Clinical Practice in Pediatric Psychology

ISSN: 2169-4826

2021, Vol. 9, No. 4, 359–371
http://dx.doi.org/10.1037/cpp0000356

Barriers and Facilitators to Integrating Behavioral Health Services and Pediatric Primary Care

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Objective: To describe the barriers and facilitators to integrating behavioral health services and pediatric primary care in federally qualified health centers (FQHCs) during the early stages of implementation. ***Method:*** We conducted 34 semistructured interviews with primary care providers ($n = 11$), behavioral health clinicians ($n = 12$), community health workers, and other pediatric staff ($n = 11$) at 3 FQHCs. Themes were identified inductively using methods informed by grounded theory; inductively identified themes were then deductively organized within the Consolidated Framework for Implementation Research. ***Results:*** Interviewees perceived that the adoption and sustainability of behavioral health integration (BHI) in the pediatric practices of FQHCs were most dependent on barriers and facilitators in the outer setting (the health

This article was published Online First November 12, 2020.

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This work was presented as a poster presentation at the June 2018 AcademyHealth Research Meeting in Seattle, Washington.

Funding from the TEAM UP for Children initiative was provided by the Richard and Susan Smith Family Foundation and the Robert Wood Johnson Foundation.

This article is published in memory of Dr. James F. Burgess, Professor of Health Law, Policy & Management, Boston University School of Public Health. We remember Dr. Burgess for his wisdom, humor, mentorship, and kindness and are appreciative of his contributions to our work.

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system context, including financing, partnerships with community organizations and providers, local supply of specialty behavioral health providers, and characteristics of their patient population) and internal clinic structures (resources to support protected provider/staff time, colocation, professional development, and adequate staffing). In turn, adequate clinic structure was perceived as a foundational component in facilitating the process, relational, and individual changes required for BHI implementation, including improving provider and staff collaboration and communication, reducing staff stigma, improving provider compassion, and supporting provider and staff well-being. ***Conclusions:*** The successful adoption and sustainability of BHI in the pediatric primary care practices of urban FQHCs may depend highly on the health system context and internal clinic structures. Implications for implementing pediatric BHI interventions in FQHCs are discussed.

Implications for Impact Statement
The findings of this research suggest that the successful adoption and sustainability of behavioral health integration (BHI) in the pediatric primary care practices of urban federally qualified health centers (FQHCs) may be most impacted by the health system context (reimbursement policies and practices, partnerships with community organizations and providers, the local supply of specialty behavioral health providers, and characteristics of their patient population) and internal clinic structures (resources to support protected provider/staff time, colocation, professional development, and adequate staffing). Our findings can be used by pediatric psychologists, health care professionals, administrators, and health policymakers to inform the design of future pediatric BHI interventions within urban FQHCs.

Keywords: pediatrics, behavioral health integration, collaborative care, barriers and facilitators

Supplemental materials: http://dx.doi.org/10.1037/cpp0000356.supp

Pediatric behavioral health disorders have a major impact on families, communities, and society. Half of all lifetime cases of behavioral health problems begin by age 14 (Kessler, Chiu, Demler, Merikangas, & Walters, 2005), with the average delay between onset of illness and intervention being 10 years (Hagan, Shaw, & Duncan, 2008). Once children and adolescents (referred to inclusively as "children") are identified as having a behavioral health disorder, only a fraction access treatment, with children of color significantly less likely than their White peers to receive appropriate care (Arora, Godoy, & Hodgkinson, 2017; Kataoka, Zhang, & Wells, 2002; Martini et al., 2012).

The integration of behavioral health services into pediatric primary care, or pediatric behavioral health integration (BHI), is a model of care that aims to address children's access barriers to effective pediatric behavioral health treatment. BHI aims to systematically address patients' behavioral health alongside their primary care, specialty care, and social support needs within the medical home (SAMSHA-HRSA Center for Integrated Health Solutions, 2013). By integrating care in the pediatric primary care setting, children may be more likely to obtain behavioral health treatment for symptoms that may otherwise adversely impact child and family functioning (Asarnow, Rozenman, Wiblin, & Zeltzer, 2015). BHI often aims to provide short-term services to prevent the onset/maintenance of longer-term problems. In a meta-analysis of randomized controlled trials that studied the effectiveness of pediatric BHI on child behavioral health outcomes, researchers found that pediatric BHI interventions had a significant advantage over usual primary care (Asarnow et al., 2015).

