SCHOOL-BASED HEALTH CENTERS

2018 EVALUATION REPORT

DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health

DELAWARE HEALTH AND SOCIAL SERVICES
Division of Public Health
A Nationally Accredited Health Department

Evaluation Report:
Assessing the impact of Delaware's School-Based Health Centers (SBHCs) on health outcomes

Mission — Protect and Promote the Health of all People in Delaware

Vision — Healthy People in Healthy Communities

Core Values — Integrity–Respect–Participation–Accountability–Teamwork–Excellence

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EXECUTIVE SUMMARY

There are 31 wellness centers, or School-Based Health Centers (SBHCs), in Delaware high schools. They are operated by five medical providers (i.e. Christiana Care Health Services, Inc., Bayhealth, Beebe, La Red Health Services, and Nanticoke). For more than 30 years, the SBHCs have provided health care services without comprehensive evaluation of outcomes. This initiative, in response to a charge from the Delaware School Based Health Alliance (DSBHA), provides an initial evaluation of SBHCs and informs future evaluation efforts.

The specific aims of this study were to:

Aim 1. Explore students' and parents'/guardians' perceptions of health outcomes, satisfaction with services, and costs and/or potential costs savings associated with episodic care of those who use SBHCs.

Aim 2. Examine the relationship between use of SBHCs and health care utilization.

This mixed methods study included focus groups and secondary data analyses to explore our proposed aims. This qualitative data reflected the high-quality services rendered by the SBHCs and their ability to meet the unique needs of teens. The themes that emerged from the focus group analysis included:

- Confidentiality, consistency, cost, convenience
- Relationships: Caring, trust, and teen orientation without judgment
- Stay in school, class, and seat
- Health care: Access, education, and self-advocacy
- Mental health: High needs, high quality care

Quantitative data demonstrated that there is some evidence of impact of SBHCs on health care utilization. We found that Medicaid eligible SBHC enrolled students were more likely than non-SBHC students to have a higher number of well child visits, annual risk assessments, Body Mass Index (BMI) screening, nutrition counseling, physical activity counseling, chlamydia and sexually transmitted infection (STI) screenings, and mental health visits, which are National Performance Measures (NPMs). With regards to overall healthcare utilization results indicated that on average students who were enrolled in SBHCs and Medicaid eligible had higher utilization (measured as office visits as compared to non-enrolled who were Medicaid eligible). We also found support to our hypothesis that even after stratifying for race and ethnicity, SBHC enrolled students who were Medicaid eligible had higher utilization as compared to non-enrolled SBHCs who were Medicaid eligible. The results suggest that race and ethnic minorities who may lack access to services can benefit from availability of services lending support to improved health of low income minority students, which facilitate improved health equity.

Conclusions drawn from triangulation of the quantitative and qualitative data highlight the mental health and other health care needs prevalent among teens and the ability of the SBHCs to meet those needs based on funding and staffing available. The study highlights the fact that opportunities exist to increase utilization and membership of the SBHCs, as well as capacity. Several major points (the “So what?”) and recommendations (the “Now what?”) are included within this report.

SCHOOL-BASED HEALTH CENTERS

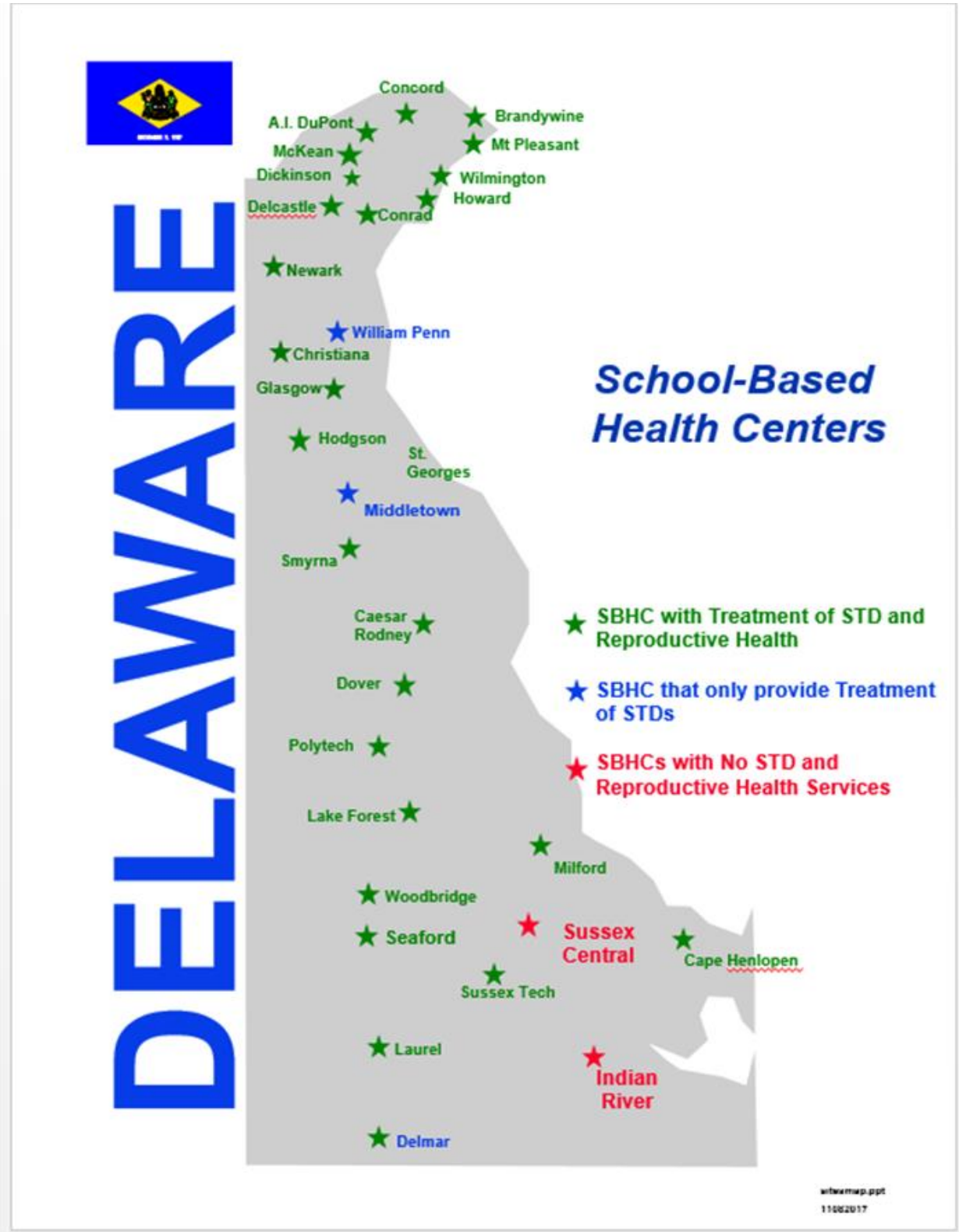
Although health insurance coverage among the U.S. population increased following the implementation of the Affordable Care Act (ACA) [1], having health insurance does not necessarily imply access to and/or use of health services. Children who, for a variety of reasons, may not otherwise access the health care system may access critical health services through SBHCs.

SBHCs provide health services to students located within schools or at off-site locations. SBHCs operate in different socio-political and economic contexts and benefit children and adolescents' physical, psychosocial, and emotional needs by providing access to health services [2]. A total of $200 million was available through the ACA to support SBHCs in the U.S. in 2010 and 2013 [2]. One recommendation from the Community Prevention Services Task Force (CPSTF) is that SBHCs may be located in low income communities, assuming there is sufficient evidence of improving educational and health outcomes [3].

The School-Based Health Alliance (SBHA) indicates that there are 2,315 SBHCs in the U.S. [4]. In Delaware, SBHCs are operated under statutory regulations 18 Del. C. §3365 and 3517G and defined as "a health care clinic located in or near a school facility that is organized through school and health provider relationships that provides services…"[5]. Services offered in SBHCs may include comprehensive health assessments; diagnosis and treatment of minor, acute, and chronic medical conditions; nutrition consultation and education; referrals to and follow-up for specialty care; oral and vision health services; mental health and substance use disorder assessments; crisis intervention and counseling; and referrals to community support programs. In addition to some of these services, SBHCs must promote the provision of all vaccinations required or recommended by the DPH to students either on site or through referral. Diagnosis and treatment of sexually transmitted infections, reproductive health, provision of birth control, and HIV testing and counseling may be provided by a SBHC subject to the approval of the school board governing the SBHC.

There are 19 school districts in Delaware with approximately 225 public schools that include early education, special instructional learning centers (ILC), middle schools, vocational and technical schools, and high schools [6]. There are currently 31 SBHCs operated by five medical providers. SBHCs, commonly known as wellness centers, serve children and adolescents who attend these schools and who have a parental consent form [7]. Figure 1 provides the location of these 31 SBHCs in Delaware.

Figure 1. School-based health centers in Delaware, 2018



Despite a statewide network of SBHCs in Delaware, there is considerable variation in the provision of health care services both at local and national level [7]. In Delaware the variation in services provided by SBHCs are specific to operational requirements such as parental consents, service availability, staff, and school board policies. For example, more than half of SBHCs provide contraceptive services and treatment for STIs (n = 20; 70%); 20 percent of SBHCs (n = 6) do not provide contraceptive services but include treatment services for STIs; and approximately 10 percent (n=3) provide no reproductive health care services [7]. It is important to note that SBHCs in Delaware do not supplant the services provided by primary care physicians (PCPs), but rather coordinate care between students and their PCPs and increase access to services.

This report is responsive to the expressed need by DSBHA for an outcome-based evaluation of SBHCs. The DSBHA hopes to use evaluative outcome-related data to demonstrate the value of SBHCs to the public, school administrations, legislators, and funders. After several discussions during 2017 with DSBHA and other stakeholders, DPH developed an evaluation proposal with a primary goal to assess whether students who access services in Delaware-based SBHCs have better health outcomes as compared to students who do not access SBHC services. Although stakeholders expressed the need to examine educational outcomes resulting from improved health due to utilization of SBHCs, the authors of this report focused on health in this preliminary evaluation due to the lack of available of data on educational outcomes, and because health outcomes were listed as a top priority.

1.1 Background and Literature

In a comprehensive systematic review of the evidence, Knopf et al. (2016) noted that SBHCs were associated with educational benefits such as fewer suspensions, lower rates of recidivism, higher grade point averages, and increased grade promotion. In addition, SBHCs were linked to increases in recommended immunizations and other preventive services [8]. Regarding health outcomes, Knopf et al. noted that there were fewer asthma symptoms and asthmatic-related incidents, substantial reductions in Emergency Department visits and hospital utilization for all conditions, and a small effect on self-reported health and mental health status [8]. Similarly, Ran et al. (2016) suggest that the total annual benefit per SBHC ranged from $15,028 to $912,878, while Medicaid savings ranged from $30 to $960 per visit [4]. Furthermore, recent evidence suggests that SBHCs reduce barriers to accessing mental health services [9].

Despite the positive findings that SBHCs improve health outcomes and reduce health care costs, systematic reviews found that there is insufficient evidence to quantify the impact of SBHCs on risk-taking behaviors among adolescents (e.g., smoking, substance use, nutrition, and physical activity, contraceptive use among male

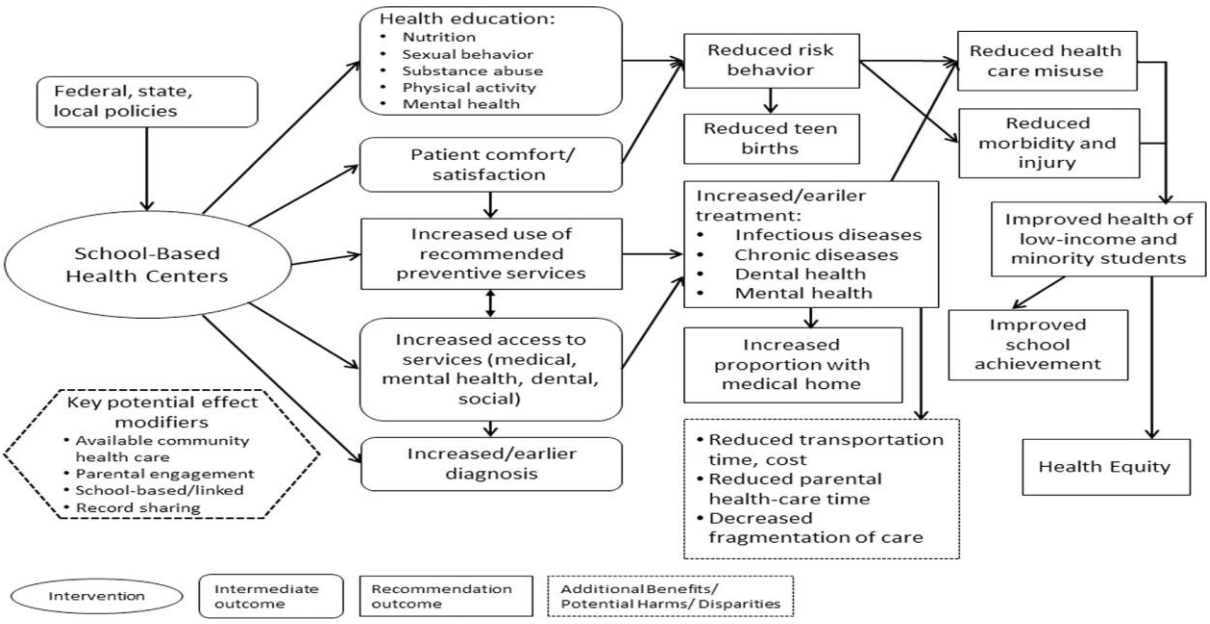
adolescents, pregnancy complications among female adolescents, and other sexual, reproductive, and mental health outcomes [10]). These reviews also noted methodologic and logistical challenges with evaluating the effectiveness of SBHCs. Some of the methodologic issues identified relate to selection bias, maturational and historical effects, sample size and statistical power, heterogeneity in services delivered or received, displacement effects, and issues relating to clustering effects [10].

