

Advancing Care for Sexual and Gender Minority Students in Oregon School Health Centers:

A Needs Assessment

Amika C. Savage

School of Nursing, Oregon Health & Science University

### **Abstract**

Sexual and gender minority (SGM) adolescents frequently experience higher rates of negative health outcomes than their cisgender and heterosexual peers. School Health Centers (SHCs) have been identified as an equitable, efficacious and adolescent-friendly resource for health care diagnosis, referral, and treatment for many groups, but their specific impact on the health of SGM adolescents has not been well studied. Multnomah County is home to ten of Oregon's SHCs, all of which serve SGM adolescents. A web-based survey was conducted to assess the knowledge, attitudes and beliefs, behaviors, and insights of 26 Multnomah County SHC employees, as they relate to the care of SGM adolescents. Findings suggest that employees with higher SGM-related knowledge have more SGM-supportive attitudes. Inadequate training was the most frequently perceived barrier to providing SGM-affirming care, and increasing staff training was the most frequent recommendation made. Study results suggest that efforts to increase staff knowledge of SGM topics should be pursued. In addition, existing SGM-affirming practices, such as the collection of sexual orientation and gender identity demographic data from patients, should be sustained.

*Keywords:* student health center, needs assessment, sexual minority, gender minority, LGBT

## Introduction

### Problem Description

In the United States, an estimated 9.5% of adolescents, roughly 2 million people, identify as lesbian, gay, bisexual, or transgender (LGBT) (Conron, 2020). For the purposes of this report, the umbrella term sexual and gender minority (SGM) will be used to describe LGBT persons and other minority sexual and gender identities such as queer, questioning, non-binary, gender non-conforming, pansexual, intersex, and asexual, among others.

Sexual and gender minority adolescents have been found to have higher rates of multiple negative health outcomes than their cisgender and heterosexual peers. These include significantly increased risks of suicide, depression, anxiety, eating disorders, violence and victimization, substance use, sexually transmitted infections including HIV, unintended pregnancy, engaging in sexual acts while under the influence, and other high-risk behaviors (Garbers, Heck, Gold, Santelli, & Bersamin, 2018; Gersh, Richardson, Breland, Bocek, & McCarty, 2018; Marshal et al., 2011).

School health centers (SHCs) are designed to be an adolescent-friendly resource for healthcare diagnosis, referral, and treatment services that are low-cost and easily accessible (Bersamin, Paschall, & Fisher, 2018; Daley, Polifroni, & Sadler, 2019). Oregon's first SHC opened in Portland in 1986 (OHA, 2020a). There are now 79 SHCs across Oregon offering services in 26 of the state's 36 counties. The majority of these medical clinics are designated as Federally Qualified Health Centers and exist within primary care health professional shortage areas, thereby providing care for some of Oregon's most underserved populations (OHA, 2020a).

Among Oregon SHC users, gender nonconforming youth were found to be more likely to identify SHCs as their predominant source of health care (OHA, 2020a). Gender nonconforming

and other SGM youth frequently have poorer health outcomes than their heterosexual peers (Garbers et al., 2018; Gersh et al., 2018; Marshal et al., 2011), especially mental, reproductive and sexual health. There is considerable evidence supporting the efficacy of SHCs in addressing these aspects of health for the broad population of students (Bersamin, 2018; Larson, 2017; Mitchell, 2012; Paschall & Bersamin, 2018). However, the impact of SHCs on SGM adolescents has not been thoroughly investigated (Garbers et al., 2018). Investigating and implementing measures SHCs can take to target the specific needs of SGM adolescents has the potential to yield improved health outcomes for this vulnerable population and add to the considerable evidence that supports increased resource allocation for SHCs.

### **Available Knowledge**

#### ***School Health Centers***

School Health Centers are community resources that provide health services in close proximity to a school (Daley et al., 2019). They have increased in number in the United States for the last three decades (Wade & Guo, 2010), and have become a popular means of addressing health disparities and improving student academic and health outcomes, with particular benefit to underserved populations (Anyon et al., 2013).

The efficacy of SHCs at reducing cultural, familial, language, and financial barriers to care has been documented (Daley et al., 2019; Guo, Wade, Pan, & Keller, 2010; Knopf et al., 2016; Koenig et al., 2016; Larson, Chapman, Spetz, & Brindis, 2017). Although SHC users are less likely to be insured (McNall, Lichty, & Mavis, 2010; Strolin-Goltzman, Sisselman, Melekis, & Auerbach, 2014), they are more likely to be vaccinated and to receive high-quality primary care services including increased mental health and dental care (Guo et al., 2010; Strolin-Goltzman et al., 2014). In addition, SHCs have been found to decrease emergency room visits

and prescription drug use, and to lower overall health care costs for their patients, with an estimated \$1.35 million net social benefit over a three-year period, equating to a \$35 savings per student per year (Guo et al., 2010; Knopf et al., 2016; Wade & Guo, 2010). By addressing barriers to care, SHCs improve health equity within the communities they serve.

Data supports additional benefits of SHCs. A positive relationship has been found between access and use of SHCs and the academic outcomes of school attendance and tardiness, dropout rates, college preparation efforts, and grade point average (Bersamin, Garbers, Gaarde, & Santelli, 2016; Knopf et al., 2016; Strolin-Goltzman et al., 2014). Furthermore, SHC users report increased health-related quality of life (Guo et al., 2010), increased physical activity, greater satisfaction with their health, and more healthy eating behaviors than nonusers (McNall et al., 2010).

The presence of a SHC, especially one that prescribes and dispenses contraceptives, has been found to benefit the sexual and reproductive health of adolescents. Students attending schools with SHCs were found to be 31% more likely to use contraception than similar students attending schools without SHCs (Bersamin et al., 2018). Moreover, among students with access to SHCs, students at those that prescribed and dispensed contraceptives were 42% more likely to report contraceptive use at last intercourse than students attending SHC schools that did not prescribe and dispense contraceptives (Bersamin et al., 2018).

SHCs are supported in the literature as effective adolescent mental health service providers (Larson et al., 2017). When increased funding has been allotted to SHCs, allowing for increased availability of mental health services, there have been associated reductions in depressive episodes and suicide risk (Paschall & Bersamin, 2018). Additionally, substance use

interventions provided in the SHC setting have been successful in decreasing substance use (Mitchell et al., 2012).