Despite evidence demonstrating the overall effectiveness of integrating behavioral health services and pediatric primary care, few studies

have evaluated the barriers and facilitators to implementing pediatric BHI in federally qualified health centers (FQHCs). FQHCs comprise the largest primary care network in the United States and are responsible for providing comprehensive services to the nation's most vulnerable pediatric populations, which are often disproportionately affected by behavioral health conditions compared to other pediatric populations (Howell, 2004; Kaliebe, 2016). Because well-intentioned, evidence-based interventions can often fail in practice due to poor implementation efforts, attention to factors affecting the degree to which pediatric BHI interventions are adopted and sustained (i.e., implemented) in practice is critical to its success in improving pediatric behavioral health outcomes in FQHCs. Moreover, because providers' and staff members' early perceptions of barriers and facilitators to the implementation of an intervention may determine long-term implementation outcomes, there is a need to understand perceived barriers and facilitators to pediatric BHI in FQHCs at the start (i.e., early stages) of implementation (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). In this study, we qualitatively examined perceived barriers and facilitators to the implementation of pediatric BHI among providers and staff in three FQHCs during the early stages of BHI implementation.

Method

This study included a series of semistructured one-on-one interviews with primary care clinicians (PCCs), behavioral health clinicians (BHCs), community health workers (CHWs), and other staff at three urban FQHCs. A qualitative research design was chosen for this investigation because little is known regarding potential barriers and facilitators to the implementation of pediatric BHI in FQHCs (Creswell, 2003; Kolko, 2015).

Setting

This study was conducted as part of the formative evaluation for the Transforming and Expanding Access to Mental Health in Urban Pediatrics for Children Initiative (TEAM UP for Children). Launched in May, 2016, TEAM UP for Children is a 4-year study evaluating the implementation processes and outcomes of a multicomponent intervention aiming to integrate behavioral health services into pediatric primary care in greater Boston FQHCs. Participating FQHCs applied in a competitive grant process to be a part of the initiative. At the time of this study, the three FQHCs included in this study were the only clinics participating in the TEAM UP for Children Initiative. Together, the three sites serve over 19,000 pediatric patients annually, the majority of whom are insured by Medicaid.

Provider and staff interviews occurred at the start of pediatric BHI implementation (May to June 2016) when each FQHC was beginning to implement core BHI intervention components, including universal screening, colocation, integrated clinical systems, team-based care, stepped care, and continuous quality improvement (online Supplemental Material 1). The BHI intervention aimed to fully integrate (not merely colocate) behavioral health services and pediatric primary care. As part of the BHI intervention, each FQHC received grant funding to support the hiring of a full-time, on-site (nonclinical) TEAM UP for Children program manager; two to three integrated, master's-prepared BHCs who provided behavioral health services to children within pediatric primary care; and two to three CHWs in pediatric primary care. Interviews represent respondents' perceptions of barriers and facilitators to pediatric BHI among PCCs, BHCs, CHWs, and other FQHC staff. In this article, we define "integrated BHCs" as BHCs who are providing behavioral health services in pediatric primary care. We define "on-site specialty BHCs" as those providing long-term behavioral health services and practicing in on-site specialty behavioral health clinics. Each FQHC had existing on-site specialty BHCs prior to the start BHI intervention. The TEAM UP for Children model of BHI is applicable to all BHC types, including psychologists.

Participants and Data Collection

Participants eligible for inclusion in the study were PCCs, integrated BHCs (master's-prepared social workers and licensed mental health clinicians), specialty BHCs (child and adolescent psychiatrists), CHWs, and other clinic staff involved in the provision and/or organization of patient care at each clinic site (e.g., nurses,

medical assistants, and administrators). All clinic staff involved in the TEAM UP initiative were invited to participate in interviews by the TEAM UP clinical leads working within each clinic, and the contact information of interested participants was provided to the study team. All interested potential participants were then recruited into the study using a convenience sampling approach. Semistructured interviews were conducted at each clinic site by research staff (KJSB, AF, CH, DM, MPD, MB-M; online Supplemental Material 2). Semistructured, one-on-one interviews occurred in private rooms, lasted 45–60 min, and were audio-recorded following verbal informed consent. Our interview guide was designed to explore provider and staff perceptions regarding individual, interpersonal, and organizational factors that may impact the implementation and sustainability of BHI at each clinic (online Supplemental Material 3–5). Basic demographic information was also collected via survey at the time of each interview. This study was approved by the Boston University Medical Campus Institutional Review Board.

