Received: 13 August 2021 | Revised: 21 December 2021 | Accepted: 24 January 2022

DOI: 10.1002/wmh3.498

ORIGINAL ARTICLE

WMHP WORLD MEDICAL & HEALTH POLICY WILEY

When a school is more than just a school: Improving school-based health in the wake of COVID-19

Simon F. Haeder[1] | **Emily Maxfield**[2] | **Kara Ulmen**[2] | **Sara Anderson**[2]

[1]School of Public Policy, The Pennsylvania State University, University Park, Pennsylvania, USA

[2]Child Trends, Bethesda, Maryland, USA

Correspondence
Simon F. Haeder, School of Public Policy, The Pennsylvania State University, 329 Pond Lab,University Park, PA 16802, USA.
Email: sfh5482@psu.edu

Funding information
Robert Wood Johnson Foundation

Abstract

The ongoing COVID-19 pandemic has posed tremendous challenges for economies and individuals around the world. At the same time, it has also laid bare the blatant and growing inequities that many individuals, particularly children, are confronted with on a daily basis. With communities in lockdowns and schools going virtual in many parts of the United States, the important role that schools and school-based services play in the lives of many children have gained new attention. Nonetheless, only 3% of American schools have school-based health centers on campus, and they remain relegated to the fringes of both health care and education. One key limitation has been the lack of appropriately trained health-care professionals. Over the past 2 years, we have interviewed dozens of individuals about their experiences in school-based health centers. Based on this study, we explore what it means for a health-care professional to work in school-based health care and how it differs from more traditional health-care settings. Our analysis particularly focuses on training and education, work environments, and their unique demands that come from being embedded within the educational setting. We conclude by addressing the important role that governmental policies could play in augmenting this crucial workforce.

Highlights

- School-based services can play an important role in providing more equitable health-care access to students.

[Correction added on 21 March 2022, after first online publication: The third word in the Title “schools” has been updated to “school”]

© 2022 Policy Studies Organization

- Only 3% of American schools have school-based health centers on campus.
- A key limitation in expanding school-based care has been the lack of appropriately trained health-care professionals.
- Our analysis explores the training and education, work environments, and their unique demands that come from being embedded within the educational setting.

KEYWORDS

COVID-19, medical education, medical providers, school-based health, school-based health centers,

INTRODUCTION

The provision of education remains the core function of America's schools. Yet across the nation's school districts there has been a growing realization that schools offer an excellent opportunity to address many of the inherent inequities present in the United States. One intervention that has been shown to hold great promise is the provision of health-care services (Anderson et al., 2020; Keeton et al., 2012; Soleimanpour, 2020). Yet while many schools have a school nurse, these medical providers are often severely limited legally in the services they can provide. As a result, in some places, more comprehensive service providers have entered school grounds: school-based health centers (SBHCs). While these SBHCs have been around since the 1960s (Lear et al., 1991) they have seen tremendous growth over the last decade or so (Love et al., 2019). Indeed, they "have become an important method of health delivery for youth" (AAP Council on School Health, 2012). Because they are subject to local agreements, there is great diversity in how SBHCs functions, how they are staffed, and how they are funded. As a result, SBHCs are often highly unique and services can include preventative care such as well-child visits and screenings as well as immediate medical, dental, and mental health care. Often SBHCs also facilitate referral to specialty care.

Yet as alluded to above, the idea of opening school doors to health services providers is nothing new. Even before the turn of the 20th century and the high point of the Progressive movement, at least in certain locations, physicians were tasked with examining students for infectious diseases (Dunfee, 2020; Haeder, 2021b; Lear, 1996; Reynolds et al., 1999), dentists were checking on children's oral health, and school psychologists were supporting students' mental health (Flaherty & Osher, 2003; Ryan et al., 1996; Tyack, 1992). Driven by social reformers, attention was paid to what we today refer to as social determinants of health including access to safe and appropriate housing and food (Tyack, 1992). In places like New York, relatively comprehensive school health programs emerged (Lear et al., 1991). However, because of their limited reach, staffing demands remained small. Moreover, under pressure from conservatives and the private health system corporations, the focus over time-shifted increasingly towards education, not direct service delivery, and services were taken out of schools (Lear, 1996, 2011).

By the 1960s and 1970s, the concept of school-based health reemerged to increase access to primary care services as well as to rein in growing rates of teenage pregnancies (Brown & Bolen, 2008; Kisker & Brown, 1996; Love et al., 2019). Despite support from a number of foundations (Federico et al., 2011; Keeton et al., 2012), growth remained slow. By the late 1980s, only 120 centers had opened (Keeton et al., 2012). Conservative and religious opposition as well as concerns about infringement on

parental autonomy remained a major impediment (Lear, 1996, 2003). Yet in light of growing need as well as increasing research indicating the benefits of SBHCs, more and more schools began to welcome back health services once more. Crucially, the Affordable Care Act also provide much needed subsidies (Price, 2017). By 2017, more than 6.3 million students in almost 11,000 schools received services from more than 2500 SBHCs nationwide (Love et al., 2019).

Evidence has emerged that SBHCs may be beneficial to students in diverse ways. A number of studies have shown that SBHCs lead to increased health services access and utilization (Guo et al., 2008; Santor et al., 2006; Silberberg & Cantor, 2008; Soleimanpour et al., 2010). There is also evidence that SBHCs are particularly crucial in improving access by lowering barriers for those children who would otherwise not be able to access health services (Gance-Cleveland & Yousey, 2005; Gold et al., 2011; Kaplan et al., 1999; Parasuraman & Shi, 2015; Wade et al., 2008). This particularly holds for children in rural areas (Arenson et al., 2019; Crespo & Shaler, 2000; Rickert et al., 1997; Wade et al., 2008), from racial and ethnic minorities (Keeton et al., 2012), and other marginalized groups (Zhang et al., 2018; Zhang et al., 2020). There is also evidence that the benefits of SBHCs are multi-pronged and range from increases in health knowledge and education (Keeton et al., 2012; Kisker & Brown, 1996) to improved immunization rates (Adams et al., 2020; Federico et al., 2010; Keeton et al., 2012) (Allison et al., 2007; Federico et al., 2010). Health benefits may also carry over into academics, as some studies point to improved academic outcomes (Brown & Bolen, 2008; Knopf et al., 2016; Sisselman et al., 2012). Finally, not only is there evidence that care provided by SBHCs achieves high levels of satisfaction from students (Charette et al., 2019; O'Leary et al., 2014; Silberberg & Cantor, 2008; Zarate et al., 2020), but that it is also highly cost-effective (Fisher et al., 2019) and offers large social benefits (Ran et al., 2016). Given this body of knowledge, SBHCs may be particularly helpful during the ongoing pandemic as well as during the long-term recovery (Anderson et al., 2020; Hoffman & Miller, 2020; Naff et al., 2020).

Yet even before the COVID-19 pandemic swept America, inequalities with regard to race, ethnicity, health, and income provided uneven playing fields in America's classrooms (Knopf et al., 2016). The interdependencies between education and health are well-known (Keeton et al., 2012; Soleimanpour, 2020). Yet as calls to turn schools into social service centers have grown louder to battle inequities and access limitations (Morone et al., 2001), another challenge has only gained limited attention: staffing school-based health services with appropriately and adequately trained providers. And despite what is known about SBHCs and student health, very few studies have focused on medical providers servicing SBHCs as well as potential challenges in training, recruiting, and retaining these providers. The few studies that have focused on the issue indicate that lack of appropriate provider training (Comfort et al., 2020; Kalet et al., 2007) and challenges in collaboration between schools, school nurses, and SBHCs may be particular road blocks (Hacker & Wessel, 1998; Richardson, 2007).

We extend the work on school health by examining what it means for a health-care professional to work in school-based health care and how it differs from more traditional settings. We do so based on interviews from a multi-year study of SBHCs in West Virginia, a rural state in Appalachia with one of the lowest median incomes in the U.S. (Shrider et al., 2021), and offer new insights on what is necessary to train, recruit, and retain for America's schools of the 21st century. West Virginia also is a state that has struggled with the opioid epidemic as few other states have (Haeder, 2018). Results from the present investigation can inform approaches to training and supporting staff in SBHCs, especially those in rural or under-resourced communities.

DATA AND METHODS

The reported findings come from a qualitative study of SBHC providers and school personnel participant experiences. Data were collected through 24 interviews with SBHC providers and administrators in West Virginia from April 2019 to April 2021. Interviewees were recruited to participate through professional networks and referrals. Participants included 10 medical providers, five mental health providers, one school health educator, and one administrator. Semi-structured interviews occurred in local restaurants, SBHC facilities, and via Microsoft Teams or Zoom. They covered a range of topics including: the initiation and scope of SBHC services, utilization of services, SBHC staffing, funding, connectedness of SBHCs to school and community, short- and long-term sustainability, and impacts of COVID-19. Team members facilitated interviews, and time was reserved during weekly check-in meetings to debrief on interview responses and emerging themes, which were referred to during the analysis phase.

