Overview
In January 2017, HPIO released Connections Between Education and Health, the first policy brief in a four-part series. It describes the two-way relationship between health and education, explaining that people with higher educational attainment generally have better health outcomes and that healthier children are more likely to have academic success. This brief (policy brief No. 2) and the two upcoming briefs described in the box below explore specific evidence-based policies and programs that have demonstrated both health and education benefits.

Students with untreated physical and/or mental health conditions often struggle academically. They are more likely than healthier peers to be absent from school and often have difficulty paying attention and learning while in class. Research has shown that schools can positively impact student achievement through health improvement efforts.\(^1\)

Schools cannot address the complex health-related needs of children alone, especially with limited financial resources. Effective solutions must include parents and often require collaboration with others in the community. School leaders increasingly recognize the value of addressing non-academic barriers to student success and partnering with community healthcare and social service providers to address these barriers. For example, schools have begun to offer students greater access to health services. Providing health services in schools has many benefits, including:

- Less missed class time for students
- Less lost work time for parents
- Enhanced access to healthcare services for low-income children who are uninsured or have other barriers to accessing care (e.g. transportation)
- Early detection of health issues
- Improved management of chronic conditions such as asthma and diabetes
- Prevention of more costly emergency room visits and hospitalizations
- Greater trust of providers in a school setting among parents and students\(^2\)

Schools are well-positioned to identify and address student health needs, given that nearly all children attend school an average of six hours a day, five days a week, eight to nine months a year. In addition, schools often provide before and after school care and summer programming.

This brief describes how Ohio schools are providing health services to students, including an overview of relevant federal and state policies and programs and the types of health professionals commonly working in schools. The brief also explores school partnerships to provide health services, with an emphasis on school-based health centers. The provision of mental health and preventive services in schools is also discussed, along with policy options to expand health services in schools.

Additional HPIO education and health publications and resources
- Policy brief No. 1 explains the relationship between education and health and describes factors impacting this relationship (Released: January 2017)
- Policy brief No. 3 explores early learning policies and programs, including early childhood education and family supports and social-emotional development (Released: October 2017)
- Policy brief No. 4 describes school-based interventions to prevent drug use and violence and promote mental health (Released: August 2018)
- Additional resources can be found on HPIO’s Intersections between education and health online resource page
Common health conditions among school-age children
The prevalence of chronic conditions among children has increased in recent decades. Examples of common health conditions found among school-age children include asthma, food allergies and tooth decay. The proportion of children who are overweight or obese has also increased, leading to other conditions such as diabetes (see figure 1). Mental health disorders affect an estimated one in five children, with Attention-Deficit/Hyperactivity Disorder (ADHD), behavioral or conduct problems, anxiety and depression being the most prevalent. Research indicates that half of all psychiatric illnesses begin before the age of 14 and 75 percent begin by age 24.

Current landscape: health services in schools
Neither federal nor Ohio law requires schools to provide comprehensive health services to all students. However, several federal and state policies and programs outline requirements related to the provision of health services in schools, particularly for children with special health needs and Medicaid reimbursement for health services provided in schools.

Whole School, Whole Community, Whole Child (WSCC) framework
The WSCC framework, developed by the Centers for Disease Control and Prevention (CDC) and ASCD (formerly known as the Association for Supervision and Curriculum Development), provides school leaders with a comprehensive approach for addressing health-related barriers to learning. It calls for greater collaboration across the community, school and health sectors, providing the opportunity for these sectors to leverage limited resources and work together to provide effective and efficient programs and services to improve both the health and academic success of students. This framework shifts the conversation from being narrowly focused on academic achievement to one that promotes long-term development and success of the whole child. The model envisions a child who is challenged, healthy, safe, engaged and supported. The model includes ten components, which represent a full range of learning and health system supports:
- Health education
- Physical education and physical activity
- Nutrition environment and services
- Health services
- Social and emotional climate
- Counseling, psychological and social services
- Physical environment
- Employee wellness
- Family engagement
- Community engagement

The goal is to implement all components school-wide, but each component on its own has been found to positively influence student health and academic achievement.