To improve adolescent health care access and delivery at SHCs, the following recommendations have been made: highlighting the perceived importance of confidentiality and privacy within the clinic setting to adolescent users (Daley et al., 2019), educating and engaging teachers in making appropriate student referrals to the clinics (Anyon et al., 2013), expanding hours of operation and offered services (Knopf et al., 2016), increasing on-site contraceptive prescribing and dispersal (Daley et al., 2019), and increasing attention to preventative services (Koenig et al., 2016). To begin improving care for SGM adolescents at SHCs, addressing the variable and poorly understood measures SHCs have taken to provide SGM-sensitive care has been suggested (Garbers et al., 2018).

### ***SGM-Affirming Health Care***

Although little has been published that is specific to the care of SGM patients in SHCs, general suggestions have been made to promote a safe and welcoming clinical environment for SGM patients across health care settings. These recommendations support SGM-affirming health care, which recognizes and affirms patients' sexual and gender expressions and identities (Baldwin et al., 2018; Gridley et al., 2016). Positive clinician-patient encounters have been identified as those characterized by clinical staff demonstrating knowledge of basic terminology surrounding gender, being experienced in caring for SGM patients, and referring to the patient by their correct pronouns and preferred name (Baldwin et al., 2018).

A foundational practice that encourages patient engagement and allows health care providers and staff to refer to patients correctly and respectfully is the routine collection of sexual orientation and gender identity (SOGI) demographic data from all patients (Baldwin et al.,

2018; Brown et al., 2020; Furness et al., 2020). Conversely, inadequately trained staff are less likely to have the knowledge and experience necessary to consistently provide SGM-affirming care (Baldwin et al., 2018). Educating staff about SGM health and terminology including the promotion of proactive behaviors such as consistently including their own pronouns in introductions, has been recommended. Such initiatives may include cultural awareness trainings and assessments of personal internal biases (Klein, Paradise, & Goodwin, 2018).

This needs assessment was conducted to better understand the relationships between Multnomah County SHC staff and SGM-affirming practices, with an interest in identifying opportunities to improve related patient care and overall health outcomes.

### **Rationale**

Donabedian's Quality Framework suggests a relationship between three concepts: structures, processes, and outcomes (McDonald et al., 2007). When related to health care, structures are the physical and organizational components of care settings, such as personnel and the clinic environment, processes include patient care activities and care coordination, and outcomes include health outcomes and patient satisfaction. This framework suggests that altering the structures and/or processes have an impact on the outcomes, and should be considered in quality improvement initiatives (McDonald et al., 2007).

### **Specific Aims**

The specific aims of this quality improvement project are to assess the knowledge, attitudes and beliefs, behaviors, and recommendations of clinic personnel within Multnomah County SHCs regarding care of SGM patients, and to analyze collected data to identify areas for improvement that may guide interventions or future research.

## **Methods**

### **Context**

There are ten SHCs in Multnomah County, Oregon, serving youth in grades kindergarden-12, that live or attend school in the region (OHA, 2020a). All have been designated as Federally Qualified Health Centers. With the exception of the SHC associated with Benson High School, the Multnomah County Health Department (MCHD) is the medical sponsor of these SHCs (OHA, 2020b). The majority of medical providers at these sites are Advanced Practice Registered Nurses (OHA, 2020a). Other staff include mental and behavioral health care providers, registered nurses, medical assistants, and non-clinical staff, such as program managers, among others. These clinics are committed to providing accessible care to students of all backgrounds and identities, and serve all patients regardless of their financial situation or insurance coverage; they never charge for out-of-pocket expenses.

About six years ago, several managers of MCHD SHCs championed initiatives aimed at improving care for their SGM patients. Following those initiatives, advances were made in clinic protocols related to the collection and documentation of SOGI data. Also, student groups associated with the SHCs expanded their involvement with SGM students and activities. The culmination of such measures demonstrates that this system has supported prior SGM initiatives and that support within the system may facilitate this project.

### **Proposed Methods**

The original plan for this project included focus groups with students served by MCHD SHCs. The focus groups would pursue the students' perspectives and feedback regarding care for SGM patients within the SHCs. After several months of preparatory efforts, a research review board specific to the Portland Public School District declined to authorize this project due to



concerns about further taxing their students with additional obligations while the students were in the midst of remote-learning due to the COVID-19 pandemic. Therefore, the proposed focus groups were not conducted. However, engagement of adults, including the MCHD SHC staff, was not hindered by these determinations and the following needs assessment ensued.

### **Participants**

All of the 43 MCHD SHC adult staff were invited to participate in a needs assessment initiative. Among these voluntary participants were persons employed in roles with direct patient interaction as well as personnel who do not directly interact with students. Recruitment was conducted in partnership by this author and the manager of the MCHD SHCs. Recruitment efforts included introduction of the project within the SHC staff's routine virtual weekly meeting, as well as written correspondence via their work email. These communications included brief acknowledgement of the poor health outcomes frequently experienced by SGM adolescents, requests for participation in an anonymous survey about SGM topics, information about a survey participation incentive, and reminders about the closing date of the survey. Protections of the needs assessment participants included review and oversight from two research review boards, including specific guidance related to participant safeguarding. The informed consent protocol and anonymity of the survey offered additional protections to participants.

### **Implementation**

#### ***Survey Creation***

In order to assess the knowledge, attitudes and beliefs, behaviors and recommendations of MCHD SHC personnel regarding the care of SGM patients, a voluntary and anonymous web-based survey was conducted among this group. The survey tool was created based on insights from related literature, prior system initiatives and recommendations from the MCHD SHCs

program manager. Maintaining anonymity of respondents was identified as an essential element in the pursuit of candid responses from SHC staff. Therefore, demographic data collection was extremely limited to protect participant identities within the relatively small group of coworkers.

### ***Survey Design***

The survey was created using secure online Qualtrics software, which was available to this author via a professional agreement between Qualtrics and Oregon Health & Science University. Upon opening the Qualtrics survey link, details of the study were displayed to presumptive participants who were then given the opportunity to consent to participation. In the event that a respondent declined to consent to participation, the survey ended. Otherwise, following receipt of consent, additional survey questions were displayed. While participants were encouraged to answer all questions, they were blocked from skipping this question. Participants were then thanked for their willingness to participate and encouraged to answer survey questions as truthfully as possible, with an accompanying reminder that they are a valuable asset to the SHC team and that the survey was not a test of their character. Other encouragements were included throughout the survey, such as prompts about progress through the survey and acknowledgements of the challenging nature of the survey content.

The two survey questions following the informed consent query also had dichotomous answer formats. They asked whether the respondent had received training specific to SGM patients while employed by the MCHD and whether they interact directly with patients in their SHC role. Following these items was a section with five multiple-choice questions, each with four answer choices, but only one correct answer, that aimed to assess the respondent's knowledge of SGM terminology (See Appendix B). Upon completion of the knowledge section, definitions of SGM-related terminology that would be included in the subsequent sections was

provided. Participants were not able to go back to the knowledge section and change their answers after exposure to these definitions.

