a great learning process for all of us involved,” described one DULCE team member.

“Just as helpful is the education that the lawyer has provided to me and to the family specialist. Just about the process of public benefits. ‘Here’s how you appeal your food stamp denial.’ Or, ‘Here’s how to make a correction to the benefit you’re getting.’”



Challenges like physical distance and long waitlists still limit family access to community services. But team members reported that the systems innovations helped reduce barriers to connecting families to community referral partners.

**Findings: Strengthening Relationships within the Clinic**  
 DULCE/I-SCRN team members reported that implementation had surfaced opportunities to engage a broader group of staff in integrating screening, referral, and linkage. They highlighted the importance of a family-centered approach to scheduling well-child visits, including considering the availability of the family specialist, behavioral health appointments, and community partners that regularly “drop in” to the clinic as part of scheduling. Team members indicated that quality improvement approaches supported by the innovations, particularly small tests of change, facilitated local adaptations to screening and referral practices. These adaptations helped ensure integration into clinic flow, as well as efforts to scale practices clinic-wide or to additional sites. These adaptations included: training staff how to conduct screenings; developing explicit expectations for documenting and ensuring that

providers have timely access to screening results; and honing a clinic-wide message for communicating with families about screening for social determinants of health. These represented important organizational investments in integrating screening, referral, and linkage into clinic workflow.

Across clinics, DULCE/I-SCRN team members reported giving increased time to supporting families participating in referrals. At DULCE clinics, family specialists helped support families connecting with resources, including providing warm handoffs to community partners and educating families on how to navigate the resource systems. At I-SCRN clinics, social workers or other staff supported families participating in referrals. In larger clinics, DULCE/I-SCRN team members also described developing new practices to coordinate with social workers or departments that supported referrals. However, team members struggled with how to leverage their existing technology to support referral and linkage. They described needing to enter data into or consult multiple data systems because no single data system (including their electronic health record systems) provided a straightforward way to track families’ participation in referrals or support feedback loops with referral partners.