Figure 1. Common health conditions among school-age children in Ohio

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Percentage of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (2014)</td>
<td>14%</td>
</tr>
<tr>
<td>Tooth decay (2013-2015 school years)</td>
<td>51%</td>
</tr>
<tr>
<td>Overweight or obese (2013)</td>
<td>29%</td>
</tr>
<tr>
<td>Overweight or obese adolescents (ages 12-17)</td>
<td>12%</td>
</tr>
<tr>
<td>Major depression who did not receive mental health services (2012-2013)</td>
<td>64%</td>
</tr>
</tbody>
</table>

Sources: Behavioral Risk Factor Surveillance System; Ohio Department of Health Third Grade Oral Health Screening Survey; Youth Risk Behavior Surveillance System; National Survey on Drug Use and Health; Mental Health America
The Individuals with Disabilities Education Act

The Individuals with Disabilities Education Act (IDEA), a federal law overseen by the U.S. Department of Education, mandates that all children with special health needs receive "free appropriate public education." Part B of the Act requires schools to provide special education and related services for school-age children with disabilities, including intellectual disabilities, hearing, speech, language or visual impairments, emotional disturbances, orthopedic impairments, autism, traumatic brain injury and specific learning disabilities.

Children’s needs are identified and documented in an individualized education plan (IEP). The IEP outlines the services that must be provided to the student, including related medically necessary services such as physical and speech therapy. In the 2016-17 academic year, approximately 243,000 children in Ohio had an IEP.

The federal government provides some funding to states to cover a portion of the cost of IDEA requirements. States and individual school districts must fund the remainder. In FY 2015, the IDEA federal funding gap in Ohio was estimated to be $646.3 million.

Free care policy

In the past, the federal Centers for Medicare and Medicaid Services (CMS) generally did not allow Medicaid to reimburse for services provided to Medicaid-eligible students if the services were available without charge to all students or the community at large (referred to as “free care”). In December of 2014, CMS issued new guidance to “facilitate and improve access to quality healthcare services and improve the health of communities.” Under this guidance, CMS allows Medicaid to reimburse for Medicaid-covered services provided to Medicaid beneficiaries, regardless of whether the services are also provided without charge to others in the school or community.

This change can alleviate some of the financial burden on schools providing health services and facilitate expanded access to health services in schools. However, to take advantage of this new policy, states may need to make changes to their Medicaid state plan and/or other regulations. Ohio Medicaid would need to submit a state plan amendment (SPA) and make changes to its administrative policies to allow Medicaid to reimburse schools. To date, Ohio has not done so.

Types of providers in schools

Providing healthcare services in schools is not a new idea. Nurses have been working in schools for over a century and continue to play a central role in school health programs and services. School nurses are often employed by school districts and may serve multiple school buildings. Some districts contract with local health departments or other community healthcare organizations for nursing services. Healthy People 2020 recommends that schools have at least one full-time registered school nurse for every 750 students.

Ohio’s Medicaid Schools Program

Ohio’s Medicaid Schools Program (MSP) allows Medicaid to pay for Medicaid-reimbursable services delivered to Medicaid-eligible children who receive services included or indicated on an IEP. In Ohio, therapists (including physical, occupational and speech therapists) enrolled in the Medicaid program can make referrals for services independent of an outside medical order. Schools often contract with third party administrators to manage Medicaid billing and reimbursement processes.

Both traditional school districts and charter schools in Ohio can take part in the MSP and receive Medicaid reimbursement. Approximately 85 percent of traditional schools in Ohio took part in the MSP program in the 2016-17 academic year. The program is administered jointly between the Ohio Department of Medicaid (ODM) and the Ohio Department of Education (ODE).

Medicaid MSP reimbursement to schools totaled $73 million in FY 2015. Medicaid is financed through a federal-state reimbursement arrangement based on the Federal Medical Assistance Percentage (FMAP). Through this arrangement, states receive partial reimbursement from the federal government for healthcare services provided to Medicaid enrollees at a rate that generally varies between 50 and 83 percent for most enrollees. The remaining costs are paid by a state match allocated through state General Revenue Fund (GRF) dollars. For Ohio’s MSP, local school districts, not the state, are responsible for this “match”, which is typically paid through local tax/levy dollars instead of state GRF dollars.