Then, Likert scale questions were employed to assess the degree to which respondents agreed or disagreed with statements regarding SGM-related attitudes and beliefs in one section, and SGM-related behaviors in another (see Appendix B). The *Attitudes & Beliefs* section included ten distinct questions, while the behaviors section included nine questions. Only respondents who indicated that they interacted with patients as part of their SHC role were shown the *Behaviors* block of questions. All Likert scale questions included four answer choices: *strongly disagree, somewhat disagree, somewhat agree, and strongly agree*. A neutral answer choice was not provided in order to encourage a more definitive, and potentially more revealing response.

Finally, five open-ended questions concluded the survey. These questions asked respondents to identify one aspect of care for SGM patients within the SHC setting that was going well, one barrier that limited their ability to provide high-quality care to this population, a general recommendation to improve SGM patient care, and lastly, a training-related recommendation. At the end of the survey was an optional field to write in any additional thoughts.

### ***Data Collection***

Survey responses were collected for a one-week period. All SHC staff were notified when the survey collection period opened and also one day prior to the end of the collection period. Survey responses were stored within the secure Qualtrics database before analysis ensued on an encrypted and password-protected computer.

## **Measures**

As noted above, data was collected through a web-based survey using Qualtrics software. Measures for studying processes and outcomes of the intervention include the number of collected surveys, quantitative interpretation of respondents' scores in the *Knowledge, Attitudes & Beliefs, and Behaviors* survey sections, and qualitative analysis of responses to the survey's open-ended inquiries. Following data collection, a raw data report was downloaded from the Qualtrics database and was directly imported into the Statistical Package for the Social Sciences (SPSS) software for more comprehensive analysis.

## ***Data Analysis***

Within the SPSS software, descriptive statistics was used to identify the total number of survey participants, the number of respondents who consented to participation, those who identified that they directly interact with patients as part of their SHC role, and those who have had SGM-specific training while employed by the MCHD. To interpret results from the *Knowledge* section of survey, which included multiple-choice questions, responses were transformed into dichotomous variables, and each respondent's score was summed to calculate total knowledge scores. For the *Attitudes & Beliefs* and the *Behaviors* sections, which included Likert-style questions, variables were recoded on the four-number scale so that the highest scores always designated the respondent's selection of the answer choice that most strongly designated attitudes and beliefs, or behaviors that supported affirming care for SGM patients. This process was necessary due to the inclusion of reverse-coded questions in the survey. After these data were transformed, total scores were calculated for the *Attitudes & Beliefs* and *Behaviors* sections. Then, respondents were split into high and low scoring groups, determined by median scores, for

each of the *Knowledge, Attitudes & Beliefs* and *Behaviors* sections. Descriptive statistics were used to evaluate frequency distributions within these data.

### ***Ethical Considerations***

A proposal for this project was submitted to the Institutional Review Board at Oregon Health and Science University and the Multnomah County Health Department Project Review Team for approval prior to initiating data collection. After thorough review, both institutions determined that this project did not require formal IRB oversight. A research review team specific to the Portland Public School District evaluated an earlier version of this project plan (see *Proposed Methods*) that included collecting data from student participants. That proposal was not approved; consequently, student participation was not solicited. Aside from permissions to conduct the project and official oversight, other ethical considerations included maintaining respondents' anonymity and mandating acquisition of informed consent for all participants. There were no identified conflicts of interest.

## **Outcomes**

### **Data Analysis**

Of the 43 identified MCHD SHC employees, 60% (n=26) participated in the survey intervention. All 26 respondents provided informed consent. Of these participants, 81% (n=21) identified that they interact directly with patients in their SHC role, while 19% (n=5) disclosed that they do not (see Appendix A). Because the *Behaviors* section was geared towards experiences with direct patient interaction, 19% of respondents were not shown that block of questions. Additionally, 69% (n=18) of respondents indicated that they had received SGM-related training while employed by the MCHD, while 31% (n=8) of respondents had not (see Appendix A).

***Test Validity***

Test validity was evaluated with Pearson Correlation testing with a 2-tailed significance level of  $p < .05$  designating significant relationships (see Appendix C). The validity of each questionnaire item in the *Knowledge* section was  $p < .05$ , except for *Knowledge Question 4*. The validity of most questions in the *Attitudes & Beliefs* section were valid, as defined by a p-value  $< .05$  with the exception of *Attitude Question 3* and *Attitude Question 4*. Interestingly, there was a strong negative correlation for *Attitude Question 10*. The validity of the *Behaviors* section was more variable, with poor validity identified for *Behavior Questions 1, 2, and 9*, while the other *Behaviors* section questions were deemed valid with p-values  $< .05$ .

***Test Reliability***

Internal consistency reliability of scales was measured using Chronbach's Alpha testing (see Appendix D). In the *Attitudes & Beliefs* section, Chronbach's Alpha was initially .60, which was improved to .73 with removal of *Attitude & Beliefs Questions 3, 4, and 10*. For the *Behaviors* section, internal consistency was initially very low, with a Chronbach's Alpha score of -.058; after removal of *Behavior Questions 1, 2, 5, and 9*, the score improved to .64.

With the removal of 8 survey questions, (i.e., *Knowledge Question 4, Attitudes & Behaviors Questions 3, 4, and 10, and Behaviors Question 1, 2, 5, 9*) the assessment tool was modified to include only valid questions. The internal reliability of the *Attitudes & Beliefs* and *Behaviors* sections improved through the omission of these survey items.

### ***High & Low-Scoring Groups***

In the three main sections of the survey, *Knowledge*, *Attitudes & Beliefs*, and *Behaviors*, individual participant scores were summed after removal of questions with low validity and/or reliability. These scores were then split at the median into high- and low-scoring groups in order to create categorical variables for Chi-Square testing. The median score in the 4-point *Knowledge* section was 4, with a minimum score of zero and a maximum score of 4 (see Appendix E). Respondents were split into high- and low-scoring groups, with scores of 3 and below in the low-scoring group (n=11) and scores of 4 in the high-scoring group (n=15). In the 28-point, *Attitudes & Beliefs* section, the median score was 24, with a minimum score of 17 and a high score of 28. Respondents were split into high- and low-scoring groups with scores of 23 and below falling into the low-scoring group (n=12) and scores of 24 and above in the high-scoring group (n=13). In the 20-point *Behaviors* section, the median score was 14, with a minimum score of 8 and a maximum score of 16. Respondents were split into high- and low-scoring groups with scores of 14 and below in the low-scoring group (n=11) and scores of 15 and above in the high-scoring group (n=10).