Our evaluation study examines the impact of SBHCs on health outcomes specific to services provided by SBHCs in Delaware. This project's primary goal is to assess whether Delaware-based SBHCs influence the health outcomes of adolescents ages 13 to 18 years. Although Delaware SBHCs serve this age group, our evaluation is responsive to Healthy People 2020 objective: AHS-5.2: "Increase the proportion of children and youth aged 17 years and under who have a specific source of ongoing care."

1.2 Study aims

The central premise of our study rests on the belief that access to, and utilization of, SBHC services improves the well-being of adolescents. As such, well-being extends to better educational outcomes. Our conceptual model is based on Knopf et al.'s analytic framework as outlined in Figure 2.

Figure 2. Knopf's conceptual model for school-based health centers to promote health equity



Source: Knopf J, Finnie R, Peng Y, et al. School-Based Health Centers to Advance Health Equity: A Community Guide Systematic Review. *Am J Prev Med.* 2016;51:114-126.

The conceptual model of Knopf et al. categorizes outcomes into: a) intermediate outcome; b) recommendation outcome; and c) unintended effects (i.e., additional benefits/potential harms/disparities). Our study examines outcomes in all three categories, thus maximizing the variation in services offered in Delaware. Based on Knopf et al.'s analytic framework, improved health of low-income and minority students is consistent with the CPSTF recommendation to locate SBHCs in low-income communities and to reduce morbidity and injury, an additional benefit of health equity.

To accomplish our primary goals and test our central premise, the authors propose two specific aims:

Aim 1

Explore students' and parents'/guardians' perceptions of health outcomes, satisfaction with services, and costs and/or potential costs savings associated with episodic care of those who use SBHCs. It is well-documented that among the myriad of factors that influence adolescent's health behavior, family and school-context play a pivotal role [11] and parental engagement and/or lack thereof [12] as shown in figure 2 can influence whether or not adolescents access services. Additional benefits such as reduced time-off from work for parents, reduced child care, transportation needs, time, and costs have also been noted [8]. In addition, adolescents' own perceptions of healthcare services will impact health behaviors. Hence, consistent with aim 1 we propose to assess students' and parent/guardian's perceptions of outcomes of the value of SBHCs, including: patient comfort and satisfaction; health, health education, and healthcare access; school performance, engagement, attendance, and achievement; and parents/guardians' perceptions of cost/cost-savings and healthcare time/effort associated with their children's use of SBHCs. Consistent with qualitative research methodology, we, therefore, sought to answer the following research questions:

1) What are the perceptions of students who use SBHCs on a variety of outcome domains, including: patient comfort and satisfaction; health, health education, and health care access; school performance, engagement, attendance, and achievement; students' perceptions of cost, cost-savings, and parent/guardian health care time and effort?

2) What are the perceptions of parents/guardians of children who use SBHCs on a variety of outcome domains, including: patient comfort and satisfaction; health, health education, and health care access; school performance, engagement, attendance, and achievement; parents/guardians' perceptions of cost/cost-savings and health care time/effort associated with their children's use of SBHCs?

Aim 2

Examine the relationship between use of SBHCs and health care utilization. Based on Knopf et al.'s analytic framework, we assessed the extent of services utilized by adolescents served by SBHCs with the intermediate outcomes of increased access to services. It is well documented that SBHCs increase health care services including physical, mental, and sexual health in a convenient and confidential setting [13]. The underlying premise is to understand factors that may influence the use of available SBHC services and/or barriers to access them, as it is expected that "students who are enrolled in SBHCs actually use the programs' clinical services" [14]. One estimate from a nationwide study indicated that slightly over 70 percent of the "students enrolled in SBHCs reported having a health care visit compared with 59 [percent] who were not enrolled" [13]. Further, minority youth are perhaps more likely to access SBHC services in comparison to the general population because of differential need [15]. As noted earlier, evidence also suggests that student enrollees who use SBHCs were less likely to have Emergency Department (ED) visits, less likely to be hospitalized for asthma-related conditions, and more likely to have recommended vaccinations.

1.3 Study hypotheses

Our hypotheses flow from our general aim to assess the relationship between use of SBHC and health care utilization. Consistent with Aim 2, we wanted to know if:

Hypothesis 2a. The majority (70 percent or more) of the enrolled students in SBHCs also use the SBHC services (i.e. 4 or more visits during the study period).

Hypothesis 2b. The average number of health care visits among Medicaid SBHC enrolled students stratified by race and ethnicity is higher than the average number of health care visits among Medicaid non-SBHC enrolled students in the general population.

Hypothesis 2c. Asthma-related ED visits for Medicaid SBHC enrolled students are lower than Medicaid non-SBHC enrolled students in the general population.

Hypothesis 2d. Asthma-related hospitalization rates are lower for Medicaid SBHC enrolled students than Medicaid non-SBHC enrolled students in the general population.

Hypothesis 2e. Recommended vaccination coverage is higher for Medicaid SBHC enrolled students than the vaccination coverage of Medicaid non-SBHC enrolled students in the general population.

Hypothesis 2f. Average number of mental health visits are higher for Medicaid SBHC enrolled students than the average number of mental health visits of Medicaid non-SBHC enrolled students in the general population.

METHODS

We utilize a mixed-methods design to test our proposed aims. For Aim 1, we used primary data from focus groups of students who use the SBHC and parents and/or guardians of students. For Aim 2, we used secondary data from linked Medicaid claims and School-Community Health Alliance of Michigan (SCHA-MI) enrollment data.

2.1 Data, Sample, Study Design

For the qualitative arm of the study, we collected data via eight focus groups solicited from SBHCs from Delaware (Appendix 1). Six of the focus groups were with teens and two were with parent/guardians. The total N= 37; with nine adults; 28 teens (eight males and 20 females); with a mean age 16.1 years. The sample was racially and ethnically diverse (Appendix 1 provides further demographic details).

Dr. Judith Herrman conducted the focus groups. The SBHC coordinators obtained parental/guardian permission for teens younger than 18 years and consent for teens 18 or older. Parents/guardians consented to the focus groups. Dr. Herrman ensured that each participant provided assent prior to each focus group. Focus groups were conducted in quiet rooms at the schools or community centers and followed the focus group guides (Appendix 2). DSBHA reviewed the Focus Group Guide developed after a thorough review of the literature, expert review by the DSBHA, and review by adolescents for readability and understandability. Main questions and probing items surrounded the following domains:

- Comfort and satisfaction using the SBHCs
- Health status, health care access, and receipt of health education at the SBHCs
- SBHC relationship to school attendance, performance, engagement, and achievement
- Cost and time savings.

Participants were also asked to share a prominent or poignant narrative or experience related to the wellness center and for any other thoughts or contributions. The average time for each focus group was 48 minutes, with a range of 35 to 75 minutes. Focus groups were audiotaped.

Focus groups were conducted until data reached saturation. Data saturation was most apparent in the later focus groups with the teens, wherein no new information was obtained. Due to logistical issues, although additional parent/guardian focus groups may have proved fruitful, they were unable to be arranged and it is not known if saturation was achieved. In contrast, many of the parent/guardian perceptions replicated teen thoughts, demonstrating that saturation was achieved in the dominant thematic areas. The interviews yielded rich data reflecting teen and parent perceptions,

demonstrating both commonalities and differences of perspectives. A confidential source transcribed tapes.

We used two administrative databases to create three datasets specific to our Aim 2. Our first administrative database contained SBHCs enrolled student-level data from the SCHA-MI's central database administrator. The SCHA-MI data contain unique identifiers for all enrolled students 13 to 18 years with name, date of birth, school, provider, grade, encounter number, encounter date, ICD9/ICD10 codes, and CPT codes, along with primary and secondary insurers. Our second administrative database contains Delaware Medicaid claims data. We extracted Medicaid incurred claims for the years 2014 through 2016 for 13 to 18-year-olds.

Figure 3. Sample Selection and Data Linkage

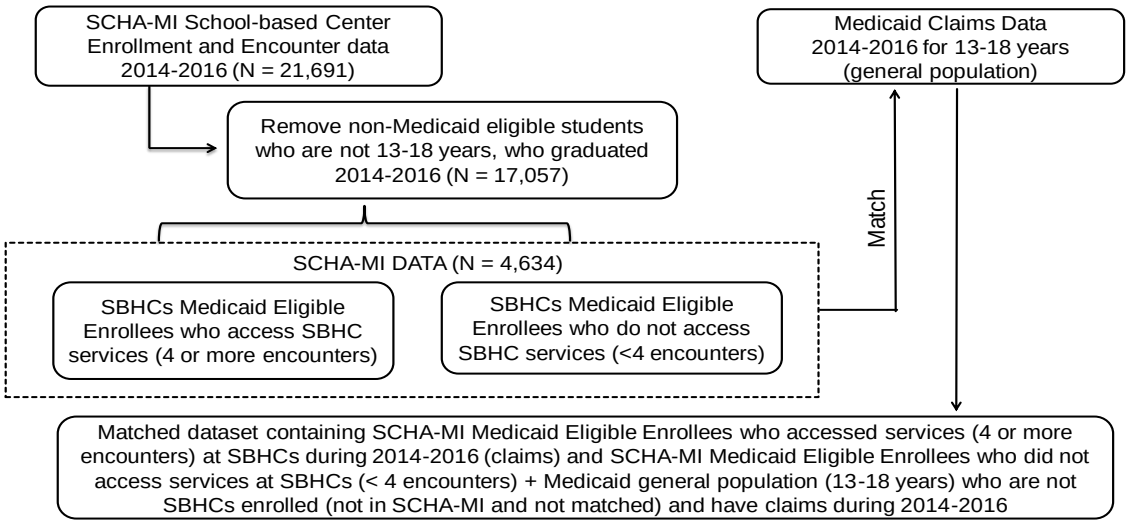


Figure 3 shows the inclusion criteria and matching process with SCHA-MI data using unique identifying information for a subset of Medicaid eligible students to Medicaid claims data for 2014-2016. There were a total 4,634 Medicaid eligible students in the SCHA-MI database, and it was matched to Medicaid office visit claims to yield an effective sample size of 38,547 records, of which 3,450 (~74%) were students enrolled in SBHCs. A similar matching process for ED visit claims from Medicaid yielded another dataset with an effective sample of 17,528, of which 1,940 were students enrolled in SBHC.

Aim 2 uses these linked datasets to test the hypotheses described earlier. To reduce the threat of selection, researchers utilized propensity score analyses based on Neyman-Rubin's counterfactual framework [16]. Counterfactuals are potential outcomes that happen in the absence of cause [17] and as such for participants in treatment, a counterfactual is the potential outcome under the control condition, and

vice-versa [16]. Stated in another way, propensity scores are the conditional probabilities of assignment to a particular treatment (intervention) given a vector of observed covariates [18]. In particular, we utilize inverse probability of treatment weighting (IPTW). As a strategy, multivariate propensity score weighting reduces the potential loss of participants by using weights in a weighted regression of the outcome on treatment and covariates and does not resample the data [19]. In essence, it creates a synthetic sample in which treatment assignment is independent of the observed covariates, and as such IPTW provides an unbiased estimate of average treatment effects [20].

2.2 Measures

Our primary outcome variable (dependent variable) of interest was health care utilization as measured by Medicaid claims for office visits from 2014-2016. Using SCHA-MI data we defined use of SBHC services as four or more encounters during 2014-2016. We used Medicaid claims office visit data to calculate recommended and validated measures from the National School-Based Health Alliance, National Performance Measures (NPMs): well-child visits; annual risk assessment; BMI screening; nutrition counseling; physical activity counseling; depression screening; and STI and chlamydia screening. In addition to these NPMs, we used Medicaid claims data to calculate Agency for Healthcare Research and Quality (measure for preventable asthma, and Healthcare Data Information Set (HEDIS) measures for immunization and assessed mental health visits. All these measures were assessed using International Classification of Diseases Ninth and Tenth Revision Clinical Modification (ICD-9-CM and ICD-10-CM) and Current Procedural Terminology (CPT).

For well child visits, we included ICD or CPT values 99381, 99382, 99383, 99384, 99385, V20.2, V70.0, V.70.3, V70.5, V70.6, V70.8, V70.9, Z00.00, Z00.01, Z00.121, Z00.129, Z00.05, Z00.8, Z02.0, Z02.1, Z02.2, Z02.3, Z02.4, Z02.5, Z02.6, Z02.71, Z02.79, Z02.81, Z02.82, Z02.83, Z02.89, and Z02.9. While well child visits typically do not include ‘sports physical’ (i.e., V70.3 and/or Z20.5), we included them as Delaware SBHCs providers routinely include as part of the visit. Annual risk included 99420, 96127, V82.9, V79.8, Z13.9, and Z13.4. BMI screening, nutrition, and physical activity counseling was measured by V85.51, V85.54, V85.51, V85.52, V85.53, V85.54, V65.41, V65.3, Z68.51, Z68.52 Z68.53, Z68.54, Z71.89, and 'Z71.3'. Depression screening included V79.0, Z13.89, G8431, and G8510. In addition, our final NPM measure, STI/chlamydia screening included V73.98, V73.88, Z11.3, A56.01, A56.09.

Asthma measure included 493.00, 493.01, 493.02, 493.10, 493.11, 493.12 , 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92, and ICD10-CM equivalent. Immunizations included CPT values, 90698, 90700, 90721, 90723, 90698, 90713,

90723, 90707, 90710, 90708, 90705, 90704, 90706, 90645-90648, 90698, 90721, 90748, 90723, 90740, 90744, 90747, 90748, 90710, 90716, 90669, 90633, 90681, 90655, 90657, 90661, 90662. Mental health visits included V73.98, V73.88, Z11.3; A56.01; A56.09, F43.21, 309.0, 309.1, F43.23, 309.28, F32.9, 296.20, 311, F33.1, 296.32, F41.1 300.02, F43.25, 309.4, F41.9, 300.00.

We created several dichotomous variables for all these measures to indicate whether a Medicaid eligible SBHC enrolled student had a particular office visit or not.