For more information on Ohio’s Medicaid program and FMAP rates, see Ohio Medicaid Basics 2017.
Policy proposals in Ohio to improve student health

The Governor’s Office of Health Transformation (OHT) has indicated interest in improving academic achievement through better student health. Proposed strategies outlined in OHT’s 2018-2019 budget white paper are summarized below:

• OHT and ODE would reconvene a School Health Advisory Council (originally convened in 2014) to develop a school health care toolkit, which would provide guidance to school districts on how to address barriers to forming school-based health care partnerships. The tool kit would be made available to school districts in mid-2017. ODE would also provide technical assistance upon request to schools pursuing school-health care partnerships. The Council included representatives from schools, healthcare providers, state and local government, the business community, parents and student advocates.

• Through implementation of the comprehensive primary care (CPC) payment model, primary care practices would earn financial rewards for meeting certain quality targets to keep children well, such as adolescent well-care visits and weight assessment and counseling for nutrition and physical activity. Practices could use these additional dollars to partner with schools to improve student health.

• Medicaid managed care plans would be financially rewarded for improved academic performance of their enrollees in low-performing schools. Specific performance metrics would be identified by ODM and ODE.

Notably, the final 2018-2019 budget included a provision prohibiting ODM from implementing a program during the 2018-2019 fiscal biennium under which Medicaid managed care plans could receive incentives for helping students with Medicaid attending low-performing primary schools improve their academic performance.

The 2017-2019 State Health Improvement Plan, developed with input from many state and local-level stakeholders, under the auspices of OHT and the Ohio Department of Health, also includes several objectives and recommended strategies, such as the implementation of school-based health centers, aimed at improving academic achievement and student health.
In 2015, Ohio repealed a provision of state law adopted in 1983 which regulated the ratio of certain staff to students within a school district. Under the provision, known as the “5 of 8 rule,” schools were required to employ, at minimum, five full-time equivalent educational service personnel selected from the following eight personnel areas for every 1,000 students in their district: counselor, library media specialist, visiting teacher, social worker, school nurse and elementary art, music or physical education personnel.

Because there is no mandate in Ohio for schools to employ nurses, these positions are susceptible to being cut in periods of economic downturn. This may explain the decrease in school nurses from 2009 to 2012 (see figure 3). However, data from the Ohio School Health Profiles survey shows that the percentage of schools with a full-time registered nurse providing health services to students increased overall from 40.2 percent in the 2007-2008 school year to 44 percent in the 2015-2016 school year. Since the “5 of 8” rule was repealed in 2015, continued monitoring of these numbers will be helpful in evaluating whether the policy change will impact the percent of schools with a full-time registered nurse going forward.

Partnerships for providing health services in schools

School leaders increasingly recognize the value of addressing non-academic barriers to student success and partnering with healthcare and social service providers in the community to address these barriers. Because funding constraints limit the extent to which schools can afford to employ full-time school nurses and other school-based healthcare professionals, forming partnerships with organizations in the community can be a powerful and cost-effective option.

Partnerships may take several different forms along a continuum ranging from low collaboration and coordination with external partners to partnerships that make schools a location where the entire community can access healthcare services and other supports (see figure 4). These arrangements expand the scope of preventive, diagnostic and treatment services available to students.
School-based health centers (SBHCs) are health centers located within or near a school that deliver health services to students (pre-K through grade 12). Some SBHCs also serve school staff, parents and siblings of students and other community members. In these cases, SBHCs often stay open beyond normal school hours and/or during summers.34

In a typical SBHC model, a sponsoring entity operates and administers the SBHC and employs or contracts with staff to provide healthcare services. SBHCs are commonly sponsored by community healthcare providers such as federally qualified health centers (FQHCs), hospitals or local health departments.35 Less often, an SBHC is sponsored by a school system, nonprofit organization or university.36

Services provided by SBHCs vary based on community need. SBHCs typically provide primary care and preventive services, but can also offer dental, vision and/or mental health services. Reproductive health services can also be offered, as allowed by school district policies.37 It is most common for SBHCs to be staffed by a primary care provider, such as a nurse practitioner or physician’s assistant, although some SBHCs are staffed by a more comprehensive multi-disciplinary team of clinicians.

