Examining Provider Perspectives of Equity at School-Based Health Centers in King County

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Abstract

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School-based health centers (SBHCs) provide primary and preventative health care to children and adolescents in the school setting, serving as an accessible and low-barrier healthcare option. For this reason, SBHCs are often upheld as an example of health equity. However, provider perspectives of equitable access and care in the SBHC setting have not been formally examined. This qualitative study interviewed 17 SBHC medical and mental health providers regarding their perspectives of equitable service delivery. Five themes emerged from these interviews: the presence of logistical barriers and facilitators, the impact of provider behaviors, the importance of relationships, the provision of mental health care services, and the lasting impact of SBHCs on students and families. These themes informed recommendations and future research directions for SBHCs in King County and beyond.

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Introduction

For school-aged children and adolescents, reducing health-related disparities and ensuring equitable access to quality healthcare is of the utmost importance.[1] Racial and ethnic disparities in health outcomes among children and adolescents are well documented in the United States.[2–5] According to the National Health Interview Survey, children and adolescents of color and of lower-income are less likely to have a usual place to receive health care, more likely to have frequent emergency room visits, and more likely to be in fair or poor health.[6] Other disparities include lower rates of health insurance, decreased access to primary health care services including a medical home, increased rates of unmet health needs, increased barriers to receiving health care, and poorer overall health outcomes. Adolescents face unique challenges to accessing and receiving healthcare; those without health insurance and of low-income are less likely to have received comprehensive preventative healthcare services.[7]

Looking at health outcomes among children and adolescents in Seattle and King County, Washington, recent data illustrate similar health disparities. Youth of color were significantly less likely to have had a recent preventative health visit. Additionally, data indicate higher rates of adverse health outcomes among youth of color, youth living in South King County, and youth of lower socioeconomic status.[8] Such health outcomes include increased rates of asthma and mental health problems.

Recent data indicate additional health disparities related to the novel coronavirus (COVID-19) pandemic. A recent report from the Centers for Disease Control and Prevention (CDC) describes evidence of significant racial and ethnic disparities related to COVID-19 diagnoses and outcomes among school-aged children and adolescents in the United States, likely exacerbated by existing systemic inequities and impacts of social determinants of health.[9] Additionally,

adolescents of all backgrounds have reported negative emotional and mental health impacts of the COVID-19 pandemic, including increased symptoms of negative stress, anxiety, and depression.[10,11]

Health Equity

Addressing such health disparities among children and adolescents requires a commitment to and shared understanding of health equity. In the healthcare field, the concept of health equity is frequently upheld as a pursuit to strive for, with healthcare agencies and organizations often aiming to reduce disparities in health outcomes. For example, one of the primary goals of the United States Office of Disease Prevention and Health Promotion *Healthy People 2030* initiative involves both eliminating health disparities and achieving health equity.[12] For health systems to effectively achieve this ambitious goal, these concepts must be understood in a way that is specific, measurable, and actionable. That is, in order to create and maintain equitable healthcare delivery systems, it is necessary to develop a shared understanding of health disparities, health equity and the barriers and facilitators to equitable service delivery.[13–16]

Research from Browne et al. provides some insight into how to build principles of health equity into the work of primary health care. Through interviews with patients and staff at health clinics in Canada, they found that the provision of equitable care depends on addressing social determinants of health, providing trauma-informed care, providing care tailored to the needs of the population, and providing culturally-competent care.[17] Providing equity-oriented healthcare in the primary care setting also improves the patient experience and outcomes.[18] Research also highlights the important role of the health system and the healthcare provider in advancing health equity and addressing inequities.[19,20] Despite the central role of the health system and the healthcare provider, a review of the current literature shows that insight into providers'

perspectives of health equity and practical guidance regarding the attainment of health equity is still evolving.[21,22]

School-Based Health Centers

School-based health centers (SBHCs) provide an innovative method of primary healthcare delivery for school-aged children and adolescents, aiming to address health inequities and disparities among this population. SBHCs are at the intersection of healthcare and education and are frequently described as an example of a successful intervention to advance health equity for school-aged youth. For this reason, SBHCs are a unique model of care through which to explore the practical implications of the roles of health systems and healthcare providers in advancing health equity.

Over the past twenty years, the number of SBHCs in the United States has more than doubled.[23] As of 2022, there are over 2,500 SBHCs nationwide representing every state, the District of Columbia, and Puerto Rico.[24] Through collaborative partnerships between K-12 schools, local government entities, and community health organizations, SBHCs provide primary and preventative medical, mental health, dental, and vision services to students on the school campus. At its core, the SBHC model of care is intended to provide quality health care in a setting that is familiar, convenient, and accessible to students.[24] The SBHC model of care is designed to reduce barriers in access to care, address health disparities, and advance health equity. Previous research demonstrates improved healthcare access, utilization, knowledge, and outcomes for students who use SBHC services compared to those who do not use SBHC services.[23,25–37]

During the COVID-19 pandemic, over 80% of SBHCs temporarily transitioned to a telehealth model of care. Some SBHCs were forced to close when their school site closed. During this time, many SBHCs faced significant logistical challenges impacting their ability to successfully engage students and provide standard SBHC services.[38] SBHCs are gradually transitioning back to offering services in person at their pre-pandemic capacities. During and after the COVID-19 pandemic, SBHCs must determine the best way to move forward to continue to equitably provide services to students and families in need.[39]

Effects of SBHCs on Equitable Access and Care

Previous research has consistently demonstrated the positive effects of SBHCs on healthcare access and utilization for children and adolescents from historically underserved populations. A study by Soleimanpour et al. demonstrated that SBHCs provide healthcare access to students of diverse racial and ethnic backgrounds who might otherwise face barriers to access.[29] Multiple research studies have compared healthcare access and utilization among SBHC users and non-users in the adolescent population. These studies indicate that adolescents from underserved populations at schools with SBHCs had higher rates of healthcare access and utilization compared to those at schools without SBHCs.[25,28,33,34] Additionally, research shows that adolescents from underserved populations with access to a SBHC had higher rates of healthcare access and utilization compared to those with only access to community health centers, indicating that the accessible nature of the SBHC contributes to higher rates of access and utilization.[30] Looking specifically at adolescent perspectives of barriers and facilitators to SBHC access, adolescents describe the confidential services, convenience, welcoming environment, and understanding nature of SBHC providers as notable facilitators to access.[40]

While much of the existing literature appears to focus on assessing equitable access and utilization among adolescents in the high school setting, several previous studies have demonstrated the positive effects of SBHCs in the elementary school setting, in terms of both access and utilization. These studies indicate that elementary-aged children from underserved populations with access to SBHCs demonstrate higher rates of healthcare access and utilization compared to those without access to SBHCs.[35,36] Evidently, the available literature clearly describes the effect of SBHCs on improving healthcare access and utilization for youth from underserved populations, suggesting that SBHCs have important implications for equitable service delivery.

Conversely, there is limited research examining the provision of quality, equitable, culturally responsive care to students. There has been some research into student and family satisfaction with SBHC services, generally indicating high levels of satisfaction.[29,41–44] Research by Benkert et al. found that adolescents using SBHC services indicated satisfaction with how their provider listened, explained concepts, and treated them respectfully.[42] Looking at student and parent experiences receiving care in the SBHC setting, Albright et al. found that students reported that care received at the SBHC was delivered in a trustworthy, compassionate, and high-quality manner.[43] Similarly, adolescents who utilized SBHC services were more likely to report receiving preventative care in a supportive manner compared to those who did not utilize a SBHC.[45] Parents also indicate satisfaction with care provided in the SBHC.[46] However, there is evidence that SBHCs do not always adequately provide culturally competent care to students identifying as LGBTQ.[47] These studies provide some insight into the care provided within the SBHC, but questions remain regarding how the SBHC organization and providers can provide equitable and culturally responsive care to all students from underserved populations. It is

important to note that while these studies provide insight into patient and family satisfaction with SBHC services, satisfaction is not necessarily synonymous with or indicative of equity and cultural responsiveness.