### ***Data Correlations***

Relationships between survey sections were evaluated using Chi-Square testing for categorical variables and Pearson's correlation coefficient testing to assess the relationship between continuous variables (see Appendix F). The overall relationship between high- and low-scoring groups in the *Attitudes & Beliefs* and the *Knowledge* section were found to be significant (p=.028). Several statistically significant relationships between individual queries in the *Attitudes & Beliefs* and the *Knowledge* sections were discovered.

There were no apparent statistically significant correlations between the dichotomous categorical variables “interact directly with patients in their SHC role,” and “have received SGM-specific training while employed by the MCHD,” and the high- and low-scoring groups from the *Knowledge* section.

Unlike the many strong and evident relationships between the *Attitudes & Beliefs* and *Knowledge* sections, relationships with the *Behaviors* section were less substantive, with no relationships meeting the significance threshold of  $p < .05$ .

### ***Qualitative Data***

The collection of SOGI demographic data, the environment of care established by the SHCs, and positive community relationships were most frequently identified by staff as ongoing facilitators of SGM-affirming care (See Appendix G). Perceived barriers to SGM-affirming care included lack of SGM-related knowledge, faults of their coworkers such as SGM-related biases, challenges specific to providing care to minors, and non-cohesive clinic processes. The most frequent recommendation was to implement SGM-specific staff training. Other recommendations included seeking direct feedback from SGM students, increasing SGM-inclusive visuals in the clinics, and standardizing clinic protocols around SOGI collection and best-practices for SGM care. Training-specific recommendations were also provided (see Table 4G).

## **Discussion**

### **Summary**

The knowledge, attitudes and beliefs, behaviors, and insights of MCHD SHC staff were investigated in this needs assessment. Findings suggest opportunities to improve the structures and processes of these health care systems in order to positively influence the third component of



Donabedian's Quality Framework: outcomes. This study benefitted from support from MCHD personnel and outside community organizations. It was conducted during a period of heightened local and national attention to related issues, which may have strengthened interest in the project.

### **Interpretation**

The significant and positive correlations between the SGM-specific knowledge of respondents and their SGM-related attitudes and beliefs suggest that persons who know more about SGM topics are likely to have more supportive attitudes towards this group. This relationship is well supported in the literature and fortifies the assertion that conducting educational initiatives for all staff members is likely to benefit SGM patients (Baldwin et al., 2018; Dolan, Strauss, Winter, & Lin, 2020; Klein et al., 2018).

Although many staff scored well in the *Knowledge* section overall, they most frequently identified a lack of knowledge of SGM-related topics as a barrier hindering them from providing high-quality care to SGM patients. There was not a clear relationship between respondents who indicated they had received SGM training while employed by the MCHD and knowledge scores. This may suggest that prior training initiatives of years past were not effective in increasing long-term knowledge, that staff who were employed after those training initiatives arrived with a level of knowledge similar to that of trained staff, or that this study was unable to accurately capture these relationships, among other possible explanations.

The less robust relationships with staff-reported behaviors and evaluated knowledge and attitudes and beliefs are not well understood. Possible explanations include that the survey instrument and/or small sample size failed to accurately capture these associations, or that the behaviors of staff are truly independent of their knowledge or attitudes and beliefs with regard to SGM topics. Further investigation is needed to comprehend and generalize these relationships.

Staff-identified facilitators and barriers to providing SGM-affirming care, such as the SGM-affirming practice of SOGI collection and the identification of negative SGM-related biases overlap with evidence-based facilitators and barriers (Baldwin et al., 2018; Brown et al., 2020; Furness et al., 2020; Klein et al., 2018). Increasing staff training on SGM topics was the most frequently made recommendation and demonstrates a common interest among respondents. However, it is possible that the SHC staff that did not participate in the survey do not share this interest. Training-specific recommendations may provide insight into specific areas of SGM education that would be most beneficial to SHC staff and thus should be considered.

### **Limitations**

This project had multiple limitations. It was limited by its small sample size, collected by voluntary convenience sampling within one institution. It is possible that the survey respondents are not representative of the staff as a whole. The use of a novel survey tool that had not been evaluated for validity or reliability prior to implementation, precipitated the omission of several survey items in order to improve the validity and reliability of the survey results. This project was conducted to fulfill an educational requirement, which imposed constraints on its timeline. Finally, the entirety of the project was conducted during the COVID-19 pandemic. The effects of the pandemic on this project are immeasurable, they may include barriers to engaging with SHC staff in-person, the impacts of changes in the SHC workplace environments on respondents, the blocking of access to already overwhelmed students, and impacts to the mental, physical, financial, and other wellbeing of respondents, which may have impaired their capacity to participate in this voluntary effort. Virtual video meetings held between this researcher and other involved parties, including SHC staff, were conducted in an effort to adjust for limitations.

**Conclusion**

In conclusion, SGM adolescents face significant and at times life-threatening health disparities that must be addressed. Because SHCs are uniquely positioned to increase health equity for adolescents, the quality of the care they provide to SGM adolescent patients should be maximized. The SGM-related knowledge, attitudes and beliefs, and behaviors of SHC staff have the potential to affect the care they provide to SGM patients, ultimately impacting the health outcomes of this vulnerable group. Efforts to improve the Multnomah County SHC staff's delivery of SGM-affirming care are warranted. Recommendations include training programs to increase SGM-related knowledge and to support the delivery of SGM-affirming health care. Additional large-sample, multi-site, randomized investigations specific to the care of SGM adolescents in SHCs are needed to better understand the relationships between SHCs and SGM adolescents. SGM adolescents will benefit from future study and the application of resulting best practices.

**Funding**

Fifty Licks ice cream shop in Portland, OR donated \$100 worth of gift cards that were used as incentives for survey participants. There were no other sources of direct monetary support.