School-based health center landscape and challenges
There is no formal standardized reporting of SBHCs in Ohio. However, various stakeholder groups, including the Ohio Association of Community Health Centers, indicate that there are more than 60 SBHCs in the state to date, with more than half sponsored by an FQHC.38 Many of Ohio’s SBHCs are in the Cincinnati-Hamilton County region, although SBHCs also operate in other areas of the state, including Cuyahoga and Franklin Counties. Several of the key challenges that arise when integrating SBHCs into schools are described in the subsequent pages.
Reimbursement and financial sustainability

Reimbursement for SBHCs is critical, but schools are not designed to bill third party payers (e.g., Medicaid and private health insurers) for healthcare services. In Ohio, SBHCs also are not considered a separate provider type, which restricts their ability to receive payment directly from a health plan. SBHCs often serve students with Medicaid coverage and/or those who are uninsured. Consequently, ensuring financial sustainability while providing healthcare services regardless of a student’s ability to pay can be extremely challenging for an SBHC.

Partnerships with FQHCs and FQHC look-alikes as sponsoring entities can provide added benefits – particularly for SBHCs established in underserved areas with a higher proportion of students enrolled in Medicaid. FQHCs and FQHC look-alikes are reimbursed under a prospective payment system, which provides a higher payment rate under Medicaid. In addition, FQHCs have access to federal grants, programs and federal safety net protections that may not apply to other providers, such as medical malpractice protections under the Federal Tort Claims Act.

SBHCs can improve financial sustainability by expanding their target population to additional school sites within a district or providing services to individuals within the surrounding community. SBHCs may also rely on supplemental funding from other entities to maintain sustainability, including funding from the state or private entities and foundations.

Prior authorization

State Medicaid programs may require beneficiaries to select or be assigned a primary care provider. Under these circumstances, healthcare services provided to a Medicaid beneficiary by another provider can require pre-approval or prior authorization from a Medicaid managed care plan in order to get Medicaid payment. SBHCs may therefore have to obtain approval to provide healthcare services to their students with Medicaid coverage in order to be eligible for reimbursement.

Privacy issues

SBHCs must ensure compliance with laws regulating use of personal health and education information. The federal Health Insurance Portability and Accountability Act (HIPAA) sets privacy and security standards for a person’s protected health information. Health information included in a child’s education records may also fall under the federal Family Educational Rights and Privacy Act (FERPA), which protects the privacy of a student’s education records. Determining when HIPAA or FERPA applies and navigating the overlap between these two federal laws can be challenging for an SBHC.

School-based telehealth services

The development of telehealth technology and its growing implementation provides a promising opportunity to integrate and expand upon health services provided in schools. Telehealth, or telemedicine, includes the use of electronic information and communications technology to deliver clinical services to patients from a distance.

School-based telehealth services can provide students with increased access to primary, acute and specialty care, and increased overall access to healthcare services for students living in rural or designated health professional shortage areas. Research suggests that telehealth services can also be a more cost-effective way to provide healthcare services.

Reimbursement for telemedicine under Ohio Medicaid

There is no federal law regulating Medicaid or private payer coverage of telehealth services. There are also no widely accepted guidelines around telehealth reimbursement for Medicaid or private payers, so laws vary greatly from state to state.

Ohio Medicaid pays for telemedicine in certain settings under OAC 5160-1-18. To qualify for reimbursement, a patient must be seen at one of the following locations: office of an MD, DO, optometrist or podiatrist, an FQHC, rural health center or primary care clinic, outpatient hospital, inpatient hospital or nursing facility.

A school cannot be reimbursed for telemedicine services under the rule. However, an SBHC sponsored by one of the provider types listed above may qualify for reimbursement. To qualify for reimbursement, the site at which the patient is located and the site where the provider is located must be outside of a five-mile radius from one another.

In early 2017, Ohio Medicaid sought stakeholder comments on potential revision of its telemedicine rule. Revision of the rule could provide an opportunity to expand reimbursement for school-based telehealth/telemedicine services.
Space
In many SBHCs, the school provides space to the sponsoring entity free of charge and often covers the overhead costs associated with operation of the SBHC. In other models, the school may charge the sponsoring entity rent or an overhead/utility fee to cover the cost of space.