Provider Perspectives

As with the broader health equity literature, there is fairly limited research into how healthcare providers perceive the role of SBHCs in advancing health equity and promoting equitable service delivery. Most recently, Haeder et al. interviewed SBHC providers and administrators in West Virginia regarding the role of the SBHC provider. They found that SBHC providers play a unique role in primary healthcare and described some equity implications.[48] Similarly, Zarate et al. interviewed SBHC providers in the state of Georgia and found that providers both described SBHCs as providing accessible care to students and expressed the need for additional resources to meet the needs of students and families from underserved populations.[46] Previous research has also looked specifically at providers' perceptions of barriers to addressing adolescent substance use in the SBHC setting.[49] While these studies offer some insight into provider perspectives of barriers and facilitators to equitable service delivery, they do not explicitly and intentionally explore provider perspectives of contributors to equitable service delivery in the SBHC setting. Given the important role of the provider in advancing health equity, SBHC providers should have valuable perspectives to share.

Implications for Health Equity

SBHCs are a valuable and necessary resource to provide convenient and comfortable access to healthcare for students from historically underserved populations. Research suggests that SBHCs are an effective tool in reducing health disparities and thereby strengthening health equity for students and families from historically underserved populations. Research indicates that SBHCs

can be a resource to improve health equity in terms of access and utilization, but more information is needed regarding the quality of care provided. To this point, equity has primarily been measured through indicators of equitable access rather than equitable delivery of care. More information is also needed regarding providers' perspectives of barriers and facilitators to equitable service delivery within the SBHC system.

SBHCs in Seattle and King County

In Seattle and King County, Washington, SBHCs are coordinated by Public Health – Seattle & King County (PHSKC) in partnership with the City of Seattle Department of Education and Early Learning (DEEL). With the operational and financial support of PHSKC and DEEL, schools and community health organizations partner to provide primary and preventative healthcare to students. This work is supported and funded by King County's Best Starts for Kids levy, King County General Funds, and the City of Seattle's Families, Education, Preschool, and Promise Levy, initially approved by Seattle voters in 1990.[50]

As of 2022, there are 47 SBHCs serving over 10,000 students at elementary, middle, and high schools in Seattle and King County. Of these 47 clinics, most provide both medical and mental health services, while some provide only mental health services. SBHCs in Seattle and King County are staffed with licensed medical providers, mental health professionals, and clinic coordinators. Each center is affiliated with and staffed by one of the following community healthcare agencies:

- Country Doctor Community Health Centers
- HealthPoint Community Health Centers
- International Community Health Services

- Kaiser Permanente
- Neighborcare Health
- Odessa Brown Children's Clinic
- Public Health – Seattle & King County
- Swedish Medical Center

SBHC Logic Model

PHSKC and DEEL developed a logic model to illustrate the provision of services and theory of change for SBHCs in Seattle and King County.[50] As illustrated by this logic model (*Figure 1*), SBHCs aim to change the health-related behaviors and perspectives of both students and providers. Long-term outcomes include addressing race-based gaps and disparities, improving health and academic outcomes for students, and developing best practices for providers regarding the provision of SBHC services.

Furthermore, this logic model references the provision of high-quality, equitable, and culturally responsive care as a medium-term outcome, indicating the importance of examining how the implementation of the service delivery outputs serves to advance these measurements of health equity.

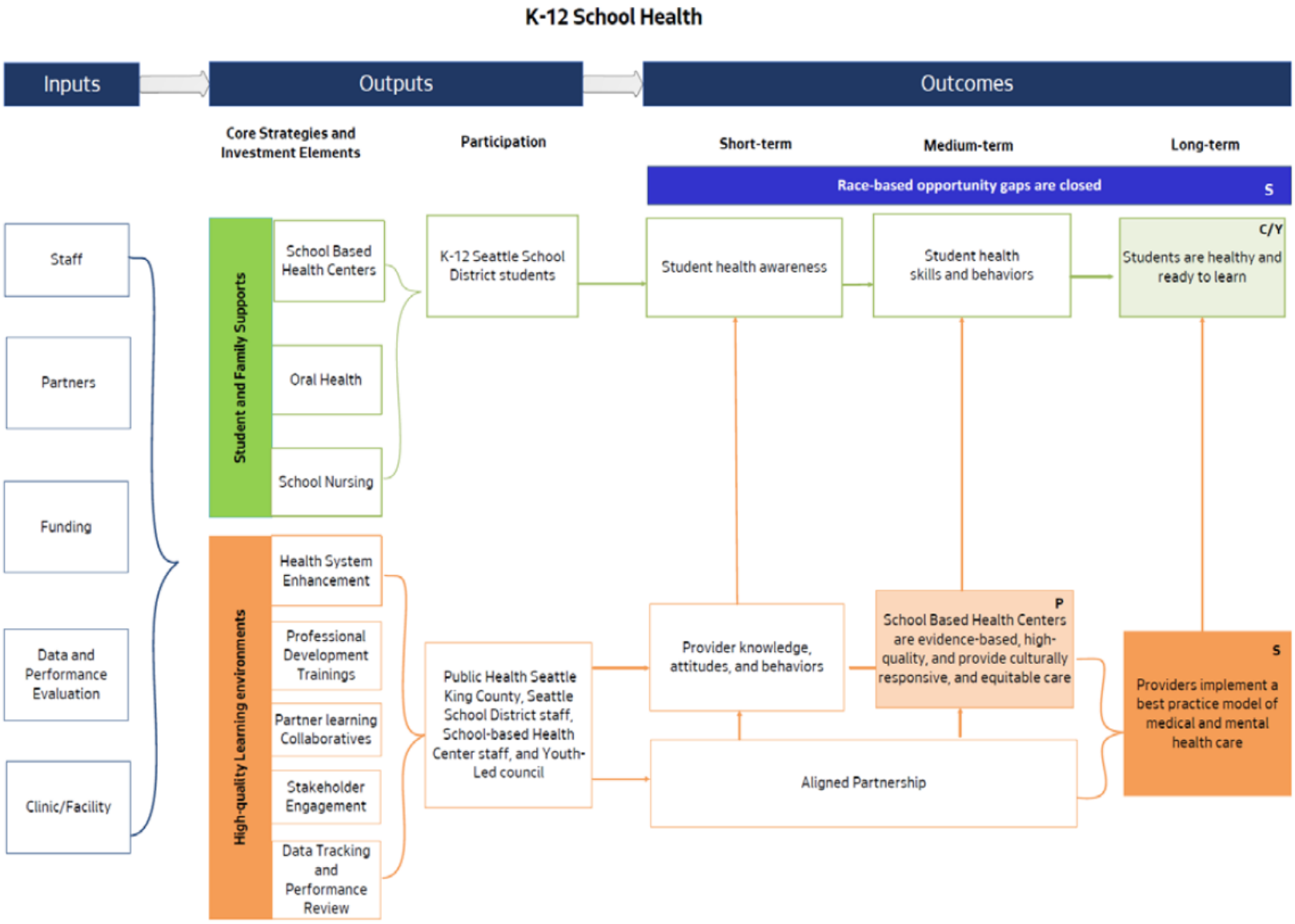

Figure 1. K-12 School Health Logic Model

Purpose and Specific Aims

As illustrated by the logic model (*Figure 1*), one of the primary objectives of SBHCs in Seattle and King County is to provide access to high-quality, equitable, culturally responsive care to all students. However, progress towards this goal has not yet been formally evaluated. The purpose of this qualitative research study was to examine how individual SBHC medical and mental health providers perceive and promote equitable access and care for students in Seattle and King County.

For the purpose of this research study, equitable access means that students from historically underserved populations have an equal opportunity to access and utilize SBHC services as students from non-underserved populations. Equitable care means that all students receive quality and culturally responsive care at the SBHC with consideration of the impacts of social determinants of health.

Given the limited existing research into practical implications and guidance for advancing health equity from the perspectives of health systems and healthcare providers, this study explored the questions of how providers perceive the meaning of health equity and what healthcare providers can do to advance equity. Additionally, this study explored the provision of both equitable access and equitable care in the SBHC setting, as previous research has focused primarily on access and utilization. Considering these gaps in the literature, the specific research questions addressed by this study are:

- ***Research Question 1****:* How do SBHC providers perceive the role of SBHCs in addressing health equity and inequities?