2.3 Analytic Procedures

For Aim 1, analysis used a variety of processes to ascertain prominent themes and other key information. Observational notes documenting the non-verbal aspects of the focus groups were merged with the transcriptions and were read repeatedly for meaning and to allow immersion in the data. Initially, template analysis allowed for the data to be placed within the focus group interview guide to isolate and validate the study domains. The study domains pertain to the perceptions of parents or guardians of children who use SBHCs, including:

- Patient comfort and satisfaction
- Health, health education, and health care access
- School performance, engagement, attendance, and achievement
- Cost, cost-savings, and parent/guardian health care time and effort

Through an iterative, constant comparative technique, content analysis allowed the data to be coded manually. NVivo software was used to ensure reliability of data clustering. These were super-imposed on the study domains and thematic analysis identified the major themes of the study as they emerged through review of the data. The researchers conducted a member check and maintained an audit trail to increase the credibility, transferability, and authenticity of the findings [22]. Data interpretation delineated the study domains which were represented by exemplar quotes; emergent themes were then identified. This last focus group served as a member check to validate themes as present, prevalent, and meaningful. Finally, framework analysis offered the ability to place the data within a format that organized study domains, themes, sub-themes, and exemplar quotes. Framework analysis, as a means of data organization and interpretation, provides a mechanism to enhance rigor in qualitative data analysis and allows for deductive use of assigned domains [23]. The frameworks, the form of major study domains and exemplar quotes, provided insights into the perceived outcomes related to use of SBHCs (Appendix 3). The extracted themes and how they triangulated with the quantitative data are presented later in this report.

For Aim 2, we calculated propensity weights as the inverse of propensity scores [19, 20-21] using multivariable model logistic regression using covariates year of claim, age, gender, race and ethnicity, and individual's geographic location (i.e., urban and/or rural area) and interaction variables: age and gender; year of claim and race and ethnicity. Assuming a small effect size of $f^2 = 0.05$ and assuming multivariable normal distribution with 10 covariates, we expected a sample of 393 students to achieve 80 percent power with an alpha of 0.05. We modeled health care visits as a function of SBHC Medicaid eligible enrollees (categorical outcome), adjusting for relevant confounders using the propensity weights described above. We estimated crude and adjusted odds ratios with 95 percent confidence intervals (CI) using IPTW as a weight variable. We assessed model fit using the Hosmer and Lemeshow and c statistic, a measure of how well the model discriminates individuals experiencing the event from individuals not. We calculated standardized differences before and after weighting and assessed the reduction in the amount of bias. We performed sensitivity analyses restricting claims specific to school days (Monday through Friday) and school academic years to assess if the results held true.

RESULTS

Our results provide an overview of student and parent perceptions' of SBHCs using qualitative focus group data specific to Aim 1. We also provide results from quantitative analyses of Medicaid claims data for office visits and ED visits specific to Aim 2. Where feasible we compare and contrast results from Aim 1 and Aim 2 to reinforce our findings. Results from inpatient hospitalizations from hospital discharge data (HDD) are not presented, as data was available for only 2014 and 2015.

3.1 Aim 1

For Aim 1, five themes were identified and extrapolated, and related to:

- confidentiality, consistency, cost, and convenience
- relationships: caring, trust, and teen orientation without judgment
- stay in school, class, and seat
- health care: access, education, and self-advocacy;
- mental health: High needs, high quality care. In the following paragraphs, we detail these five themes to provide context to the quantitative data in Aim 2.

Confidentiality, consistency, cost, convenience

This theme speaks to the most prevalent priorities cited by both teen and adult participants. The most common priority to the teens, when asked about satisfaction and comfort in using the wellness centers, related to the confidential nature of the settings and services. They were aware that, as in health care settings, the wellness centers were held to a different standard than other parts of the school.

Although they knew that their parents were critical in knowing about their health care, the teens relayed the wellness center staff ensured that parents were not called until the teens were ready and that teens were able to influence when that contact occurred. Some discussion was related to the issue of confidentiality among their peers when using the wellness centers, but teens identified that they could say that they were getting vaccines or other physical care rather than divulging personal information. Others were proud that their use of the wellness center, and confidential counseling or reproductive services, was a positive life choice and demonstrated to others that they were mature and getting their life and issues under control.

Several teens noted the importance of consistency in caregivers. Most discussed their comfort in using the wellness centers by having consistent counselors and health care providers. They did not have to repeat their story and that consistency allayed anxiety. This was one of the few negative components relayed by the teens at centers with part-time care or high turnover—they had experienced consistency at one time but not at other times. They contrasted the experience and wished for a stable, accessible work force to provide the highest level of care. Parents also commented on the importance of this consistency, and the need for accessible and full-service hours, in their children's lives.

Both teens and parents referred to cost. The provision of services for free or without a co-pay was a key component. Teens shared that they did not have insurance, did not live with parents, did not have funds for health care, did not have transportation, did not have other health care, or did not want parents to know about all care — making low or no cost a high priority. Parents also cited cost when discussing co-pays, medication, time off from work, and insurance costs. The teens lamented on their own economic status but were quick to cite the obstacles confronted by the most vulnerable and lowest income populations, affirming that the true value of wellness centers rested with the care provided to marginalized teens.

Probably one of the most used words during these interviews was convenience. Parents and teens stated that being able to use the wellness centers during school hours, having the centers on-site, and having the services available in one place was paramount. The convenience had implications for school success, school attendance, and parents' schedules, and was seen as critical to teens' utilizing SBHC services. Teens saw the wellness centers as "low effort" and, therefore, highly acceptable.

Relationships: Caring, trust, and teen orientation without judgment

Sincere and heartfelt stories validated this theme. As teens described highly charged points in their lives, characterized by suicide, cutting, sexual abuse, fighting, depression, family discord, anxiety, anger, and dealing with day-to-day issues, they often came back to these critical elements of a relationship. They spoke of counselors and health care providers, and even administrative assistants, as having sincere desires to work with teens and having a strong bond with these caregivers. They discussed being treated as individuals – not as just other patients -- and being respected for their personal uniqueness.

Parents and teens used words such as "caring, open, trusting, empathy, sincere, real, and helping" to describe their encounters. They painted a picture of seeing wellness center professionals as credible resources who have the students' best interests in

mind. They even went so far as to use the term research-based to discuss the care and recommendations from wellness center staff. They appreciated the teen orientation where they were not spoken to as children, able to be teens, and not always expected to act like adults. Several participants relayed the importance of non-judgmental care. They felt that outside health care providers judged their thoughts and perceptions and they verbalized appreciation for being respected for their own perspectives. Judgments from outside providers were noted to hamper communication as it jeopardized trust and were paramount concerns among teens. Feeling judged, which did not occur in the wellness centers, would be an impediment to accessing care from or recommending others to them.

Stay in school, class, and seat

A great asset of the SBHCs to teens, parents, schools, and administrators, was the ability for students to miss as little school as possible while meeting health care and emotional needs. The teens discussed the issues associated with seeing outside health care providers, including the visit, wait time, transportation, time to get medications, and parents' time from work. They discussed being in Special Education or high-level classes and not wanting to miss class or to have to make up work. Although they enjoyed missing school at one time, now as juniors and seniors, it was more important to be at school. Participants relayed how going to a doctor's appointment outside of school can cause them to miss several periods, or even whole or half-days of school.

Participants who were distracted by emotional issues or anxiety shared how SBHC staff help them cope, calm down, and focus on learning. They discussed the encouragement and positive reinforcement they received from SBHCs, which enabled them to be motivated and uplifted to meet the challenges of school. They also discussed school as getting harder as one progressed and the temptation to avoid classes or school due to headaches or illnesses—they reinforced that the coping mechanisms they learned and encouragement they received assisted in fostering school success. Although they discussed being more engaged in school or involved, and sometimes doing better in school because of the wellness centers, they did not associate the wellness centers with these elements and really focused on school attendance and class time as a benefit of on-site services.

Staying in school and graduating was also credited to the wellness centers. Students expressed that students may quit school due to pregnancy, negative experiences, or poor academic performance. The SBHCs ameliorated some of the difficulties associated with staying in school and addressed issues leading to school drop-out, such as abuse, interpersonal violence, bullying, and pregnancy.

Health care: Access, education, and self-advocacy

Many of the teens relayed that the SBHCs served as their lone source of health care. They shared such obstacles to access to care as: lack of community settings, lack of knowledge of community resources, transportation issues, cost, lack of motivation/energy to seek care, and parental perceptions of lack of access to services, concern, time, energy, inclination, or finances to obtain care. Conversely, the participants discussed the ease of access to SBHC services, wherein one service may seamlessly lead to other services. Students discussed seeking a physical or counseling service and obtaining other services, such as reproductive health or nutrition services. As discussed above, the ease of access of services associated with convenience, low or no cost care, decreased time commitment, and comfort with the services increased access to health care for those who do not/will not/may not access services. Participants spoke of using EDs and urgent care centers in the absence of access to the wellness centers. Many did not perceive that they had health care resources, nor a medical home, in the community, substantiating their perceptions that SBHCs met a critical health care need of many of those interviewed.

The students affirmed the value of the wellness centers in providing education and information to teens, whether in the form of posters, pamphlets, signs, announcements, presentations, groups, or one-on-one teaching. The participants discussed how SBHCs rendered care with information as a normal part of routine care, so that every care component included teaching and age-appropriate information. Teens and parents contrasted these experiences with community experiences, when limited information was provided and care was expedited without sufficient teaching.

Both parents and teens observed that wellness centers taught their clients the ability to learn about, navigate through, and advocate for their own health care. Teens learned to identify personal needs, make appointments, navigate health care, and become health care consumers. As parents identified relationships with community providers, students described SBHCs as their hub. Teens identified their personal independence when seeking and accessing their care. Parents noted the increased independence created by the use of and need to maintain ongoing relationships with SBHCs. The teens appreciated this level of control. They also discussed that wellness centers enabled them to advocate for others, helping them become better advocates for themselves.

Mental health: High needs, high quality care

Although the wellness centers' provision of physical and medical care cannot be undervalued, the prevalence and magnitude of the mental health issues expressed by

teens and their parents was notable. Teens expressed that they were physically and emotionally healthier after receiving wellness center care for mental health needs. They discussed the ability to stay healthier and to be treated early for potential diagnoses related to care there. They relayed that the teen-friendly environments, with knowledgeable personnel, made all the difference and reinforced the value of SBHCs.

The most alarming mental health issues identified in this study were depictions of suicidal ideations, depression, anxiety, substance use, abuse, intimate partner violence, child abuse, and stress. Bullying, schoolwork stress, and relationship issues elevated the significance of these concerns. The teens discussed the level of stress inherent to adolescence and the ability of SBHCs to reduce stress. The magnitude of these issues, both personally discussed by parents and participants and shared about peers and colleagues, validated the need for counseling and mental health services. Stress management and communication skills taught and role-modeled in the wellness centers were noted as effectively allaying stress. The need for this care may exceed the current capacity of some centers, since teens shared that they often waited for appointments and, unless in crisis, were not able to be seen. The teens and parents reinforced the value of the care provided by the wellness centers, reinforced by describing intense relationships formed with SBHC staff who fostered quality care and caring. When asked what would be missing if there were no wellness centers, the students remarked about the increase in high risk behaviors and subsequent consequences, reinforcing the integral role they play in school health and success.

It is important to note that although the results are not generalized, as is typical in qualitative research, these results provide rich contextual details of student and parental perceptions of Delaware's SBHCs and their importance in providing care.

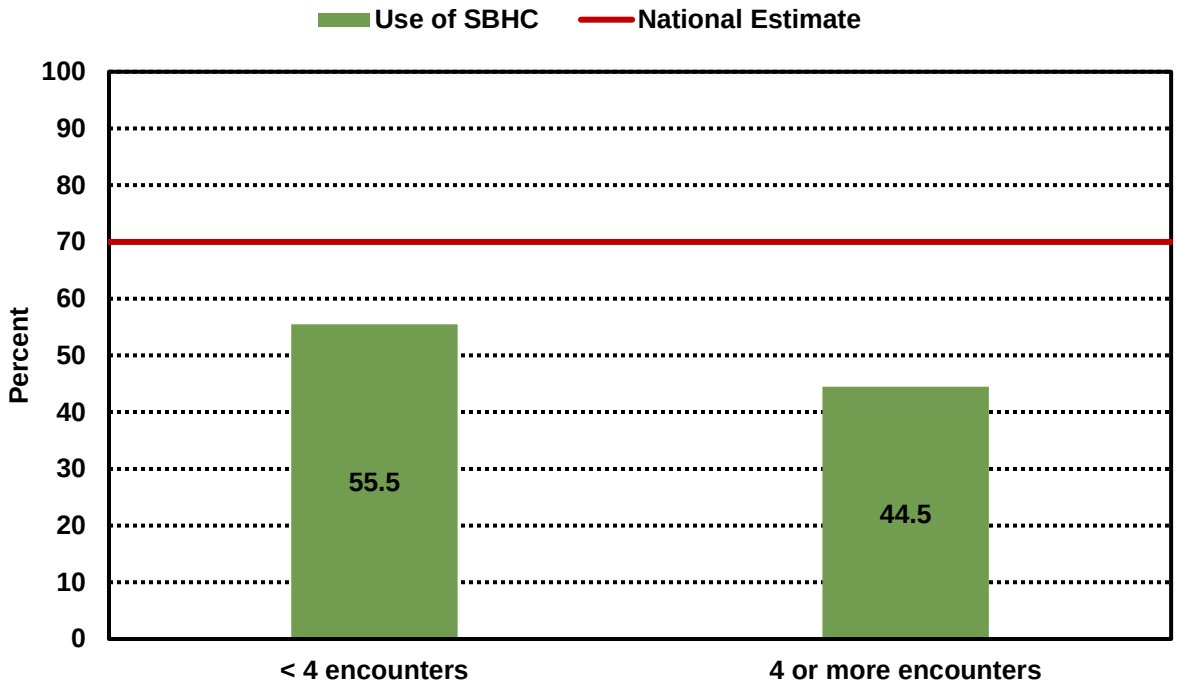
3.2 Aim 2

Results for Aim 2 of the evaluation study draws from analyses of three separate datasets specifically created to understand the utilization of SBHCs in Delaware. The first dataset utilizes data from SCHA-MI enrollment and encounter data. The second dataset utilizes linked SCHA-MI and Medicaid Office Visit data, and the third dataset utilizes linked SCHA-MI and Medicaid ED visit data.