### References

- Anyon, Y., Moore, M., Horevitz, E., Whitaker, K., Stone, S., & Shields, J. P. (2013). Health risks, race, and adolescents' use of school-based health centers: policy and service recommendations. *Journal of Behavioral Health Services & Research, 40*(4), 457-468. doi:10.1007/s11414-013-9356-9
- Baldwin, A., Dodge, B., Schick, V. R., Light, B., Scharrs, P. W., Herbenick, D., & Fortenberry, J. D. (2018). Transgender and Genderqueer Individuals' Experiences with Health Care Providers: What's Working, What's Not, and Where Do We Go from Here? *J Health Care Poor Underserved, 29*(4), 1300-1318. doi:10.1353/hpu.2018.0097
- Bersamin, M., Garbers, S., Gaarde, J., & Santelli, J. (2016). Assessing the Impact of School-Based Health Centers on Academic Achievement and College Preparation Efforts. *Journal of School Nursing, 32*(4), 241-245. doi:10.1177/1059840516634805
- Bersamin, M., Paschall, M. J., & Fisher, D. A. (2018). Oregon School-Based Health Centers and Sexual and Contraceptive Behaviors Among Adolescents. *Journal of School Nursing, 34*(5), 359-366. doi:10.1177/1059840517703161
- Brown, C., Frohard-Dourlent, H., Wood, B. A., Saewyc, E., Eisenberg, M. E., & Porta, C. M. (2020). "It makes such a difference": An examination of how LGBTQ youth talk about personal gender pronouns. *Journal of the American Association of Nurse Practitioners, 32*(1), 70-80. doi:10.1016/j.pedhc.2018.11.003.
- Conron, K. J. (2020). *LGBT Youth Population in the United States*. Los Angeles, CA, UCLA.

- Daley, A. M., Polifroni, E. C., & Sadler, L. S. (2019). The Essential Elements of Adolescent-friendly Care in School-based Health Centers: A Mixed Methods Study of the Perspectives of Nurse Practitioners and Adolescents. *Journal of Pediatric Nursing, 47*, 7-17. doi:<https://dx.doi.org/10.1016/j.pedn.2019.03.005>
- Dolan, I. J., Strauss, P., Winter, S., & Lin, A. (2020). Misgendering and experiences of stigma in health care settings for transgender people. *Med J Aust, 212*(4), 150-151.e151. doi:[10.5694/mja2.50497](https://doi.org/10.5694/mja2.50497)
- Furness, B. W., Goldhammer, H., Montalvo, W., Gagnon, K., Bifulco, L., Lentine, D., & Anderson, D. (2020). Transforming Primary Care for Lesbian, Gay, Bisexual, and Transgender People: A Collaborative Quality Improvement Initiative. *Annals of family medicine, 18*(4), 292-302. doi:[10.1370/afm.2542](https://doi.org/10.1370/afm.2542)
- Garbers, S., Heck, C. J., Gold, M. A., Santelli, J. S., & Bersamin, M. (2018). Providing Culturally Competent Care for LGBTQ Youth in School-Based Health Centers: A Needs Assessment to Guide Quality of Care Improvements. *The Journal of school nursing : the official publication of the National Association of School Nurses, 34*(6), 424-429. doi:[10.1177/1059840517727335](https://doi.org/10.1177/1059840517727335)
- Gersh, E., Richardson, L. P., Breland, D. J., Bocek, K., & McCarty, C. A. (2018). 84 - Mental Health, Sexual Health and Substance Use in Same, Opposite and Both-Sex Attracted Adolescents Attending School Based Health Centers. *Journal of Adolescent Health, 62*, S45-S46. doi:[10.1016/j.jadohealth.2017.11.091](https://doi.org/10.1016/j.jadohealth.2017.11.091)

- Gridley, S. J., Crouch, J. M., Evans, Y., Eng, W., Antoon, E., Lyapustina, M., . . . Breland, D. J. (2016). Youth and Caregiver Perspectives on Barriers to Gender-Affirming Health Care for Transgender Youth. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 59(3), 254-261. doi:10.1016/j.jadohealth.2016.03.017
- Guo, J. J., Wade, T. J., Pan, W., & Keller, K. N. (2010). School-based health centers: cost-benefit analysis and impact on health care disparities. *American Journal of Public Health*, 100(9), 1617-1623. doi:10.2105/AJPH.2009.185181
- Knopf, J. A., Finnie, R. K. C., Peng, Y., Hahn, R. A., Truman, B. I., Vernon-Smiley, M., . . . Fullilove, M. T. (2016). School-Based Health Centers to Advance Health Equity: A Community Guide Systematic Review. *American Journal of Preventive Medicine*, 51(1), 114-126. doi:https://doi.org/10.1016/j.amepre.2016.01.009
- Koenig, K. T., Ramos, M. M., Fowler, T. T., Oreskovich, K., McGrath, J., & Fairbrother, G. (2016). A Statewide Profile of Frequent Users of School-Based Health Centers: Implications for Adolescent Health Care. *Journal of School Health*, 86(4), 250-257. doi:https://dx.doi.org/10.1111/josh.12374
- Klein, D. A., Paradise, S. L., & Goodwin, E. T. (2018). Caring for Transgender and Gender-Diverse Persons: What Clinicians Should Know. *Am Fam Physician*, 98(11), 645-653.
- Larson, S., Chapman, S., Spetz, J., & Brindis, C. D. (2017). Chronic Childhood Trauma, Mental Health, Academic Achievement, and School-Based Health Center Mental Health Services. *Journal of School Health*, 87(9), 675-686. doi:https://dx.doi.org/10.1111/josh.12541

- Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., . . . Brent, D. A. (2011). Suicidality and Depression Disparities Between Sexual Minority and Heterosexual Youth: A Meta-Analytic Review. *Journal of Adolescent Health, 49*(2), 115-123. doi:<https://doi.org/10.1016/j.jadohealth.2011.02.005>
- McDonald, K. M., Sundaram, V., Bravata, D. M., Lewis, R., Lin, N., Kraft, S. A., ... & Owens, D. K. (2007). Closing the quality gap: a critical analysis of quality improvement strategies (Vol. 7: Care Coordination)
- McNall, M. A., Lichty, L. F., & Mavis, B. (2010). The impact of school-based health centers on the health outcomes of middle school and high school students. *American Journal of Public Health, 100*(9), 1604-1610. doi:10.2105/AJPH.2009.183590
- Mitchell, S. G., Gryczynski, J., Gonzales, A., Moseley, A., Peterson, T., O'Grady, K. E., & Schwartz, R. P. (2012). Screening, brief intervention, and referral to treatment (SBIRT) for substance use in a school-based program: services and outcomes. *American Journal on Addictions, 21*, S5-S13. doi:10.1111/j.1521-0391.2012.00299.x
- Multnomah County Health Department. (2020). Student health centers: Locations and hours. Retrieved from: <https://multco.us/school/student-health-centers-locations-and-hours>
- Oregon Health Authority [OHA]. (2020a). Oregon School-Based Health Centers: Status Update 2020. Retrieved from: <https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/YOUTH/HEALTHSCHOOL/SCHOOLBASEDHEALTHCENTERS/Pages/publications.aspx>