- ***Research Question 2:*** How do SBHC providers perceive and address equity and cultural responsiveness in their provision of services? Does this vary by provider type, agency affiliation, and/or school?

Methods

This qualitative research study used a phenomenological approach to collect data regarding provider perspectives of equitable service delivery within SBHCs in King County. To gain insight into provider perspectives of equity and how providers address equity and cultural competence within their provision of services, individual semi-structured interviews were conducted with providers working at SBHCs affiliated with PHSKC. Data was collected via semi-structured interviews with individual SBHC providers until reaching data saturation. Seventeen providers participated in the study.

This study received exempt approval from the University of Washington Institutional Review Board in October 2021.

Population and Setting

The study population consisted of medical and mental health providers working at SBHCs in Seattle and King County. For this study, providers were defined as an individual providing direct medical or mental health care to students at a SBHC affiliated with PHSKC. Regarding eligibility criteria, to be eligible to participate in the study, participants were required to be a SBHC medical or mental health provider, employed by one of the healthcare agencies affiliated with PHSKC, English-speaking, and employed by their agency for at least three months at the time of the interview.

Interviews took place virtually via video call (using Zoom software) or phone call, depending on the participant's availability and preference. All interviews took place in King County, Washington. Participants were given the option of meeting in person for the interview, but all participants preferred to meet virtually.

Recruitment

Participant recruitment took place through internal announcements and email communication with assistance from the PHSKC School-Based Partnerships Program (SBPP) and Assessment, Policy Development and Evaluation (APDE) teams. The research team first contacted SBHC managers to provide information about the study and request a list of providers who might be willing to participate. The manager email template is included in *Appendix A.* SBHC managers then provided the research team with a preliminary list of providers who agreed to be contacted regarding the study. These providers received basic information about the purpose of the evaluation via email and were given time to make an informed decision about participating.

To determine which providers to recruit and enroll, purposive sampling was used to ensure a balanced sample in terms of healthcare agency affiliation and provider type (i.e., medical or mental health). The PHSKC SBPP and APDE teams wanted to ensure that none of the different healthcare agencies were overrepresented or underrepresented in the study sample. Thus, the objective was to interview at least two providers from each healthcare agency and a relatively equal number of medical and mental health providers.

After receiving a list of interested providers from SBHC managers, providers were contacted directly via email to provide additional information about the study and assess interest in participating. The provider recruitment email template is included in *Appendix B.* Before the

semi-structured interview, participants provided informed consent to participate using an electronic Research Electronic Data Capture (REDCap) form. With the exception of email communication during the enrollment process, relationships were not established with participants before study commencement. Regarding information provided about the interviewer, participants were informed that the Principal Investigator is a graduate student at the University of Washington working closely with the PHSKC SBPP team to conduct an evaluation of equitable service delivery in SBHCs.

Nearly 40 SBHC providers were contacted via email about participating in the study. Seventeen of these providers participated in the study, and nine declined to participate. Eleven providers did not respond to the initial recruitment email. Zero participants withdrew from the study after agreeing to participate and enrolling.

Data Collection

Qualitative data consisted of responses to semi-structured interview questions. To develop the semi-structured interview guide, the research team worked closely with the PHSKC SBPP and APDE teams to ensure that the questions were aligned with their questions and desires. After developing the interview guide, the interview questions were pilot tested with two individuals not affiliated with the study to assess logic, flow, and overall understanding of the questions. The interview guide consisted of questions related to the role of the provider, knowledge of health equity, perceptions of equitable access and equitable care, perceptions of barriers to equitable service delivery, and recommendations for SBHCs in King County and beyond. Given the nature and objective of semi-structured interviews, interviews were conducted in a conversational manner, and the questions asked were guided by the flow of the interview.[51] That is, not all questions were necessarily asked of all participants. Throughout the data collection process, the

interview guide was revised in an iterative manner with the research team adding and revising questions as needed based on the interviews. The final version of the interview guide is provided in *Appendix C*.

The research team conducted semi-structured interviews between November 2021 and January 2022. All interviews were conducted by the Principal Investigator in English. The Principal Investigator audio recorded each of the interviews using the recording feature in Otter.ai software. Aside from the Principal Investigator and participant, there were no other individuals present during the interviews. The research team transcribed each interview within one to three weeks of the interview using the transcription feature in Otter.ai software. Interviews ranged from 23 minutes to 60 minutes in length. The average interview length was 34 minutes. Interviews were completed until reaching both a representative sample of providers and data saturation. Due to having a relatively short timeline to complete the study activities, repeat interviews were not carried out and transcripts were not returned to the participants prior to analysis.

Data Analysis

The research team primarily used inductive coding methods to code the semi-structured provider interviews. While inductive coding was the primary method, some deductive coding strategies were used to generate the initial codebook. After transcribing and coding each of the semi-structured interviews, thematic analysis methods were used to guide the analysis and interpretation of the results. After completing the thematic analysis and preliminary interpretation of the results, the research team met with representatives from both PHSKC and DEEL to answer questions and obtain additional insight to inform the final interpretation of the results.

Coding Process

Interview data were coded during January and February 2022 using Dedoose data analysis software. To strengthen the reliability and internal validity of the results, two graduate-level researchers worked collaboratively to develop the codebook and code each of the interviews, as described in detail below. The Principal Investigator served as the primary coder, and another University of Washington graduate student served as the secondary coder.

The codebook was developed using a combination of inductive and deductive methods. During the coding process, the research team primarily used an inductive approach, deriving codes directly from the semi-structured interview data. Some deductive codes were also included based on existing knowledge of the topic and preliminary observations from the interviews. An iterative approach was used to develop the codebook; the codebook was revisited and refined each time the coders met to reconcile coding strategies. The final version of the codebook with definitions, inclusion, and exclusion criteria is provided in *Appendix D.*

To code the transcripts, a combination of consensus coding and independent coding was used. For this research study, consensus coding refers to the practice of each coder coding the same transcripts and resolving disagreements in code applications. Independent coding refers to the practice of each coder coding separate transcripts, reviewing the codes generated by the other coder, and then resolving disagreements in code applications. The coders used consensus coding to code the first six interview transcripts, meeting after the first, third, and sixth coded interviews to reconcile coding strategies. After coding six interviews using consensus coding, the coders discussed the coding process and determined that their coding strategies were aligned. For the remaining 11 interviews, the coders independently coded different transcripts and reviewed each other's coding, noting areas of disagreement. After independently coding the final transcripts,

coding strategies were reconciled, and disagreements were resolved. Final decisions regarding code reconciliation were made by the Principal Investigator.

Late-Stage Analysis and Interpretation

Thematic analysis was used to identify the primary themes. To identify these themes, pattern identification strategies were used to recognize items that were frequently mentioned and discussed by participants during the semi-structured interviews. During this process, the research team focused on analyzing the relative importance and relationships between codes. Analysis tools in Dedoose were used to identify codes that were commonly applied together. After identifying preliminary themes, the Principal Investigator reviewed each transcript again to ensure that the preliminary themes were representative of the semi-structured interviews in their entirety. After thoroughly reviewing each transcript, the Principal Investigator determined that the themes were representative of the original data in the transcripts.

After completing the thematic analysis, the research team worked closely with representatives from PHSKC and DEEL to interpret the results. The preliminary results were shared and discussed with the PHSKC and DEEL teams during a virtual meeting. During this meeting, the Principal Investigator shared participant demographics, preliminary themes, sample quotations, and primary recommendations informed by the semi-structured interviews. Representatives from PHSKC and DEEL were given the opportunity to ask questions and provide insights about the results. Feedback and insight gathered during this meeting informed the final interpretation of the results, including recommendations and directions for future research.

Results

Population

Seventeen SBHC providers participated in the study. This sample included nine medical providers and eight mental health providers. Providers from each of the eight community healthcare agencies affiliated with PHSKC were represented by the sample, and all but one agency had at least two providers participate. Additional participant demographic data is included in *Table 1*.