All recordings were uploaded to Rev.com to be transcribed and later coded in Dedoose (SocioCultural Research Consultants LLC, 2020). An a priori coding scheme was developed which aligned with interview protocols before facilitating interviews. Coding focused on semantic/explicit content instead of latent content/assumptions (Braun & Clarke, 2006). Two coders coded the same three transcripts and reviewed together to ensure similar codes were used and discrepancies were discussed. Coders then coded individual transcripts. Once all transcripts were coded, an inter-rater reliability test was used. Coders achieved a .85 pooled kappa statistic, indicating "excellent" agreement (Fleiss, 1971). A select number of codes of interest were identified for analysis, including the root code "cooperation" and child codes "SBHC personality," "SBHC training," and "relationships with staff" and "historical challenges" and "current challenges" (Braun & Clarke, 2006).

We used a thematic analysis framework (Braun & Clarke, 2012) to interpret coded transcripts (see Table 1 for codes). Thematic analysis is an appropriate framework for our analysis because of the nature of the data and its ability to systematically identify patterns and themes. We followed the recommended approach that moved from familiarization with the data to generating initial codes to searching for themes to reviewing themes to defining and naming themes and finally to producing the analysis (Braun & Clarke, 2012). Analyses here focused on identifying key themes that emerged across interviews and on questions focused on the SBHC workforce. Prototypic quotes were derived from participant interviews and are used to illustrate the identified themes (Table 2).

Consent to record was obtained, and recordings were stored in a secure location. Interviews lasted approximately 1 h. Participants received $25 gift cards for their

TABLE 1 Definition of codes used for analysis

Key codes	Definition
SBHC personality	Personal characteristics associated with success when working at an SBHC
SBHC training	Whether there is training for working at an SBHC
Historical challenges	Challenge the SBHC has confronted over its history, since the interviewee has been at the school, or that they are aware of (e.g., lack of parental permission; SBHC staff turnover)
Current challenges	Any challenge the SBHC is confronting now
Relationships with staff	Any discussion about the relationship between school staff and the SBHC

Abbreviation: SBHC, school-based health centers.

TABLE 2 Overview of themes with quotations from interviews

SBHC provider personal characteristics	
Characteristic 1: Being flexible	
I go get the kids myself. I back off if the teachers say it's not convenient. I adjust the schedule. It's a nightmare frankly. It's a nightmare when you've got four different schools and you're juggling this. Okay we're not… I don't take kids out of math and reading and science… Then the music teachers say, "Really? This kid loves music. Can't you find some other time to get them?"	Interviewee A Mental health provider
It's like I told one of my fellow workers who works in the community in a health center, I'm like, "Sometimes when you just see three kids on my schedule, that doesn't mean that we weren't busy. That just means one of those visits has probably turned into an emergency or a tragedy that has happened. And it has taken all of us to deal with that."	Interviewee B Medical provider
Sometimes I find that staff get very caught up in what it looks like and are unwilling to be flexible and change it because some kid might fall in PE. There might be a fight. Just tons of things can happen. School-based health centers, you have to have staff that are very flexible.	Interviewee C Administrator
[…] it's like, "You can have this closet, or you can have this very small space. It's all we have." Then it's up to us to figure out how to make it work. I've had staff in closets […] We have a behavioral health provider in a shower. It was like they […] I mean it wasn't a fully functioning shower, don't get me wrong, but the drain was there. We've had people in bathrooms.	Interviewee C Administrator
You have to be really organized and flexible. You need to understand where people are coming from, like how their relationship with school-based health and staff has been shaped. Also, it's never straightforward. You're not going to see a patient and have all the information that you need. You're going to have to call a parent or a guardian. You're talking about working with kids, right, so what they know about their health history is pretty limited. So, what normally may take just a sit-down visit of five minutes in urgent care, you have to investigate. You need to have a curious, investigative, and creative mind.	Interviewee D Medical provider
…just letting people know that we're here. And actually with [SBHC], we did the rapid COVID swabs and basically let parents know at the beginning of the school year and sent home a separate consent form just for a COVID 19 swab, if that was needed at school […] we had a big return on those which sending out a form like that was kind of like, 'do we want to do that'? But it was also like, this is an additional service that we have available for these students, and we just want the parents to know that would be available if needed.	Interviewee O, Medical provider
[…] if a kid needed a swab for COVID, we would also go ahead and swab their parents, even if they weren't ours. So as far as that, we have done more of community swabbing. If a kid has exposed grandma, aunt, so on. We have offered come on down and we'll swab you. So, I think in that aspect, or just offering the swab even if they aren't students here, we'll go out to the car and swab them.	Interviewee B, medical provider
Characteristic 2: Working well with children	
If I was working on OB, I would know everything I needed to know about OB, about unborn babies, about heart rates that, when is it healthy? When is it not healthy? And it's the same with adolescents. You've got to know their brains, […] And their hormone levels and that kind of thing, where they're at physiologically, that's going to affect their psychology and the way they behave.	Interviewee E Medical provider

TABLE 2 (Continued)

SBHC provider personal characteristics	
I think that we have a number of wonderful stories at every school-based health center with kids that we've been able to connect to resources, who write letters to say that they love our staff because of things we have done […] That feel like the school-based health center is a family. So, I know that there are a handful of lives that are better because of a school-based health center […] Because someone cared about them.	Interviewee C Administrator
Our kids are first. We try to make it better. We'll look at each year…how does this need to change? What do we need to do better? With the COVID, we're still figuring out how can we get these kids? What is our routine going to be? Because the routine has changed this year. The kids can't just freely stop in here between classes or anything anymore. They have to be with a piece of paper, they have to notify the office, and the office notifies us. So, it's kind of our routine has changed.	Interviewee B Medical provider
And this year, it's like I said, the doors have been locked and kids can't come without teacher permission and the teacher has to call and it's a big ordeal. I feel like kids could easily slip in last year and get whatever and it not be a big deal, but this year, it's like a big deal.	Interviewee N Mental health provider
Characteristic 3: Proactive communicating and building relationship	
They [SBHC staff] have to be outgoing. They have to be willing to go out and maybe have lunch one day with the students. They have to be willing to engage in school activities. You just can't sit back in the office and wait for them to come to you, because it doesn't work. Whereas when you're in an office setting, you have people scheduling appointments. You don't have to go out there and search for your clients. It's just the fact that I think school-based, you really need to be really outgoing and really able to socialize and be personable.	Interviewee H Medical provider
Another thing that I do when I try to teach my staff to do, walk the halls. I tell them, look, I know the bell rings at 3:30 or 3:00 or whatever, and the buses leave, but just go for a walk through the hallway. And amazingly teachers will say, “Oh, I'm so glad to see you. I had such a horrible day […] That creates some cooperation and it's an opportunity to say to the teacher, you are doing an awesome job. Thank you for your dedication.	Interviewee I Administrator
Having a good rapport with that receptionist is so vital. It makes the difference between, can I see five students in a day, or can I see 12 students in a day because they are going to work for you when they feel validated and feel like that you care about them as well. And that you have that cooperative think of flow with them as well. It's all about being personable and I'm not talking, being fake. I mean genuinely, authentically, I care about you as a fellow coworker. I care about the students. It has to be authentic, but when it's done authentically, it's amazing what you can do together.	Interviewee I Administrator
We have a case manager and two staff for behavioral health. And that really takes a load off of the guidance counselors. They can focus on getting kids in their classes and making sure they have their credits and all that. And they don't have to counsel kids with the things that kids get upset about. They can come right in here and talk to our behavioral health people.	Interviewee E Mental health provider
I spoke to one of the other elementary school principals yesterday. We do a lot of Zoom meetings now with principals and the whole staff now, just so we could answer questions. That was what he said. “It has surely been a help to have you all in our building and know that I'm guaranteed to get this kid	Interviewee L Medical provider

(Continues)

TABLE 2 (Continued)