- Oregon Health Authority [OHA]. (2020b). SBHC medical sponsor list, 2019-2020. Retrieved from:[https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/YOUTH/HEALTHSCHOOL/SCHOOLBASEDHEALTHCENTERS/Documents/SBHC\\_\\_Pubs/SBHC-medical-sponsor-list.pdf](https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/YOUTH/HEALTHSCHOOL/SCHOOLBASEDHEALTHCENTERS/Documents/SBHC__Pubs/SBHC-medical-sponsor-list.pdf)
- Paschall, M. J., & Bersamin, M. (2018). School-Based Health Centers, Depression, and Suicide Risk Among Adolescents. *American Journal of Preventive Medicine*, *54*(1), 44-50. doi:<https://dx.doi.org/10.1016/j.amepre.2017.08.022>
- Strolin-Goltzman, J., Sisselman, A., Melekis, K., & Auerbach, C. (2014). Understanding the Relationship between School-Based Health Center Use, School Connection, and Academic Performance. *Health & Social Work*, *39*(2), 83-91. doi:10.1093/hsw/hlu018
- Wade, T. J., & Guo, J. J. (2010). Linking improvements in health-related quality of life to reductions in Medicaid costs among students who use school-based health centers. *American Journal of Public Health*, *100*(9), 1611-1616. doi:10.2105/AJPH.2009.185355



## Appendix A

### Frequency Tables of Dichotomous Variables

Table A1.

*Interacts Directly with Patients in Student Health Center Role*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	80.8	80.8	80.8
	No	5	19.2	19.2	100.0
Total		26	100.0	100.0	

Table A2.

*Received SGM-Specific Training while Employed by Multnomah County Health Department*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	69.2	69.2	69.2
	No	8	30.8	30.8	100.0
Total		26	100.0	100.0	

## Appendix B

### *Survey Questions from Knowledge, Attitudes & Beliefs, and Behaviors Sections*

<i>Knowledge</i> <i>Question 1</i> (K1)	An individual who was assigned female at birth but who currently identifies as a man is termed a: a) Cisgender man b) Cisgender woman c) Transgender man or transman d) Transgender women or transwoman
<i>Knowledge</i> <i>Question 2</i> (K2)	An individual who was assigned male at birth and currently identifies as a man is termed a: a) Heterosexual man b) Homosexual man c) Cisgender man d) Transgender man
<i>Knowledge</i> <i>Question 3</i> (K3)	Cisgender is a term used to describe: a) Individuals whose current gender identity is the same as what is normative for the sex they were assigned at birth b) Individuals who are attracted to both people of their gender and people of other genders c) A man who is primarily attracted to women or a woman who is primarily attracted to men d) Individuals whose current gender identity is different from what is normative for the sex they were assigned at birth
<i>Knowledge</i> <i>Question 4</i> (K4) $\phi$	Which statement is the most correct? a) Gender is assigned at birth based on anatomical characteristics while sex has to do with the way people express themselves b) Individuals who identify as gender nonbinary often have two or more distinct personalities c) People can change their sex but by definition cannot change their gender d) Sex is what's listed on a birth certificate while gender is a socially constructed
<i>Knowledge</i> <i>Question 5</i> (K5)	Dylan, a new 15 year old patient, indicates on their Student Health Center intake form that they were assigned male at birth and now identify as a woman. Upon discussing their sexual health, you learn that Dylan is primarily attracted to and has sexual contact with women. Based on this information, which of the following statements is the most correct? a) Dylan is heterosexual b) Dylan is transgender c) Dylan is cisgender d) There is not enough information provided to answer this question

<i>Attitudes &amp; Beliefs</i> <i>Question 1</i> (A1) *	To what extent do you agree or disagree with the following statements? - The questions that I just answered in the "knowledge section" were hard for me
<i>Attitudes &amp; Beliefs</i> <i>Question 2</i> (A2) *	To what extent do you agree or disagree with the following statements? - The terminology used to describe sexual and/or gender minority individuals is confusing
<i>Attitudes &amp; Beliefs</i> <i>Question 3</i> (A3) $\phi$	To what extent do you agree or disagree with the following statements? - Without asking someone's gender pronouns it is impossible to know how best to refer to them
<i>Attitudes &amp; Beliefs</i> <i>Question 4</i> (A4) $\phi$	To what extent do you agree or disagree with the following statements? - The experiences that sexual and/or gender minority patients have when accessing health care may influence whether or not they seek care in the future
<i>Attitudes &amp; Beliefs</i> <i>Question 5</i> (A5)	To what extent do you agree or disagree with the following statements? - All staff share in the responsibility of providing high-quality care to sexual and/or gender minority patients
<i>Attitudes &amp; Beliefs</i> <i>Question 6</i> (A6)	To what extent do you agree or disagree with the following statements? - Sexual and/or gender minority students are good role models for their peers
<i>Attitudes &amp; Beliefs</i> <i>Question 7</i> (A7) *	To what extent do you agree or disagree with the following statements? - Sexual and/or gender minority patients are confused about who they really are
<i>Attitudes &amp; Beliefs</i> <i>Question 8</i> (A8) *	To what extent do you agree or disagree with the following statements? - Transgender men are able to look like men but will never really be men
<i>Attitudes &amp; Beliefs</i> <i>Question 9</i> (A9) *	To what extent do you agree or disagree with the following statements? - Bisexual individuals are seeking attention through their sexual identity
<i>Attitudes &amp; Beliefs</i> <i>Question 10</i> (A10) * $\phi$	To what extent do you agree or disagree with the following statements? - Patients should keep information about their sexual and gender identities to themselves
<i>Behaviors</i> <i>Question 1</i> (B1) $\phi$	To what extent do you agree or disagree with the following statements? - I know how to enter a patient's preferred name and gender pronouns into Epic