Demographic Data (Table 1)

Characteristic	***N (%)***
Gender Identity	
Female	*15 (88%)*
Male	*2 (12%)*
Race*	
White	*13 (76%)*
Asian American	*1 (6%)*
Indigenous/Native American	*1 (6%)*
Hispanic/Latinx	*3 (18%)*
Years Employed by SBHC	
0-5 years	*11 (64%)*
5-10 years	*4 (24%)*
10+ years	*2 (12%)*
Provider Type	
Medical	*9 (53%)*
Mental health	*8 (47%)*
School Type**	
Elementary School	*2 (12%)*
Middle School	*6 (35%)*
High School	*10 (59%)*

**One provider identified in multiple racial categories.*
***One provider worked at both a middle school and a high school.*

Thematic Analysis

This research provides insight into how SBHC providers perceive the role of SBHCs in advancing health equity. There was considerable agreement among providers regarding the importance of SBHCs as a mechanism to provide students with culturally responsive care in a convenient and accessible manner. Providers indicated that SBHCs serve their intended purpose of providing equitable access and care to students. Providers also identified barriers and facilitators to equitable service delivery.

There did not seem to be significant variation by provider type, healthcare agency affiliation, or school site. Providers working with younger populations of students in the elementary and middle school settings typically described experiencing more direct communication with and involvement from parents and families as a regular occurrence in their provision of services. However, this did not significantly influence the primary themes.

Five primary themes emerged from the semi-structured interviews:

1. SBHCs provide access to high-quality, culturally responsive healthcare with few logistical barriers for students. To better meet the needs of students from underserved populations, there are several logistical barriers that should be addressed.
2. Provider diversity, attitudes, behaviors, and activities are key to equitable access and care for students.
3. Cultivating relationships with the school community, families, students, and other community organizations supports and facilitates equitable service delivery.
4. SBHCs face notable challenges to equitably providing mental health care to all students in need of services.

5. SBHCs have the potential to have a lasting and meaningful impact on the lives of students and families from underserved populations.

Theme 1 – SBHCs provide access to high-quality, culturally responsive healthcare with few logistical barriers for students. To better meet the needs of students from underserved populations, there are several logistical barriers that should be addressed.

Most providers indicated that SBHCs provide a low-barrier option for students to access quality healthcare in a convenient setting. Unlike other primary health care services, SBHCs typically do not have significant barriers related to cost, health insurance status, transportation, time, or confidentiality. In the SBHC setting, providers described how these often serve as facilitators to access. This means that it is typically relatively easy for students to access and utilize services.

> *"I think the free care is like the single most important thing, like being available, being in the schools, having free care, having zero limits to who can be a patient here other than being a student is hugely important. And so, I would say we do really, really well in terms of health equity. Like I love to be able to say to the kids, like 'just come in, it's all free to you, I'm happy to see you for anything.'"*

> *"If they've got insurance, we would love to see them. If they don't have insurance, we would love to see them. And there's no preference given in terms of what type of insurance, whether they have insurance."*

> *"Transportation, you know, we're there at the school and so they don't have to worry about getting in a car or a parent taking time off like, they just get a pass out of class, and they can come."*

However, some providers indicated that there are several logistical barriers that can make it more challenging for students from historically underserved populations to access and utilize SBHC services. Specifically, providers described challenges related to obtaining parental consent, completing required clinic paperwork, and accessing sufficient translation and interpretation services for students and families with limited English proficiency.

> *"We've gone over and over and over [the registration paperwork] and thumbed through it to make sure it's like whittled down to as little as we can to make everything legal. I think it's as straightforward of registration as you can get anywhere, but it is really hard for people to fill out. And so I think that that's a that's a barrier for some families."*

> *"I think some of the biggest barriers is just the paperwork part….we do need parent or guardian consent if they're under 18. And that can be that can be a barrier. One, I think just the time and getting a parent to sign the paperwork. Also, the paperwork in in the language that they speak. We, we offer registrations and our required paperwork in I believe three or four languages, but you know, I mean, that, that's, that doesn't cover everybody."*

> *"…one of the biggest things that you know, things that is a challenge is language, language differences. I mean, having multilingual staff is a huge help. And phone interpretation is really not ideal. You know, it basically, basically patients get less care in the same amount of time."*

Overall, providers perceive SBHCs to be a highly accessible and convenient service for students in terms of logistical facilitators and barriers. To more equitably reach students and families from historically underserved populations, some providers recommended that improvements be made

to the consent process, registration paperwork, and translation services. However, many providers also indicated that there are no barriers to access for students, suggesting that these are not notable issues at their site.

Theme 2 – Provider diversity, attitudes, behaviors, and activities are key to equitable access and care for students.

Providers frequently referred to specific personal characteristics, attitudes, behaviors, and activities that seem to influence both students' willingness to access SBHC services and the quality of care provided to students.

Nearly all providers mentioned that students are more likely to feel comfortable accessing services if they feel seen and represented by the SBHC providers and staff. However, most providers indicated that the majority of current SBHC providers are not diverse or representative of the populations they serve in terms of demographics. They also indicated that having a more representative staff, in terms of demographics, may help reduce potential barriers to students accessing and receiving care.

> *"…it's a couple white ladies who are doing the healthcare, that's not who's in the front of the office, that's not the only people who are here, but I think that can make it feel like a less comfortable environment."*

> *"…what makes somebody comfortable to come to a clinic? That's a big question. And it has to do with a lot of different factors. So like, I think that one thing that can make a clinic more comfortable for people is, there's people who look like them in that clinic….We don't really have that."*

> *"…if our clinics want to serve people of different backgrounds, we need to have providers that represent those different backgrounds as well."*

Providers also described how their individual attitudes and behaviors towards students facilitate the provision of equitable and culturally responsive care. Providers specifically described the importance of having an awareness of implicit biases, actively listening, being welcoming and accepting, seeing each student as an individual, and providing trauma-informed care.

> *"I think just being aware of my own culture and my own bias, and you know, I may assume things about people, just being aware so that I can try to put it aside and see things from a different lens and try to consider like I said, everything that may be going on in this person's life and all they need, some barriers that they may be encountering, and, you know, trying to find other explanations as to why things are happening. Instead of like, assuming that I know, like not to have the expert role and assume that I know everything that's going on or why they're acting the way they're acting."*

> *"…it's been just a really good thing for me to check in with myself first, so that I can really approach the visit and them with just so much openness and non, non-judgmental attitude even, even if I have a different way of thinking about something than they do."*

Similarly, providers described the importance of being flexible and accommodating in working with students and families. Many providers described the importance of "meeting people where they are." They indicated that the SBHC setting allows for increased flexibility to work closely with students and families and provide additional accommodations, depending on the student's individual needs.

> *"…[equitable care] just means meeting the students and the families where they're at and seeing what they need from us rather than what do we need from them. A lot of the times we always kind of pinpoint on them saying like, 'I need you to do this, this, this and this' without really going into explanation why. So really listening to them and figuring out what their needs are, what they would want from us, and then figuring out a way if we could provide that."*

> *"…we make a lot of accommodations to make things work for people depending on where they're coming from. So, for example, like if someone has challenges with literacy, someone from our clinic might sit down and verbally go through their registration with them to make sure they really understand the consents, they know, they understand what they're signing. It means getting things in different languages, getting lots of interpreters on the phone. It means kind of going to great lengths to make things available for patients."*

Finally, providers indicated that they play a significant role in planning and implementing outreach activities to improve and facilitate equitable access and utilization of the SBHC among students and families. Providers described how they not only do the typical activities of a healthcare provider but also facilitate outreach activities to students and families.

> *"I mean, at a very basic level, I think [equitable access] means doing outreach to ensure that our student population entirely knows what services are available…"*

> *"…one of the things we've identified is that kids that are a lot of times underserved or oftentimes parents of color, they don't seek out the services as much as parents of means*

do and so if we have more targeted and specific outreach that we can do for students of color, students who are coming from or students who just have lower resources."

Ultimately, providers strive to provide equitable and culturally responsive services through their attitudes, behaviors, and outreach activities. Despite these efforts, providers are aware of challenges related to provider diversity. Providers recommended that at an organizational level, SBHCs provide equity and implicit bias training to all staff and focus on having more diversity and representation among SBHC providers and staff.

