Development of a Shelter-based Pediatric Behavioral and Developmental Health Screening Program Through Community Partnerships

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Abstract

Children experiencing homelessness face elevated risks for behavioral health disorders and developmental delays, including autism spectrum disorder (ASD), yet access to screening and early intervention is limited. This column describes the establishment of a pediatric behavioral health and ASD screening program at two Philadelphia homeless shelters through a partnership with JeffHOPE, a student-run free clinic at Thomas Jefferson University. The program illustrates how student-run clinics can function as flexible, community-based platforms for early identification and referral.

Screenings utilized the Pediatric Symptom Checklist (PSC-17) for school-aged children and the Modified Checklist for Autism in Toddlers (M-CHAT-R/F) for toddler-age children, offered in multiple formats to accommodate family preferences and literacy levels, and were integrated into routine clinic workflow. Families received resource handouts and discharge summaries to support follow-up with pediatricians and community services.

The program benefited from partnerships with faculty, community behavioral health providers, shelter administrators, and families, which informed trauma-informed implementation, workflow integration, and ongoing program refinement. Key strengths included feasibility without external funding, adaptability to family needs, and the ability to build trust and engagement with families over time. Challenges included ensuring continuity across volunteer transitions and maintaining follow-up in a transient population.

This experience provides a practical model for student-run clinics seeking to implement behavioral health and developmental screening initiatives in shelter settings. By emphasizing

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collaboration, flexibility, and responsiveness to family needs, similar programs can improve access to care for children who are often underserved by traditional healthcare systems.

Background

Approximately two in five children and adolescents meet criteria for a behavioral health disorder by 18 years old, with attention-deficit/hyperactivity disorder (ADHD) (9.8%) and anxiety (9.4%) being the most common in the U.S. Despite high prevalence, utilization of mental health services remains limited.[1] Children experiencing homelessness are at greater risk for mental health problems, as housing instability and adverse childhood experiences (ACEs), which disproportionately affect low-income and racially marginalized children, contribute to persistent behavioral health disparities.[2,3,4] Shelter-based screening programs have shown that standardized tools can identify children needing referral and facilitate linkage to care.[5]

These disparities are especially relevant in urban centers with large, unhoused populations. In Philadelphia, the January 2024 point-in-time count identified 5,191 individuals experiencing homelessness, including 727 children under 18.[6,7] The high number of families affected underscores the need for accessible developmental and behavioral health services within shelter settings.

Surveillance between 2016 and 2019 has shown prevalence estimates of autism spectrum disorder (ASD) among children and adolescents in the U.S. ranging from 2.0-2.9%.[1] Early diagnosis of ASD is essential for timely intervention, improving outcomes and social skills, and

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increasing access to resources and support, while homelessness poses a potential obstacle to early ASD diagnosis.[5,8]

Research has shown that behavioral health screening at shelter clinics is feasible, generates a high volume of referrals, and is practical without significantly disrupting clinic workflow.[5,9] This descriptive report presents the development and implementation of a pediatric behavioral health and autism screening program embedded within student-run free clinics located in homeless shelters. Our intended contribution to the student-run clinic literature is to provide a feasible implementation model, describe key community partnerships, and offer a replicable framework that other programs can adapt to expand access to behavioral and developmental health screening for children experiencing homelessness, a population with unmet mental health and developmental needs.

Identifying Needs

JeffHOPE is a student-run free clinic program at Thomas Jefferson University that operates within Philadelphia shelters and provides longitudinal medical care and social service support under faculty supervision. Each clinic session is staffed by a practicing family medicine or internal medicine physician. A component of JeffHOPE is the Kids Committee, which helps support the academic, social, and developmental needs of children at two women and children's shelters. Kids volunteers are primarily first- and second-year medical students trained by senior students and supervised by a faculty advisor. Kids volunteers have the unique privilege of getting to know families well, and parents expressed concern to volunteers about their children's mental health and interest in behavioral screening.