Analyses of the SCHA-MI dataset indicated that of the 4,634 SBHC students who were Medicaid eligible, approximately 54 percent (n = 2,499) were females, about 43 percent (n = 1,968) were African American, and about 52 percent were enrolled in centers served by Christiana Health Care Health System (CCHS). The average age of the enrolled student was 15.6 years (*SD* = 1.7). Our first hypothesis was to assess if the

majority (70% or more) of enrolled students accessed SBHC services. Figure 4 provides the percent of enrolled students who use SBHC services.

Figure 4. Percent of enrolled students in Delaware SBHC who use SBHC services, 2014-2016

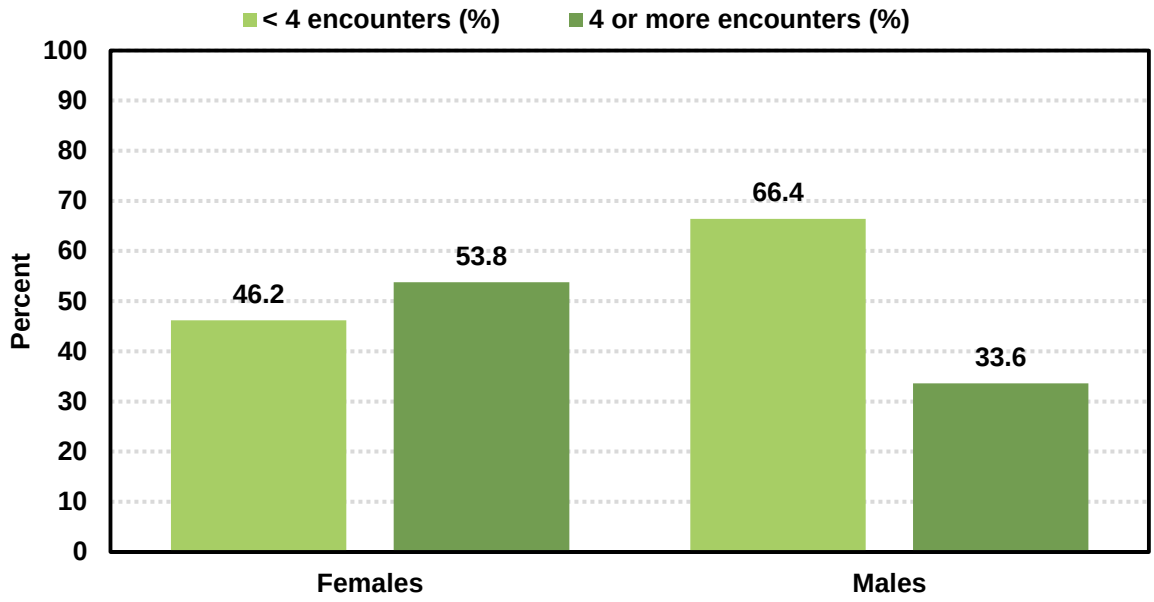


Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI data, 2014-2016.

As evident from Figure 4, our first hypotheses 2a, which claimed that a majority of Delaware SBHC students enrolled would access services, was not confirmed. We found that approximately 45 percent of the enrolled Medicaid eligible SBHC children used services as compared to one available national estimate (70 percent).

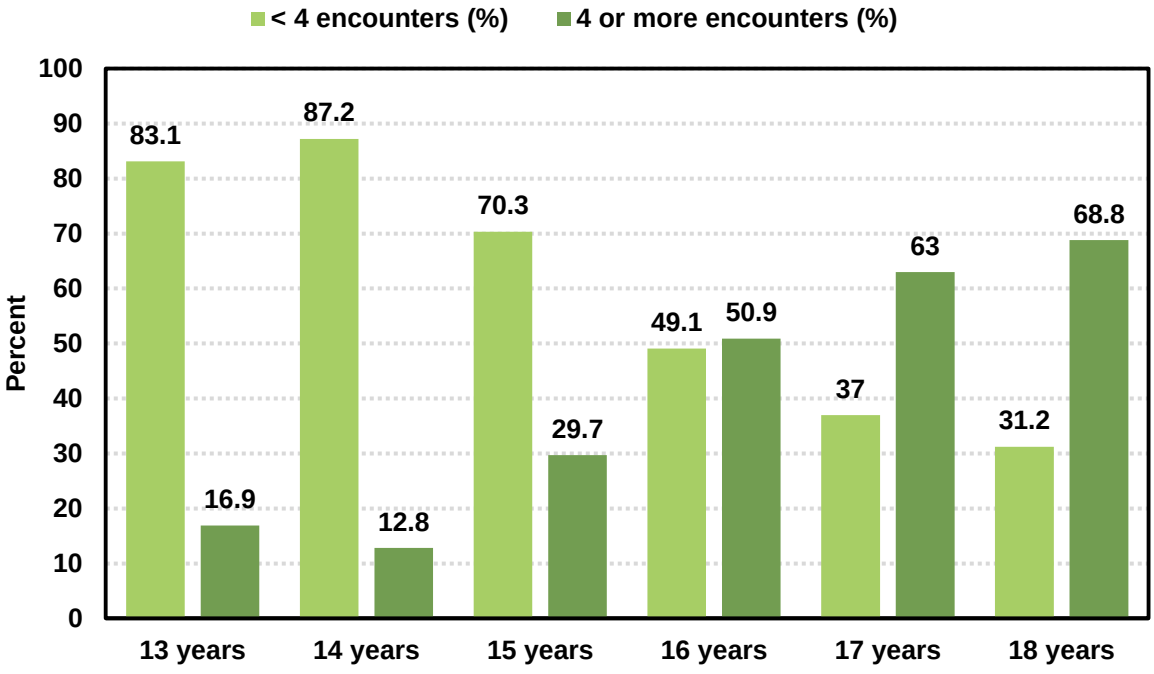
Figure 5 through Figure 9 provides an overview of the enrolled student characteristics and their encounters. It is evident females were more likely than males to access SBHC services. Similarly, older students and those in higher grades were more likely to use SBHC services. African American students were less likely to use the services as compared to other race and ethnicities, and utilization was low in SBHCs serviced by Nanticoke and La Red.

Figure 5. Percent of Delaware SBHC enrolled students who utilize SBHCs services, by gender, 2014-2016



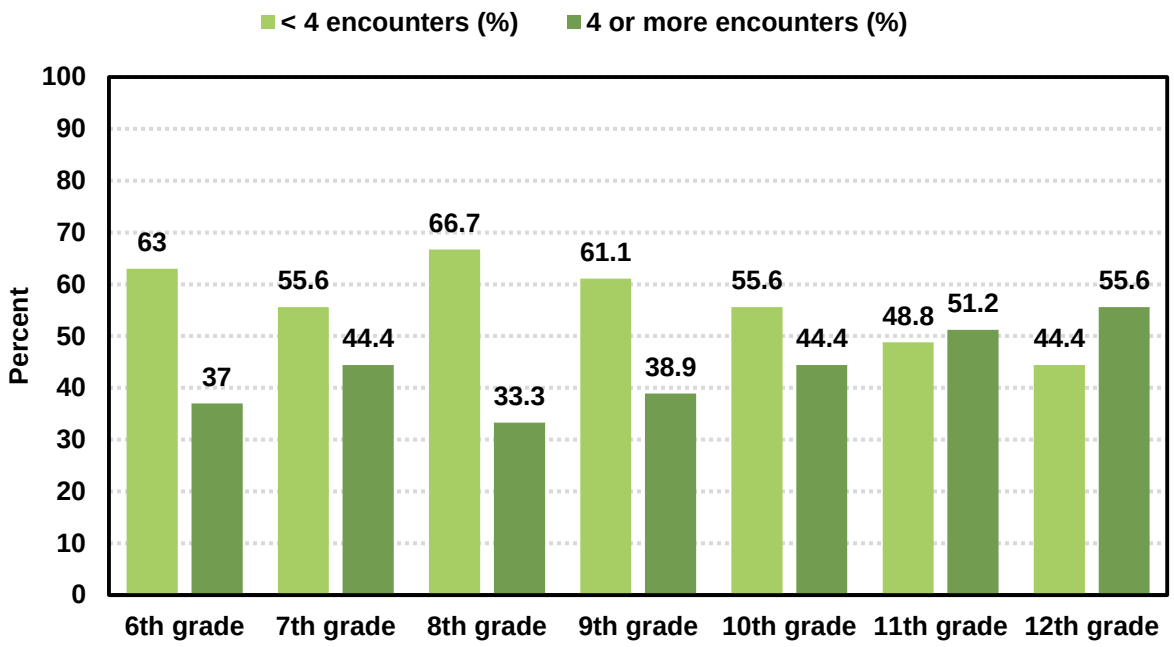
Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI data, 2014-2016.

Figure 6. Percent of Delaware SBHC enrolled students who utilize SBHCs services, by age, 2014-2016



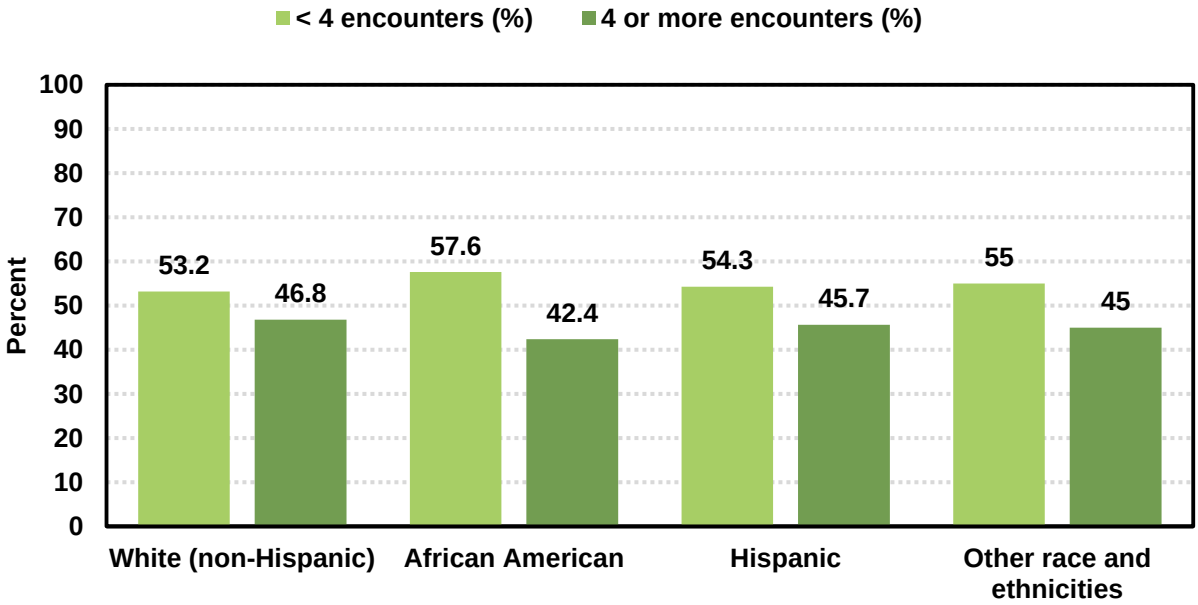
Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI data, 2014-2016.

Figure 7. Percent of Delaware SBHC enrolled students who utilize SBHCs services, by grade, 2014-2016



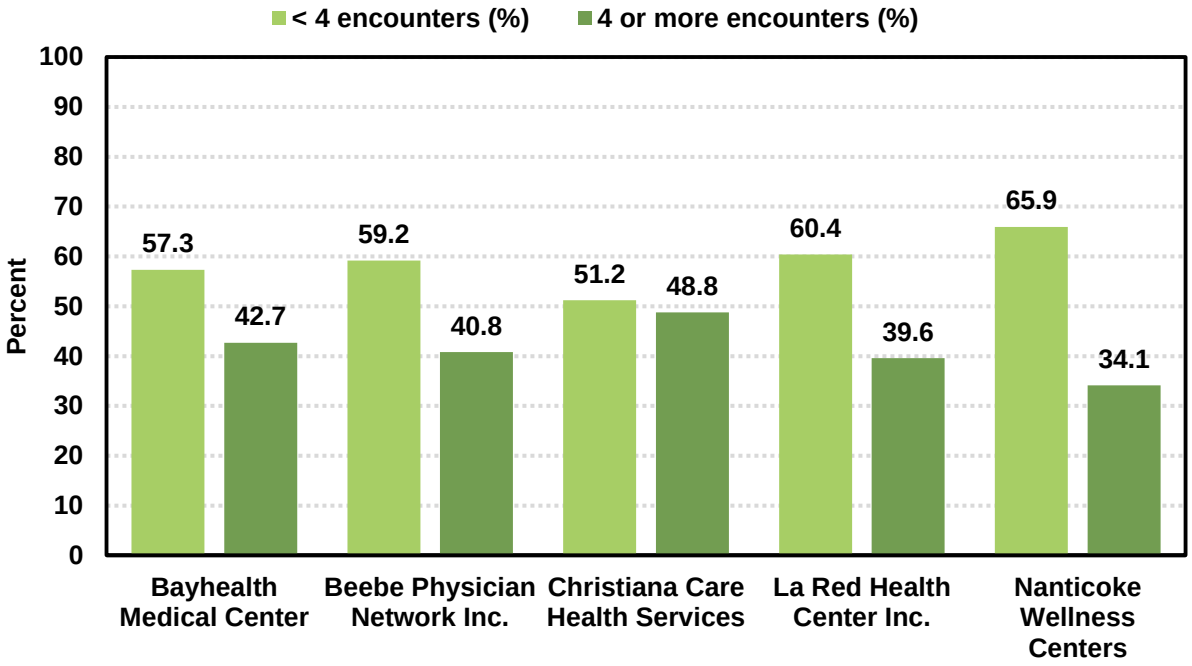
Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI data, 2014-2016.