Theme 3 – Cultivating strong relationships with the school community, families, students, and other community organizations supports and facilitates equitable service delivery. Providers highlighted the importance of building and maintaining relationships with key stakeholders including the school community, families, students, and other community organizations and SBHCs.

Nearly all providers mentioned that having a strong relationship with the school community is crucial to equitable access and care for students. Having buy-in and support from school administrators, teachers, and staff makes it easier for the SBHC to be successful in terms of having students access and benefit from services.

"…getting to know the teachers and having the teachers get to know us has been, has been very important."

"…a big one is that leadership, school leadership, and the school leadership feeling that [the clinic] is valuable and important and allowing students to leave class and having them for being able to actually access the care if they want to is also a big piece. And I think thinking about equitable access in our school, I have, I have felt, and I have been

> *told that our school in particular has had leadership that is that is really supportive of the teen health clinic. I was previously at [former SBHC site], and that was not as much the case and there was much more pushback...."*

Providers also indicated the importance of school staff referring students to the SBHC for healthcare services.

> *"Working with school staff in you know, ideally a very much mutual beneficial relationship where if [the school staff] identified students or families in need of primary care, they can refer to our school-based health clinic."*

> *"I personally have a really good relationship with like, my team here at school….pretty much all my referrals come through them."*

> *"…a lot of that is through kind of our relationships with the school staff, and that is they recognize a need to kind of bring the student in."*

On the other hand, some providers revealed that relationships with school staff can be a barrier. One provider compared the challenges associated with this relationship to being "a guest in somebody else's house." If teachers or other school staff do not understand the importance or reason for the SBHC, it can be challenging for students to utilize the clinic during the school day.

> *"Oftentimes teachers are burnt out, they are feeling overwhelmed, and when we give passes, they may forget about that, they may forget to give it to students, or maybe really want the student to be in that class because maybe they haven't been attending….And for the most part, teachers are very supportive, and staff is very supportive of the school-based health center….there are always some teachers, some staff members or*

> *administrators that would not be so much supportive, or maybe they would say, 'okay, you can take them only during this period or this period, but not during this period...'"*
>
> *"Other barriers are sometimes teachers because we primarily take students out of their elective courses….And then there's some penalization for kids not being in class. And so administratively, like support from my principal and vice principal is totally there, but the culture of our teachers, they're not."*
>
> *"Half the time [school] staff have no idea what we do….They think we're the school nurse."*

Providers also described the importance of building trusting relationships with students, parents, and families. This trusted relationship not only helps students and families feel comfortable using the clinic services but also enables providers to provide quality care and necessary accommodations, as described within *Theme 2*. Providers also indicated that the SBHC setting is conducive to building relationships with students.

> *"I think having time, having more time to hear more about the students' lives, and being able to brainstorm with them about what their barriers are to having a healthy diet or exercising, and just having the time to really get to know them and see what their unique circumstances and then brainstorming together is important….I think we have more capacity to do it because our appointments are longer than in the classic primary care setting and so I think we have an opportunity to see students repeatedly, build up that relationship, and then just have longer appointments with them than in primary care."*
>
> *"I do always try to make myself available. I think maybe sometimes to a little bit of a detriment. So just, again, calling and then also reaching out, even if it's not part of the*

health related aspect, you know, all of these other things do affect their health, these social determinants, and then working so closely with the staff I think is another way to build that relationship and making sure that we are reaching them and providing that care in an equitable way So figuring out okay, where they are, what they need, and if it's not something that I can do, is there someone I can connect with to get them that resource."

"…going around to classrooms, being out, never closing your door, having lunch with students, going to their assemblies, going to their sports events. Just, it's just like kind of a, it's a different relationship. I'm sure you already know, than a normal clinic where they just come to you and then leave."

While forming relationships with parents and families is important, several providers described complexities associated with these relationships. They expressed that it can be challenging not to have access to parents during the school day and to provide confidential services to adolescents while maintaining a positive relationship with the family. Several providers also indicated a need for strengthened communication with families and students to build stronger relationships.

"To not have that access to parents, is a little bit of a barrier. I mean we can call and we do and we involve parents when we can, but it's an extra step that you don't do when they are just sitting in a in an exam room or sitting in a waiting room, you know?"

"Some [parents] are a lot more available to talk than others. Like if somebody's working a job where they don't have breaks, or they can't take my phone call in the middle of the day when I've got their student in the clinic, that's a barrier. But I'm willing to, you know,

> *call on the off times, call super early, call later after work, you know, so I just have to be flexible myself."*

> *"It becomes really difficult when patients, for example, don't have family support for mental health services, but they also don't have their own cell phone. And so if there is some kind of snafu and they don't make it to their appointment, we have like, we have a very difficult time like getting, getting back in touch with them."*

Several providers also indicated that it is important to have relationships with other community organizations, including other SBHCs, to share information and refer students to resources.

> *"…[PHSKC has] like a retreat every year, and there's like a network that we can kind of like tap into, for things to be a little bit more streamlined. They do like monthly coffee chats and stuff like that. But it's all like, none of it's like required, but I think more like communication amongst providers too as to like, 'this is what we're doing. And this has been really helpful' and things of that nature, just like troubleshooting some of those things, I think would be helpful and ultimately, like, create more access for students."*

Overall, providers reiterated that cultivating strong relationships with the school community, students, families, and other community organizations is crucial to providing equitable access and care to students. Many providers recommended that relationship-building be prioritized as SBHC organizations and providers.

Theme 4 - SBHCs face notable challenges to equitably providing mental health care to all students in need of services.

The ability of the clinic to equitably provide mental health care to all students was another notable theme among providers interviewed. Most providers explained that there is a high

demand for mental health services and SBHCs have a limited capacity to accommodate this demand. Regarding equity implications, providers highlighted how this challenge presents a substantial barrier to equitable service delivery in terms of access to mental health services.

Both medical and mental health providers observed that during the COVID-19 pandemic, mental and behavioral health needs among students seem to be substantially higher and more acute than what they observed prior to the COVID-19 pandemic.

> *"I mean, everything that's happened to us has happened to them, right? Only they're developmentally in a very different place. So, so a lot seeing a lot more kids who, who've had mental health issues. I don't know the normal, but just they're just different."*

> *"I definitely think that there is a much higher need right now for, for mental health support, just to kind of process everything that happened over the last like year and a half or so."*

> *"This school year now that we're back in person, I think it's been a lot better for the kids' mental health to be back together, even though I would say anxiety is super ramped up this year. I think that kids are really struggling in this, in the middle, the middle school and high school ages especially. There are a lot more mental health needs than there ever has been before."*

Providers also indicated that it has been challenging for SBHCs to meet the increased mental health needs of students. In recent years, they have observed an increase in the number of mental health referrals and indicated that there are not enough mental health providers at the SBHC to meet the increased needs.

> *"…we have noticed just like higher referral rates than our site has ever seen before, I think, you know, talking with other therapists even in other school-based sites like just the need seems to be extreme compared to other years. We already have a waitlist, we already have more, you know, students who are asking for support than we have the ability to accommodate and that has not been the case in previous years."*

> *"…there's just a lack of mental health providers now in the general area and to have mental health available at the school I think is critical in terms of health equity…. And the need is so great to have access at the school for folks that don't have connections with the healthcare system outside of school. Or can't afford private counseling is totally critical and a mean that we still need to meet."*

> *"…all of our mental health therapists are a lot busier and then it spills over into the nurse practitioners because there's not a lot of outside therapists available…. places can't hire even for a school-based health center mental health person….So then sometimes, they just see me for a while until our person can see them or until I can refer them somewhere that will, that will take them."*

Finally, providers described that for some students, there is perceived stigma around accessing mental health services at the SBHC. This stigma can come from fellow students, families, and communities. This stigma can impact the ability and willingness of students to access mental health services in the SBHC.