Designating space for an SBHC on school grounds can be a significant obstacle. However, schools and communities interested in establishing SBHCs have been able to identify innovative ways to overcome space issues or acquire start-up funding to build out space on school grounds. The Ohio School Facilities Commission also offers blueprints for new-build schools in Ohio to guide design of an SBHC or clinic space from the ground up.

Other challenges
Other challenges to SBHC implementation include:
- Obtaining parental consent as needed to provide health services to students
- Securing buy-in and engagement from teachers, administrators, parents and community members
- Ensuring academic teaching time is minimally interrupted

Provision of mental health and preventive services in schools
Prevention, early detection and early intervention in childhood are key to avoiding more complex and expensive problems later in life. Schools are well-positioned to address mental health conditions in students and promote healthy behaviors that can help them develop a foundation for physical and mental wellness later in life.

Mental health services
One in five children exhibits symptoms of mental health problems severe enough to warrant clinical intervention; however fewer than 20 percent of these children receive needed treatment. This percentage is even lower for minority populations. Students with mental health conditions miss three times as many days of school and are at a higher risk of not completing high school. Mental health conditions can also lead to behavioral problems in the classroom. Elementary school children with mental health conditions are three times more likely to be suspended or expelled. These conditions also can lead to entrance into the juvenile justice system, substance use or suicide.

Approximately 70 percent of children who receive mental health treatment access services at school. Students are much more likely to seek and follow through with treatment that is provided in their school. One study found that students with access to an SBHC were 10 times more likely to initiate a visit for a mental health or substance use concern than students without access to these services at school.

Evidence on the effectiveness of school-based health centers
SBHCs have been proven to increase access to care and improve health and academic achievement among students. Although outcomes vary depending on the types of services offered, hours of operation and other factors, research has identified the following benefits associated with SBHCs:
- Improved grade point averages
- Higher rates of high school completion
- Increased grade promotion
- Increased vaccination rates and provision of other clinical preventive services
- Better asthma management
- Fewer emergency department visits and hospitalizations
- Improved health behaviors

SBHCs also provide a positive return on investment and have been found to produce savings for Medicaid. Studies have shown net savings to Medicaid ranging from $46 to $1,166 per SBHC user. Studies report pharmaceutical savings and lower emergency department and hospitalization expenses, especially for children with asthma, which outweigh the costs of increased provision of preventive care, dental care and mental health services through SBHCS.
School mental health programs can range from minimal support services provided by a school counselor or other school-based professional to a comprehensive continuum of mental health services and supports, ranging from universal prevention to more targeted, intensive clinical interventions. Many effective school-based mental health programs offer three tiers of interventions (see figure 5). This approach is consistent with the Multi-Tier Systems of Support (MTSS) and Positive Behavioral Interventions and Supports (PBIS) frameworks and has been found to produce a number of positive outcomes among students, such as improved grades and better attendance.

The first tier involves schoolwide mental health prevention efforts which aim to decrease risk factors, build resilience and promote mental wellness among students. Such interventions produce a more positive and supportive school environment. Social-emotional instruction is an example of an evidence-based strategy used in the first tier. There are a number of programs proven to promote social and emotional development, such as the PAX Good Behavior Game and Second Step.

The second tier applies to a smaller number of students for whom mental health concerns have been identified but are not to the level of causing impairment. Services for students in this tier normally involve individual or group counseling. These early intervention efforts may reduce the need for more intensive support later. The third tier involves the smallest number of students – those with more severe mental health symptoms and diagnoses for whom more intensive clinical interventions are needed.

Because schools often do not have professionals on staff to support all students’ mental health needs, especially those requiring more intensive intervention, schools are increasingly turning to partnerships with community-based mental health professionals for provision of these services. These professionals often can receive payment from Medicaid and private health insurers for services in the second and third tiers. However, shortages of mental health providers are an ongoing challenge, especially in rural areas. For example, a shortage of school psychologists has been identified in Ohio.

