The Landscape of School-Based Health Services in Ohio
Results from a Fall 2021 Survey

Jessica Salley Riccardi, MS - Rebekah Russell, MPH
Catalina Beltran - Vishu Chandrasekhar
Sonia Minnes, PhD - Gabriella Celeste, JD
School Based Health Care in Ohio

Access to quality health services is vital to the overall physical and mental health of children and adolescents and K-12 schools have played an increasingly important role in ensuring students and their families have access to this care. The Ohio School Based Health Alliance (the Ohio Alliance) is a statewide professional organization that provides advocacy and technical assistance and supports high quality, sustainable models of health care in school settings (Ohio School Based Health Alliance, 2021). According to Love et al. (2018), a school-based health center (SBHC) is “a shared commitment between a community’s schools and health care organizations to support the health, well-being, and academic success of students by providing preventive, early intervention, and treatment services in school” (p. 1). SBHC providers have been serving communities in Ohio for over 30 years (Davis, 2021). School based health services (SBHSs) is used in this report to reflect the type of school-based health providers that completed this survey and encompass various types of delivery models and services in Ohio, including traditional SBHCs and other models of care such as mobile units. The term “SBHC” is used in this report when the referenced resources are specific to center-based service delivery models. The operations of and research on SBHCs can critically inform the broader framework of SBHSs.

Ohio SBHSs seek to create an accessible, connected community of caring adults around each student to keep them in class and learning (Ohio Department of Education, 2021a). Beyond the student population, more than two-thirds of SBHCs nationwide report providing services to children and youth from other schools in the community, out-of-school youth, faculty and school personnel, family members of students, and other community members (Keeton, 2012). As a result, SBHCs provide opportunities to impact health for entire communities.

In 2018, Ohio’s “School-Based Health Care Support Toolkit” was developed by the Governor’s Office and the Ohio Departments of Education, Medicaid, Health, and Ohio Department of Mental Health and Addiction Services to aid schools and districts in the development and maintenance of SBHSs (Ohio Department of Education, 2021a). In 2019, Ohio released “Each Child, Our Future: Ohio’s Strategic Plan for Education: 2019–2024” with the goal of “ensuring that each student is challenged, prepared and empowered for his or her future by way of an excellent prekindergarten through grade 12 education” (Ohio Department of Education, 2021a). “Each Child, Our Future” further reinforced the value of SBHSs to support schools, families, and the community in meeting the needs of the whole child.

SBHSs are a part of greater national and state efforts to support the whole child. School-aged children in Ohio have various physical and mental health issues, including but not limited to asthma,
tooth decay, depression, being overweight, and/or being obese (Ohio Department of Education, 2021a). The presence of SBHCs allows for students to remain in school while receiving healthcare, reducing time out of the classroom and increasing time spent learning (The Health Foundation of Greater Cincinnati, 2005). Research has shown an association between the presence of SBHCs and reduced absenteeism (Barnet et al., 2004; Gall et al., 2000). Moreover, SBHSs can act as an important safety net by improving healthcare utilization and access for Medicaid-insured youth who would not otherwise have healthcare (Hussaini et al., 2021; Wade, et al., 2008). Youth in schools with SBHCs are ten times more likely to utilize an SBHC for mental health services than a community health center or HMO (Juszczak, 2003). Given their known benefits, SBHSs in Ohio, including SBHCs, can play a critical role in student education and healthy development.

Creating and maintaining a sustainability plan is a core aspect of SBHS models. In Ohio, SBHS providers may receive funding from public and private insurance billing and grants from community, state, federal, private, or nonprofit sources (Ohio Department of Education, 2021c). Maintaining a continued source of funding is an ever-present challenge for SBHSs and a key driver for accurate and current data collection (Nystrom and Prata, 2008).

Survey Purpose for Ohio

Recognizing the value of SBHCs in Ohio, the Ohio School-Based Health Alliance developed a survey to better understand the reach and needs of schools that rely on SBHSs, including SBHCs and other models of SBHS delivery. This survey data will be used to provide the Ohio School-Based Health Alliance with accurate, expanded information about SBHSs’ demographics, services provided, utilization, and prevention activities. This data will be used to update statewide and national census information on current SBHSs’ practice and inform partnerships between Ohio SBHSs to facilitate data sharing and collaboration. This data will also be used for future SBHS advocacy efforts, to inform the broader effort in Ohio to improve child health and well-being and build support for public policies and investments that are informed by research.