Analysis

Interview data were transcribed and analyzed using constant comparative methods informed by grounded theory (online Supplemental Material 6; Creswell, 2003). Themes were inductively identified from coded passages of text and then deductively categorized into relevant constructs of the Consolidated Framework for Implementation Research (CFIR) model (Damschroder et al., 2009). CFIR is a socioecological conceptual framework used in implementation science to explain the complex, interacting, and multilevel constructs involved in the implementation of health service innovations. The framework integrates existing implementation science theories and models into an overarching taxonomy of constructs that are known to affect the change processes associated with the adoption and use of organizational interventions. In this study, CFIR was used as the organizing framework for describing the emergent themes regarding barriers and facilitators to pediatric BHI and was selected as an organizing framework following our inductive identification of themes. Demographic survey data were summarized using frequencies and percentages for categorical variables and means and ranges for continuous variables.

Results

Thirty-four providers and staff (interviewees) were included in the sample (see Table 1). The majority of the sample were female and clinicians. Emergent themes describing perceived barriers and facilitators to pediatric BHI were organized broadly within three CFIR domains: the outer setting, inner setting, and characteristics of individuals (Figure 1). Table 2 presents selected quotations illustrating the themes within each domain. To maintain the confidentiality of interviewees, we define the staff roles of interviewees broadly as PCCs, BHCs, or other pediatric staff. A more detailed summary of identified themes is available in online Supplemental Material 7.

Outer Setting

The outer setting domain of CFIR describes the larger health system, political context, and economic context within which the implementation effort is occurring. Barriers and facilitators to the implementation of pediatric BHI within the outer setting related to the following emergent themes: financing the intervention, partnerships with external agencies and provid-

Table 1
Sample Demographics (n = 34)

Variable	Value
Sex, *n* (%)	
Male	3 (9)
Female	31 (91)
Role, *n* (%)	
PCC	11 (32)
BHC	12 (35)
Other staff[a]	11 (32)
Age, years, mean [range]	39.53 [22–70]
Years at clinic, mean [range]	5.97 [0.4–24]
Years in respective field, mean [range]	11.88 [0.5–50]

Note. PCC = primary care clinician; BHC = behavioral health clinician.
[a] Other staff included community health workers, nurses, medical assistants, clinic administrators, and TEAM UP program managers involved in pediatric behavioral health integration implementation within each federally qualified health center.

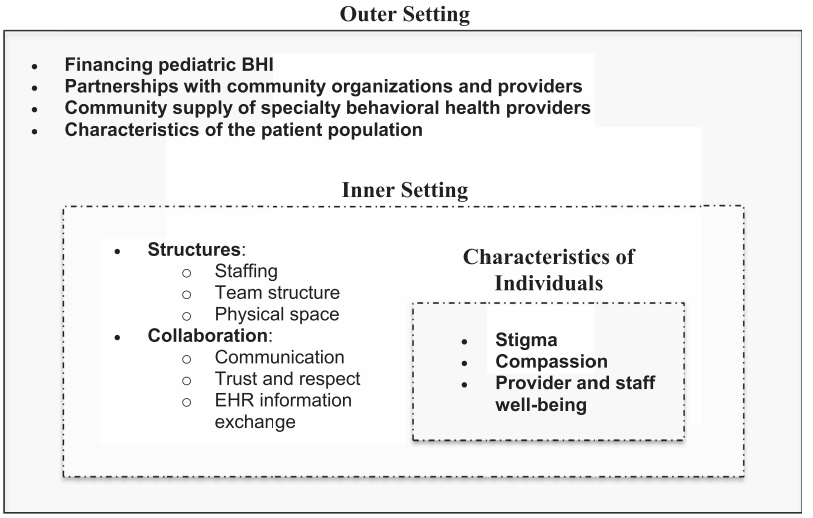

Figure 1. Emergent themes describing the barriers and facilitators to pediatric behavioral health integration (BHI) organized in Consolidated Framework for Implementation Research model domains. EHR = electronic health record.

ers, and the community supply of specialty behavioral health providers.