> *"One of the big [barriers] is stigmatization….we were originally called school-based mental health, and we dropped the mental because so many people were getting hung up on like, meeting with a therapist and analyzing and all this stuff. And my strategy and*

> *how we've been trained is very skills based. So, I've been able to have conversations with some parents and get them on board and like, 'Yeah, this isn't a like, we're going to dig into your deep dark secrets, it's what are you struggling with currently, how can I give you skills and then move you on your way.'"*
>
> *"...kids are very leery of wanting to be, you know, observed by their peers as someone who needs counseling."*
>
> *"[Students] might still be struggling with, like big things that they could really get support with through mental health support, but maybe their parents like have a stigma towards like counseling or therapy, and they won't sign consent, or things of that nature. So that would be like a main barrier in terms of like, equitable access."*

Considering the mental health impacts of the COVID-19 pandemic, this issue is complex. While equitably providing more mental health services would require a multifaceted approach, providers recommend SBHCs focus on hiring more mental health providers to meet the increased mental health needs.

Theme 5 - SBHCs have the potential to have a lasting and meaningful impact on the lives of students and families from underserved populations.

Providers highlighted the overall positive impact of SBHCs on students and families who access and utilize services. Many providers indicated that SBHCs do meaningful and impactful work to advance health equity and described the lasting impact on the lives of students and families.

Many providers mentioned that SBHCs encourage students to develop independence and in doing so, provide vital health education in a comfortable setting. This health education prepares students to be knowledgeable, educated, and savvy users of the healthcare system.

> *"I want to create a situation where whatever little bit of interaction with healthcare they have is decent, so they know that it's not all scary."*

> *"[SBHCs advance equity by] allowing patients to have a safe and helpful place to kind of learn what it means to access healthcare and why it's important and kind of demystifying the process. Because it only gets, because it only gets more difficult as you get older, when it comes to access and insurance and making appointments and things like that."*

Providers mentioned that the accessibility and low-barrier nature of SBHCs also enable students and families to access healthcare in a manner that will not have a long-term negative impact on the family due to cost or logistical challenges. Providers described that accessing healthcare services through the SBHC will not "upend" the family due to logistical burdens or create additional hardships.

> *"I think the presence of a school-based health center is, is kind of supposed to be a version of equity, right? It means that there's access to health care for anyone who's in the school, and not just for the students whose parents maybe are able to get them access to health care. You know, to me, it's kind of like, the whole reason we exist is, if you think about how a minor illness or a minor health care need, can, can upend a family, you know, if, if they don't have access."*

> *"I know that can be really stressful, especially for families that are you know, struggling financially or just like anyone, like medical bills are expensive. And so I think really, that's one thing can continue doing is to be able to provide services. Free, free, free. Free to the patient. You know, I bill insurance if they got it if they don't, they don't."*

Similarly, the nature of SBHCs as a healthcare delivery system enables providers to address other needs faced by students and families accessing services, including other health needs and social determinants of health. Providers described how they try to recognize these needs and provide support and referrals to other community resources as needed.

> *"I think, to have equitable access, I think you really need to consider all the social determinants of health….So it's just like trying to figure out what's going on really at home and what resources they have and all the different social determinants of health."*

> *"[The students] need like clothes and they need food and they need all that kind of stuff. Which is more, I mean, it doesn't seem like that should be school-based health, but actually it is."*

> *"…having the ability to help patients access resources, not just, not just medical and mental health care, but like, finding out what's, what's needed. For the, for the whole person, as opposed to just like we provide these siloed services and if you need something else, we can't help you."*

Overall, providers indicated that SBHCs make a positive contribution to improving health equity for children and adolescents. Despite some of the aforementioned barriers and challenges to achieving health equity in the SBHC setting, most providers expressed that SBHCs make an important contribution to health equity.

> *"I think I am biased, but I think school-based health centers are such an amazing point to work on health equity because they're catching students when they're young and when they need things like vaccines to stay in school or birth control to avoid a teen pregnancy. I just think more school-based health centers the better."*

> *"I think the single greatest asset or benefit or offering around this is we are able to create a safe, welcoming, culturally responsive, and medical and mental health, destigmatized space within the kids primary environment and place of, of learning and socializing and, and so I think that right there gives kids the opportunity to step into a medical, mental health setting and get care, feel respected, feel seen, and sort of build an understanding of how to advocate and get their needs met overall from the medical and mental health system"*

Thematic Deviation

Overall, there was a substantial level of agreement among participants' responses, thereby informing the development of the primary themes. However, there were several participants who shared additional observations and concerns about implications for equitable service delivery within their organization. For example, several SBHC providers shared details about diversity, equity, and inclusion (DEI) efforts within their affiliated healthcare agency. Most providers who discussed this indicated that these efforts have had a positive impact. However, one participant voiced significant concerns about their affiliated healthcare agency, supervisor, and SBHC colleagues in relation to their commitment to equity. While these observations and concerns were voiced by a small minority of participants and were not discussed frequently enough to fit into the primary themes, they are important to consider given their potential implications for equitable service delivery in the SBHC setting.

Discussion

To the research team's knowledge, this is the first qualitative study explicitly examining SBHC providers' perspectives of the equitable provision of services within SBHCs. This study is also unique in that it attempts to untangle the practical implications of health equity and gives equal

weight to both equitable access and equitable care within the SBHC service delivery model. If this area of research is left unaddressed, SBHCs risk a significant disconnect between the theoretical understanding of health equity that serves as the foundation for SBHCs and the lived experiences and perspectives of SBHC healthcare providers. Additionally, the results from this study provide important implications for recommendations for current SBHCs and directions for future research in this area.

This research attempted to develop a shared understanding of what health equity means to SBHC providers and how providers contribute to the provision of equitable access and culturally responsive care. In the healthcare field, achieving health equity is regularly described as the ultimate objective. Furthermore, SBHCs are frequently upheld and championed as a successful example of health equity. However, this claim has not been examined from the perspectives of the individuals doing the work. Likewise, a review of the literature suggests that there is limited standardized guidance for organizations and providers regarding how to incorporate the principles of health equity in practice.[21,22] Despite these gaps in the available literature, the research team found that SBHC providers generally agree that SBHCs are succeeding in doing meaningful and impactful work to advance health equity for children and adolescents. However, providers also described notable barriers and challenges to advancing health equity in the SBHC setting, indicating the need for organizational and systems-level change.

Previous SBHC research has focused primarily on equitable access and utilization rather than the provision of equitable and culturally responsive care. Such research has demonstrated that SBHCs constitute a highly accessible method of healthcare delivery for school-aged children and adolescents.[23,31,37] This study validated many of these past research findings regarding access and

provided insight into equitable and culturally responsive care, exploring the question of what happens after students choose to access and utilize SBHC services.

Ultimately, the research team found that equitable *access* and utilization seem to be largely dependent on the actions of the SBHC at an organizational level. Providers described organization-level facilitators and barriers to access and utilization, including interpretation services, cost, and clinic registration forms. Conversely, the provision of equitable and culturally responsive *care* seems to be directly related to the actions, behaviors, attitudes, and characteristics of individual providers. Providers described individual-level impacts on care provided to students. Previous research involving qualitative interviews with both students and providers also points to the importance of individual provider behaviors.[40,48]

Interestingly, the implications of relationship-building and provider diversity seem to diverge from this pattern. The capacity to cultivate meaningful relationships has a substantial impact on both equitable access and equitable care. Providers described how these relationships rely on both organizational and individual actions. On the other hand, provider diversity, or lack thereof, is an individual-level characteristic that seems to have a notable impact on provider perceptions of equitable access, utilization, and care provided.

Recommendations

The results of this research study informed several key recommendations for SBHCs affiliated with PHSKC and SBHCs more broadly. These recommendations were informed by the results of the thematic analysis and developed in partnership with representatives from both PHSKC and DEEL.

Recommendation 1 - Develop additional resources and training for SBHC providers focused on reducing logistical barriers to access and addressing inequities for students and families from underserved populations.

Overall, providers indicated that SBHCs are a low-barrier and highly accessible healthcare option for students and families. However, some providers also indicated that to meet the needs of students and families from underserved populations, there are organizational barriers that should be addressed. These barriers include inadequate interpretation and translation services, complex registration forms, and challenges associated with obtaining parental consent. Some providers interviewed described how the consent process and registration forms can be challenging for students and families to complete. Similarly, some providers described that interpretation services do not meet the needs of all students and families who speak a language other than English.