Project Overview

The Ohio School-Based Health Alliance has a history of convening state school-based health partners and reporting state updates to the National School-Based Health Alliance. The Schubert Center for Child Studies at Case Western Reserve University focuses on bridging research, practice, policy, and education for the well-being of children and adolescents.

The Ohio Alliance identified a need to better understand the school-based health services landscape in Ohio and partnered with the Schubert Center for Child Studies to accomplish the
following project goals: update the Ohio School Based Health Alliance contact list of existing Ohio SBHS providers; understand the SBHSs landscape in Ohio, including scope and basic operating procedures; and utilize data to inform collaborative planning to better serve statewide SBHSs.

**Survey Methods & Sample**

The survey was developed collaboratively by the Ohio Alliance and Schubert Center teams. Questions on the National School-Based Health Care survey were evaluated to determine if they aligned with the Ohio Alliance’s needs and aims. In consultation with the Schubert Center, key questions were derived, including the addition of COVID-19-related questions, and Ohio Alliance leadership provided feedback on the format of questions (e.g., multiple choice options). The survey was created in Google forms and pilot tested on Ohio Alliance members. Edits were made after the pilot of the survey for clarity and the survey was finalized. The final survey included 29 general (pre-pandemic) service questions and 5 COVID-19 related questions, including multiple choice and short-answer questions. The survey took 5-15 minutes to complete depending on the survey completer and the site’s services.

The survey was launched at the end of July via email from the Ohio Alliance leadership to the Ohio Alliance site contacts. The survey was self-administered by site representatives on the Google forms platform. Three email reminders and up to three phone calls were completed by the Schubert Center team with the master contact list provided by the Ohio Alliance.

It is estimated that there are at least 140 SBHS sites in Ohio, given the master contact list provided by the Ohio Alliance. As of September 17, 2021 (six weeks after launch), 64 SBHS sites representing 34 or more school districts completed the survey. Contact was made with 23 other sites who were unable to complete the survey because the site was closed or the site did not have any data to complete the survey. In total, the survey contact rate was 55.41% (87 sites) with a 45.71% response rate (64 sites).

![Figure 1. Ohio Counties with SBHS sites](image)
School Based Health Services in Ohio

Of the 64 SBHS sites represented in the survey, 89.06% (57) were traditional school-based health centers co-located within a school, 6.25% (4) were mobile school-based health care, and 4.69% (3) were categorized as “other”. About half (51.61%, 32) of the sites had an exterior entrance separate from the school. Most sites were open year-round (67.19%, 42), five days per week (68.75%, 44), and 30+ hours per week (71.87%, 46). One-third of sites (33.33%, 21) had advisory boards that focused on organizational matters (19.05%, 4), community engagement (4.76%, 1), or both organizational matters and community engagement (76.19%, 16).

Clients Served

Forty-five (45) sites (70.31%) reported serving an average of 8.76 clients per day during a typical, non-pandemic year, with sites ranging from 2 to 30 clients per day. SBHS sites most often served multiple schools, depicted in Figure 2.

For 87.18% (34) of sites, at least 75% of their caseload is students. Only three (3) sites serve exclusively students. Forty-four (44) sites (70.31%) serve school members (i.e., students and staff) and fifty-two (52) sites (80.25%) serve families (i.e., students and parents/siblings). Twenty-eight (28) sites (43.75%) serve students, staff, parents/siblings, and children and adults from the community. The groups of clients served by sites is depicted in Figure 3.
Types of School-Based Health Services

SBHS sites offered a range of seven (7) to 14 services. All sites (100%) offered sick visits, well-child visits, and vaccinations. The types of services offered by SBHS sites are depicted in Figure 4. Most sites (95.31%, 62) offered telehealth services with an average of 5.78% of services being delivered through telehealth. Specific types of outcome measures were reported by 34 sites, in which single sites could report multiple outcome measures.