Financing pediatric BHI. Within the outer setting, financing pediatric BHI emerged as the greatest perceived barrier to implementing pediatric BHI. Barriers included knowledge gaps regarding how to implement and sustain internal billing systems to maximize behavioral health service reimbursement, providing services that are nonreimbursable or difficult to reimburse, and a need for better cost accounting systems to evaluate whether pediatric BHI yields a return on investment. To attenuate these barriers, providers and staff recommended implementing ongoing training and technical assistance on billing procedures and systems and negotiating directly with payers to advocate for changes in reimbursement policies that support integrated clinic operations. These include policies that support reimbursement for time spent by integrated BHCs conducting warm handoffs, impromptu integrated BHC and PCC communication regarding patient cases, and CHW services.

Partnerships with community organizations and providers. Providers and staff shared a desire to improve partnerships with external entities, such as community or tertiary behavioral health providers, schools, and social service organizations, to improve information exchange and the likelihood their patients would receive community services. Perceived facilitators to partnering with community agencies included implementing routine processes for communicating with community agencies, such as having a dedicated clinic staff member responsible for liaising with school clinicians and other community providers.

Community supply of specialty behavioral health providers. Providers at one site expressed concern regarding the lack of BHCs who could provide long-term treatment or psychiatry within the greater community. This presented a major barrier to the implementation of pediatric BHI for the children and families who required long-term behavioral health treatment, given that each FQHC's internal capacity to address long-term treatment via on-site specialty behavioral health providers was also limited.

Characteristics of the patient population. Interviewees shared that many of their patients struggle to meet their basic needs (food, shelter, safety) and may be highly transient, leading to missed appointments or complete loss of contact with patients. These characteristics of the patient population cause difficulties engaging patients in their behavioral health care during transitions between PCCs and integrated BHCs or between integrated BHCs and on-site spe-

Table 2
Quotations Illustrating Each Theme/Subtheme

Theme/subtheme	Perceived barrier(s)/facilitator(s)
Outer setting	
Financing the pediatric BHI	• Revenue is a barrier for us. We've not figured out the billing.—Other staff • It would be awesome if we can . . . actually get reimbursement for a lot of the work that we do, say in the hallway when we're talking to the doctors. None of that's reimbursable.—BHC
Partnerships with community organizations and providers	• Our connection to the tertiary care part of this . . . it is terrible. We really wish we could know . . . how to get information to any of our kids who have had to interface with a higher level of . . . behavioral health care.—PCC • The nice thing would be if there were like someone to better liaison with the school, so that we have better systems in place of getting that collateral information.—PCC
Community supply of specialty BHCs	• Whether it's long-term counseling or . . . psychiatry and there's just not enough places to send these people. One is because of the wait lists, two is because there's a huge need . . . all of [the community] needs it.—PCC
Characteristics of patient population	• We need to have somebody readily available to address the issues. I feel like a lot falls through the cracks when we're asking families to connect with [an on-site specialty] behavioral health clinician . . . most of the times they don't make their appointments.—Other pediatric staff
Inner setting	
Structures: Staffing	• Once they [integrated BHCs] are available they fill up rather quickly, so it's nice to have one person that might be on call during the day where they don't have any schedules but can sort of migrate from one to the other instead of being filled and their schedules blocked.—PCC
Structures: Team structure	• They're [CHWs] going to help me navigate just like [this] really complex system and help me decide what the best referral is. . . . The reality is as a PCC, I don't know all those systems as well as our team does.—PCC
Structures: Physical space	• Sometimes when they [integrated BHCs] do have appointments, they use some of our rooms; that might slow down the workflow.—PCC
Collaboration: Communication	• The quality of communication is very significant . . . that's where the co-location I think is important. My office is right next to [the primary care physicians'] office[s] . . . we all kind of monitor each other's schedules.—BHC
Collaboration: Trust/respect	• We have department gatherings . . . together, so we all know each other really well, so I think we all feel very comfortable approaching each other about patients and issues.—PCC
Collaboration: EHR information exchange	• EHR is a pain in the neck . . . our behavioral health folks, the treatment plans that they put together is really hard to capture in our EHR right now. So they have to do it as sort of like a couple of quick points here in the problem list, but then the whole treatment plan or the extent of the treatment has to be a document that is scanned in and it is so hard to find. You can't update it easily.—PCC
Characteristics of individuals	
Stigma	• I can think of some pretty harmful experiences of language that MAs . . . if medical assistant or a registration person . . . is using stigmatizing or hurtful language . . . that's going to hurt the patient.—BHC
Compassion	• I think that there needs to be a greater awareness for pediatricians. . . . Recognizing that just because a child has a symptom of ADHD doesn't mean that they actually have ADHD . . . there's a much bigger picture that's going on that social story, the family story, the history is really important that the environment of the family is trying to survive in.—BHC