Figure 8. Percent of Delaware SBHC enrolled students who utilize SBHCs services, by race and ethnicity, 2014-2016



Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI data, 2014-2016.

Figure 9. Percent of Delaware SBHC enrolled students who utilize SBHC services, by Medical Provider, 2014-2016



Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI data, 2014-2016.

Despite the fact that our first hypothesis on the use of SBHC services was not supported, and there are characteristic differences in students using services, results indicate several opportunities to enhance enrollment and increase the use of SBHC services, especially among those who are Medicaid eligible.

Our next set of results examine data from Medicaid claims office visits data. First, we present the characteristics of Medicaid eligible, SBHC enrolled and non-SBHC students prior to estimating IPTW (Table 1). Second, we show reduction in bias after weighting. Third, we present the propensity score weighted results specific to the hypotheses to look at health care utilization for Medicaid eligible, SBHC and non-SBHC enrolled students, by race and ethnicity. Finally, we present IPTW results for our outcome variables of interest NPMs, asthma, immunization, and mental health visits. We employ a similar process to present ED visits for Medicaid eligible, SBHC, and non-SBHC enrolled students for asthma and mental health.

Table 1. Characteristics of Delaware students who are SBHC enrolled and those who are non-SBHC who are Medicaid eligible, Office Visit Claims

Characteristics of Medicaid enrollees¶ (N = 38,547)	Intervention/Exposure		
	SBHC enrolled (n = 3,450)	Non-SBHC (n = 35,097)	Standardized difference (d)
Year of Claim***			
2014	451 (13.1%)	9,276 (26.4%)	-33.9
2015	767 (22.2%)	8,986 (25.6%)	-8.0
2016	2,232 (64.7%)	16,835 (48%)	34.2
Age	15.6 (±1.7)	15.6 (±1.9)	0
Gender*			
Females	1,846 (53.5%)	18,082 (51.5%)	4.0
Race and Ethnicity***			
White (non-Hispanic)	1,656 (48%)	18,552 (52.9%)	-9.8
African American	1,678 (48.6%)	14,238 (40.6%)	16.1
Other	116 (3.4%)	2,307 (6.6%)	-14.8
Geographic location*			
Urban	2,856 (82.8%)	29,530 (84.1%)	-3.5

Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.

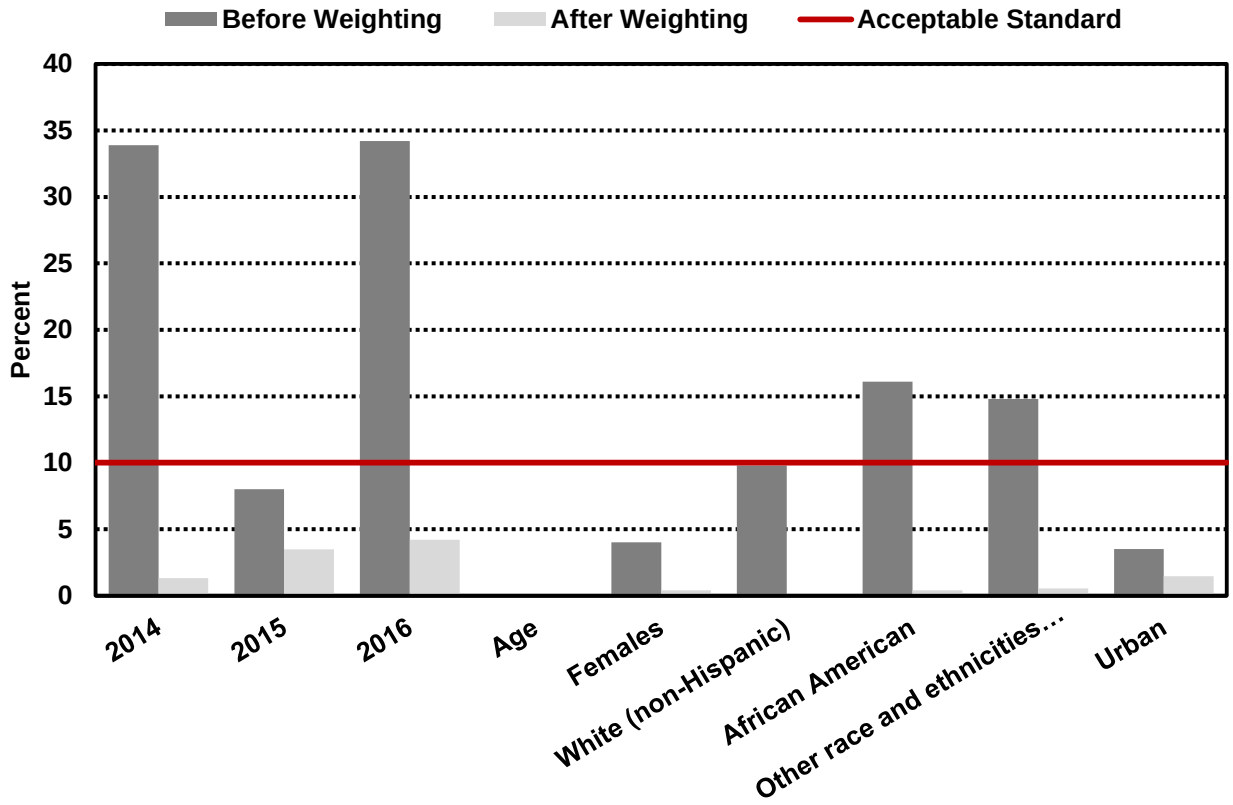
Note: Continuous variables are represented as mean ± standard deviation, while dichotomous and categorical variables are represented as N (%). Independent t-tests continuous measures and chi-square tests for dichotomous and categorical variables.

¶Unique for 2014-2016 time-period from Medicaid office visit claims for 2014-2016 for 13-18 year olds.

***p < .0001 **p < .01 *p < .05

It is evident from Table 1 that there are differences in SBHC and non-SBHC enrolled students on a variety of characteristics. Figure 10 displays the reduction in bias as measured through standardized differences for the variables above. After propensity weighting, the standardized differences reduced bias by more than 95%.

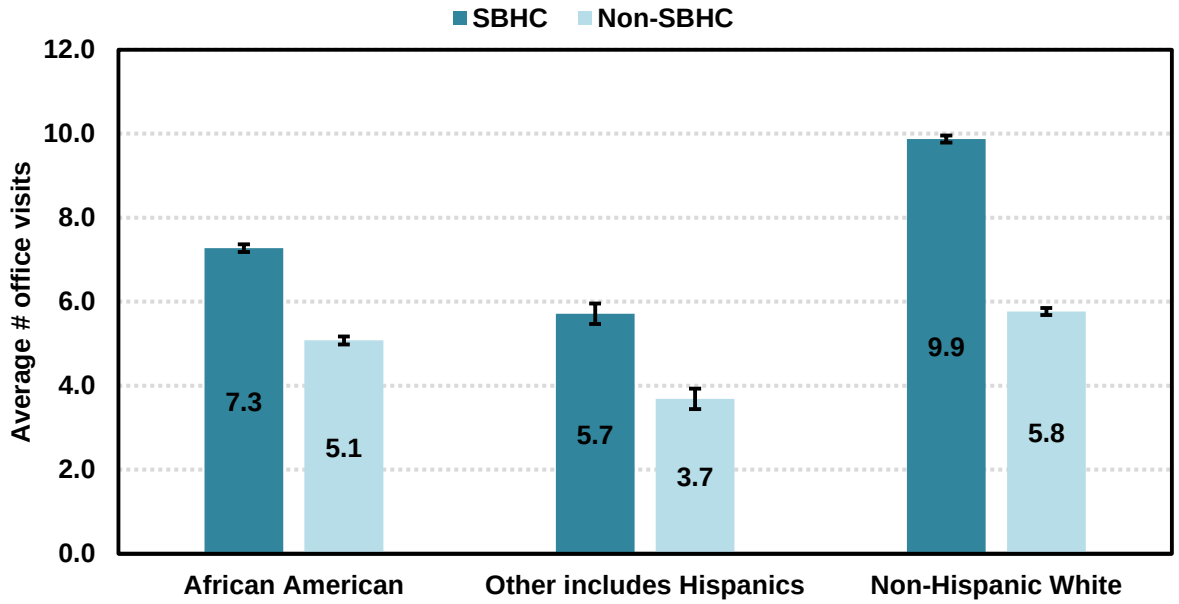
Figure 10. Standardized differences in Medicaid eligible SBHC enrolled and non-SBHC individual characteristics in Delaware before and after propensity weighting, 2014-2016



Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.

Regarding overall health care utilization, propensity score weighted results indicated that on average students who were enrolled in SBHCs and Medicaid eligible (*M* = 8.7; 95%CI: 7.9-9.5) had higher utilization (measured as office visits) as compared to non-enrolled SBHCs (*M* = 4.5; 95% CI: 4.3-4.7) who were Medicaid eligible. Further, we found support for our hypothesis 2B (Figure 11) as we determined that even after stratifying for race and ethnicity, SBHC enrolled Medicaid eligible students had higher utilization as compared to non-enrolled SBHCs who were Medicaid eligible. The results suggest that race and ethnic minorities who may lack access to services can benefit from the availability of SBHC services, lending support to Knopf et al.'s improved health of low income minority students, which facilitates improved health equity. While this was true between SBHC and non-SBHC groups, there were significant differences within SBHC groups. For instance, SBHC, non-Hispanic whites had the highest utilization (*M* = 9.9; 95% CI: 9.7-10.0), compared to African Americans (*M* = 7.3; 95% CI: 7.1-7.5) and other race and ethnicities including Hispanics (*M* = 5.7; 95% CI: 5.2-6.2).

Figure 11. Health care utilization (average Medicaid office visit claims) for Medicaid eligible SBHC enrolled and non-SBHC, in Delaware, by race and ethnicity, 2014-2016

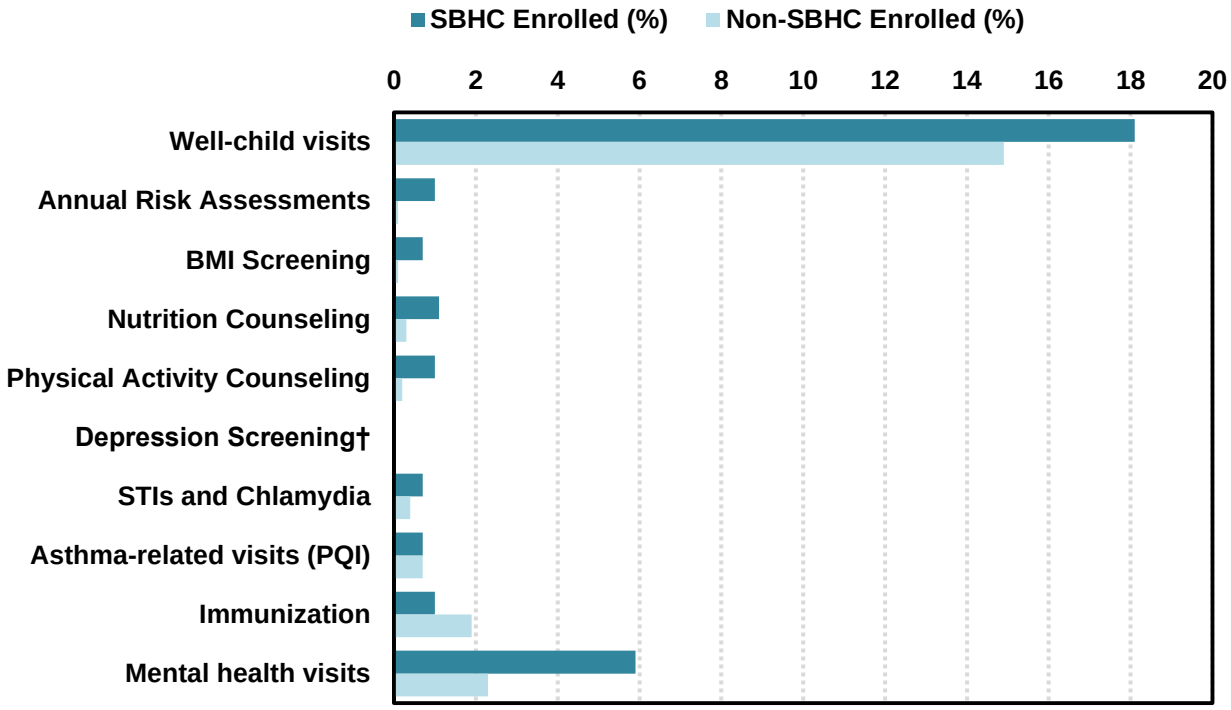


Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.
Note: Propensity score weighted means with 95% confidence intervals (CI). UCL = Upper Confidence Limit; LCL = Lower Confidence Limit.
¶Propensity score weighted Bonferroni corrected least square means for multiple comparisons.

Figure 12 presents results for the NPMs: well child visits, annual risk assessments, BMI screening, nutrition and physical activity counseling, depression screening, STI and Chlamydia screening; asthma visits, immunizations, and mental health visits.

As hypothesized, unlike non-SBHC students, SBHC enrolled students had a higher number of office visit claims for all NPMs: well child visits, annual risk assessments, BMI screening, nutrition counseling, physical activity counseling, STI and chlamydia screenings, and mental health counseling. We did not find any codes for depression screening as proposed by NSBHA and hence not estimated. We found no difference between asthma-related visits of enrolled and non-enrolled students. Contrary to our hypothesis, we found immunization visits for non-SBHC enrolled teens were higher compared to SBHC enrolled students.