SBHC provider personal characteristics	
COVID tested. If I send him out in the building, they may or may not have that. They may not have access to go further on down to Charleston or wherever to get that COVID test. At least I know that before they go home, if we suspect COVID, I'm going to be able to get some things done with this kid before they leave my building."	
Characteristic 4: Adapting to West Virginia's changing context	
It takes a person who's going to take the time to listen to the kids. You can't just be in and out. Just because they're coming down for a well-child or a sore throat, it might turn into I'm suicidal, or my mom is beating me at home. You can't just say, okay, sore throat, strep, see you later. That's all you need it. It takes more than that. You have to be here for the kids and not just the visits.	Interviewee B Medical provider
We would also handhold some of these kids through different things. Especially ones that were maybe in foster care or potentially neglected, we would try to maybe make that referral ourselves. Sometimes I even had a nurse that would go pick a prescription up for a child and bring it back to the school because the parent had transportation problems. Literacy issues calling parents and filling out forms for parents over the phone and then sending it home for the parent to sign.	Interviewee F Medical provider
Yeah, it's just been hard when we're used to seeing a kid on Tuesday and can have that potential to follow up with them Thursday, we know we won't see them for at least another week, so that's been a big change for us.	Interviewee O Medical provider
Basically, they didn't know what to do with school health because when we shut down in March in West Virginia, schools never went back in session and I don't know how else to say it, but they didn't want to pay us to just sit there and do nothing, obviously. I mean we didn't have access to kids. And part of the struggle with school-based health is that these are the kinds of kids who don't have someone who will bring them to appointments…So much of what they come to therapy for is because of the problems at home…. So, it's very rare for parents to bring their kids. So, if there's not school, they're probably not going to bring their kids.	Interviewee M Mental health provider
We really shifted to telehealth for everybody just to what we knew at the time and that's what seemed like most people were doing. And I have to laugh at us ourselves because we shut down for two months that way, we just did all telehealth and might go out in the parking lot and see some people and do that sort of stuff.	Interviewee P Administrator
Sometimes I feel like when I call, I end up doing more therapy with the parent than I do the kid on certain days, just because of the level of frustration that they're feeling. This year has definitely been the COVID challenge and the virtual schooling.	Interviewee N Mental health provider
This [working in an SBHC] is just different. You have kids who don't want you to share anything with the parent. You have kids who haven't seen their parents in you don't know how long. They're sleeping on a friend's couch. It's just sometimes really hard because it's not how [providers are] trained in the textbook, particularly if they're coming right out of school. They just really seem to struggle and then these kids have really heartbreaking stories. It's just hard to leave that at the office.	Interviewee C Administrator
I think it takes somebody not only with compassion, but also with the ability to disconnect, because you can't take your work home with you. I can't build a mansion and take all these kids home, but I'd like to. So, I think you have to	Interviewee G Mental health provider

TABLE 2 (Continued)

SBHC provider personal characteristics	
have the ability to set boundaries and be able to go home at night and not worry yourself to death about this kid going home.	
Training to support SBHC staff	
Challenge 1: Lack of SBHC-focused components in provider education	
You know what, I can only speak from personal experience, but I never had per se formal training to work in a school-based health center […] and if you would have asked me that even a year into it, I would say, "No." Because I just really didn't understand fully, it took time to really understand the scope of it. But knowing what I know now, yes. I think it would be super beneficial to have structured trainings because it's different. The fact of the matter is, it's different to provide therapy in a main clinic where people actually have to come in for their appointment versus school-based health centers. It's just a whole different ball game in a lot of ways.	Interviewee J Mental health provider
So, when you first come to school-based, you're not really trained in that, I don't know anybody who gets training, whether they be a nurse practitioner, MDs, PAs, in what to do when you come to a school-based health center. So, if there's not somebody in your facility that already knows the ropes of what to do at a school-based health center, then you're kind of out there flying blind, or you have your MA who may have some experience if you are following another provider that was there. If you're a brand-new health center, you have nobody who has any experience.	Interviewee L Medical provider
Staff is always a challenge. And it is particularly a challenge because I'm all about hiring somebody with both the credentials and either the ability they either have, or they can develop the skills that are necessary for the environment of school-based behavioral health. I have met clinicians that are good clinicians, but I wouldn't send them into a school, or they don't fit with the overall mission statement or program of the way that the philosophy of how we do things.	Interviewee I Administrator
[…] here's the thing, every school is a little different in how they get kids and how they want to structure that. […] I definitely think there needs to be specific training to that. Because like I said, having done therapy on both ends of the spectrum, it's definitely different when you don't have as much parent involvement. That's kind of the whole point is that these kids are often kids who don't have parent involvement in any aspect of their life. So that's a totally different type of therapy than the parent who's going to bring their kid to therapy every week.	Interviewee M Mental health provider
And when we talked about telehealth and we have done some telehealth, don't get me wrong, but especially with kids and therapy, there's a huge confidentiality problem based with doing telehealth. Because you have no idea who might be listening on the other end of the camera, just outside of the camera and you have no idea what that kid is facing.	Interviewee M Mental health provider
It's internet issues or just not having access. Because when our care coordinators were scheduling those visits, they would give them the option of meeting over Zoom, kind of a little more face to face or by phone. And they, for me, all met by phone. And honestly, and I think that's maybe a specific to West Virginia.	Interviewee O Medical provider
I will say from the behavioral health side, if I could do a Zoom, I would be quite willing to try more with tele-health. I made a few efforts to do some tele-health with the phone for kids and felt that it was not effective. And I just	Interviewee A Mental health provider

(Continues)

TABLE 2 (Continued)

SBHC provider personal characteristics	
stopped even trying. Even in a case where a parent had said, “Please call my kid. My kid's having trouble. They want to talk to you.” Then I called but I wouldn't get called back and so on. And so, it didn't seem to be the way.	
…we had some therapists who were not experienced with virtual and not real comfortable with that. So, we had to play some catch-up and provide a lot of supervision to get people used to that, medical providers as well, not used to doing that.	Interviewee I Mental health provider
Challenge 2: Lack of awareness of SBHCs among providers	
It's not all that common when somebody would say, “Hey, I want to work in school-based health centers.” Sometimes it happens but it's not very often.	Interviewee K Administrator
School-based is totally different. The residents have all said that. It's very interesting because they don't get this experience. They don't know much about school-based. I enjoy the fact that we get to show them what it can be about. Several of them who've come through, didn't know what to expect until they got here, and they realized what it was. In leaving, a lot of them have said, “I really enjoyed that.” “I liked coming here. The kids were so much different here in this setting than they are in my office because they don't have their parents. They're freer. They talk.”	Interviewee L Medical provider
Challenge 3: Need for continued and local-context specific training	
In social work we do a lot of trainings on ethical standards but sometimes the lines can be a little blurry in regard to school-based health centers. Maybe even a training on that, that spells it out. Yes, you're allowed to accept referrals from school counselors, for example. Is it okay to check in with the child's teacher and say, “Hey, has so and so gotten into a fight at recess again?” Or, “Have you noticed so and so […]” Just stuff like that.	Interviewee J Mental health provider
So, I think in some ways the providers were always willing to talk to people because they had things they needed to bounce off and figure out how that works or what do you do, how do you get those consent [forms] back? What are your methods to getting as many as you can? We've done everything from incentives to yeah, gifts cards, to the school nurses one year, I think she bought something for the class that brought back the most. There's lots of different things like that. How do you get your well-childs in during the day? We pick a number that we want to hit every day and try to plug those into the schedule so that we go through our list in advance, find them put them on the schedule and go from there. So, there's just that, how the basics work. So, the providers welcome those ideas and brainstorming.	Interviewee L Medical provider
[T]here's no primer on how to do this … just coming in, you just don't know your resources. Even having this resource packet for school-based health staff to say, “Hey, you work in school-based health in this area. Here are the resources that you have.” I was also starting in a town where there weren't very many school-based health staff working, so I think that normally where I would have gotten a little bit more mentorship for that stuff, that wasn't necessarily available. So, I look forward to as we kind of move through this, and I'm not going to say move out of it because I don't know when that's going to happen, but as we move through this that I'm able to identify those things and kind of build my own resource packet.	Interviewee D Medical provider
So, I definitely think they ought to have some training working with kids, and maybe some education on the school system too. How that all works, because I've found out that every school system's different, in our state each county has something different going on.	Interviewee G Mental health provider

participation. The study was approved by the Pennsylvania State University's Institutional Review Board.

RESULTS

SBHCs are unique work environments that present staff with challenges and opportunities distinct from those experienced by providers working in more traditional health care settings. As a result of being embedded within the educational environment, staff may need to work with limited clinical space and inconsistent daily routines. However, SBHCs also allow staff easy access to students in need of medical and mental health services, as well as the opportunity to build supportive relationships and holistically assess student's needs and well-being. The SBHC staff in this study discussed the characteristics and skills, like flexibility and proactive communication skills, that are needed to work effectively in the SBHC setting. They also discussed how traditional provider training may not sufficiently prepare staff for working in the school setting and offered suggestions to support SBHC staff, like formal rotations in SBHCs or local trainings on available community resources.

SBHC provider personal characteristics

The SBHC providers and administrators described the ideal characteristics of SBHC staff, and the two most common qualities highlighted were flexibility and an ability to work well with children. Moreover, staff also discussed the need for SBHC staff to have the ability to work well with students living in stressful and potentially hostile environments, maintain their own mental health in a challenging work environment, and to be proactive communicators and relationship builders.

Characteristic 1: Being flexible

Many staff discussed the need to be flexible when working at the intersection between two very complex systems—health care and public education. Interviewees discussed several aspects of working in a SBHC that necessitate provider flexibility: unpredictable daily schedules, limited space and resources, and limited access to or responsiveness from parents. One of the most frequently mentioned issues was that SBHC staff typically have unpredictable clinic and school schedules. While many SBHC services are equivalent to the services provided in health centers, such as providing routine well-child visits and vaccinations, SBHC staff also respond to immediate teacher and student needs. As a result, SBHC staff schedules are typically unpredictable throughout the day and may vary substantially from day to day or week to week. For example, one SBHC mental health provider discussed working with teachers to decide when to pull students from class for an appointment.