(*table continues*)

Table 2 (*continued*)

Theme/subtheme	Perceived barrier(s)/facilitator(s)
Provider and staff well-being	• I feel like we're [at the] limit of the amount of screening that we can do, and what we're being asked to enter into the electronic record is overwhelming right now . . . I don't know how much more we can do . . . I'm spending so much time at home and in my days off, and my time off entering stuff in the record.—PCC • I think kind of the work that I do can kind of be sad because there is no end. Like I may help a family get shelter but then they will call me up in a month and say . . . there is like mice everywhere.—Other pediatric staff

Note. BHI = behavioral health integration; BHC = behavioral health clinician; PCC = primary care clinician; CHW = community health worker; EHR = electronic health record; MA = medical assistant; ADHD = attention-deficit/hyperactivity disorder.

cialty BHCs. To mitigate this barrier, interviewees discussed the need for behavioral health care coordination, whereby clinic systems for patient and provider follow-up are put in place to manage the transition of patients between on-site PCCs and BHCs within primary care and between primary care and on-site specialty behavioral health services following referrals.

Inner Setting

Factors in the outer setting are posited to influence the implementation of an intervention through their direct effects on the inner setting, or the structural, cultural, and relational contexts that exist within an organization. Barriers and facilitators to the implementation of pediatric BHI within the inner setting fell within two subdomains: structures (how the organization is staffed and resourced) and collaboration (the quality of collaboration and formal and informal communication within an organization).

Structures.

Staffing. Maintaining appropriate staffing levels within pediatric primary care to meet patient needs was the most pressing structural barrier to BHI. In particular, interviewees identified a need to hire more integrated BHCs of different genders, language capabilities, and prescribing capabilities. Low integrated BHC staffing levels were compounded by traditional back-to-back scheduling of BHC appointments, making it difficult for PCCs to access integrated BHCs when needed for warm hand-offs or in a behavioral health-related crisis situation. Some BHCs expressed concern regarding their clinic's capacity to address more severe behavioral health conditions due to an increased demand for long-term behavioral health services caused by pediatric BHI and a strained supply of existing on-site specialty BHCs. To alleviate these barriers, BHCs suggested hiring more integrated BHCs, specialty BHCs, CHWs, and administrative support and implementing alternative staffing models (such as having on-call "floating" integrated BHCs available in addition to scheduled integrated BHCs).

Team structure. Providers underscored the importance of including CHWs on the integrated care team with PCCs and BHCs, recognizing that patients' basic needs must be met before providers can effectively address behavioral health concerns. Providers relied heavily on CHWs to assist them with addressing patients' complex social needs, which allowed PCCs and integrated BHCs to focus their time addressing specific clinical needs versus spending their time addressing patients' social, safety, and material needs.

Physical space. Limited physical space for integrated BHCs to meet with patients also emerged as a primary structural barrier to BHI implementation. As a result of limited space, some integrated BHCs reported using exam rooms to meet with patients in pediatric primary care, which they perceived as a barrier to facilitating a comfortable, open discussion of behavioral health issues with patients. To alleviate this barrier, interviewees recommended creating dedicated space for BHCs to meet with patients in pediatric primary care.

Collaboration.

Communication. Providers and staff who described the communication between integrated BHC and PCC team members as excel-

lent noted a number of key facilitators. These included colocation of integrated BHCs, PCCs, and CHWs; PCCs and integrated BHCs monitoring each other's schedules (which was facilitated by colocation); protected meeting time for PCC and integrated BHC staff; monthly all-staff meetings; and informal check-ins between PCCs and BHCs. Out of these facilitators, colocation was widely recognized as one of the most important facilitators to improved communication between integrated BHCs and PCCs. Those who experienced barriers in the communication between behavioral health and primary care team members viewed increased systematization and structured communication processes as a solution. They noted that communication barriers most often occurred when patients were either (a) referred to an integrated BHC for ongoing therapy sessions within primary care or (b) referred to on-site specialty BHCs for long-term services. Providers highlighted the need to ensure integrated BHCs are adequately networked with both the primary care and specialty behavioral health teams to prevent a "third silo" of providers. Proposed processes to promote communication across teams and throughout the continuum of patient care included the establishment of recurrent case review meetings among primary care, integrated behavioral health, and specialty behavioral health providers and staff; protecting provider/staff time for these meetings; and standardizing the way routine notes are recorded in the electronic health record (EHR). For a few providers, as-needed informal communication (e.g., catching another provider in the hallway), combined with EHR messaging, was viewed as an effective means of communication.