Figure 12. Health care utilization (Medicaid office visit claims) for Medicaid eligible SBHC enrolled and non-SBHC, in Delaware, by race and ethnicity, 2014-2016



Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.
Note: Propensity score weighted percent for NPMs, Asthma, Immunization, and Mental Health Visits for SBHC enrolled and non-SBHC.
†No cases for Depression Screening and hence not estimated

Table 2 provides propensity weighted crude (CORs) and adjusted odds ratios (AORs) with 95% CI for results presented above. Results suggest that those enrolled in SBHC were 1.2 times and/or 20% more likely to receive well-child visits as compared to non-SBHC (AOR = 1.2; 95% CI: 1.1-1.3). SBHC enrolled students were 11 times more likely to have an annual risk assessment than non-SBHC (AOR = 11.2; 95% CI: 7.0-18.0). SBHC enrolled students were more than five times likely to be screened for BMI than non-SBHC (AOR = 5.6; 95% CI: 3.3-9.5). SBHC enrolled students were four times more likely to receive nutrition counseling, compared to non-SBHC (AOR = 4.8; 95% CI: 2.8-6.1). SBHC enrolled students were more than six times likely to receive physical activity counseling, compared to non-SBHC (AOR = 6.4; 95% CI: 4.2-9.6). SBHC enrolled students were 90% more likely to be screened for STIs and Chlamydia, compared to non-SBHC (AOR = 1.9; 95% CI: 1.3-2.8). Most importantly, SBHC enrolled students were about three times more likely to receive a mental health visit than non-SBHC (AOR = 2.7; 95% CI: 2.3-3.2).

However, the results for immunizations were in the unanticipated direction. There was no difference in asthma-related office visits. All hypotheses specific to health care utilization was confirmed except for asthma and immunization (hypothesis 2e).

Table 2. National Performance Measures, Asthma related visits, Immunizations, Mental Health Visits, for Medicaid eligible SBHC enrolled and non-SBHCs students, Delaware, 2014-2016

Primary Outcomes	Crude Odds Ratio (95% CI)	Adjusted Odds Ratio (95% CI)
National Performance Measures		
1. Well-child visits	1.3 (1.2-1.3)	1.2 (1.1-1.3)
2. Annual Risk Assessments	10.0 (7.3-13.9)	11.2 (7.0-18.0)
3. BMI Screening	5.6 (4.1-7.7)	5.6 (3.3-9.5)
4. Nutrition Counseling	4.0 (3.2-4.9)	4.1 (2.8-6.1)
5. Physical Activity Counseling	6.4 (4.9-8.4)	6.4 (4.2-9.6)
6. Depression Screening†	#N/A	#N/A
7. STIs and Chlamydia	1.9 (1.5-2.3)	1.9 (1.3-2.8)
Asthma-related visits (PQI)	1.0 (0.9-1.2)	0.9 (0.6-1.4)
Mental health visits	2.7 (2.5-2.9)	2.7 (2.3-3.2)
Immunization	0.5 (0.5-0.6)	0.5 (0.3-0.7)

Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.
Notes: Crude odds ratio (COR) with 95%CIs. Adjusted Odds Ratio (AOR) models include propensity weights with covariates service year, age, gender, race and ethnicity, and geographic location. Adjusted models are estimated with robust standard errors using exchangeable correlation with 95% CIs.
†No cases and hence not estimated

Table 3 presents characteristics of SBHC enrolled and non-SBHC students for the ER dataset. Similar to office visit data, there were differences in SBHC and non-SBHC students. After propensity weighting these differences were minimal.

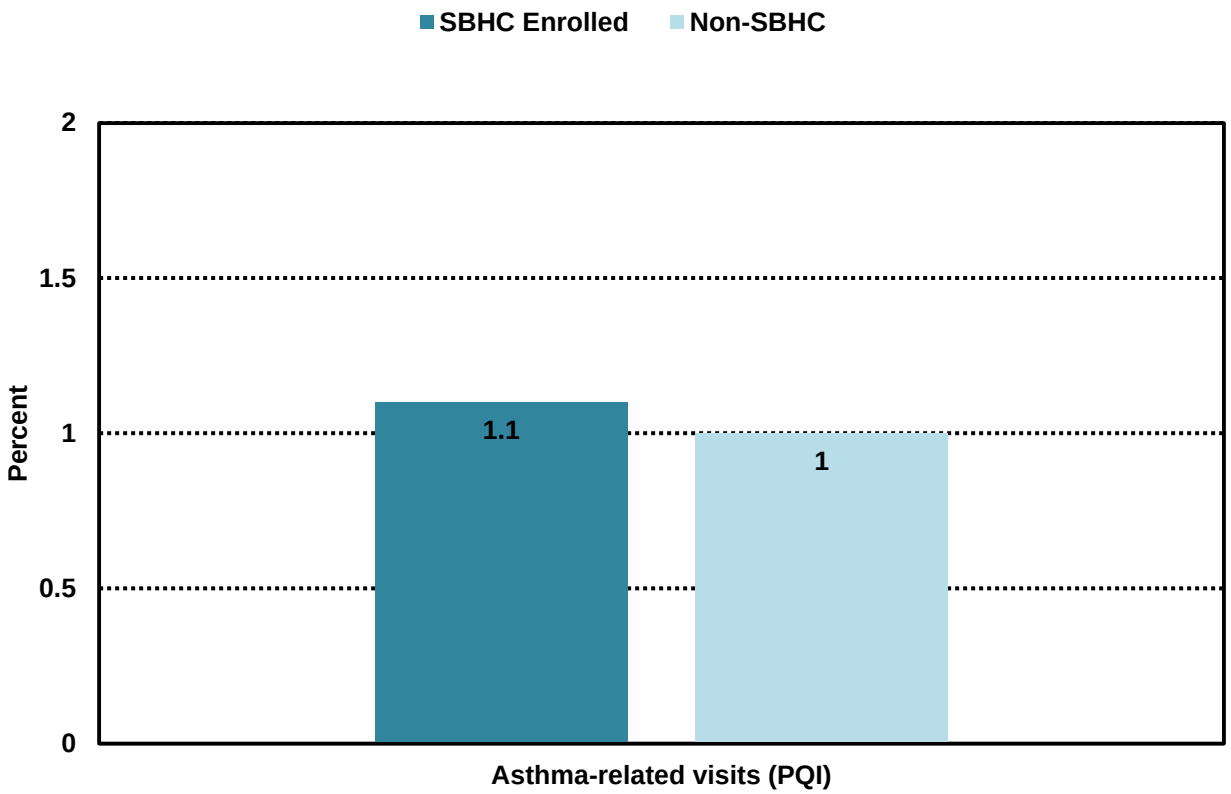
Table 3. Characteristics of Delaware students who are SBHC enrolled and those who are non-SBHC who are Medicaid eligible, Emergency Department Visit Claims

Characteristics of Medicaid enrollees¶ (N = 17,528)	Intervention/Exposure		
	SBHC enrolled (n = 1,940)	Non-SBHC (n = 15,558)	Standardized difference (d)
Year of Claim***			
2014	390 (20.1%)	4,472 (28.7%)	-20.1
2015	549 (28.3%)	4,732 (30.4%)	-4.6
2016	1,001 (51.6%)	6,384 (41%)	21.4
Age***	15.5 (±1.4)	15.8 (±1.8)	-21
Gender**			
Females	1,103 (56.9%)	8,355 (53.6%)	6.6
Race and Ethnicity***			
White (non-Hispanic)	973 (50.2%)	7,980 (51.2%)	-9.8
African American	928 (47.8%)	6,970 (44.7%)	16.1
Other race and ethnicities includes Hispanics	39 (2%)	638 (4.1%)	-14.8
Geographic location*			
Urban	1,596 (82.3%)	13,135 (84.3%)	-3.5

Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.
Note: Continuous variables are represented as mean ± standard deviation, while dichotomous and categorical variables are represented as N (%). Independent t-tests continuous measures and chi-square tests for dichotomous and categorical variables.
¶Unique for 2014-2016 time-period from Medicaid outpatient claims for 2014-2016 for 13-18 year olds.
***p < .0001 **p < .01 *p < .05

Figure 13 presents results Medicaid eligible SBHC enrolled and non-SBHC for ER visits specific to asthma (hypotheses 2c). There were no differences between SBHC enrolled and non-SBHC students for asthma-related ED visits (AOR =1.0; 95% CI: 0.6-1.6).

Figure 13. Emergency visits for Medicaid eligible SBHC enrolled and non-SBHC, in Delaware, 2014-2016



Source: Delaware Department of Health and Social Services, Division of Public Health, SCHA-MI and Medicaid linked data, 2014-2016.
Note: Adjusted models include propensity weights with covariates service year, age, gender, race and ethnicity, and geographic location. Adjusted models are estimated with robust standard errors using exchangeable correlation with 95% CIs.

3.3 Discussion

Our evaluation results suggest that there is some evidence of impact of SBHCs on health care utilization. We found that Medicaid eligible SBHC enrolled students were more likely than non-SBHC students to on average have higher number of well child visits, annual risk assessments, BMI screenings, nutrition counseling, physical activity counseling, STI and chlamydia screening, and mental health visits. Our results are consistent with evidence synthesis by Knopf et al.'s regarding health care utilization. Of particular importance is that our results specifically look to Medicaid eligible students' ages 13 to 18-years old and stratify the results by race and ethnic minorities. Although generally non-Hispanic whites had a greater number of office visits if they were SBHC enrolled Medicaid eligible students, we found that African Americans, and other race and ethnic minorities who were enrolled in SBHCs and Medicaid eligible were also

much likely to have on average higher utilization as compared to non-SBHC students and Medicaid eligible.

While some studies have found that SBHCs also contribute to reduced asthma-related morbidity, we found no evidence of it. An important finding of our study was that utilization for mental health was consistently higher for SBHC enrolled students than for non-SBHC students. Our quantitative results, bolstered by the qualitative focus group results, underscore the importance of access to and availability of mental health services. Delaware-based SBHCs seem to play a pivotal role in providing mental health services, especially to those who may have difficulty accessing them. Although Knopf et al.'s study noted small effects for self-reported mental health status, our results are consistent with Bains et al [9] who suggest that "SBHCs provide much needed access to students with mental health issues and that such students were more likely to access services at the SBHCs." While our study did not delve to examine if females were more likely to use mental health services, and/or examine specific race and ethnic groups, future studies could specifically examine this in Delaware.

While we hypothesized immunizations to be higher in SBHC enrolled students, the direction of the relationship was inverse. We found that SBHC enrolled students who are Medicaid eligible were less likely than their non-SBHC peers to have office visits specific to immunizations. There are several plausible explanations for this, including the fact that most SBHCs may be providing referrals for immunizations, rather than administering them, due to storage and/or stockpile issues. Second, students who access these services are already immunized by their local PCPs prior to the school year and therefore do not see the need for immunization. Third, specific school board policies and SBHC and medical provider consent processes may restrict administering certain procedures, including immunizations.

Our study has several strengths and limitations. The qualitative arm was limited by smaller parent/guardian representation despite the fact that we tried to recruit additional parents; this was a difficult group to recruit. In addition, one Medical provider's Institutional Review Board restricted collection and knowledge of student personal data. Therefore, the student focus groups included teens who were frequent users of the SHCs and not Medicaid eligible students.

Qualitative data, by definition, does not seek to generalize and/or seek to represent all teens using the SBHCs. Instead, it provides rich contextual data and provides individual and group perceptions by complementing the secondary data analyses presented here. The strength of secondary data analyses lies in the fact that it was a population-based study for all Medicaid eligible SBHC enrolled students. Unlike many states without limited SBHCs, Delaware SBHCs are available to all public and charter schools,

provided respective school boards and/or districts permit it. A key determining factor for SBHC enrollment is essentially parental consent. Further, our study was restricted to the Medicaid population (a proxy for low SES) and we used propensity weights to minimize selection bias. Another strength of our study was rather than rely on survey and self-report measures, we could use Medicaid incurred claims and actual listed diagnoses and CPT codes to assess several of our outcomes variables of interest.

Despite its strengths, the study is also limited in several ways. First, while IPTW reduces bias, it only does so for what is measured. There were several variables such as baseline morbidity for enrolled SBHC students, Medicaid plan details, family structure and/or household characteristics, parental consent details, and provider details that were unavailable to be incorporated in estimating propensity scores. The limited availability of measures that to estimate propensity scores as such limits us with developing a true comparator group, and hence, makes it difficult to draw population-based causal inferences. Second, it is well known that because claims data are prone to coding errors, it is difficult to ascertain the extent of bias in Medicaid data. Third, Guo et al.'s study examined continuously enrolled Medicaid eligible students, while our study did not place any such restrictions. Since eligibility can vary on a monthly basis, it may impact some students more differentially than others. Fourth, it was difficult to ascertain whether claims could be directly attributable to SBHCs (i.e., if the claim originated at SBHCs). We addressed this issue by conducting several sensitivity analyses. We restricted the claims to medical providers by using National Provider Identifiers (NPIs) specific to billing and restricted incurred claims to school week and during academic years (i.e., September to June) for 2014-2016. Despite these restrictions, our results held true providing us with increased confidence in our findings.

It is imperative that the results obtained here be interpreted as promising rather than conclusive. More studies specific to Delaware SBHCs should be conducted using a more comprehensive database with a complete school list. In particular, the school list from the Delaware Department of Education, and/or participating schools can bolster matches and minimize selection issues. This was especially critical for those SBHC students who are low utilizers, such as having less than four visits during the study period. We recognize the need for ongoing evaluation efforts and the need for consistent, reliable, and valid data to ensure accurate analyses. We will work with the DSBHA to ensure data collection that is meaningful and useful in future evaluations.

CONCLUSIONS

We conducted a mixed-methods study assessing the effectiveness of SBHCs. The primary goal of this project was to assess whether students who accessed services in Delaware-based SBHCs had better health outcomes than students who did not access SBHC services. Qualitative data, using focus groups, was solicited to add richness and depth to the numerical, quantitative study in hopes of triangulation and strengthening the meaning of both datasets. The conclusions and recommendations need to be viewed in light of the results of both qualitative and quantitative findings and the study limitations. While inconclusive, the evidence for SBHCs is at best promising and therefore, continuous monitoring and evaluation of healthcare outcomes and utilization is needed. The importance of quality data and a centralized database cannot be overstated as the quantitative analyses would not have been possible without a centralized database such as SCHA-MI. It is therefore critical that SBHC providers maintain and provide timely quality data for continuous monitoring and evaluation. Bearing these factors in mind, there are some general conclusions we can derive from our analyses of qualitative and quantitative data.