> *I go get the kids myself. I back off if the teachers say it's not convenient. I adjust the schedule. It's a nightmare frankly. It's a nightmare when you've got four different schools and you're juggling this. Okay we're not… I don't take kids out of math and reading and science… Then the music teachers say, "Really? This kid loves music. Can't you find some other time to get them?"*
>
> *– Interviewee A, mental health provider*

SBHC providers also adjust their schedules to respond to student needs or school crises that may arise throughout the day. One medical provider described their experience working within a school the following way:

It's like I told one of my fellow workers who works in the community in a health center, I'm like, "Sometimes when you just see three kids on my schedule, that doesn't mean that we weren't busy. That just means one of those visits has probably turned into an emergency or a tragedy that has happened. And it has taken all of us to deal with that.

– Interviewee B, medical provider

An SBHC administrator also agreed that staff need to maintain flexible schedules to respond to student needs and unforeseen events that may arise.

Sometimes I find that staff get very caught up in what it looks like and are unwilling to be flexible and change it because some kid might fall in PE. There might be a fight. Just tons of things can happen. School-based health centers, you have to have staff that are very flexible.

– Interviewee C, administrator

In addition to remaining flexible to meet the needs of students and teachers, staff also expressed the need to be flexible regarding the physical space in which they provide care. SBHCs are located either inside or in close proximity the school buildings they serve. However, as most of West Virginia's schools were not designed to include space for a health center, they usually adapt the space available to provide services. Staff described working in trailers outside the building, which can make access difficult for younger students, and working in small rooms, often with limited privacy, within the building in response to limited school space. One SBHC administrator described their staff's experience the following way:

[…] it's like, "You can have this closet, or you can have this very small space. It's all we have." Then it's up to us to figure out how to make it work. I've had staff in closets […] We have a behavioral health provider in a shower. It was like they […] I mean it wasn't a fully functioning shower, don't get me wrong, but the drain was there. We've had people in bathrooms.

– Interviewee C, administrator

Staff also discussed being flexible with treatment approaches when there is limited access to students' parents, or when students' parents are unable to engage with care. Students can use SBHC services without their parent being at the appointment, though all students need a signed parental consent form to receive services. SBHC staff may thus have limited opportunities to interact with the student's family. Additionally, SBHC staff may face barriers to parental engagement related to West Virginia's changing context. Parents may be working multiple jobs, lack transportation, have inconsistent phone or Internet service, or may struggle with a substance use disorder. Mental health providers discussed how their training typically assumes a level of access to parents or other family members, which may not be feasible in a school setting where parents do not drop off and pick up their child directly from the provider. One medical provider described adapting her practice to work without guaranteed access to parents or family members.

You have to be really organized and flexible. You need to understand where people are coming from, like how their relationship with school-based health and staff has been shaped. Also, it's never straightforward. You're not going to see a patient and have all the information that you need. You're going to have to call a parent or a guardian. You're talking about working with kids, right, so what they know about their health history is pretty limited. So, what normally may take just a sit-down visit of five minutes in urgent care, you have to investigate. You need to have a curious, investigative, and creative mind.

– Interviewee D, medical provider

Limited access to parents in the school setting can present additional challenges to SBHC medical and mental health providers. Staff discussed low parental awareness of SBHC services, and how difficult it can be to achieve parental involvement or to get parents to sign the consent forms needed to treat their children. One medical provider (Interviewee L) mentioned that if SBHCs do not develop strong relationships and integrate themselves within the school and community, buy-in and use of the clinic services can be limited. A mental health provider (Interviewee M) also talked about how many parents and school personnel are unaware that the SBHC provider is not the same as the school nurse or counselor. Parents who are unaware that the SBHC provider is credentialed and can provide the same level of care as a provider in a traditional doctor's office have been reported to take students out of care in the SBHC center and seek treatment elsewhere.

While SBHCs worked to educate families and communities about who they are and what services they provide before the COVID-19 pandemic, during the pandemic, families particularly used SBHCs for testing. Some SBHCs even tested students who did not go to the school and community members who did not have an affiliation with the school. For example, one SBHC staffer told us the following:

…just letting people know that we're here. And actually with [SBHC], we did the rapid COVID swabs and basically let parents know at the beginning of the school year and sent home a separate consent form just for a COVID 19 swab, if that was needed at school […] we had a big return on those which sending out a form like that was kind of like, 'do we want to do that'? But it was also like, this is an additional service that we have available for these students, and we just want the parents to know that would be available if needed.

-Interviewee O, medical provider

Another SBHC went even further

[…] if a kid needed a swab for COVID, we would also go ahead and swab their parents, even if they weren't ours. So as far as that, we have done more of community swabbing. If a kid has exposed grandma, aunt, so on. We have offered come on down and we'll swab you. So, I think in that aspect, or just offering the swab even if they aren't students here, we'll go out to the car and swab them.

-Interviewee B, medical provider

Characteristic 2: Working well with children

The staff in this study also felt that SBHC staff should work well with children, not only by having a working knowledge of how to effectively treat children at different stages of development, but also by enjoying the dynamic interaction and cultivation of relationships with them. Several staff discussed the importance of being familiar with child development to offer appropriate and effective care. One medical provider discussed the need for staff to be attuned to the differences between child and adult patients, adding that SBHC staff can teach children how to access and use the medical system, including when and how to utilize preventive services. Another medical provider compared the need for SBHC staff to be aware of child development to the expertise in prenatal health seen in obstetrics and gynecology providers.

> *If I was working on OB, I would know everything I needed to know about OB, about unborn babies, about heart rates that, when is it healthy? When is it not healthy? And it's the same with adolescents. You've got to know their brains, […] And their hormone levels and that kind of thing, where they're at physiologically, that's going to affect their psychology and the way they behave.*
>
> *– Interviewee E, medical provider*

Staff also discussed enjoying their work with children. Two staff members described the importance of establishing a family-like bond with their students, referencing the need to care about (Interviewee C) and "have a heart" (Interviewee M) for children. One provider mentioned having passion for the children in the age group they work with, while another mentioned the need to have compassion when working with adolescents. One SBHC administrator discussed their experience developing relationships with students over the years.

> *I think that we have a number of wonderful stories at every school-based health center with kids that we've been able to connect to resources, who write letters to say that they love our staff because of things we have done […] That feel like the school-based health center is a family. So, I know that there are a handful of lives that are better because of a school-based health center […] Because someone cared about them.*
>
> *– Interviewee C, administrator*

However, school and SBHC protocols put in place to reduce the spread of the COVID-19 virus strained connections with students. As one staffer told us:

> *Our kids are first. We try to make it better. We'll look at each year…how does this need to change? What do we need to do better? With the COVID, we're still figuring out how can we get these kids? What is our routine going to be? Because the routine has changed this year. The kids can't just freely stop in here between classes or anything anymore. They have to be with a piece of paper, they have to notify the office, and the office notifies us. So, it's kind of our routine has changed.*
>
> *-Interviewee B, medical provider*

The experiences were similar at yet another SBHC:

> *And this year, it's like I said, the doors have been locked and kids can't come without teacher permission and the teacher has to call and it's a big ordeal. I feel like kids could easily slip in last year and get whatever and it not be a big deal, but this year, it's like a big deal*.
>
> *-Interviewee N, mental health provider*

Characteristic 3: Proactive communicating and building relationship

The SBHC staff in this study discussed the need to not only need to build rapport with the students in the treatment room, but also develop relationships with the educational staff within the school, such as the principals, office staff, school nurses, school counselors, and school resource officers. Of course, SBHC staff also need to communicate effectively with parents and families. Proactive communication and building relationships with students, school staff, and family members ensures that they are aware of the services offered in the SBHC and are utilizing or referring students for care. As one medical provider put it, SBHC staff cannot just sit in their offices and wait for the students to come to them, but instead be willing to meet the students where they are.

> *They [SBHC staff] have to be outgoing. They have to be willing to go out and maybe have lunch one day with the students. They have to be willing to engage in school activities. You just can't sit back in the office and wait for them to come to you, because it doesn't work. Whereas when you're in an office setting, you have people scheduling appointments. You don't have to go out there and search for your clients. It's just the fact that I think school-based, you really need to be really outgoing and really able to socialize and be personable*.
>
> *– Interviewee H, medical provider*

Similar to building relationships with students by interacting with them outside of the clinic, an administrators shared advice on how to build relationships with teachers.

> *Another thing that I do when I try to teach my staff to do, walk the halls. I tell them, look, I know the bell rings at 3:30 or 3:00 or whatever, and the buses leave, but just go for a walk through the hallway. And amazingly teachers will say, "Oh, I'm so glad to see you. I had such a horrible day […] That creates some cooperation and it's an opportunity to say to the teacher, you are doing an awesome job. Thank you for your dedication*.
>
> *– Interviewee I, administrator*

School personnel can assist SBHCs in raising awareness and disseminating messaging and assist in reminding students about their appointments. The same administrator described how building strong relationships with school staff can improve SBHC staff's ability to provide care to more students.

Having a good rapport with that receptionist is so vital. It makes the difference between, can I see five students in a day, or can I see 12 students in a day because they are going to work for you when they feel validated and feel like that you care about them as well. And that you have that cooperative think of flow with them as well. It's all about being personable and I'm not talking, being fake. I mean genuinely, authentically, I care about you as a fellow coworker. I care about the students. It has to be authentic, but when it's done authentically, it's amazing what you can do together.