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To address this, the authors designed and initiated a screening program utilizing previously validated screening tools: the Pediatric Symptom Checklist (PSC-17) for behavioral health disorders such as anxiety and depression and the Modified Checklist for Autism in Toddlers (M-CHAT-R/F). The PSC-17 is a validated 17-item caregiver questionnaire that screens for emotional, behavioral, and attention concerns and provides cutoff scores indicating elevated risk warranting further evaluation.[10] The M-CHAT-R/F is a validated 20-item autism screening tool used in toddlers that stratifies risk and prompts referral for further developmental evaluation when positive.[11] Both instruments can be administered using standard items, supporting feasibility in community and clinical settings.

The purpose of these screenings was to help parents identify if their children were at higher risk for behavioral health disorders or ASD and to increase access to care by assisting parents with scheduling appointments, obtaining insurance, and learning about local behavioral health resources. Prior to initiating the program, the authors assessed which community referrals were feasible by reaching out to local organizations such as Philadelphia FIGHT, a network of community health centers providing primary care and social services to low-income patients.

Forming Partnerships

This screening program was developed in collaboration with Family Medicine, Psychiatry, and Pediatrics faculty at Thomas Jefferson University, who advised on protocol development, ethical considerations, and referral pathways. Partnerships with the National Alliance on Mental Illness

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(NAMI) and Philadelphia FIGHT expanded access to community-based behavioral health services and youth support programs.

Close collaboration with shelter administrators, case managers, and families ensured that screening procedures aligned with daily operations and addressed concerns regarding stigma, feasibility, and communication. Family feedback informed iterative refinements to educational materials and workflow.

Implementation Process

This project was reviewed by the Thomas Jefferson University Institutional Review Board and determined to be exempt from review under 45 CFR 46.104(d)(2) (Exemption Category 2). Participation in screening and satisfaction surveys was voluntary, and caregivers provided verbal consent prior to participation. Screening data were collected using a secure online form and were de-identified prior to analysis. The authors trained Kids volunteers on PSC-17 and M-CHAT-R/F administration. An online form was used to collect screening and parent survey results and ensure consistent use of the protocol. In the initial phases, screening was conducted by the authors, with one or two Kids volunteers observing. Volunteers then conducted screens under supervision until they were able to independently administer them.

Screening was offered to parents during initial sign-in for childcare and as part of triage for general medical visits. Volunteers also recruited families door-to-door and in common spaces. Screenings were flexible and adapted to family needs: caregivers could complete the forms privately, verbally with a volunteer, or alongside a volunteer if they had questions. This approach

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ensured accessibility for families with varying literacy levels, child ages, and needs. For families who required additional support, Kids volunteers could provide resources and connect them to the clinic's Advocacy team, which assists with scheduling appointments and acquiring health insurance. The choice of screening tool (PSC-17 vs. M-CHAT-R/F) was guided by caregiver preference and child context, including age and developmental considerations.

Outcomes and Progress

From June 2024 to April 2025, the initial implementation period of this process, 28 families (n = 28 children) participated in screening (Table 1). The mean age of screened children was 6.8 years old, with 89.3% identifying as Black. 7.1% of the families had no health insurance for their children, and 25% lacked a regular pediatrician or did not engage in routine pediatric care. 78.6% had never received diagnoses or treatment for a behavioral health disorder.

A total of 21 PSC-17 screens and 7 M-CHAT-R/F screens were conducted. The lower uptake of M-CHAT-R/F screening likely reflects its narrower age eligibility (validated for children aged 16–30 months), whereas the PSC-17 is validated for a broader pediatric age range (approximately 4–15 years). The 28 families included in this analysis represent unique participants and do not include repeat screenings. Among the PSC-17 screens (n = 21), 14 children (14/21, 66.7%) had a positive total score. By subscale, 7 of 20 (35.0%) internalizing scores, 12 of 21 (57.1%) attention scores, and 7 of 20 (35.0%) externalizing scores were positive. Due to incomplete responses, denominators vary by subscale (n = 20-21). Notably, 8 of 21 PSC-17 respondents (38.1%) screened positive on more than one subscale. Among the M-CHAT-R/F

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screens (n = 7), 2 children (2/7, 28.6%) screened positive. These screening results reflect the identification of potential concerns within the population rather than diagnostic outcomes.