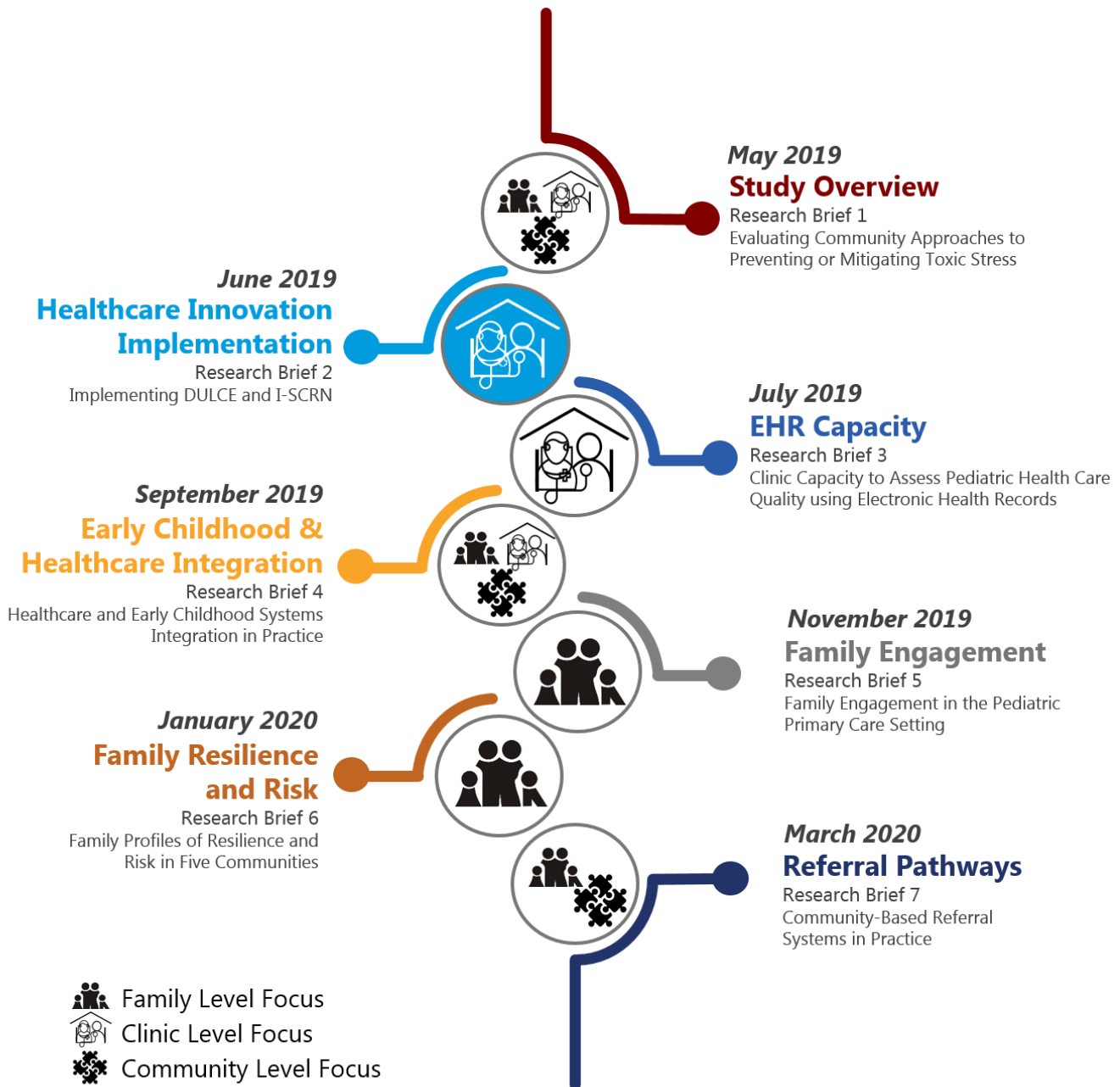
**Conclusion**

The pediatric primary care setting offers a critical, near universal opportunity to promote healthy child development and mitigate the impacts of stressors with families of young children. Across clinics, team members positively described their implementation experiences and reported that the changes supported by the innovations contributed to the quality of care delivered to families with young children. Findings suggest the potential of integrating an intentional focus on screening, referral, and linkage practices to build family connectedness to the medical home and supporting families at scale. Findings also elevate the multiple organizational investments needed to integrate screening, referral, and linkage practices into clinic workflow and sustainability implications, given the limited support available through current healthcare funding models.

“I build relationships with some of the actual people who do the work, and I ask them. I call them. I check in.”

Chapin Hall at the University of Chicago is committed to delivering actionable recommendations and products from our research to inform our partners, policymakers, and the early childhood field in general. Figure 1, below, outlines the timeline for a series of research briefs for clinics, families, and national partners that highlight key study findings in 2019 and 2020.

Figure 1. Evaluating Community Approaches to Preventing or Mitigating Toxic Stress: Research Brief Series



# 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.

**Linkage:** The strategies used by health or community-based service providers to support families to uptake referred services (e.g., a referral phone call from clinic staff to a community-based provider that provides the agency the family's contact information).

**Medical home:** A model for primary care practice that is patient-centered, focused on treating patients with respect and compassion, and leverages an integrated, collaborative team of care providers and connections to community-based providers to offer patients comprehensive care.

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The opinions, findings, and conclusions or 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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<sup>1</sup> See, for example, Franke, H. A. (2014). Toxic stress: Effects, prevention and treatment. *Children*, 1(3), 390–402; FRIENDS National Resource Center (n.d.). *Protective Factors Survey*. Chapel Hill, NC: Author. Retrieved from [http://friendsnrc.org/jdownloads/attachments/pfs\\_faq\\_2014.pdf](http://friendsnrc.org/jdownloads/attachments/pfs_faq_2014.pdf); Steptoe, A., & Feldman, P. J. (2001). Neighborhood problems as sources of chronic stress: development of a measure of neighborhood problems, and associations with socioeconomic status and health. *Annals of Behavioral Medicine*, 23(3), 177–185.

<sup>2</sup> Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129, 232–246.

<sup>3</sup> Additional study information is available here: <https://www.chapinhall.org/project/mitigating-toxic-stress/>