– Interviewee I, administrator

Strong relationships with parents and school staff not only enable the SBHC to better serve the students, but they can also be beneficial for the school. Several staff shared how SBHC and school personnel stay in touch to understand the situations among specific students. One mental health provider shared how SBHC behavioral staff can help alleviate burdens on school guidance counselors, freeing up more time for the counselor to focus on school-related issues.

We have a case manager and two staff for behavioral health. And that really takes a load off of the guidance counselors. They can focus on getting kids in their classes and making sure they have their credits and all that. And they don't have to counsel kids with the things that kids get upset about. They can come right in here and talk to our behavioral health people.

– Interviewee E, mental health provider

These relationships have also proven helpful during the COVID-19 pandemic. When students were experiencing COVID-like symptoms, schools used either isolation rooms or sent students directly to their SBHC for testing and monitoring. In addition to testing, SBHCs have also been administrating vaccines.

I spoke to one of the other elementary school principals yesterday. We do a lot of Zoom meetings now with principals and the whole staff now, just so we could answer questions. That was what he said. "It has surely been a help to have you all in our building and know that I'm guaranteed to get this kid COVID tested. If I send him out in the building, they may or may not have that. They may not have access to go further on down to Charleston or wherever to get that COVID test. At least I know that before they go home, if we suspect COVID, I'm going to be able to get some things done with this kid before they leave my building."

-Interviewee L, medical provider

One provider shared how their school used SBHC providers as "experts on the ground" to help determine how to keep everyone safe when returning to in-person classes.

Then we also worked with our schools quite a bit to figure out how to return in person. They used us a lot as their experts on the ground to help them develop their plan for return of students to the building. We worked with our school nurses. We worked on immunizations, the kids that she needed to have immunized before they could return due to immunization requirements. We

even did days out in the parking lot, where we would just be out there to do those vaccine drive-throughs.

-Interviewee L, medical provider

Characteristic 4: Adapting to West Virginia's changing context

Finally, we note the importance of local circumstances. For example, the West Virginia context has been changing due to factors like increases in unemployment, poverty, the opioid epidemic (Sylvester et al., 2021), and regional flooding (Merino et al., 2019). Staff discussed how they felt there has been an increase in the number of students living in adverse situations and facing challenges within their families such as homelessness, the foster-care system, and substance use disorder. SBHC staff talked about the challenges associated with providing compassionate, competent care to children living in challenging situations, and highlighted the growing need for and acceptance of mental health services. The current pandemic has only intensified and exacerbated these developments. When discussing how more students were coming to the SBHC with anxiety and mental health concerns, a medical provided noted, "…some of these kids didn't have much social interaction to begin with just because of their circumstances. But it's even worse now" (Interviewee M). Another medical provider, when asked about changing health care needs, shared, "We see a lot of mental health decline. I think that's due to the pandemic. And I have seen some students with some financial concerns with food and with family finances. But I think mental health has really taken a toll since the pandemic started" (Interviewee Q). As these challenges apply to the qualities of SBHC staff, a few staff explicitly mentioned the need for SBHC staff to provide additional assistance and services for students challenged by a myriad physical and emotional circumstances that the provider may not be able to mitigate, and to develop the ability to maintain mental health while working in a challenging environment.

As the needs of students has grown, one medical provider talked about the need for SBHC staff to go above and beyond the provider role by developing relationships to form a more holistic assessment of student needs.

It takes a person who's going to take the time to listen to the kids. You can't just be in and out. Just because they're coming down for a well-child or a sore throat, it might turn into I'm suicidal, or my mom is beating me at home. You can't just say, okay, sore throat, strep, see you later. That's all you need it. It takes more than that. You have to be here for the kids and not just the visits.

– Interviewee B, medical provider

Another medical provider discussed helping to remove barriers students may face in accessing care or treatment.

We would also handhold some of these kids through different things. Especially ones that were maybe in foster care or potentially neglected, we would try to maybe make that referral ourselves. Sometimes I even had a nurse that would go pick a prescription up for a child and bring it back to the school because the parent had transportation problems. Literacy issues calling parents and filling out forms for parents over the phone and then sending it home for the parent to sign.

– Interviewee F, medical provider

However, the pandemic made it difficult for SBHCs providers to reach as many students as they were previously. Many discussed being open, but work was slower as individuals could not sit in waiting rooms or show up without appointments.

> *Yeah, it's just been hard when we're used to seeing a kid on Tuesday and can have that potential to follow up with them Thursday, we know we won't see them for at least another week, so that's been a big change for us*.
>
> *-Interviewee O, medical provider*

The situation was particularly challenging for mental health providers:

> *Basically, they didn't know what to do with school health because when we shut down in March in West Virginia, schools never went back in session and I don't know how else to say it, but they didn't want to pay us to just sit there and do nothing, obviously. I mean we didn't have access to kids. And part of the struggle with school-based health is that these are the kinds of kids who don't have someone who will bring them to appointments…So much of what they come to therapy for is because of the problems at home…. So, it's very rare for parents to bring their kids. So, if there's not school, they're probably not going to bring their kids*.
>
> *-Interviewee M, mental health provider*

Some SBHCs had the resources to mediate the situation by taking advantage of telemedicine opportunities:

> *We really shifted to telehealth for everybody just to what we knew at the time and that's what seemed like most people were doing. And I have to laugh at us ourselves because we shut down for two months that way, we just did all telehealth and might go out in the parking lot and see some people and do that sort of stuff*.
>
> *-Interviewee P, administrator*

Of course, much of these efforts were limited by the challenging IT infrastructure in large parts of the state. As a result, many SBHCs resorted to phone calls to check in on their students and families. As one mental health provider put it:

> *Sometimes I feel like when I call, I end up doing more therapy with the parent than I do the kid on certain days, just because of the level of frustration that they're feeling. This year has definitely been the COVID challenge and the virtual schooling*.
>
> *-Interviewee N, mental health provider*

Beyond providing additional assistance and services to meet student's needs, a few staff also discussed the importance of maintaining mental health in a challenging work environment. One SBHC administrator discussed the challenges new SBHC staff face when beginning to work in school-based centers, highlighting how working with the West Virginia student population can have an emotional toll.

This [working in an SBHC] is just different. You have kids who don't want you to share anything with the parent. You have kids who haven't seen their parents in you don't know how long. They're sleeping on a friend's couch. It's just sometimes really hard because it's not how [providers are] trained in the textbook, particularly if they're coming right out of school. They just really seem to struggle and then these kids have really heartbreaking stories. It's just hard to leave that at the office.

– Interviewee C, administrator

A mental health provider also referenced the emotional toll of working with students living in adverse circumstances, adding that SBHC staff not only need to be able to develop relationships with children but also establish boundaries to maintain mental health.

I think it takes somebody not only with compassion but also with the ability to disconnect, because you can't take your work home with you. I can't build a mansion and take all these kids home, but I'd like to. So, I think you have to have the ability to set boundaries and be able to go home at night and not worry yourself to death about this kid going home.

– Interviewee G, mental health provider

Training to support SBHC staff

In addition to certain personality characteristics, the interviewees discussed how school-based health-focused training during providers' education could also support SBHC staff. Several SBHC administrators and providers discussed the challenges associated with recruiting adequately prepared SBHC staff. Many staff identified options for formal and location-specific training opportunities that could support SBHC staff.

Challenge 1: Lack of SBHC-focused components in provider education

Many staff felt that additional training in how to work effectively in a school setting could be beneficial for new staff, as one mental health provider described her changing opinion on the utility of SBHC-specific training:

You know what, I can only speak from personal experience, but I never had per se formal training to work in a school-based health center […] and if you would have asked me that even a year into it, I would say, "No." Because I just really didn't understand fully, it took time to really understand the scope of it. But knowing what I know now, yes. I think it would be super beneficial to have structured trainings because it's different. The fact of the matter is, it's different to provide therapy in a main clinic where people actually have to come in for their appointment versus school-based health centers. It's just a whole different ball game in a lot of ways.

– Interviewee J, mental health provider

In addition to a lack of awareness or interest, newly credentialed staff may not be adequately prepared for SBHC work. As discussed in the section on SBHC personality characteristics, staff discussed several significant differences between working in a medical center and in a school-based setting, from scheduling visits to obtaining medical history to conducting follow-up visits. Several mental health staff highlighted how their training did not prepare them to work with children without parental involvement. One medical provider described the experience of starting work in a SBHC as "flying blind."