These rates appear elevated compared to general pediatric populations as described earlier, however higher rates are expected in children experiencing homelessness, who face disproportionate exposure to adverse childhood experiences and psychosocial stressors. Prior studies have reported that up to 78% of children experiencing homelessness demonstrate behavioral concerns, academic delays, or symptoms of depression.[4] In contrast, there is limited literature describing autism screening outcomes specifically in homeless populations, and few studies report rates of risk based on M-CHAT-R/F screening in this setting.

Following screening, most families received written materials. Specifically, 24 of 28 parents (85.7%) were provided a resource handout, and 18 of 28 (64.3%) received a discharge summary (Figure 1). As shown in Figure 1, the majority of families left the encounter with both verbal feedback and written documentation to support follow-up.

Parents also reported planned next steps (Figure 2). Sixteen of 28 (57.1%) stated they planned to make an appointment with their child's pediatrician, and 15 of 28 (53.6%) planned to discuss the screening results at their child's next visit. Two parents (2/28, 7.1%) reported making an appointment with a behavioral health provider at the time of screening. Six families (6/28, 21.4%) reported no planned changes. As illustrated in Figure 2, most parents endorsed at least one follow-up action, suggesting that screening prompted intended engagement with care. Families reporting no changes included those with both positive and negative screens, as

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resources were offered broadly in response to caregiver concerns and interest. These data represent parent-reported intentions at the time of screening and do not reflect verified follow-up or completed care.

Parent satisfaction with the screening experience was consistently high. All families (28/28, 100%) strongly agreed that they were satisfied with the communication provided during screening. Twenty-six of 28 (92.9%) strongly agreed that the screening process was organized and clear, and 26 of 28 (92.9%) strongly agreed that the resources provided were satisfactory. These findings support acceptability of the screening process within this setting.

Anecdotally, in the early phases of the program, our team approached families at clinics to offer screenings. Over time, families began to seek us out proactively, often requesting screenings based on word-of-mouth from other parents in the shelter as well as increased visibility of the program through posted flyers and shelter-based advertising. This change likely reflects growing trust in the screening process and increased awareness of available services through internal shelter communication channels. Parents often shared that they had been unaware of available community resources prior to screening—especially those tied to critical age windows or transitions, such as Early Intervention eligibility or the start of school-based services. These findings highlight how sustained presence and relationship-building foster engagement, consistent with cultural humility and trust-building in shelter-based care.

The outcomes presented in this report are descriptive and exploratory and are intended to assess program feasibility and acceptability rather than effectiveness. Specifically, we evaluated

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feasibility through the number of families screened, integration into clinic workflow, and distribution of resources, and acceptability through parent-reported satisfaction and intended follow-up actions. Because this initiative was implemented as a practice-based program within a student-run clinic without a comparison group or longitudinal follow-up, the data are not intended to demonstrate clinical effectiveness or changes in health outcomes. Instead, these findings provide preliminary evidence that shelter-based screening can be implemented and is acceptable to participating families, while informing future evaluation efforts.

Lessons Learned and Obstacles

This process revealed several structural and ethical challenges, one of which was ensuring program continuity. Because JeffHOPE is student-run, annual leadership transitions posed challenges to program continuity. Although structured handoffs and volunteer training supported sustainability, the relatively short duration of student involvement resulted in variability in familiarity with screening protocols and year-to-year consistency.

Trust and engagement presented challenges given the sensitive nature of mental health screening and parental concerns about stigma. Kids volunteers completed an interactive, multi-hour trauma-informed training early in their roles, conducted by external experts and overseen by upper-year student directors and the faculty advisor. The training covered strategies for recognizing and responding to common parent traumas in the shelter context, such as housing instability, prior interpersonal violence, and systemic barriers to care. In the context of this training, the volunteers were able to emphasize validation, choice, and respectful dialogue to foster trust and strengthen partnerships with parents. This approach was directly incorporated

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into screening delivery, including use of trauma-informed language during consent, offering caregivers choice in how to complete screenings (independently or with assistance), and allowing flexibility to pause or defer screening based on caregiver comfort.

Another factor contributing to the relatively low number of screenings (28 families over 10 months) was the nature of the shelter itself. Many families reside in the shelter for extended periods, often as part of long-term housing programs, and would have already undergone screening during prior clinic visits or intake processes. Additionally, operational limitations such as volunteer availability, training cycles, and the temporary presence of some families further restricted the total number of screenings completed.