Trust and respect. Interviewees believed effective communication and collaboration were ultimately dependent on the degree of shared trust and mutual respect that team members as well as the organization as a whole had for individuals' expertise. At an interpersonal level, colocation and protected time for informal social gatherings (e.g., through a department potluck, walk breaks with coworkers) were commonly cited as a way to build trust and respect among colleagues. At an organizational level, some BHCs perceived respect as inferred by the organization's clinical model (described as "a medical model") and, relatedly, the degree of power balance (or imbalance) between physicians and BHCs. Some providers noted that separate budgets for integrated behavioral health services and primary care may perpetuate power imbalances between primary care physicians and BHCs because integrated BHCs' revenue will inevitably be lower than revenue generated by primary care physicians. As a result, separate budgets leave fewer financial resources to support the structural needs of integrated BHCs compared to primary care physicians. To mitigate this barrier, a PCC recommended integrating financial resources across primary care and behavioral health departments into a global budget to support the needs of all providers and staff as one team, despite differences in levels of revenue generated across providers.

EHR information exchange. Interviewees often perceived the EHR as a barrier to efficient information exchange between BHCs and PCCs, which they viewed as crucial for effective collaboration in implementing pediatric BHI. Interviewees expressed the need for both live updates and an integrated treatment plan so providers can access patient treatment plans in real time and all in one place. Many interviewees also reported poor usability of EHRs, whereby entering and accessing patient information has been inherently time-consuming and difficult to locate and update. To facilitate improved EHR-based information exchange between BHCs and PCCs, providers identified the need to remove unnecessary steps in the documentation and information access process. For example, one PCC noted that she needs to submit a request each time she requires access to a patient's behavioral health notes. Interviewees also recommended improving the organization of patient notes to attenuate existing information access barriers.

Characteristics of individuals. The "characteristics of individuals" CFIR domain describes the attitudes and beliefs of individuals involved in implementing the intervention within the inner setting. These characteristics are known predictors of individual behavior change and interact at team and organizational levels in the organizational change processes occurring as part of implementation (Damschroder et al., 2009). Themes that emerged within this domain relate to staff stigma, PCC compassion, and provider and staff well-being.

Stigma and compassion. Integrated BHCs identified stigma toward patient behavioral health problems among nursing, medical assistant, and registration staff as a barrier to pediatric BHI. For instance, clinic staff may use inappropriate terminology to describe behavioral health during interactions with patients, are uncomfortable working with patients with behavioral health problems, or inappropriately inquire about patient behavioral health following integrated BHCs' consultations with patients in primary care. Integrated BHCs felt that training clinic staff on behavioral health would mitigate these barriers. Moreover, integrated BHCs also noted the need for PCCs to express greater compassion, patience, and comfort toward patients who are either behaving emotionally in a visit or dealing with complex psychosocial and environmental circumstances (e.g., trauma, poverty), citing training as a potential solution.

Provider and staff well-being. Providers and staff were asked to describe how they perceive pediatric BHI implementation has or will affect their well-being, including burnout and professional fulfillment. Interviewees explained that long-term therapeutic relationships and provision of quality care to a population in need give meaning to their work. Because all interviewees viewed pediatric BHI as an improvement in the quality of patient care, most interviewees perceived pediatric BHI as having a positive impact on their well-being. In particular, PCCs generally felt that pediatric BHI may reduce provider and staff burnout by mitigating providers' and staff's feelings of helplessness that arise in part from being unable to offer resources to patients in need. However, some PCCs had concerns regarding the added EHR documentation requirements that the intervention would require. Feelings of helplessness were also common among BHCs, CHWs, and even other clinic staff such as medical assistants, who described feeling burned out hearing about frequent patient abuse and dire social circumstances. Some integrated BHCs also feared they and CHWs may burn out as a result of PCCs overusing their services.