<i>Behaviors</i> <i>Question 2</i> (B2) $\phi$	To what extent do you agree or disagree with the following statements? - Before a patient interaction, I look in Epic to see if a patient's gender pronouns and preferred name are listed
<i>Behaviors</i> <i>Question 3</i> (B3) *	To what extent do you agree or disagree with the following statements? - Even when they are listed in Epic and/or shared with me, I sometimes struggle to use a patient's preferred name and gender pronouns
<i>Behaviors</i> <i>Question 4</i> (B4)	To what extent do you agree or disagree with the following statements? - When introducing myself to a patient for the first time, I always state my own gender pronouns
<i>Behaviors</i> <i>Question 5</i> (B5) $\phi$	To what extent do you agree or disagree with the following statements? - I wish that I felt more comfortable around sexual and/or gender minority patients
<i>Behaviors</i> <i>Question 6</i> (B6) *	To what extent do you agree or disagree with the following statements? - After learning that a patient is attracted to or has sexual contact with someone of the same gender, I avoid asking them questions about their sexuality
<i>Behaviors</i> <i>Question 7</i> (B7) *	To what extent do you agree or disagree with the following statements? - I avoid conversations with transgender or other gender minority patients because I worry that I will say the wrong thing
<i>Behaviors</i> <i>Question 8</i> (B8) *	To what extent do you agree or disagree with the following statements? - When a patient discloses to me that they identify as a sexual and/or gender minority I feel uncomfortable
<i>Behaviors</i> <i>Question 9</i> (B9) $\phi$	To what extent do you agree or disagree with the following statements? - I am troubled by the poor health outcomes frequently experienced by sexual and/or gender minority patients

*Note.* \*Reverse-coded question.  $\phi$  Item omitted following validity and reliability analyses.

**Appendix C**  
**Validity Analysis**

Table 1C.

*Correlations Between Knowledge Section Questions 1-5 and Total Section Scores*

		K1	K2	K3	K4	K5	K Total Score
K1	Pearson Correlation	1	.333	.513**	.062	.362	.671**
	Sig. (2-tailed)		.097	.007	.762	.069	.000
	N	26	26	26	26	26	26
K2	Pearson Correlation	.333	1	.740**	.010	.465*	.768**
	Sig. (2-tailed)	.097		.000	.963	.017	.000
	N	26	26	26	26	26	26
K3	Pearson Correlation	.513**	.740**	1	.129	.496**	.852**
	Sig. (2-tailed)	.007	.000		.529	.010	.000
	N	26	26	26	26	26	26
K4	Pearson Correlation	.062	.010	.129	1	-.150	.307
	Sig. (2-tailed)	.762	.963	.529		.465	.127
	N	26	26	26	26	26	26
K5	Pearson Correlation	.362	.465*	.496**	-.150	1	.700**
	Sig. (2-tailed)	.069	.017	.010	.465		.000
	N	26	26	26	26	26	26
K Total Score	Pearson Correlation	.671**	.768**	.852**	.307	.700**	1
	Sig. (2-tailed)	.000	.000	.000	.127	.000	
	N	26	26	26	26	26	26

*Note.* \*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 2C.

*Correlations Between Attitudes & Beliefs Section Questions 1-10 and Total Section Scores*

		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A Total Score
A1	Pearson Correlation	1	.421*	.025	.209	-.015	.448*	.512**	.121	.004	.024	.603**
	Sig. (2-tailed)		.032	.904	.305	.940	.025	.007	.555	.986	.909	.001
	N	26	26	26	26	26	25	26	26	26	25	25
A2	Pearson Correlation	.421*	1	-.150	-.045	-.065	.260	.153	.422*	.422*	-.229	.598**
	Sig. (2-tailed)	.032		.464	.827	.754	.210	.454	.032	.032	.271	.002
	N	26	26	26	26	26	25	26	26	26	25	25
A3	Pearson Correlation	.025	-.150	1	.213	.275	.038	.081	-.161	-.117	-.367	.221
	Sig. (2-tailed)	.904	.464		.296	.174	.856	.693	.433	.568	.071	.288
	N	26	26	26	26	26	25	26	26	26	25	25
A4	Pearson Correlation	.209	-.045	.213	1	.750**	.630**	.450*	.198	.270	.125	.595**
	Sig. (2-tailed)	.305	.827	.296		.000	.001	.021	.332	.182	.553	.002
	N	26	26	26	26	26	25	26	26	26	25	25
A5	Pearson Correlation	-.015	-.065	.275	.750**	1	.432*	.167	.099	.135	.062	.403*
	Sig. (2-tailed)	.940	.754	.174	.000		.031	.414	.629	.510	.767	.046
	N	26	26	26	26	26	25	26	26	26	25	25
A6	Pearson Correlation	.448*	.260	.038	.630**	.432*	1	.433*	.226	.338	.063	.700**
	Sig. (2-tailed)	.025	.210	.856	.001	.031		.031	.278	.099	.764	.000
	N	25	25	25	25	25	25	25	25	25	25	25
A7	Pearson Correlation	.512**	.153	.081	.450*	.167	.433*	1	.185	.345	.083	.638**
	Sig. (2-tailed)	.007	.454	.693	.021	.414	.031		.366	.084	.693	.001
	N	26	26	26	26	26	25	26	26	26	25	25
A8	Pearson Correlation	.121	.422*	-.161	.198	.099	.226	.185	1	.756**	-.062	.604**
	Sig. (2-tailed)	.555	.032	.433	.332	.629	.278	.366		.000	.770	.001
	N	26	26	26	26	26	25	26	26	26	25	25

A9	Pearson Correlation	.004	.422*	-.117	.270	.135	.338	.345	.756**	1	-.055	.638**
	Sig. (2-tailed)	.986	.032	.568	.182	.510	.099	.084	.000		.794	.001
	N	26	26	26	26	26	25	26	26	26	25	25
A10	Pearson Correlation	.024	-.229	-.367	.125	.062	.063	.083	-.062	-.055	1	-.120
	Sig. (2-tailed)	.909	.271	.071	.553	.767	.764	.693	.770	.794		.569
	N	25	25	25	25	25	25	25	25	25	25	25
A Total Score	Pearson Correlation	.603**	.598**	.221	.595**	.403*	.700**	.638**	.604**	.638**	-.120	1
	Sig. (2-tailed)	.001	.002	.288	.002	.046	.000	.001	.001	.001	.569	
	N	25	25	25	25	25	25	25	25	25	25	25

Note. \*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).





B9	Pearson Correlation	-.343	-.258	-.193	.208	-.152	.461*	.203	.120	1	.369
	Sig. (2-tailed)	.128	.259	.401	.365	.511	.036	.378	.604		.100
	N	21	21	21	21	21	21	21	21	21	21
B Total Score	Pearson Correlation	.106	.126	.578**	.560**	-.676**	.484*	.762**	.598**	.369	1
	Sig. (2-tailed)	.647	.586	.006	.008	.001	.026	.000	.004	.100	
	N	21	21	21	21	21	21	21	21	21	21

*Note.* \*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

## Appendix D

### Internal Consistency Reliability Analysis

Table 1D.