Another limitation was the absence of a formal follow-up mechanism, particularly in the context of a positive screening result. As a result, outcomes related to follow-up are based on parent-reported intentions at the time of screening rather than verified care utilization or completed referrals. In response, we created discharge summaries outlining screening results and referral recommendations, along with resource handouts detailing community behavioral health services and insurance support. The clinic advocacy team assisted families with appointment scheduling and insurance navigation. Notably, the program required no external funding, supporting feasibility in low-resource settings.

Finally, we encountered several ethical considerations given the already vulnerable population we were working with. One early concern was the lack of follow-up, especially in case of psychiatric emergencies. Emergency hotline and crisis resource information were included in

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materials and reviewed with families, and a physician preceptor was available at each clinic session to address urgent concerns. Another concern was conducting screens if parents had low health literacy. Volunteers were trained to provide education in plain language, and written materials were developed in English and Spanish to ensure accessibility.

Discussion and Conclusion

In this column, we describe a pediatric behavioral and developmental screening program implemented through a student-run free clinic in partnership with two homeless shelters in Philadelphia. Physician faculty provided oversight, with shelter and local behavioral health providers supporting trauma-informed implementation and referral pathways. Student volunteers from JeffHOPE leveraged established relationships with families, facilitating trust and engagement. Ongoing feedback from caregivers informed iterative improvements and reinforced the importance of patient-centered design.

Our experience demonstrates that integrating behavioral and developmental screening into student-run outreach is feasible and can improve early identification and connection to care for children experiencing homelessness. Screening within trusted community spaces lowers logistical and relational barriers to behavioral health engagement.

Importantly, some components of our model were context-specific. Several elements were essential to implementation: trauma-informed volunteer training, use of brief validated screening tools (PSC-17, M-CHAT-R/F), and integration into an existing clinical workflow. In contrast, facilitating factors included established clinic infrastructure, longstanding shelter partnerships,

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and proximity to referral networks, which enhanced efficiency but were not strictly required for program initiation. Student-run clinics without these features may require additional time to build community trust, formalize supervision structures, or identify referral partners. Programs without established shelter partnerships should anticipate approximately 6–12 months for relationship-building prior to implementation

However, several elements are broadly transferable across settings: embedding screening into existing outreach efforts, prioritizing trauma-informed approaches, using brief validated tools, engaging families in program refinement, and cultivating bidirectional communication with community stakeholders. These core principles can be adapted across diverse shelter structures, clinic capacities, and regional resource environments.

Three key lessons emerge for student-run clinics. First, community partnership is foundational to both feasibility and sustainability. Second, integration into existing clinic workflows enhances scalability without requiring external funding. Third, family-guided program development strengthens acceptability and relevance. Student-run clinics are uniquely positioned to address developmental and behavioral health disparities among children experiencing homelessness. We encourage clinics to pilot shelter-based screening initiatives while intentionally investing in referral partnerships tailored to their local context.

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Table 1. Demographic Characteristics of Screened Children (n = 28)	
Characteristic	**N (%)**
Gender	
Male	16 (57.14)
Female	12 (42.86)
Race	
Black or African-American	25 (89.29)
Hispanic	1 (3.57)
Other / multiracial	2 (7.14)
Ethnicity	
Hispanic or Latino	4 (14.29)
Not Hispanic or Latino	21 (75.00)
Prefer not to say	3 (10.71)
Insurance status	
Insured	26 (92.86)
Uninsured	2 (7.14)
Established care with pediatrician	
Yes	21 (75.00)
No / inconsistent care	7 (25.00)
This table displays the demographic characteristics of children screened during the study period of June 2024–April 2025. Values are presented as counts and percentages.	