- Twenty-eight (28) sites used healthcare outcome measures (e.g., UDS Measures for HRSA; HEDIS; PCMH; Social Determinants of Health; developmental screenings; immunization compliance; emergency department utilization; clinical indicators across primary care, vision, dental).
- Nine (9) sites use operations-related outcome measures (e.g., program enrollment; utilization data; billing data; scheduled appointments/no shows; visit volumes; patient satisfaction surveys).
- Eight (8) sites use School-Based Health Alliance outcome measures (e.g., National Quality Indicators, immunization compliance).
- Eight (8) sites use other outcome measures, such as data requests of foundations, funders, and partners (e.g., Growing Well), Pathways Hub, and educational outcomes.

Figure 4. Types of Services Offered by SBHS Sites (n = 64)
**COVID-19 Related Services**

Most sites (96.88%, 62) offered services during the COVID-19 Pandemic. When asked if the site offered testing or vaccinations in the past and currently (i.e., at the time of survey completion), 79.69% (51) reported offering COVID-19 testing in the past, while 78.13% (50) offered testing currently, and 46.88% (3) reported offering COVID-19 vaccinations in the past, while 23.44% (15) offered testing currently. Based on conversations with the Ohio Alliance leadership, the decrease in COVID-19 related-services was likely attributable to facility restrictions (e.g., refrigerators, storage, potential waste of vaccines) that decreased sites’ capacities to maintain these services. Further, pharmacies partnered with larger clinics during the early stages of testing and vaccinations to best reach clients, but these partnerships have decreased over time as need has decreased.

Thirty-four (34) sites reported on changes made due to the COVID-19 Pandemic. Sixteen (16) sites reduced hours or days open, 13 sites expanded delivery models (e.g., increased telehealth offerings), and nine (9) changed protocols/logistics (e.g., rotated open sites, condensed to a single site, no overlapping visits).

**School-Based Health Services Site-Reported Needs and Opportunities**

Approximately half of sites (49.15%, 20) reported care gaps or areas of need (i.e., needs not being met and whether the Ohio Alliance could be of assistance). Figure 5 depicts the care gaps or areas of need identified by the 20 SBHS sites, in which single sites could endorse multiple categories of responses. Vision and dental services were most frequently reported as an unmet service need of clients of 19 and 15 SBHS sites, respectively. Additional care gaps and areas of need are depicted in Figure 4. When asked about future changes and opportunities, 42.19% of sites (27) stated changes are being implemented for the upcoming school year, largely in service delivery and operations, and 64.52% (40) of sites were interested in sharing data with SBHS providers and other stakeholders.

![Figure 5. Care Gaps or Needs of SBHS Sites (n = 20)](image_url)
Project Limitations and Opportunities

This project sought to understand SBHSs characteristics in Ohio and identify opportunities for collaboration, expansion, and support. There are several limitations and challenges that warrant discussion. Most importantly, there was limited representation of SBHS sites in this project as only 64 sites (of an estimated 140 sites) participated. This may be explained by the fact that many sites are under the same funding source and may not have responded in a way to reflect all the sites under consideration. Moreover, some sights may not have been able to complete the survey as a result of responder availability, limited knowledge about each SBHS, and/or the short time frame for respondent contact and survey completion that coincided with the start of the academic year with continued COVID-19 disruptions. Lastly, limited contact information for each site likely negatively impacted representation and no open-source database was available to obtain such information. An additional consideration is that data collected during the COVID-19 pandemic may not reflect past/future patterns and may also have impacted site ability to complete the survey. These limitations provide useful information for future research.

Future projects can improve on this current effort in many ways. It is recommended that continuous SBHS site-engagement could improve responder participation and be used to maintain updated contact information for each site. Engagement could be facilitated by partnering with state agencies such as the Ohio Department of Health, Ohio Department of Education, and Ohio Department of Medicaid to identify sites and contact information. In addition, improvements in study design could also increase the impact of future surveys. For example, more-in depth surveys in the future should include information on funding, demographics of students and others served, and student outcomes and outcomes of others served. An expanded survey would likely require more project time overall and would ideally be conducted by someone with knowledge and well-established relationships with existing education agencies (e.g. Ohio Department of Health, Ohio Department of Education, etc.) and expertise on the school-based health system. Lastly, one-on-one interviews with site staff may provide more detailed knowledge on the needs and opportunities to expand SBHSs and better support existing sites and their services.
References