- Utilization of SBHCs among Medicaid eligible students is low and there is opportunity for better utilization. Among the percentages of teens who had four or more encounters with the SBHCs (44 percent of the sample), 54 percent were girls and 34 percent were boys. This indicates that girls are more frequent users — and indicates that SBHCs meet a critical need for girls (including reproductive and mental health services). It may also speak to the boys seeing the SBHC as a site for sports physicals and not for routine care. Additionally, it may indicate that teens are generally physically healthy and instead have greater need of the mental health services provided by the SBHCs. The lack of mental health services, both in the regions and within some of the centers, were prominent findings in the qualitative portion as teens and parents discussed consistency and cost as major factors in addition to access. ***Theme: Mental health: High needs, high quality care.***
- The low utilization for chronic health conditions may also reflect the availability of physical health care services in selected areas of the state. In New Castle County, there is significant focus on having a medical home and non-competition with the wellness centers. Due to lack of access, this is not as much of a problem as one travels south in the state. ***Theme: Health care: Access, education, and self-advocacy.***
- Fewer boys were noted to be frequent users. Several participants cited this factor as a potential for growth.

- Utilization increased as teens aged, perhaps reflecting changes in adolescent developmental stages, coupled with physical and psychosocial needs: increased stress and increased need for mental health services, and increased need for reproductive services. SBHCs fill these gaps by providing social emotional support in a confidential setting and alleviating concerns among teens regarding self-worth and may be instrumental in keeping the teens in school. ***Theme: Confidentiality, Stay in school, class, and seat.***
- Health equity and reduction of health disparities is one of the stated outcomes in literature. Results suggest that although a disproportionate number of non-Hispanic whites utilized SBHC services, other racial and ethnic minorities also greatly benefitted from access to the services (hypotheses 2b). Socioeconomic status (i.e., poverty) seems to be an important factor. SBHC enrollment should focus on those living in poverty as it hampers access to health care, regardless of Medicaid. Transportation and lack of parental knowledge, initiative, ability to leave work, and involvement were key qualitative themes. In addition, teens cited cost, convenience, and confidentiality as key reasons SBHCs were superior as sites of health care. ***Theme: Confidentiality, consistency, cost, convenience***.
- Both qualitative and quantitative data pointed to high utilization of mental health services. Mental health services and substance use/abuse were seen as key values of the focus groups and validated by the quantitative study. Theme: Mental health: High needs, high quality care. The assets of early diagnosis and management, ongoing/supportive care, relationship building, and assisting teens to cope were noted. The ability for teens to self-advocate and begin their road to independence was a critical finding. ***Theme: Relationships: Caring, trust, and teen orientation without judgment and Health care: Access, education, and self-advocacy***

4.1 MAJOR POINTS/So What?

- The sincere and emotion-filled student accolades in the focus groups demonstrate the high level of worth of the SBHCs. For many of the interviewed teens, as validated by the quantitative data, the SBHCs were life-saving, life-changing, and played a crucial role in adolescents navigating school, early adulthood, and other complex components of the life of adolescents today.
- Although difficult to depict quantitatively, the data speaks to the frequent use of mental health services and other services that highlight the need for teen-friendly, low effort, and caring services.

- SBHCs meet a critical need among teens in Delaware. Mental health issues, including suicidal ideations and intentions, depression, anxiety, complex and chaotic family/home issues, difficulties in coping with school, and crisis intervention were all expressed by students. The mental health counselors were able to engage students, provide ongoing support and counseling, and keep teens in school.
- Since utilization is low, efforts may be made to increase utilization as well as recruitment in the SBHCs, especially with young men.
- SBHCs provide a means to teach and role model self-advocacy in navigating the health care world, a key skill in achieving independence on the road to adulthood.
- SBHCs provide seamless care: a notable model as others attempt to develop integrated and holistic health care models.
- To accommodate this increased recruitment, funding needs to be increased to ensure full staffing, especially of mental health workers.
- Because the teen years are largely characterized as healthy with few chronic illnesses, the SBHCs meet the students' needs for sports physicals, reproductive health, episodic health care, nutrition counseling, screening and immunizations, and mental health counseling, among other services. The use of SBHCs for chronic health issues such as asthma and diabetes differs among school districts based on primary care and medical home availability and accessibility. Because teens generally have immunizations prior to school enrollment, the lower rates of immunization provide another opportunity to ensure SBHC users have the needed vaccinations.
- SBHCs meet the diverse needs of a variety of populations. Although the most vulnerable of teens' needs are addressed, it is important to consider the SBHCs provide integral services for teens across socioeconomic, ethnic/racial, gender, and achievement boundaries.

4.2 RECOMMENDATIONS/Now what?

- Promising results imply that SBHCs need to be continually monitored and evaluated for performance using quality data on an ongoing basis.
- Ensure a feasible, usable, and acceptable data management system for use with all the SBHCs to provide for ongoing and future evaluative studies.
- Increase funding to ensure full coverage of SBHC sites and have dedicated dollars for ongoing monitoring and evaluation of performance.

- Increase provision of reproductive health services at settings that do not provide services.
- Use study findings to conduct community-specific needs assessments to determine school needs for the SBHCs.
- Disseminate study findings to various stakeholders to validate SBHC value and need for increased funding.
- Some evidence suggests that SBHC-enrolled students may under-utilize wellness center services. Methods to enhance student utilization to meet the holistic needs of students may be explored. The students in the focus groups discussed greater marketing of SBHC services and the need to reach additional students.
- Findings suggest that as students aged and progressed in school, they became more frequent users of SBHC services. This may highlight the need for peer mentoring for younger students in the assets of using a SBHC and the services provided. Peer and near-peer initiatives demonstrate a high level of effectiveness and may provide a means to market to students, increase utilization, and build increased school engagement and camaraderie.
- The SBHC model is a notable exemplar of the integrative health model to alleviate fragmented care. We should disseminate this model, along with the findings of this study, as a framework for others attempting to reform health care practices.

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APPENDIX 1

Assessing the impact of Delaware's School-Based Health Centers

(SBHCs) on health outcomes

Parent/Guardian Focus Group Guide

Ground rules: Thank you so much for consenting to participate in this focus group. Although this information is not sensitive, we ask that all information discussed here today is kept confidential and not discussed outside this focus group. We also ask that all members are given the opportunity to participate so we encourage you to refrain from interrupting and ask that you listen carefully to each other. Please share freely and again, thank you! Let's begin.

Domain 1: Patient Comfort and Satisfaction

1. Based on your own perspective, how comfortable is your teen in seeking healthcare services from the SBHC? How does this compare with other healthcare experiences?
2. Is your teen satisfied with SBHC services? Why or why not?
3. How satisfied are you with the care provided by the SBHC?

Domain 2: Health, health education, and healthcare access

4. Do you think your teen is healthier, physically or emotionally, because of the SBHC? Why or why not?
5. Do you believe the SBHC has had a positive impact on your teen's physical or emotional health? Why or why not?
6. Does your teen receive adequate health education at the SBHC?
7. Do you believe your teen's access to healthcare is enhanced by the SBHC?

Domain 3: School performance, engagement, attendance, and achievement

8. Do you believe your teen performs better in school because of the services of the SBHC? Why or why not?
9. Do you believe your teen is engaged more in school because of the services of the SBHC? Why or why not?
10. Do you believe your teen achieves more in school because of the services of the SBHC? Why or why not?

11. Do you believe your teen experiences differences in absenteeism/attendance because of the services of the SBHS? Why or why not?

Domain 4: Perceptions of cost, cost-savings, and parent/guardian time and effort

12. Do you believe your healthcare costs for your teen are different because of the services of the SBHC? Why or why not?
13. Do you believe you or your family saves money because of the services of the SBHC? Why or why not?
14. Do you believe you need to devote less time to receiving healthcare services for your teen because of the services of the SBHC? Why or why not?
15. Do you believe you need to devote less effort to receiving healthcare services for your teen because of the SBHC? Why or why not?
16. Can you tell us about personal experience you and your teen had with the SBHC that illustrates one or more of the issues we talked about today?
17. Do you have anything else to tell us or anything else you would like us to know about the services of the SBHCs?

APPENDIX 2

Assessing the impact of Delaware's School-Based Health Centers

(SBHCs) on health outcomes

Student Focus Group Guide

Ground rules: Thank you so much for consenting to participate in this focus group. Although this information is not sensitive, we ask that all information discussed here today is kept confidential and not discussed outside this focus group. We also ask that all members are given the opportunity to participate so we encourage you to refrain from interrupting and ask that you listen carefully to each other. Please share freely and again, thank you! Let's begin.

Domain 1: Patient Comfort and Satisfaction

1. How comfortable are you in seeking healthcare services from the SBHC? How does this compare with other healthcare experiences?
2. How satisfied are you with the care provided by the SBHC?

Domain 2: Health, health education, and healthcare access

3. Do you think you are healthier, physically or emotionally, because of the SBHC? Why or why not?
4. Do you believe the SBHC has had a positive impact on your physical or emotional health? Why or why not?
5. Do you receive adequate health education at the SBHC?
6. Do you believe your access to healthcare is enhanced by the SBHC?

Domain 3: School performance, engagement, attendance, and achievement

7. Do you believe you perform better in school because of the services of the SBHC? Why or why not?
8. Do you believe you are engaged more in school because of the services of the SBHC? Why or why not?
9. Do you believe you achieve more in school because of the services of the SBHC? Why or why not?
10. Do you believe you experience differences in absenteeism/attendance because of the services of the SBHS? Why or why not?

Domain 4: Cost, cost-savings, and parent/guardian healthcare time and effort

11. Do you believe your healthcare costs are different because of the services of the SBHC? Why or why not?
12. Do you believe you or your family save money because of the services of the SBHC? Why or why not?
13. Can you tell us about personal experience you and had with the SBHC that illustrates one or more of the issues we talked about today?
14. Do you have anything else to tell us or anything else you would like us to know about the services of the SBHCs?

APPENDIX 3

- ***Comfort and satisfaction***
    - "It's always just a place to go whenever you need someone…you know it's totally confidential."
    - "There's no judgement. You can walk in and say you need an appointment, the person isn't judging you about that."
    - "It's almost nurturing at the Wellness Center…My son is emotional and he likes that…the staff is trained to what they do are teens and teen issues…they know what they struggle with."
    - "It's more personal, because they have less people…they are doing it of their own accord…not because they have to."
    - "They make connections with us…it's very different than like the outside."
    - "It's trust and empathy...somebody cares about them that is not their parent or grandparent...they really care."
    - "They just make things better for you."
    - "Pregnant girls…they get academic supports from the school…sometimes they need someone to talk to stay in school. Someone to be accountable to."
    - "I generally hear they are comfortable here…I've never heard anything negative about the Wellness Center."
    - "At the doctors, I feel like they judge…I don't feel judged when I come to the Wellness Center. If I tell the doctor one thing…they'll tell my parents…and at the Wellness Center it's confidential."
    - "They welcome you…it's personal…she comes to me with open arms."
    - "They don't judge you…they ask you questions, and let you talk."
    - "Other places talk down to younger people…they don't do that…they try to lift you up instead of bringing you down."
    - "In general kids have a relationship with the providers at the Wellness Center…they think I'm {parent} associated with the community providers…but the Wellness Center is becoming their own thing…they think it's more confidential."
    - "It's very intimidating I think, even as an adult the first time you're a new patient somewhere...they hand you all those forms…part of the Wellness Center is teaching the kids to be a little more proactive with their healthcare…Independent. They get exposure when they come in here…they know what they will have to do."
    - "There are certain things you don't want other people to know…they won't like gossip about it. They keep it to theirselves and make sure you get the help you need."
    - "Like in the Wellness Center…there's just so many people you could see, so it's not kind of like…you're just here for one thing."

- "Their main goal is teens…because they are in a high school…they take their time making sure that we're okay...and if we don't want to tell our parent some things…they'll keep it confidential,"
- "I feel like adults have a better understanding of teens…I know that sounds weird, but adults already been through it…they know how to talk to you and what its like to be a teen…"
- "I feel like they actually care about how I feel…what problems I'm going through, and genuinely want to help me fix my problems…It's like I am not just another patient, I'm a person, that's what I like about the Wellness Center."
- "When you go to the doctor, they treat you like a child…(at the Wellness Center) they listen to you...they understand you."
- "I can say something to her that I wouldn't say to my mom…and she's going to keep it. I'm going to be honest…I don't tell my parents, cause sometimes if you tell your parents…they don't take it seriously and sometimes they take it over seriously!"
- "They can stop by and make an appointment and it's less threatening…if my daughter had to go to her provider by herself…she'd want me to come with her…it's easier and they can be independent and make their own appointments…it's their thing…they've got this."
- "They ask you questions and get the details at the Wellness Center."
- "Out in the world…you don't see certain people on a daily basis…school gets comfortable…you open up to certain people…I just want to see a particular person…I don't want to describe my entire life story again…I would rather it be one person."
- "I think this is a broad statement to make and it might not apply to everyone…but people typically like consistency…they don't like a lot of change. If people are bad with anxiety…they'd go into a panic attack."
- "I'm very comfortable…because it is like confidentiality running between you and the nurse practitioner. They know me well so I don't feel awkward."
- "They talk to you about it. They help you out. They make sure you are okay and you're not hurting yourself."
- "On the outside…they ask so many questions…she let's you explain your side of the story…she may ask some questions but it's only when you're comfortable and she makes you feel comfortable…she makes you feel welcome and warm to open up and feel like you're heard."
- "I can't find anything bad to say…I go there once a week…she helped me understand things...it's always with discretion…nobody hears of it. It's very confidential."
- "If she wants to talk with my parents…she makes sure I am okay with it…she doesn't want to go on a hunch…she verifies first before she talks with my parents."

