

The Health Equity Access and Leadership (HEAL) Taskforce: An Initiative to Increase Campus Health Center Utilization and Promote Health and Wellness Through Increased Outreach to the Diverse College Student Population.

Candice Banducci, MSN, FNP-C

Touro University, Nevada

DNP Project Team: Dr. Mark Quiamzon, DNP, MSN, APRN, FNP-C, NE-BC

Dr. Debra Wilson, PhD, RN, CNE

June 7, 2024

This project is in partial fulfillment of the degree requirements for the Doctor of Nursing Practice at Touro University Nevada

Table of Contents

Abstract	3-4
Problem Identification	5-6
Project Question	6
Search Methods.....	6-7
Review Synthesis... ..	7-10
Project Aims/Objectives.....	10-11
Implementation Framework	11-15
Population of Interest.....	15-16
Setting.....	16
Stakeholders.....	16-17
Interventions.....	17-19
Tools.....	19
Data Collection and Analysis.....	19-20
Ethics and Confidentiality.....	20
Summary and Interpretation of Results.....	20-22
Limitations.....	23
Conclusion.....	23
References	24-26
Appendix A.....	27
Appendix B.....	28
Appendix C.....	29

Abstract

Background: The college student population represents a diverse community made up of a variety of healthcare needs and specific health disparities. Underutilized college healthcare centers within this population contribute to poorer population health and previous studies have shown increasing utilization of college health centers improves health-seeking behaviors (Tran & Sylvestri-Elmore, 2021). Before project implementation, the healthcare center at a central California University was minimally utilized.

Objectives: This project aimed to address this gap by increasing outreach targeting diverse populations on campus to increase utilization of this CSU SHS. Additionally, to improve staff awareness of providing inclusive care.

Methods: The project focused on providing seven outreach sessions on campus, targeting disparities specific to certain populations with evaluation through a pretest/posttest format of the students' knowledge of accessible healthcare services on campus. Project implementation also included staff training on providing diverse and inclusive care.

Results: Using a paired sample t-test, compiled data showed a 197% increase in health center utilization following the outreach sessions as well as 78.5% of staff who completed diversity training. The paired sample t-test evaluated the scores of total knowledge of student health services before outreach (T1) and after outreach (T2). There was a statistically significant increase in total knowledge scores from before outreach (T1) ($M=6.05$, $SD=1.02$) to post outreach (T2) ($M=6.62$, $SD=.71$), $t(418) = -12.73$, $p < .001$ (two-tailed).

Conclusions: The project showed that targeted outreach sessions to the student population increase the utilization of healthcare centers on campus. Additionally, improving diversity training for staff across the CSU system will help the campuses become more cohesive and

provide a way for other campuses to determine focus groups needing healthcare services within their student population.

Keywords: college, health, diversity

The Health Equity Access and Leadership (HEAL) Taskforce: An Initiative to Increase Campus Health Center Utilization to Promote Health and Wellness Through Increased Outreach to a Diverse College Student Population.

Health is a correlation between factors including individual behavior, biology and genetics, policymaking, and available services. The interrelationship within these helps determine both individual and population health (Healthy People, 2020). Health disparities in diverse populations have not changed over time, and the health of college students is affected when general healthcare needs are not met (ACHA, 2019). The college student population itself is diverse with many healthcare needs. It is representative of the diverse community population and is therefore experiencing the same health disparities as the local community. These diverse groups need to have opportunities for inclusive care within their campus-based clinic (ACHA, 2019).

In particular, college students tend to have low levels of physical activity, lead a more sedentary lifestyle, have poor nutrition, interrupted sleep patterns, and have high-stress levels (Pfledderer et al., 2022). Consequently, college students have become a priority population for wellness interventions (Pfledderer et al., 2022). College healthcare centers are underutilized across the country and college students have significant health risks related to lifestyle. Decreased utilization of these services may contribute to students having difficulty transitioning to making healthcare decisions in adulthood and decisions about health-seeking behaviors (Tran & Sylvestri-Elmore, 2021). Access to care through utilization of the college health clinics improves health-seeking behaviors (Tran & Sylvestri-Elmore, 2021).

A review of operations at a central California State University (CSU) Student Health Services (SHS) reveals significant decreases in student utilization of service in the last 2 years. Students are not coming in for routine screening visits, assessments, or any ambulatory care needs

as they have in the past. Decreased utilization of the health center by students leads to poor student health, affecting the overall population of health in the surrounding community (ACHA, 2019). Decreased utilization of CSU Student Health Services is related to generalized outreach planning, reduced student enrollment in the university, and post-pandemic rebuilding. There is no current plan to change outreach activities to increase clinic utilization.