Overall, providers and staff perceived structural and process-related supports as the primary facilitators of their well-being within the context of pediatric BHI implementation. To balance the toll that difficult patient cases can take on integrated BHCs' and CHWs' emotional well-being, BHCs reported the need for protected time for regular supervision with appropriately trained supervisors. To combat feelings of helplessness and promote self-growth among all providers and staff, interviewees also desired increased opportunities for professional development, colleague interaction and support, autonomy to engage in new projects, clear boundaries around provider and staff personal time at work, the time and space throughout the workday to reflect on their work, and direct feedback on patient experiences. Other interviewees cited the following facilitators as mitigating burnout and promoting professional fulfillment within the context of pediatric BHI implementation: adequate remuneration, the ability to take vacation, receiving appreciation for their work, discussing patient issues (as opposed to staff and workflow related issues) at meetings, formal team debriefings, and receiving support from leadership. In times when clinic staff face adverse patient events (e.g., patient suicide), ongoing group meetings facilitated by a mental health professional have helped to support provider and staff emotional well-being. Having protected time to engage in informal gatherings with colleagues (e.g., protected lunch hour or planned departmental gatherings during protected time for all providers/staff) were also identified as ways to enhance employees' sense of well-being during pediatric BHI implementation.

Discussion

Using the CFIR model as an organizing framework for inductively identified themes, we qualitatively analyzed barriers and facilitators to the implementation of pediatric BHI in three FQHCs. Within the outer setting, or the larger health system, economic, and political context that envelopes each FQHC, several perceived barriers were described. Participants were concerned that implementation efforts would be challenged by payer reimbursement policies and practices, the need to develop stronger partnerships with community organizations and providers to facilitate information exchange, the shortage of specialty BHCs in the community, and the characteristics of the patient population, which made it difficult to engage patients/families in care. Within the inner setting, par-

ticipants were concerned that implementation efforts would be challenged by integrated BHC, specialty BHC, CHW, and administrative staff shortages; limited physical space for integrated BHCs; lack of communication and information exchange between integrated BHCs, PCCs, and specialty BHCs; separate medical and behavioral treatment plans; and power imbalances between integrated BHCs and primary care physicians. Finally, interviewees perceived that implementation efforts would be challenged by characteristics of the providers and staff involved in pediatric BHI, including staff stigma toward behavioral health; the need for PCCs to express greater compassion, patience, and comfort toward the psychosocial aspect of patient care; and provider and staff burnout.

Barriers within the outer setting pose a major threat to the effective implementation of pediatric BHI in FQHCs, yet individual organizations typically have less control over these factors due to the vast size and complexity of the systems to which the factors belong. As part of a larger system, outer setting barriers identified in this analysis mirror trends occurring at state and national levels. Reimbursement for behavioral health services is low; reimbursement policies are often unclear to providers and prohibitive of team-based approaches to care delivery; and national shortages of community behavioral health clinicians only compound these problems (Ader et al., 2015; Klein & Hostetter, 2014; Thomas & Holzer, 2006; Tyler, Hulkower, & Kaminski, 2017). Lessons learned from BHI implementation in adult settings recommend the formation of state-level stakeholder groups and learning communities to fuel the state-level payment and regulatory policy changes required for organizational and clinical practice transformation (Boober & Ybarra, 2015; Randell & Jacobi, 2016; Wick, 2015). State-level Medicaid delivery system and payment reforms, such as the transition from traditional Medicaid fee-for-service to state-based accountable care organizations in a number of states across the country (Center for Health Care Strategies, 2017), may also aid in attenuating the outer setting barriers to pediatric BHI via their focus on coordinating patient care across settings and providers within local communities (Tyler et al., 2017).

Nevertheless, mitigating the effect of outer setting factors on the successful implementation of pediatric BHI within FQHCs (e.g., through participation in policy advocacy efforts) will require substantial time and effort beyond the inner setting (clinic-level) structural and process changes necessary for pediatric BHI implementation. For this reason, evaluating the relative importance of outer setting barriers and (where possible) devising strategies to mitigate selected outer setting barriers may be an effective approach to implementation. Funders of BHI should also recognize the additional resources (e.g., funding, staff, time) that mitigating outer setting barriers will require beyond those necessary to support inner setting structural and process changes.