- "I was freaking out when my grandmother died…she was on the phone but she hung up the phone and came to me. It's easier to talk to people when you bond with them."

- ***Healthier***
  - "I am not sure where a lot of kids would be without it…it's hard to show what it's done like last year…looking at a kid like ten years from now…if it's helping one kid and you can see it…then it's valuable."
  - "During football season…I didn't drink enough water…the Wellness Center helped me."
  - "I suffer from depression and anxiety…she helps me through my down days…she helps me with coping mechanisms.
  - "One of my son's best friends was suicidal and goes to another school…he referred him to their Wellness Center."
  - "I think the mental health part…there's so many kids that need it…it's just the world we live in…a lot of kids go to the wellness center for counseling. Parents may be resistant or too busy…I don't think those kids would have ever gone to talk to someone if the Wellness Center wasn't here."
  - "You're not going to talk to your Mom about school…being stressed out…she'll be like…it's not a big deal…when I talk to the counselor…it's just relieving."
  - "I came for a physical…now I go to Wellness for a lot of things."
  - "Most people forget what it's like to be teenagers… the counselor treats us as if we are still teenagers."
  - "A year ago I was sexually abused and I just started having a breakdown…I hadn't told any adults…I came down and they really helped me understand because I was in denial when it happened…they helped me understand that is not my fault and that really helped. I think I would have been lost without them."
  - "I actually like the fact that I can talk to somebody and not be judged…that's my whole thing...I don't like being judged."
  - "I have a lot of issues going on in my house…she helped me handle that…she helped me handle lots of situations."
  - "She likes to talk with you about your personal problems and it keeps you out of trouble. It keeps you away from the drama and stuff…you're not fighting and stuff. You're not getting kicked out of school."
  - "They always looking out for you...just getting a check-up…and she referred me to a counselor….and a nutritionist…they're always looking out for you."
  - "I come here for more emotional or mental stuff…like religion issues, too."
  - "I was going to fight him…then I started going the Wellness Center and they helped me filter how I felt and why I felt this way. They got me into free writing …it's a way to vent to just yourself…when you are done you can see how you are really feeling."
  - "{without the Wellness Center} I wouldn't have taken him to the doctor for his acne…he got it treated at the center."

- "I got reported for suicide and I was forced to follow up. I stopped going, but now I started again because I had a lot of stuff piling in on me."
- "Nowadays people are talking about suicide, so a Wellness Center reduces it a little bit…if there is no Wellness pregnancy rate…drugs…suicide…cutting themselves increase."
- "There is just so much that goes on with my family...the kids are on the back stool...so I have eight hours to get what I need done for myself."
- "There's a difference between wanting to kill yourself and not wanting to exist…I can talk to her about being at the bottom of the pit…she'll let me talk."
- "I had a boyfriend…we just kept fighting…I finally started talking to the counselor here…just because you love him doesn't mean you should stay…you should stay when you are healthy for each other...breaking up with him was the best decision in my life."
- "The Wellness Center taught me how to help others…I say 'Why don't you go to the Wellness Center."
- "It's convenient to help you feel well…the nurse practitioner walked me through the steps on how to use the Wellness Center."
- "They helped us with coping skills for people with traumatic experiences. And the sexual stuff…you think you know all this…and then you realize you don't…it helped a lot."
- "She used it for emotional support and she's used it for vaccinations and stuff…she felt more comfortable going there than to the pediatrician…So that said a lot. But, I think that being able to have that outlet has really helped her to remain a health person emotionally."
- "I had to go there to get a physical in order to play basketball and I had to go to the wellness center…that helped me out a lot this year."
- "I feel like the majority of students have anxiety…they can't wait for their therapist so they keep it inside…if they go to the Wellness Center they have room in their head to actually think of what they are doing in class instead of balling it up inside."
- "I wish I could have the Wellness Center for my life."
- "Some parents over react…some underexaggerate…I tell my parents something's wrong and they wait three months and then it's pointless."
- "I was suicidal…I had no point to live for…we talked about everything and she made me see things more clearly…when I left I felt a lot better and I didn't want to kill myself anymore."

- ***Health education and Access***
  - "Some parents barely take kids to well visits…if they don't use the Wellness Center…that's a big loss for a lot of kids."
  - "Psychologists [out in the community] want you to keep coming back…the Wellness Center wants to get you better…they want you okay."
  - "Her mom wouldn't sign her up for Wellness because they offered birth control…but then she got sick and she all of the sudden she was signed up because it was easy and accessible."
  - "We've had quite a few teen pregnancies here…it is so easily preventable…just come here and get what you need…for free if you don't have insurance. It's the responsible thing to do. You give your kid the flu shot so they won't get sick…what's the different with allowing them to get birth control so they won't get pregnant."
  - "People are going to do, have sex either way…if they have birth control or not…some do it and some don't."
  - "They talked to me about sexual activity…it is not just a physical contact...there is emotional attachment to the person…they taught me that."
  - "Sometimes he'll be angry and it will be one of those mornings…just to know he has someone to talk with…I am glad the Wellness Center is there for him."
  - "A classmate of my daughter's was suicidal…the Wellness Center stepped in and got him the help he needed. If he had not had that support, then who knows?"
  - "You can make an appointment, but it is so much easier and faster than going to the regular doctor…You don't have to leave school."
  - "It's really convenient since I do multiple sports at a time…you can come and it saves time…"
  - "I don't really have a real doctor on the outside my house, my parents don't believe it that…so the Wellness Center is always there."
  - "We would go in the back of the cafeteria and do games and, not really like presentations…like we have a back table where we put things, and students come back and talk to us."
  - "They tell you healthy ways to deal with stress and one of the best ways is coming here because then I talk about it ...when I talk about what is stressing me out…I tend to fix the problems as I am saying it."
  - "The Wellness Center started Open Minds…we are about socializing and activism…they are indirectly helping a large group of people in the school…and the LGBTQ community."
  - "I feel like Wellness should be in elementary schools…there are kids who are getting abused at home…little kids…they can go with their parents not knowing…It's needed in today's society."
  - "We get backpacks for food…we are short on food in our house…and that's definitely helped us a lot."
  - "He can go on his own."

- "I know my kids are coughing and coughing…wait another week and see how you feel…sometimes if you catch it early you can circumvent whatever…they have access at the Wellness Center to get it checked out…they can keep a closer eye on them because they are right here. They can say let me take a quick look in two days…who's going to take their child to a doctor for that?"
- "The Wellness Center can give me things the nurse's office can't…emotionally I feel like as teens we all need someone to talk with you about what we are going through…it's cool to talk to your friends but they can't really help you."
- "We are in a group for kids that have parents or friends that are alcoholics or addicts….it helped me get better emotionally because I have those people to talk to and I don't have to keep it all in. I have cried…I have yelled in there…It's been like a roller coaster in there."
- "I'm in this group called the Triple Ten Challenge…it's a bunch of kids…she sees a lot of potential in us working better in a healthy way. We motivate each other and we try to all lose weight."
- "Going to the doctor's office…you always have to wait…a whole bunch of problems and lots of papers…when you can simply go to the wellness center…they never turn you away. They find a way to fit you in. She made a spot for me to come in…she makes it work. I guess my doctor's a busy guy…my mom makes the appointment two weeks early or something like that…"
- "They educate you…pamphlets and stuff…if you have a question…you just go to the Wellness Center and they'll usually tell you all about it."
- "She checks up with all your stuff…she has access to the {hospital name} stuff and knows what you're missing."
- "They spend a little more time asking questions and really check them out…"
- "Basically, my kids would not have any medical care if they didn't come here."
- "The posters in the bathroom…the pamphlets…sometimes they'll say they heard an announcement about something from the Wellness Center."
- "Around here…there's enough physicians…transportation is an issue…and people taking time away from work is an issue…that is why people don't get medical care."

- ***School: performance, engagement, achievement, attendance***
  - "It's really convenient…because you go in there and straight back to class…you don't have to worry about getting in and out of school."
  - "I can't waste time going to a doctor's appointment when I need to study in school because I have a lot of classes I need to stay here for…"
  - "If I miss a day, I have to make it up."
  - 'I'd rather just get it done in school."
  - "It's nice for the convenience of it…because there's a lot of important things that seniors do, like assemblies, you can't miss an assembly or stuff...school is important."

- "I think my child would have left school if he hadn't been able to come and talk to somebody."
- "I have really bad anxiety with tests…If I am freaking out…I just come down here and calm down…and take the test."
- "They don't want to miss school…if I took my kid a doctor for a sports physical in the middle of the day it would take two to three hours…then they want you to take them to lunch or something…or stop at a store…that's the whole day."
- "I wake up…not wanting to go to school…but if I know I have an appointment…I'm going to get this off my chest…I am going to get this done. If I had an appointment every single day...I'd be the best child."
- "Kids are less absent if they use the wellness center."
- "There was a time when my grades were suffering …when I had the incident…I was crashing…they did help me get back to where I was."
- "My kids take high level classes…you miss one day and it messes you up."
- "I was going to drop out…my grades went from B's to 20%...my parents were telling me just to leave school…that it wasn't worth it…the Wellness Center taught me I am better than that…that I want to make something of my life."
- "The counselor helped me transition to the new school…she helped me balance the work at the new school."
- "[My daughter]…she sees the counselor instead of her therapist…she couldn't go to school…she missed almost a month…she figured it out with the Wellness Center."
- "They fix it right there and then she can go back to class."
- "I think it has a great impact for the fact that the kids can go there…they don't have to miss time staying home if they're sick because they can go right there."
- "She gets frustrated real quick and want to walk out of class...she says school gives her a headache…school is getting tough…the Wellness Center helps her cope."
- "They help me focus more so I get work done…they keep you inside the important classes like math…if you don't go to the Wellness Center…you'd miss more school due to the fact that usually people don't come back to school afterwards so you miss a whole day…it messes up the whole day."
- "I'm a special ed student…if you miss a day or a week…you cannot catch up. No one wants to miss school, so it's very helpful to me."
- "If you go to the doctors, you're out of three classes."
- "I freak out when I think I am sick…so if I am having a problem…they give me more confidence and push me to get my grades up."
- "They calm you down so you can do your work…they tell you other stuff to do so you don't quit school."
- "I was pregnant…she helped me understand…don't let the pregnancy effect your education…that really inspired me."

- ***Cost and time savings***

- "I think my kids would prefer to come to the wellness center because they don't have to leave school for an appointment."
- "in the doctor's office...they take forever…and sometimes they just don't care…there's a lot of waiting."
- "The most I wait in the Wellness Center is 15 minutes for an hour and one-half session…that's more balanced."
- "They are quicker at the Wellness Center...I'm inpatient."
- "They care about your grades. If you're sick, you can come here and get medicine instead of being pulled out of school for the whole day. It just takes 30 minutes and you're in and out."
- "I recently got a test for HIV and it was free."
- "When you do the doctor thing…drive there and back…sit in the waiting room for an hour…see the doctor and they want you in and out…and you still have to get your prescriptions…it's a big waste of time."
- "My parents…my family makes too much to get help with insurance but we don't have money for healthcare…so it's a peace of mind kind of thing."
- "I don't have to pay my co-pay…that's $25…some are $60…they can get medications at the wellness center…not every parent can afford the co-pays or to get off work."
- "I knew a teen who was quiet and parents wouldn't let her use the Wellness Center. When she turned 18 she started using it…she disclosed she had been sexually abused by her father...she changed…she started being involved in activities…more connected with school…better grades…she was a bit happier."
- "At the doctor's office...I called for a test...they said, they don't have a nurse now...call back in June…it was September…"
- "I'm sure I save a lot of money rather than being medicated for my problems."
- "It was convenient for my mom…because instead of her run back and forth to my doctor's…I can just go to my school…they can prescribe me something."
- "You don't need insurance to go to the Wellness Center…but if you have insurance…they will bill it…we couldn't buy insurance…I wouldn't be able to afford …my mom was like…why don't you go to the Wellness Center."
- "A doctor's visit would cost so much…that was really helpful for us."
- "It saves time…money…gas. She prefers the Wellness Center and it's there whenever she needs it…it helps with time and scheduling and planning…it's much more convenient."
- "We don't have to pay for appointments…you don't need to have insurance…I can't speak about my parents' insurance…I don't have parents in my life…I am living on my own…I am emancipated."
- "When you're sick, she'll give you the prescriptions for the cheapest...she'll make sure it's affordable."

- "Since my mom's the only one working in our house right now…she's the only one bringing in money and she works 10 hour shifts…the Wellness Center is good because I am able to talk with somebody."
- "You don't have to pay for birth control."

- ***SUGGESTIONS:***
  - "I feel like they need more counselors…sometimes when I try to make an appointment and the schedule is full…you just have to wait…that could be extremely dangerous for some kids."
  - "She kind of left and they had a new counselor to replace…I liked my old social worker...I didn't feel connected…then I met one I like…but she was temporary…it's hard when you have to start over…based on notes…"
  - "[My daughter] tried to make an appointment…but it was like three days later…so I just got her an appointment with her doctor."
  - "The sexual part, I think they should do more, cause in other schools they have condoms and birth control so people don't get STDs and don't get pregnant…where we don't have that…we're not allowed to apparently. I heard because the school board is filled with a bunch of old dudes that think that we're still living in their age time. We had a petition going around putting condoms and birth control in the wellness center because some kids can't tell their parents…parents have to consent anyway…but they can't get birth control otherwise…the board is saying no, kids aren't having sex. The board doesn't understand the truth about kids nowadays because it's a bunch of old white guys. Kids don't have other resources…kids need a way to discretely get birth control or whatever they need."
  - "I feel like bullying is the biggest problem here…the school does nothing about bullying. I was scared to come to school. The Wellness Center could take down how many people come it about bullying and take it to the board or something."
  - "That survey…they always have us fill it out every single year…they need to ask more questions about mental health and bullying."
  - "You need to tell more people about it [the Wellness Center and services]…more signs…assemblies…it's a great place but some kids don't know about it."