Prevention
In addition to treating physical and mental health conditions, schools can also take steps to help prevent these conditions from developing in the first place and to identify them early. For example, Ohio law requires schools to deliver vision and hearing tests.
Together, federal and state policies outline a minimum threshold for the provision of health services in Ohio’s schools but fall short of providing a comprehensive policy for providing and funding school health services. Several other states have established more extensive policies to facilitate provision of health services in schools. For example:

**Maryland** state law mandates the provision of health services in schools by a designated school health services professional defined as a physician, certified nurse practitioner or registered nurse. Each county board of education in Maryland is also required to designate a school health services coordinator charged with implementing state and local health policies in the county’s public schools.

**Maine**, **Minnesota**, **Louisiana**, **West Virginia** and a number of other states also have mandatory nurse-to-student ratios or require school districts/schools to appoint or employ school nurses.

**Illinois** set comprehensive operational and quality standards for school-based/linked health centers (SBHLC) in law including standards around staffing, access and scope of services provided. Under Illinois law, an SBHLC must provide 24-hour coverage throughout the entire year, routinely publicize its services to the student body and the community and ensure that staff is educated in cultural diversity.

In **Michigan**, joint state funding is provided through the Michigan Department of Health and Human Services and the Michigan Department of Education to about 100 Child and Adolescent Health Centers (CAHCs) across the state. The CAHCs include school-based and school-linked health centers that provide primary, preventive and mental health services to school-age children. CAHC performance is monitored by the state across a set of key quality and clinical performance measures.

The School-Based Health Alliance 2013-2014 National Census indicates that state funding is made available to SBHCs in other states including **New York**, **New Mexico**, **West Virginia** and **Connecticut** through state general revenue funds, tobacco settlement dollars and/or Title V Maternal and Child Health Block Grants.

For more information, see our “Intersections between education and health” online resource page, which will be continually updated throughout 2017.

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Policy options to expand health services in Ohio schools

State agencies and policymakers
1. Incentivize partnerships with SBHCs through Medicaid managed care plans and the Comprehensive Primary Care initiative.
2. Create seamless data sharing agreements and procedures between and among state agencies that ensure the effective and timely delivery of services to K-12 school districts.
3. Ensure that the development of the school-based health care partnership toolkit, as proposed in the OHT 2018-19 budget white paper, includes guidance for navigating federal privacy laws (HIPAA and FERPA).
4. Reinstate and continue to convene the School Health Advisory Council.
5. Maintain chronic absenteeism as the indicator of school quality/student success in the state plan required under the Every Student Succeeds Act (ESSA).
6. Formally adopt the Whole School, Whole Community, Whole Child framework (i.e., comprehensive approach to addressing non-academic learning barriers) to inform education and/or health policy decisions.
7. Allocate direct funding to SBHCs through the General Revenue Fund or the Maternal and Child Health Block Grant.
8. Allocate direct funding to schools to employ healthcare professionals, such as a full-time school nurse.

Ohio Department of Medicaid, Medicaid managed care plans and private health insurers
9. Waive or mitigate prior authorization requirements for SBHCs.
10. Explore ways to provide enhanced payments to SBHCs including creating an SBHC provider type.
11. Remove barriers to reimbursement of school-based telehealth services, such as making an SBHC a qualifying provider.
12. Make the necessary changes to Ohio Medicaid’s state plan (through a state plan amendment) and administrative regulations to facilitate implementation of the new CMS free care policy guidance in Ohio.

Providers
13. Partner with schools to deliver health-related programs and services to students through SBHCs, mobile clinics or other collaborations.
14. Work with schools to develop an infrastructure that links school-based health records with students’ electronic health records.

Boards of education/school districts
15. Integrate mental health services, including prevention, early intervention and treatment into school-based health care.
16. Consider space to provide school-based health services when planning school building construction or expansion.
17. Employ a school health coordinator to oversee the delivery of health-related programs and services across all schools in the district.
18. Evaluate the impact of school-based health services on chronic absenteeism and academic outcomes.

Community members and other interested parties
19. Participate in school health advisory groups to regularly assess student and school health needs at the district or school level and to assist in developing policies and programs to address identified health needs.
20. Support organizations like Growing Well (state affiliate of the national School-Based Health Alliance) that advocate for the expansion of SBHCs in the state and provide guidance and technical assistance for the establishment of new SBHCs.
21. Include schools, primary care and behavioral health partners in local community health improvement planning led by local health departments and hospitals.