> *So, when you first come to school-based, you're not really trained in that, I don't know anybody who gets training, whether they be a nurse practitioner, MDs, PAs, in what to do when you come to a school-based health center. So, if there's not somebody in your facility that already knows the ropes of what to do at a school-based health center, then you're kind of out there flying blind, or you have your MA who may have some experience if you are following another provider that was there. If you're a brand-new health center, you have nobody who has any experience*.
>
> – *Interviewee L, medical provider*

Related to finding staff who have been prepared to provide health care services in a school setting, one administrator discussed the challenges finding staff who are a good fit for the SBHC setting. For example, staff described how SBHC staff need to go above and beyond their given roles to develop a holistic understanding of the student's needs and seek to remove barriers to receiving care. One administrator described their experience hiring new SBHC staff the following way:

> *Staff is always a challenge. And it is particularly a challenge because I'm all about hiring somebody with both the credentials and either the ability they either have, or they can develop the skills that are necessary for the environment of school-based behavioral health. I have met clinicians that are good clinicians, but I wouldn't send them into a school, or they don't fit with the overall mission statement or program of the way that the philosophy of how we do things*.
>
> – *Interviewee I, administrator*

Another mental health provider talked about how mental health provider training could better prepare providers for working with limited parental engagement, discussed above in the section on SBHC provider personality characteristics.

> *[…] here's the thing, every school is a little different in how they get kids and how they want to structure that. […] I definitely think there needs to be specific training to that. Because like I said, having done therapy on both ends of the spectrum, it's definitely different when you don't have as much parent involvement. That's kind of the whole point is that these kids are often kids who don't have parent involvement in any aspect of their life. So that's a totally different type of therapy than the parent who's going to bring their kid to therapy every week*.
>
> – *Interviewee M, mental health provider*

Finally, COVID-19 caused many direct service fields to go remote. SBHC providers shared how they met virtually with patients but expressed challenges with telehealth visits.

> *And when we talked about telehealth and we have done some telehealth, don't get me wrong, but especially with kids and therapy, there's a huge confidentiality problem based with doing telehealth. Because you have no idea who might be listening on the other end of the camera, just outside of the camera and you have no idea what that kid is facing.*
>
> *-Interviewee M, mental health provider*
>
> *It's internet issues or just not having access. Because when our care coordinators were scheduling those visits, they would give them the option of meeting over Zoom, kind of a little more face to face or by phone. And they, for me, all met by phone. And honestly, and I think that's maybe a specific to West Virginia.*
>
> *-Interviewee O, medical provider*
>
> *I will say from the behavioral health side, if I could do a Zoom, I would be quite willing to try more with tele-health. I made a few efforts to do some tele-health with the phone for kids and felt that it was not effective. And I just stopped even trying. Even in a case where a parent had said, "Please call my kid. My kid's having trouble. They want to talk to you." Then I called but I wouldn't get called back and so on. And so, it didn't seem to be the way.*
>
> *-Interviewee A, mental health provider*

One provider shared how some colleagues struggled to learn technology needed to conduct virtual visits.

> *…we had some therapists who were not experienced with virtual and not real comfortable with that. So, we had to play some catch-up and provide a lot of supervision to get people used to that, medical providers as well, not used to doing that.*
>
> *-Interviewee I, mental health provider*

Challenge 2: Lack of awareness of SBHCs among providers

Both administrators and providers discussed the challenges of hiring and retaining credentialed SBHC staff, especially mental health staff. Staff highlighted a lack of awareness or interest in SBHC job opportunities and expectations among newly graduated credentialed staff. As one administrator described their experience hiring new staff:

> *It's not all that common when somebody would say, "Hey, I want to work in school-based health centers." Sometimes it happens but it's not very often.*
>
> *– Interviewee K, administrator*

Several staff discussed ways to raise awareness about SBHCs and the differences in school-based versus community or clinic work through a school rotation or some other formal exposure to SBHCs during provider education. Rotations allow medical and nursing students to spend a short period of time working in and being exposed to different care environments, such as hospice or an Alzheimer's care unit. Staff suggested that including more SBHCs as rotation site could increase awareness, interest, and preparation for SBHC work. One medical provider described her positive experience with rotating pediatric residents, noting that the participating residents were not familiar with SBHCs.

> *School-based is totally different. The residents have all said that. It's very interesting because they don't get this experience. They don't know much about school-based. I enjoy the fact that we get to show them what it can be about. Several of them who've come through, didn't know what to expect until they got here, and they realized what it was. In leaving, a lot of them have said, "I really enjoyed that." "I liked coming here. The kids were so much different here in this setting than they are in my office because they don't have their parents. They're freer. They talk."*
>
> *– Interviewee L, medical provider*

Challenge 3: Need for continued and local-context specific training

The SBHC staff in this study also discussed location-specific training opportunities that could strengthen their ability to work with students in the school setting. These opportunities could be offered on-the-job and be customized to be responsive to the local community. On the formal side, one mental health provider (Interviewee J) talked about how it could be helpful to review the ethics of providing care in a school setting with school staff. Considering the collaborative relationship many SBHC staff establish with school personnel, this mental health provider suggested it would be useful to discuss guidelines around when and how information on student health can be shared with school personnel.

> *In social work we do a lot of trainings on ethical standards but sometimes the lines can be a little blurry in regard to school-based health centers. Maybe even a training on that, that spells it out. Yes, you're allowed to accept referrals from school counselors, for example. Is it okay to check in with the child's teacher and say, "Hey, has so and so gotten into a fight at recess again?" Or, "Have you noticed so and so […]" Just stuff like that.*
>
> *– Interviewee J, mental health provider*

SBHC staff themselves could be a source of guidance for new providers. For example, one medical provider talked about how in the absence of clear guidance and SBHC training, staff in the field brainstorm and develop a wealth of information that could be shared with one another.

> *So, I think in some ways the providers were always willing to talk to people because they had things they needed to bounce off and figure out how that works or what do you do, how do you get those consent [forms] back? What*

are your methods to getting as many as you can? We've done everything from incentives to yeah, gifts cards, to the school nurses one year, I think she bought something for the class that brought back the most. There's lots of different things like that. How do you get your well-childs in during the day? We pick a number that we want to hit every day and try to plug those into the schedule so that we go through our list in advance, find them put them on the schedule and go from there. So, there's just that, how the basics work. So, the providers welcome those ideas and brainstorming.

– Interviewee L, medical provider

Locally-informed trainings could also highlight the local resources available to support SBHC providers and students. One medical provider talked about the challenges associated with starting work in an area without the guidance of other SBHC staff and her plan to develop a resource packet.

[T]here's no primer on how to do this … just coming in, you just don't know your resources. Even having this resource packet for school-based health staff to say, "Hey, you work in school-based health in this area. Here are the resources that you have." I was also starting in a town where there weren't very many school-based health staff working, so I think that normally where I would have gotten a little bit more mentorship for that stuff, that wasn't necessarily available. So, I look forward to as we kind of move through this, and I'm not going to say move out of it because I don't know when that's going to happen, but as we move through this that I'm able to identify those things and kind of build my own resource packet.

– Interviewee D, medical provider

Additionally, school systems and administrations vary from one another. A mental health provider highlighted that guidance on how to understand and navigate the local school system can be beneficial for new staff.

So, I definitely think they ought to have some training working with kids, and maybe some education on the school system too. How that all works, because I've found out that every school system's different, in our state each county has something different going on.

– Interviewee G, mental health provider

DISCUSSION

Studies of SBHCs have long shown the potential benefits they might provide for students in the form of increases in access and utilization as well as improved academic and health outcomes. Importantly, they may disproportionally support the well-being and achievements of marginalized students thus offering a more equitable playing field. Yet, even despite these findings, only a small number of American students have access to their services in the nation's more than 2500 SBHCs (Love et al., 2019). While political and resource limitations carry part of the blame, the lack of appropriately trained staff is one key challenge that even

affects SBHCs already in place. Importantly, this issue may also serve as a bottleneck for potential future expansions given the inherent time-lag between training and deploying providers. Unfortunately, researchers and policymakers alike have generally overlooked this issue to this date.

Relying on interviews of SBHC staffers and administrators, this study is one of the first to explore these underlying challenges by highlighting the desirable personal characteristics of as well as the training and educational needs SBHC staff. Overall, we find that working on the boundary between the education and health sector requires large amounts of flexibility, the ability and willingness to work with and adapt to children, and a focus on being proactive and willingness to work on building relationships inside and outside the school building, perhaps especially during the COVID-19 pandemic. Crucially, there is an important local component to SBHC work that requires constant attention and a willingness to adjust quickly. In terms of challenges related to training and education, we found that providers generally lack any exposure to SBHCs during their education and often are fully unaware of this form of health-care provision. Moreover, local context requires additional and continued investment in training SBHC staff.

Our findings make an important contribution to the literature in highlighting an important, albeit often overlooked, components of healthcare access: an adequate supply of qualified staff. This issue has been particularly left unexplored in the context of SBHCs, a context that is complex and fraught with challenges due to its location at the boundary of two highly complex and often politicized fields of health care and education. Yet given the established benefits of SBHCs as well as the growing awareness of the highly inequitable nature of the U.S. health-care system, a greater exploration of this issue, as well as the potential role SBHCs can play in the health-care system, is well overdue. Moreover, the COVID-19 pandemic has underscored the potential need for coordinated services across sectors. Responding to the ongoing pandemic will require attending to students' physical and mental health needs in ways never previously seen (Wong et al., 2020). Finding suggest that despite barriers posed by COVID-19, SBHC staff were able to serve students and coordinate with the school (once schools opened back up).