Regarding training, several SBHC providers mentioned that additional DEI and implicit bias training might benefit staff and providers in their healthcare agency. Providers mentioned that conversations during this type of training might highlight other systemic barriers and inequities to address. Moving forward, SBHC agencies could prioritize investments into resources and training for staff and providers to address and overcome these barriers.

Recommendation 2 – Focus on the development of the SBHC workforce, including staffing and hiring practices.

Provider interviews suggested the need for an increased focus on developing the SBHC workforce. The first component of this recommendation is to adopt intentional and inclusive hiring practices to increase racial and ethnic diversity among the provider population. Increasing diversity within the provider population would lead to the provider population being more

representative of the student population typically served by SBHCs. However, it is important to note that during conversations with PHSKC and DEEL, they noted that for some close-knit cultural communities, it may be more desirable to have a provider from outside the community to eliminate relational conflicts and discomfort related to existing relationships. For this recommendation, it will be important to first gather feedback from students and families regarding potential unintended consequences regarding whether or not they would prefer to receive care from a racially concordant provider. PHSKC also noted that while having a more racially diverse provider population has been an organizational goal for some time, the race of the provider does not necessarily indicate their competence or knowledge of anti-racist practices. They indicated that it is also necessary to adopt anti-racist practices at the organizational level, further highlighting the importance of the first recommendation.

The second component of this recommendation is to prioritize the recruitment and retention of school-based mental health providers. Given the recent increase in mental health needs among students, it is of the utmost importance to have adequate mental health support in place in the school setting. Providers expressed that many healthcare agencies seem to be struggling to recruit mental health providers, indicating a need to focus on training new mental health providers.

Recommendation 3 – Provide opportunities for increased collaboration and relationship building between SBHCs, community stakeholders, and schools.

Providers described the importance of building relationships with community partners and other SBHCs to further equitable service delivery. While some providers may already have the knowledge and experience to navigate these relationships without additional support, others indicated that it would be helpful to have additional tools and resources. Relationship-building

efforts should not only connect SBHC providers with other community organizations but also connect SBHC providers to each other. Several providers described that it would be helpful to have a network of SBHC providers to collaborate and share resources with.

Furthermore, nearly all providers described the importance of the relationship with the school community, indicating that positive relationships serve as a facilitator to equitable service delivery and negative relationships serve as a barrier to equitable service delivery. Rather than addressing issues with the school as they arise, SBHC agencies should provide anticipatory guidance and support to providers to effectively build and maintain positive relationships with their school community.

Future Research

This research study has notable implications for future research in the field of school-based healthcare. The first area for future research focuses on examining the perspectives of students and families. The providers interviewed provided valuable perspectives regarding health equity implications in the SBHC setting. However, it is necessary to talk directly to students and families to gain a more holistic and nuanced understanding of equitable access and culturally responsive care in the SBHC. This research might involve semi-structured qualitative interviews or focus groups with students and families who have used SBHC services as well as those who have not used services.

Additionally, this research highlighted several sub-topics for future research. The first area for future research is SBHC partnerships, specifically the relationship between the SBHC and the school community. Nearly all providers highlighted the impacts and importance of this relationship. Previous research also suggests the importance and impact of this

relationship.[46,48,52] Future research could generate actionable findings to better understand the nuances of this relationship and generate more substantial recommendations for schools and SBHCs. Representatives from PHSKC and DEEL indicated that this is an area of significant interest and focus.

Another area for future research is the role of stigma as a barrier to accessing mental health services. Previous research has indicated that concerns about judgment from other students can serve as a barrier to access.[29,40] Providers in this study described stigma from other students as well as cultural stigma from students' families and communities. Evidently, this issue is complex and should be researched further. Further research should aim to understand the nuances of mental health stigma and strategies to provide mental health services to students facing perceived personal and public stigma. Future research might also explore whether having more culturally diverse and representative providers helps to combat cultural stigma regarding accessing mental health services. Representatives from PHSKC and DEEL expressed interest in exploring this further and mentioned exploring a potential connection between mental health stigma, the terminology used to describe mental health services, and providers' diagnostic coding practices.

Limitations

This study has several potential limitations. The primary limitations are related to recruitment strategies and the potential generalizability of the results. Regarding the recruitment strategies, participants opted in to participate which could create the potential for selection bias. That is, participants who were already invested in contributing to and strengthening health equity in the SBHC may have been more likely to choose to participate. The research team tried to mitigate this risk by using purposive recruitment strategies to enroll a representative sample in terms of agency affiliation and provider type.

Regarding the generalizability of the results, there may be potential limitations related to the study location, participant demographics, and sample size. Focusing solely on SBHCs in King County may limit the generalizability to other counties and regions within Washington and the United States. Regarding participant demographics, the demographics of the participants were lacking diversity, as most participants were White and female-identifying (N=12). However, this seems to be representative of the SBHC provider population in King County, as the broader provider population is primarily White and female-identifying. Considering the sample size, the relatively small number of interviews (N=17) could be viewed as another limitation, but the research team reached data saturation early in the data collection process. Therefore, the research team does not view sample size as a significant risk to generalizability.

Conclusions

This qualitative study provides valuable insight into the perspectives of SBHC providers regarding equitable service delivery in the SBHC setting. While SBHCs are an important and necessary tool to reduce disparities and advance health equity for children and adolescents, there is still work to be done. To truly advance health equity at a systems level, SBHC organizations must work to reduce barriers to equitable access and care for students and families from historically underserved populations.

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Appendix A: Manager Email Template

Dear [NAME],

I am reaching out regarding the UW SBHC evaluation project, as discussed during the recent managers meeting on [DATE]. We intend to begin interviewing SBHC providers in November and look forward to partnering with you!

For this component of the project, we are interviewing providers to learn more about perspectives of equitable service delivery in SBHCs. Participation will involve completing a virtual or in-person interview with a member of the UW research team. The interview would last approximately 30-45 minutes. Providers will be asked about their job, the services they provide, and what role equity plays in their work.

We are asking you to assist us by reaching out directly to the providers at your clinic(s) to inform them of the project and provide an opportunity to opt-out. I have attached a sample email template to be sent to all behavioral and medical providers at your clinic(s). **Please send us a list of providers who might be willing to participate by [DATE].**

Please reach out with any questions or concerns. We look forward to hearing from you!

Sincerely,
[NAMES]

Appendix B: Provider Recruitment Email Template

Dear [NAME],

We are writing to invite you to participate in a study to learn more about provider perspectives of equitable service delivery in school-based health centers. The study is called “Examining provider perspectives of equity at school-based health centers in Seattle and King County”. We got your contact information from [NAME], the manager of your SBHC, because you are a provider at [SBHC clinic name]. This study is being conducted in partnership with the school-based partnerships program team at Public Health – Seattle & King County.

Participation will involve completing an interview with a member of the research team. This interview would take place either virtually or in-person, depending on COVID-19 restrictions in King County and your preference. The interview would last approximately 30-45 minutes. You would be asked about your job, the services you provide, and what role equity plays in the work you do.

If you would like to participate, please indicate your interest by responding to this email. Our team will then follow-up to explain the study and answer questions. If we do not hear from you, we will send you one more reminder at the beginning of next week. If you do not wish to participate, you may simply respond to this email, and write, “No, I do not wish to participate” and we will not contact you further.

Thank you for your time and consideration. We look forward to hearing from you!

Sincerely,
[NAMES]

Appendix C: Semi-structured interview guide

INTRODUCTION

I am a graduate student at the University of Washington School of Public Health. I am working with Public Health – Seattle & King County to conduct an evaluation of school-based health centers (SBHCs) in Seattle and King County. This is intended to be an ongoing, multi-year evaluation. For this piece of the evaluation, we are talking to SBHC providers about service delivery, focusing specifically on equitable health access and care.

I will start by asking you some questions about your role as a provider, followed by questions about your perspectives about health equity in SBHCs. I do have a list of questions, but we can also go where the conversation takes us. If there's any question that you don't feel comfortable answering, just let me know and we can skip it.