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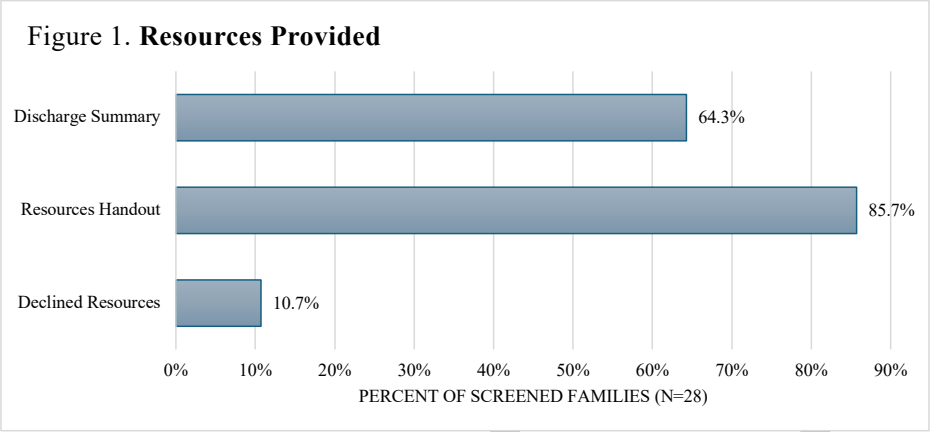


Figure 1. Resources provided to families following behavioral health screening (n = 28 children) in a shelter-based clinic, June 2024–April 2025.

This figure displays the proportion of families who received post-screening materials after completion of either the PSC-17 or M-CHAT-R/F screening. Percentages are calculated using the total number of families screened (n = 28) as the denominator. Resource handouts were provided to 24 of 28 families (85.7%), discharge summaries to 18 of 28 (64.3%), and 3 of 28 families (10.7%) declined resources. PSC-17 = Pediatric Symptom Checklist-17; M-CHAT-R/F = Modified Checklist for Autism in Toddlers, Revised with Follow-Up.

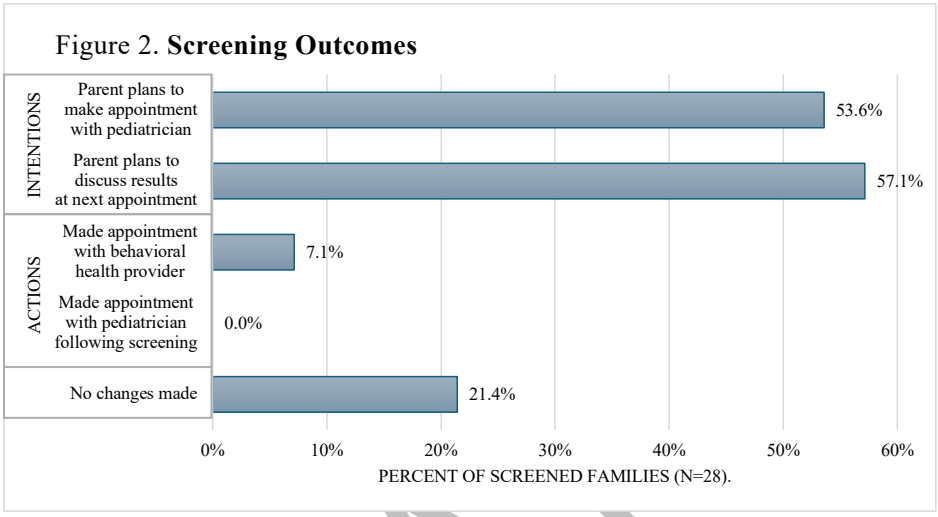


Figure 2. Parent-reported intended follow-up actions after behavioral health screening (n = 28 children) in a shelter-based clinic, June 2024–April 2025.

This figure illustrates caregiver-reported next steps following completion of PSC-17 or M-CHAT-R/F screening. Percentages are calculated using the total number of families screened (N = 28) as the denominator, and response options were not mutually exclusive. Fifteen of 28 parents (53.6%) planned to make an appointment with a pediatrician, 16 of 28 (57.1%) planned to discuss results at the next appointment, 2 of 28 (7.1%) made an appointment with a behavioral health provider, none (0/28, 0%) reported making a pediatric appointment immediately following screening, and 6 of 28 (21.4%) reported no planned changes. PSC-17 = Pediatric Symptom Checklist-17; M-CHAT-R/F = Modified Checklist for Autism in Toddlers, Revised with Follow-Up.

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