LIMITATIONS

This paper is not without limitations. First, we rely on interviews with SBHC staffers and administrators. By definition, qualitative research like this utilized a relatively small number of observations. However, we were diligent in reaching out to a diverse set of respondents along a number of dimensions including the type of sponsor, location, and medical specialty, and role within the center, for example. Future research should seek to expand on our work by surveying a larger number of staff. Second, we rely on interviews from only one state. West Virginia is a poor, rural state with a challenged health-care environment. This may require adaptations and lead to experience that may differ from other places across the country. However, we note that while each local context is unique, similar challenges are present across many areas of the country, particularly those is in similarly rural contexts. Finally, some of our interviews took place during the pandemic. This may highlight certain experiences by SBHC staffers. However, all of our interviewees have worked in the SBHC setting for long periods of time and often in multiple locations and for multiple employers.

CONCLUSIONS AND POLICY IMPLICATIONS

Undeniably, the ongoing pandemic has created additional challenges and further polarized health policymaking (Haeder & Gollust, 2020; Haeder, 2020). Yet policymakers including the U.S. Congress have increasingly become aware of the potential that SBHCs hold to improve student health and academic outcomes, especially during the ongoing pandemic. Recently, Congress passed the *School-Based Health Centers Reauthorization Act* of 2020 which provides important subsidies for SBHCs followed up with the introduction of the *Hallways to Health Care Act* (Haeder, 2021a). The funding may go along away in encouraging future growth in SBHCs, which could help address ongoing student need resulting from the pandemic. Importantly, some of the funds may also be used for training purposes. Yet based on our findings here, the potential supply of providers who will do well and succeed in the SBHC context is inherently limited. Given this small pool, substantially more resources are needed to identify and appropriately train potentially interested providers during their initial education experience. Importantly, given the inherent challenges of working in SBHCs, continued investments are likely necessary. Moreover, structural changes are likely needed within medical education programs that emphasize primary care training in general, while also increasingly seeking out placement opportunities for emerging medical providers to experience nontraditional settings like SBHCs. Further loosening scope-of-practice laws that provide additional autonomy to physician extenders like nurse practitioners and physical assistants would also make SBHCs more viable because they would reduce the need for expensive physician-level providers for SBHCs and their sponsors. Financial incentives like student loan forgiveness may also further encourage providers to work in SBHCs, as may efforts to highlight SBHCs ability to improve equitable access for underserved populations. Local and state-level governments would also be well-served to increase funding, at the very least for starting up SBHCs, to reduce barriers for emerging SBHCs. This has been done on a very limited basis in some states, but funding has been rather limited and temporary (Schlitt et al., 1995). It also seems likely that payors like Medicaid and commercial carriers ought to do more to provide financial stability for SBHCs and their parent clinics by ensuring adequate payment (Keeton et al., 2012) as well as inclusion the increasingly narrowing networks (Haeder & Weimer, & Mukamel, 2020). More scholarly work is needed to highlight the benefits generated from SBHCs, particularly from an equity standpoint and their benefits for underserved and excluded populations struggling to access care in more traditional settings. Importantly, scholars should also be mindful of the need to disseminate these findings beyond academic journals to enter into the policymaking process.

ACKNOWLEDGMENTS

This study is funded by the Robert Wood Johnson Foundation. Ms. Kelli Caseman was part of the funded project and participated in some of the interviews used for this manuscript.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

ETHICS STATEMENT

The research was conducted in line with academic ethical guidelines.

REFERENCES

AAP Council on School Health. (2012). School-based health centers and pediatric practice. *Pediatrics*, *129*(2), 387–393.

Adams, E. K., Strahan, A. E., Joski, P. J., Hawley, J. N., Johnson, V. C., & Hogue, C. J. (2020). Effect of elementary school-based health centers in Georgia on the use of preventive services. *American Journal of Preventive Medicine*, *59*(4), 504–512.

Allison, M. A., Crane, L. A., Beaty, B. L., Davidson, A. J., Melinkovich, P., & Kempe, A. (2007). School-based health centers: Improving access and quality of care for low-income adolescents. *Pediatrics*, *120*(4), e887–e894.

Anderson, S. A., Caseman, K., Haeder, S. F., Mathur, A., & Ulmen, K. (2020). When adolescents are in school during COVID-19, coordination between school-based health centers and education is key. *Journal of Adolescent Health*, *67*(6), 745–746. https://doi.org/10.1016/j.jadohealth.2020.09.005

Arenson, M., Hudson, P. J., Lee, N., & Lai, B. (2019). The evidence on school-based health centers: A review. *Global Pediatric Health*, *6*, 2333794X19828745.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association.

Brown, M. B., & Bolen, L. M. (2008). The school-based health center as a resource for prevention and health promotion. *Psychology in the Schools*, *45*(1), 28–38. https://doi.org/10.1002/pits.20276

Charette, C., Metge, C., Struthers, A., Enns, J. E., Nickel, N. C., Chartier, M., Chateau, D., Burland, E., Katz, A., & Brownell, M. (2019). Teens' perspectives on barriers and facilitators to accessing school-based clinics. *Health Behavior and Policy Review*, *6*(6), 605–618.

Comfort, A. B., Rao, L., Goodman, S., Barney, A., Glymph, A., Schroeder, R., & Harper, C. C. (2020). Improving capacity at school-based health centers to offer adolescents counseling and access to comprehensive contraceptive services. *Journal of Pediatric and Adolescent Gynecology*

Crespo, R. D., & Shaler, G. A. (2000). Assessment of school-based health centers in a rural State: The West Virginia experience. *Journal of Adolescent Health*, *26*(3), 187–193.

Dunfee, M. N. (2020). School-based health centers in the United States: Roots, reality, and potential. *Journal of School Health*, *90*(8), 665–670.

Federico, S. G., Abrams, L., Everhart, R. M., Melinkovich, P., & Hambidge, S. J. (2010). Addressing adolescent immunization disparities: A retrospective analysis of school-based health center immunization delivery. *American Journal of Public Health*, *100*(9), 1630–1634.

Federico, S. G., Marshall, W., & Melinkovich, P. (2011). School-based health centers: A model for the provision of adolescent primary care. *Advances in Pediatrics*, *58*(1), 113–121.

Fisher, R., Danza, P., McCarthy, J., & Tiezzi, L. (2019). Provision of contraception in New York City school-based health centers: Impact on teenage pregnancy and avoided costs, 2008–2017. *Perspectives on Sexual and Reproductive Health*, *51*(4), 201–209.

Flaherty, L. T., & Osher, D. (2003). History of school-based mental health services in the United States. In M. D. Weist, S. W. Evans, & N. A. Lever (Eds.), *Handbook of school mental health advancing practice and research*. Springer.

Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin*, *76*(5), 378–382.

Gance-Cleveland, B., & Yousey, Y. (2005). Benefits of a school-based health center in a preschool. *Clinical Nursing Research*, *14*(4), 327–342.

Gold, R., Naleway, A. L., Jenkins, L. L., Riedlinger, K. K., Kurosky, S. K., Nystrom, R. J., & Kurilo, M. B. (2011). Completion and timing of the three-dose human papillomavirus vaccine series among adolescents attending school-based health centers in Oregon. *Preventive Medicine*, *52*(6), 456–458.

Guo, J. J., Wade, T. J., & Keller, K. N. (2008). Impact of school-based health centers on students with mental health problems. *Public Health Reports*, *123*(6), 768–780.

Hacker, K., & Wessel, G. L. (1998). School-based health centers and school nurses: Cementing the collaboration. *Journal of School Health*, *68*(10), 409–414.

Haeder, S. F. (2018). *Making medic aid work in the Mountain State? An assessment of the effect of work requirements for medicaid beneficiaries in West Virginia*. West Virginia University.

Haeder, S. F. (2020). Political science and U.S. Health Policy in the era of the affordable care act. *Policy Studies Journal*, *48*(S1), S14–S32.

Haeder, S. F. (2021a). As schools reopen, it's time to increase funding for school-based health centers. Health Affairs Blog. https://www.healthaffairs.org/do/10.1377/hblog20190603.704918/full/

Haeder, S. F. (2021b). Joining the herd? U.S. public opinion and vaccination requirements across educational settings during the COVID-19 pandemic. *Vaccine*, *39*(17), 2375–2385.

Haeder, S. F., & Gollust, S. E. (2020). From poor to worse: Health policy and politics scholars' assessment of the U. S. COVID-19 response and its implications. *World Medical & Health Policy*, *12*(4), 454–481. https://doi.org/10.1002/wmh3.371

Haeder, S. F., Weimer, D. L., & Mukamel, D. B. (2020). Going the extra mile? How provider network design increases consumer travel distance, particularly for rural consumers. *Journal of Health Politics, Policy and Law*, *45*(6), 1107–1136. https://doi.org/10.1215/03616878-8641591

Hoffman, J. A., & Miller, E. A. (2020). Addressing the consequences of school closure due to Covid-19 on children's physical and mental well-being. *World Medical & Health Policy*, *12*(3), 300–310.