*Analysis of Attitudes & Beliefs Section Questions 1-10*

#### *Scale Statistics*

Mean	Variance	Std. Deviation	N of Items
33.9600	15.707	3.96316	10

#### *Item-Total Statistics*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
A1	31.0400	11.790	.399	.630	.544
A2	31.2400	12.523	.321	.529	.567
A3	30.6800	15.727	-.126	.317	.681
A4	30.1600	13.473	.540	.745	.547
A5	30.0400	14.540	.330	.635	.583
A6	30.4800	12.177	.606	.565	.510
A7	30.4000	12.500	.536	.523	.526
A8	30.5200	12.177	.389	.634	.548
A9	30.4400	12.340	.465	.739	.533
A10	30.6400	15.573	-.120	.278	.690

#### *Reliability Statistics*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.604	.687	10

Table 2D.

*Analysis of Attitudes & Beliefs Section Questions 1, 2, & 5-9**Scale Statistics*

Mean	Variance	Std. Deviation	N of Items
23.5600	12.923	3.59490	7

*Item-Total Statistics*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
A1	20.6400	9.323	.398	.621	.719
A2	20.8400	8.973	.509	.450	.685
A5	19.6400	12.323	.157	.267	.747
A6	20.0800	9.993	.536	.489	.683
A7	20.0000	10.250	.475	.484	.696
A8	20.1200	9.110	.498	.624	.688
A9	20.0400	9.457	.551	.738	.675

*Reliability Statistics*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.732	.730	7

Table 3D.

*Chronbach's Alpha Analysis of Behaviors Section Questions 1-9*

<i>Scale Statistics</i>					
	Mean	Variance	Std. Deviation	N of Items	
	27.6190	7.148	2.67350	9	
<i>Item-Total Statistics</i>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
B1	24.3333	7.433	-.250	.282	.174
B2	23.8095	7.262	-.127	.756	-.014
B3	24.7619	5.790	.045	.791	-.117
B4	25.9524	5.348	.194	.512	-.264
B5	25.5714	10.457	-.676	.851	.425
B6	24.0476	5.948	.225	.558	-.213
B7	24.2381	3.890	.547	.614	-.757
B8	23.8095	5.362	.421	.530	-.360
B9	24.4286	6.057	-.013	.647	-.056
<i>Reliability Statistics</i>					
	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items	
	-.058	.027		9	

Table 4D.

*Chronbach's Alpha Analysis of Behaviors Section Questions 3, 4, 6, 7, & 8*

<i>Scale Statistics</i>					
	Mean	Variance	Std. Deviation	N of Items	
	15.2857	8.214	2.86606	5	
<i>Item-Total Statistics</i>					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
B3	12.4286	5.057	.425	.235	.569
B4	13.6190	5.648	.356	.164	.603
B6	11.7143	6.914	.237	.303	.645

B7	11.9048	4.590	.587	.517	.467
B8	11.4762	6.462	.373	.398	.597
<i>Reliability Statistics</i>					
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items		
.637	.627		5		

### Appendix E

#### *Knowledge Section Scores*

##### *Statistics*

Mean	3.1923
Median	4.0000
Std. Deviation	1.23351

	Frequency	Percent	Valid Percent	Cumulative Percent
Scores				
	.00	2	7.7	7.7
	1.00	1	3.8	11.5
	2.00	2	7.7	19.2
	3.00	6	23.1	42.3
	4.00	15	57.7	100.0
	Total	26	100.0	100.0

## Appendix F

### Correlations of Knowledge and Attitudes & Beliefs

Table 1F.

#### *Correlations of High- and Low-Scoring Groups*

#### *High & Low Attitudes and Beliefs \* High & Low Knowledge Crosstabulation*

		Knowledge		Total
		High	Low	
Attitudes & Beliefs	High	8	4	12
	Low	3	10	13
Total		11	14	25

#### *Chi-Square Tests*

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.812	1	.028		
Continuity Correction	3.205	1	.073		
Likelihood Ratio	4.975	1	.026		
Fisher's Exact Test				.047	.036
Linear-by-Linear Association	4.619	1	.032		
N of Valid Cases	25				





A7	Pearson Correlation	.357	.833**	.652**	.492*	.512**	.153	.167	.433*	1	.185	.345
	Sig. (2-tailed)	.073	.000	.000	.011	.007	.454	.414	.031		.366	.084
	N	26	26	26	26	26	26	26	25	26	26	26
A8	Pearson Correlation	.556**	.242	.309	.187	.121	.422*	.099	.226	.185	1	.756**
	Sig. (2-tailed)	.003	.233	.125	.359	.555	.032	.629	.278	.366		.000
	N	26	26	26	26	26	26	26	25	26	26	26
A9	Pearson Correlation	.556**	.330	.396*	.188	.004	.422*	.135	.338	.345	.756**	1
	Sig. (2-tailed)	.003	.099	.045	.359	.986	.032	.510	.099	.084	.000	
	N	26	26	26	26	26	26	26	25	26	26	26

*Note.* \*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Appendix G**  
**Qualitative Data**

Table 1G.

*Perceived Facilitators of Sexual and Gender Minority-Affirming Care*

Response	N	Percentage of total responses
Sexual orientation & gender identity data collection	8	42.1%
Environment of care established by the School Health Centers	8	42.1%
Positive community relationships	3	15.8%
Total	19	100%

Table 2G.

*Perceived Barriers to Providing Sexual and Gender Minority-Affirming Care*

Response	N	Percentage of total responses
Lack of related knowledge	6	42.9%
Faults of co-workers	3	21.4%
Challenges associated with providing care to minors	3	21.4%
Non-cohesive clinic processes	2	14.3%
Total	14	100%

Table 3G.

*Recommendations to Improve Care for Sexual and Gender Minority Patients*

Response	N	Percentage of total responses
Implement training initiatives	6	46.2%
Collect related feedback from students	3	23.1%
Standardize clinic protocols related to SGM care	2	15.4%
Increase SGM-supportive visuals in clinics	2	15.4%
Total	13	100%

Table 4G.

*Training-Specific Recommendations*

Reponse
Teach how to take a thoughtful and non-traumatizing health history for SGM patients
Make training sessions mandatory
Provide opportunities to practice what is learned in training sessions
Conduct more than one training session
Share information about community resources for SGM patients
Provide an overview of SGM terms and identities
Describe the responsibilities of each employee role in the care of SGM patients
Share videos that include role modeling on best practices for SGM care
Address the ways the personal and religious beliefs of individuals impact their care of SGM patients
Integrate feedback from students into education content
Provide training on Pre-exposure prophylaxis medications (PrEP)
Engage all staff in brainstorming ways to make clinic settings more inclusive
Educate on how to provide SGM-affirming care to patients with non-supportive parents/guardians