I will be recording our conversation, but when we transcribe and analyze the interviews, we will remove any names or other identifying information.

Do you have any questions before we get started?

- START AUDIO RECORDER -

INTERVIEW

I am going to start by asking some general questions related to your role as a provider.

General Questions

1. How long you have been in your current position?
2. What are your primary responsibilities as a provider at your SBHC?
3. Has your job or role changed due to the COVID-19 pandemic?
    - If yes, how so?
    - If no, why not?
4. Have the needs of students changed during the COVID-19 pandemic?
    - If yes, how so?
    - If no, why not?

Health Equity at SBHCs

My next questions are about your perspective of health equity within SBHCs in general. These next two questions are about general perspectives of SBHCs, not your specific clinic. For the following questions, your responses should be based on your personal understanding health equity.

5. In general, what do you feel SBHCs do well when it comes to addressing health equity or inequities?
6. In general, what challenges do you see when it comes to SBHCs addressing health equity or inequities?

Providing Equitable Access and Care

My next questions are about your experience providing care at your SBHC. Again, your responses should be based on your personal understanding and definition of health equity.

7. From your perspective, what does equitable access look like at your SBHC?
8. We know from quantitative data that SBHCs do an excellent job at serving students from historically underserved populations. We are also curious about potential improvements. Do you ever feel like your clinic isn't able to serve historically underserved populations as well as would like?
9. Are you aware of students from historically underserved populations having barriers to accessing SBHC services?
    - If yes, what are some of the barriers?
    - During your conversations with students, what reasons do students provide for not using SBHC services?
10. As a provider, what are some specific things that you do to make sure that students from historically underserved populations have access to care?
11. From your perspective, what does equitable and culturally responsive care look like at your SBHC?
12. As a provider, how do you provide culturally responsive care to students from historically underserved populations?

13. Barriers to providing culturally responsive care
14. Have you been involved with any activities to improve access and use of services among underserved populations within your SBHC?
    - If yes, can you tell me more about these activities? Do you feel that they were successful?
    - If not, are you aware of activities within your organization? Were there any barriers to your participation?

Future Directions

My next questions are about future recommendations and directions for SBHCs.

15. Do you think providers in your clinic/organization would benefit from additional support or resources to provide equitable access and care within SBHCs?
    - If so, what types of resources might be helpful for you in your work as a provider?
16. What recommendations would you make to improve health equity at SBHCs in general?
17. What should remain the same?
18. Are there any additional questions you think we should be asking about this topic?

Demographic Questions

Finally, I am going to ask some demographic questions.

19. What are your pronouns?
20. What is your gender identity?
21. What term do you use to describe your race?

Closing Statement

That completes the interview. Do you have any final thoughts that you would like to share? Thank you again for your participation. If you find you have any questions, please feel free to contact me.

Additional Probing Questions: If responses are limited or require clarification, probes may be used to elicit more detailed responses. The following probes may be used:

- Could you please tell me more about…?
- What do you mean by…?
- Could you give an example of…?
- You mentioned…. could you tell me more about that?

- STOP AUDIO RECORDER –

Appendix D: Interview Codebook

Code Name	***Category***	***Code Definition***	***Inclusion/Exclusion Criteria***
Efforts to improve access and utilization	*Access*	*What is being done to improve use of SBHC*	*Includes formal and informal outreach efforts. Excludes efforts outside the SBHC setting.*
Equitable access	*Access*	*How providers ensure that all students have access to the care they need.*	*Excludes access outside the SBHC setting.*
Access for underserved populations	*Equitable access*	*How historically underserved populations access SBHC care*	*Excludes discussions of access outside the SBHC setting.*
Providing accommodations	*Equitable access*	*How making accommodations impacts equitable access*	*Includes how flexibility impacts access. Excludes how flexibility impacts care.*
Provider/appointment availability	*Equitable access*	*How the availability of the provider impacts access for students*	*Excludes appointment access outside the SBHC setting*
Mental health needs	*Addressing unique needs*	*Mental health needs of students*	*Excludes general information about types of mental health services provided by the SBHC.*
Inability to accommodate high mental health needs	*Mental health needs*	*Inability to accommodate high mental health needs among students*	*Includes logistical challenges and associated expressions of frustration.*
Needs of underserved populations	*Addressing unique needs*	*How SBHCs meet needs of students from underserved populations*	*Excludes discussion of access, this falls into the "Access for Underserved Populations"*

Logistical barriers/facilitators	*Barriers/facilitators to equitable service delivery*	*Factors that influence students' ability to access and benefit from SBHC*	*Includes discussion of barriers related to language, transportation, time, consent, confidentiality.*
Cultural barriers	*Barriers/facilitators to equitable service delivery*	*Cultural factors that influence students' ability to access and benefit from SBHC*	*Includes discussions of the students' community and family culture*
Connecting with students	*Barriers/facilitators to equitable service delivery*	*How the ability of the SBHC to connect with students impacts equity*	*Excludes connections outside the SBHC setting*
Stigma	*Barriers/facilitators to equitable service delivery*	*Impact of stigma in relation to willingness to access and use services.*	*Includes any discussion of stigma as a barrier, including perceived stigma.*
Health education and comfort	*Barriers/facilitators to equitable service delivery*	*How students' level of education, comfort, and familiarity with healthcare affects service delivery*	*Excludes discussion of health education unrelated to the SBHC.*
Relationship with school	*Building relationships*	*Impact of relationships with school staff and community*	*Excludes recommendations, this falls into "Recommendations – Relationship-Building"*
Relationships with community organizations	*Building relationships*	*Impacts of relationships with other community organizations*	*Excludes recommendations, this falls into "Recommendations – Relationship-Building".*
Relationships with parents/families	*Building relationships*	*Impacts of relationships with parents/families*	*Excludes recommendations, this falls into "Recommendations – Relationship-Building".*

Relationships with students	*Building relationships*	*Impacts of relationships with students*	*Excludes recommendations, this falls into "Recommendations – Relationship-Building"*
Trust	*Building relationships*	*Process of building trust and impact of trust/mistrust*	*Includes discussions of trust in the context of relationship-building*
Provider diversity	*Diversity*	*Impacts of provider demographics*	*Excludes recommendations, this falls into "Recommendations – Workforce and Staffing".*
Students feeling seen/represented	*Diversity*	*Impact of provider diversity on the student experience*	*Includes provider perceptions of the student experience and data.*
Culturally responsive care	*Equitable care*	*How providers provide culturally responsive care*	*Includes concepts related to anti-racism.*
Provider attitudes and behaviors	*Equitable care*	*Individual actions to promote equitable care, including awareness of implicit biases, meeting people where they are, and openness*	*Includes what providers do to provide equitable care. Excludes organization level actions.*
Flexibility/accommodations	*Equitable care*	*How making accommodations impacts equitable care*	*Includes how flexibility impacts care. Excludes how flexibility impacts access.*
Trauma-informed care	*Equitable care*	*How providers provide trauma-informed care*	*Excludes provision outside SBHC setting*
Education provided by SBHCs	*Education*	*Education provided to students about personal health and healthcare systems*	*Includes education provided by SBHC. Excludes education provided by school.*

COVID Impacts	*COVID*	*How the pandemic has impacted service delivery*	*Includes all discussion of COVID impacts.*
Impact on students and families	*Impact*	*How SBHCs impact the lives of students and families*	*Includes short-term and long-term impacts.*
Social determinants of health	*Impact*	*How SBHCs address SDOH*	*Includes challenges and opportunities to addressing SDOH. Includes discussion of screening tools.*
Relationship-Building	*Recommendations*	*Suggestions for increased relationship-building*	*Includes recommendations. Excludes current state.*
Workforce and Staffing	*Recommendations*	*Suggestions focused on staffing or hiring practices*	*Includes recommendations. Excludes current state.*
Systems/Organization Level	*Recommendations*	*High-level suggestions for healthcare agency*	*Includes recommendations. Excludes current state.*
Resources/Training	*Recommendations*	*Suggestions for additional resources/training*	*Includes recommendations. Excludes current state.*