Kalet, A. L., Juszczak, L., Pastore, D., Fierman, A. H., Soren, K., Cohall, A., Fisher, M., Hopkins, C., Hsieh, A., Kachur, E., Sullivan, L., Techow, B., & Volel, C. (2007). Medical training in school-based health centers: A collaboration among five medical schools. *Academic Medicine*, *82*(5), 458–464.

Kaplan, D. W., Brindis, C. D., Phibbs, S. L., Melinkovich, P., Naylor, K., & Ahlstrand, K. (1999). A comparison study of an elementary school–based health center: Effects on health care access and use. *Archives of Pediatrics & Adolescent Medicine*, *153*(3), 235–243.

Keeton, V., Soleimanpour, S., & Brindis, C. D. (2012). School-based health centers in an era of health care reform: Building on history. *Current Problems in Pediatric and Adolescent Health Care*, *42*(6), 132–156.

Kisker, E. E., & Brown, R. S. (1996). Do school-based health centers improve adolescents' access to health care, health status, and risk-taking behavior? *Journal of Adolescent Health*, *18*(5), 335–343.

Knopf, J. A., Finnie, R. K., Peng, Y., Hahn, R. A., Truman, B. I., Vernon-Smiley, M., Johnson, V. C., Johnson, R. L., Fielding, J. E., Muntaner, C., Hunt, P. C., Phyllis Jones, C., Fullilove, M. T., & Community Preventive Services Task Force. (2016). School-based health centers to advance health equity: A community guide systematic review. *American Journal of Preventive Medicine*, *51*(1), 114–126.

Lear, J. G. (1996). School-based services and adolescent health: Past, present, and future. *Adolescent Medicine*, *7*(2), 163-180

Lear, J. G. (2003). School-based health centers: A long road to travel. *Archives of Pediatrics & Adolescent Medicine*, *157*(2), 118–119.

Lear, J. G. (2011). Astoria revisited: New hope in the struggle to link community-and school-based care? *Archives of Pediatrics & Adolescent Medicine*, *165*(3), 279–281.

Lear, J. G., Gleicher, H. B., St. Germaine, A., & Porter, P. J. (1991). Reorganizing health care for adolescents: The experience of the school based adolescent health care program. *Journal of Adolescent Health*, *12*(6), 450–458.

Love, H. E., Schlitt, J., Soleimanpour, S., Panchal, N., & Behr, C. (2019). Twenty years of school-based health care growth and expansion. *Health Affairs*, *38*(5), 755–764.

Merino, R., Bowden, N., Katamneni, S., & Coustasse, A. (2019). The opioid epidemic in West Virginia. *The health Care Manager*, *38*(2), 187–195.

Morone, J. A., Kilbreth, E. H., & Langwell, K. M. (2001). Back to school: A health care strategy for youth. *Health Affairs*, *20*(1), 122–136.

Naff, D. B., Williams, S., Furman, J., & Lee, M. (2020). *Supporting student mental health during and after COVID-19*. Metropolitan Educational Research Consortium.

O'Leary, S. T., Lee, M., Federico, S., Barnard, J., Lockhart, S., Albright, K., Shmueli, D., Allison, M. A., & Kempe, A. (2014). School-based health centers as patient-centered medical homes. *Pediatrics*, *134*(5), 957–964. https://doi.org/10.1542/peds.2014-0296

Parasuraman, S. R., & Shi, L. (2015). Differences in access to care among students using school-based health centers. *Journal of School Nursing*, *31*(4), 291–299.

Price, O. A. (2017). Strategies to encourage long-term sustainability of school-based health centers. *American Journal of Medical Research*, *4*(1), 61–83.

Ran, T., Chattopadhyay, S. K., Hahn, R. A., & Community Preventive Services Task Force. (2016). Economic evaluation of school-based health centers: A community guide systematic review. *American Journal of Preventive Medicine*, *51*(1), 129–138.

Reynolds, K. D., Pass, M. A., Galvin, M., Winnail, S. D., Harrington, K. F., & DiClemente, R. J. (1999). Schools as a setting for healthpromotion and disease prevention. In J. M. Raczynski, & R. J. DiClemente (Eds.), *Handbook of health promotion and disease prevention*. Kluwer Academic.

Richardson, J. W. (2007). Building bridges between school-based health clinics and schools. *Journal of School Health*, *77*(7), 337–343.

Rickert, V. I., Davis, S. O., Riley, A. W., & Ryan, S. (1997). Rural school-based clinics: Are adolescents willing to use them and what services do they want? *Journal of School Health*, *67*(4), 144–148.

Ryan, S., Jones, M., & Weitzman, M. (1996). School-based health services. *Current Opinion in Pediatrics*, *8*(5), 453–458.
Santor, D. A., Poulin, C., LeBlanc, J. C., & Kusumakar, V. (2006). Examining school health center utilization as a function of mood disturbance and mental health difficulties. *Journal of Adolescent Health*, *39*(5), 729–735. https://doi.org/10.1016/j.jadohealth.2006.04.010
Schlitt, J. J., Rickett, K. D., Montgomery, L. L., & Lear, J. G. (1995). State initiatives to support school-based health centers: A national survey. *Journal of Adolescent Health*, *17*(2), 68–76.
Shrider, E. A., Kollar, M., Chen, F., & Semega, J. (2021). U.S. Census Bureau, Current Population Reports (P60-273). Income and Poverty in the United States: 2020, U.S. Government Publishing Office.
Silberberg, M., & Cantor, J. C. (2008). Making the case for school-based health: Where do we stand? *Journal of Health Politics, Policy and Law*, *33*(1), 3–37. https://doi.org/10.1215/03616878-2007-045
Sisselman, A., Strolin-Goltzman, J., Auerbach, C., & Sharon, L. (2012). Innovative services offered by school-based health centers in New York City. *Children & Schools*, *34*(4), 213–221.
SocioCultural Research Consultants LLC. (2020). *Dedoose (Version 8.3.17)*. SocioCultural Research Consultants LLC.
Soleimanpour, S. (2020). School-based health centers: At the intersection of health and education. *Journal of Adolescent Health*, *67*, 317–318.
Soleimanpour, S., Geierstanger, S. P., Kaller, S., McCarter, V., & Brindis, C. D. (2010). The role of school health centers in health care access and client outcomes. *American Journal of Public Health*, *100*(9), 1597–1603.
Sylvester, S., Haeder, S. F., & Callaghan, T. H. (2021). Just say no? Public attitudes about supportive and punitive policies to combat the opioid epidemic. *Journal of Public Policy*.
Tyack, D. (1992). Health and social services in public schools: Historical perspectives. *The Future of Children*, *2*, 19–31.
Wade, T. J., Mansour, M. E., Guo, J. J., Huentelman, T., Line, K., & Keller, K. N. (2008). Access and utilization patterns of school-based health centers at urban and rural elementary and middle schools. *Public Health Reports*, *123*(6), 739–750.
Wong, C. A., Ming, D., Maslow, G., & Gifford, E. J. (2020). Mitigating the impacts of the COVID-19 pandemic response on at-risk children. *Pediatrics*, *146*(1), e20200973. https://doi.org/10.1542/peds.2020-0973
Zarate, R. P., Johnson, L., Mogendi, S., Hogue, C., Johnson, V., & Gazmararian, J. (2020). Barriers and facilitators to school-based health centers: Pilot data from 3 sites in Georgia. *Journal of School Health*, *90*(2), 107–118.
Zhang, L., Finan, L. J., Bersamin, M., & Fisher, D. A. (2018). Sexual orientation-based depression and suicidality health disparities: The protective role of school-based health centers. *Journal of Research on Adolescence*, *30*(S1), 134–142. https://doi.org/10.1111/jora.12454
Zhang, L., Finan, L. J., Bersamin, M., Fisher, D. A., & Paschall, M. J. (2020). Sexual orientation–based alcohol, tobacco, and other drug use disparities: The protective role of school-based health centers. *Youth & Society*, *52*(7), 1153–1173.

AUTHOR BIOGRAPHIES

Simon F. Haeder is an Assistant Professor of Public Policy in the School of Public Policy at The Pennsylvania State University. He is also a former Fellow in the Interdisciplinary Research Leaders Program, a national leadership development program supported by the Robert Wood Johnson Foundation. His research focused on politics and policies related to health access as well regulatory policymaking.

Emily Maxfield is a senior research analyst in the early childhood development research area at Child Trends. Her areas of focus include program evaluation, quantitative analysis, and child care access and quality.

Kara Ulmen is a research analyst in the early childhood development area at the Minneapolis office. She completed her MPH in maternal and child health along with a program evaluation minor from the University of Minnesota, Twin Cities.

Sara Amadon is a senior research scientist in early childhood at Child Trends. For 10 years, she has been conducting research on contexts (neighborhoods and schools) and policies (pre-K and child care) that support children from diverse backgrounds. She is also a former Fellow in the *Interdisciplinary Research Leaders* Program, a national leadership development program supported by the Robert Wood Johnson Foundation

How to cite this article: Haeder, S. F., Maxfield, E., Ulmen, K., Anderson, S., & Caseman, K. (2022). When a school is more than just a school: Improving school-based health in the wake of COVID-19. *World Med. & Health Policy*, 14, 150–177. https://doi.org/10.1002/wmh3.498