Within the inner setting, adequate clinic structure emerged as a foundational component in facilitating the process, relational, and individual changes required for BHI implementation, including provider and staff collaboration and communication, reducing staff stigma, improving provider compassion, and supporting provider and staff well-being. Structural facilitators included time, colocation, resources for professional development opportunities, and adequate staffing levels. Adequate time, in particular, was viewed as a primary means to facilitating inner setting changes required for pediatric BHI. This finding aligns with findings from the extant literature. In a national survey of pediatricians regarding barriers to addressing child mental health in pediatric primary care, lack of time was cited at the primary barrier (Horwitz et al., 2007). However, the role of time in addressing patients' mental health is typically focused on time within the context of the primary care visit (Fiscella & Epstein, 2008). Yet, within this study, providers and staff expressed the need for protected time outside the primary care visit to implement pediatric BHI. This included time to plan clinical process changes, to engage in the communication and information exchange activities necessary for the coordination of behavioral health care, to participate in all-staff meetings, to attend professional development opportunities, to obtain supervision, to gather informally with colleagues, to take an uninterrupted lunch or walk break, and to reflect and think about their work. At an organizational level, protecting providers' time to implement the changes necessary for pediatric BHI and for maintaining their own well-being will require reductions in clinical productivity requirements.

These reductions should be viewed as an investment in preventing the provider burnout and turnover associated with chaotic and time-pressured work environments (Linzer et al., 2014; Linzer et al., 2009; Wallace, Lemaire, & Ghali, 2009). Overall, the identified structural supports will require adequate financial resources to address costs associated with adopting and sustaining pediatric BHI. This may include reconsidering the scope of BHI services to increase the availability of on-site specialty BHCs resulting from increased demands for long-term behavioral health services identified in integrated pediatric primary care. The exact costs that are adequate to successfully implement pediatric BHI within FQHCs, however, are unknown and should be the focus of future research.

As researchers and doctoral-level clinicians who routinely work in interdisciplinary settings to assess and treat pediatric psychological problems; design and evaluate programs to promote child health, disease prevention, and early intervention; and advocate for public policies that advance child health (Roberts & Steele, 2017), pediatric psychologists are uniquely positioned to serve in the clinical, leadership, and evaluation roles that will be critical to the successful implementation and sustainability of pediatric BHI in urban FQHCs.

Strengths and Limitations

To our knowledge, this is one of the only studies to examine barriers and facilitators to implementing pediatric BHI in urban FQHCs during the early stages of implementation. The strengths of this study include a focus on perceived barriers and facilitators to pediatric BHI implementation in the early stages of implementation, an analysis grounded in theories of organizational change, the use of a socioecological implementation model to examine barriers and facilitators at different interacting levels of influence, and the inclusion of diverse provider and staff roles in the study sample. However, several limitations should be noted. First, interviewees' responses may have been influenced by social desirability bias. We aimed to mitigate this by assuring interviewees of the confidentiality of their responses and ensuring interviewees had no prior relationships with interviewers. Second, perceived barriers and facilitators in this study are likely dependent on the stage of implementation in which each FQHC was engaged at the time of this study. As clinics progress through various stages of pediatric BHI implementation, it is expected that perceptions regarding barriers and facilitators at that time will change. Therefore, these findings may only be transferable to FQHCs in the beginning stages of pediatric BHI implementation. Third, despite perceiving similar outer setting barriers and facilitators, there was notable variation in interviewees' perceptions of barriers and facilitators related to the inner setting and individual provider/staff characteristics across the three FQHC sites. Differences in organizational culture, organizational structure (e.g., staff type, staffing levels, reporting structures), and institutional histories may explain these differences. Future research with larger samples of clinic organizations will be needed to examine the critical role of organizational-level variables in determining the success of pediatric BHI implementation in FQHCs. Future research could also benefit from including patient perspectives in the study of barriers and facilitators to pediatric BHI implementation.

Conclusions

The findings of this research suggest that the successful adoption and sustainability of BHI in the pediatric primary care practices of urban FQHCs may be depend highly on the health system context and internal clinic structures. A coordinated, multilevel approach in collaboration with state- and local-health policymakers, payers, community organizations, and health care providers should be considered to ensure reimbursement policies and practices do not inadvertently set pediatric BHI implementation up for financial failure. Adequate funding of pediatric BHI implementation, particularly in the early stages of practice transformation, will also be critical to successful implementation and sustainability. This includes funding for protected provider and staff time to learn, adopt, implement, reflect, adapt, and sustain the practice changes required to finance and deliver integrated pediatric care in FQHCs. It also requires adequate funding for ongoing professional development, physical space changes, and new providers and staff. Importantly, it requires structural supports and processes that

facilitate the well-being of its provider and staff workforces who will implement pediatric BHI. Future studies are needed to examine the degree to which the identified barriers and facilitators affect the outcomes of pediatric BHI in urban FQHCs, as well as the costs associated with successful pediatric BHI implementation in this setting.

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Received September 24, 2019
Revision received May 23, 2020
Accepted June 3, 2020 ■