By implementing standards of best practice through targeted outreach to the diverse college student population, CSU Student Health Services will see increased utilization of clinic services by students and promote overall campus and community health. There is literature to support that promoting student health increases overall community health. So, increasing the utilization of clinic services through awareness and inclusivity in outreach and patient care will help to achieve this goal.

Project Question

Does increasing diverse, equitable, and inclusive outreach to the diverse college student population over a 5-week period increase CSU Student Health Services utilization?

Search Methods

An extensive literature review was performed using CINAHL, EBSCO, and PubMed. The search was limited to articles published in the last 5 years to ensure data is current and up to date. Language was limited to English as this is the researcher's primary speaking, reading, and writing language. Journal articles were required to be US-based to narrow the search. They were restricted to primary health care and college campus health. Search terms were varied. Using the search terms of "standards of practice for college campus student health" yielded 213 articles of which six were used. The search topics of diversity and inclusion in college health services yielded 432 articles available, but only three met the criteria. Additionally, search terms including

diversity, equity, and inclusion in college health outreach yielded 22 results with two that met the criteria. Lastly, search terms of diversity, equity, and inclusion in higher education health resulted in 102 results of which two met the criteria. A total of thirteen research articles were included. Specific resources were also reviewed regarding specific guidelines for practice. Although it was not initially included in the inclusion/exclusion criteria the articles all utilized either qualitative or quantitative methods of analysis.

Review of Study Methods

The articles utilized incorporated survey and questionnaire methods. These methods were considered to include both qualitative and quantitative analysis. A qualitative approach is particularly useful to this project to evaluate the thoughts and feelings of students and providers alike. This aids in understanding student and provider knowledge, needs related to healthcare utilization, and perceptions about access to care. A quantitative approach is useful to help drive decision-making from reliable data. In this project, this approach helped to define strategies for outreach.

Review Synthesis

A total of thirteen articles were reviewed in this literature review. There were a few common themes that emerged. It was found that diversity, equity, and inclusion practices are a hot topic in primary healthcare including college healthcare settings. Specifically noting that modern healthcare requires delivery to diverse populations and requires an increased understanding of diversity from both patients and their providers (Bose et al, 2022). Not only is it important to recognize that students are diverse with needs related to their diversity, but also recognize that the diversity of providers within the clinic is needed as well to foster an inclusive environment. People feel more comfortable when surrounded by others with like traits, habits, lifestyles, etc

(Bose et al, 2022). Recognizing the importance of diversity, equity, and inclusive practice empowers providers to reach more patients through outreach. This, in turn, encourages utilization as students/patients feel welcomed and accepted and may be more apt to access healthcare institutions that demonstrate inclusivity.

College student campus health is important and reflective of population health (ACHA, 2019). Improving strategies to increase utilization of on-campus student health services improves personal health and contributes to improved student outcomes. The key layers are students, campus health providers and staff, campus administrators, and health educators. Decreased utilization has been noted in this central CSU SHS and incorporating outreach to the diverse college student population is key to improving knowledge and access to care. The themes discussed in this DNP project proposal are related to outreach designed to improve utilization by targeting this population. So, looking at increasing utilization and why this is important for improving the overall health of the student body helps to understand why it is important to have providers who understand and provide inclusive care. This inclusive care setting attracts more students seeking care thereby increasing utilization. Ultimately, proving an improved outreach program increases student body awareness and promotes wellness. The guidelines and best practice standards that are displayed by the ACHA are straightforward. Of the eight themes presented in the ACHA guidelines for standards of practice, four apply to this proposal and are outlined accordingly.

Socioecological-Based Practice

Socioecological diversity and inclusion can be explained in two parts. Socioecological diversity refers to the relationship of social groups within a given environment. This includes demographics, relative representation, and separation (Greenway & Turetsky, 2020).

Socioecological inclusion is related to cues from the environment that determine a group's inclusion or exclusion in settings such as the physical environment, political environment, and social environment (Greenway & Turetsky, 2020). This theme was applied through the outreach plan that aimed to increase awareness of the inclusive practice of the providers within the SHS clinic. Awareness of the clinic's ability to meet the socioecological needs of the students improved patient's willingness to access care.

Theory-Based Practice

Theory is used as a foundation for inquiry. It aims to guide inquiry and interpretation of data collected as well as be qualitative or quantitative in nature (Hall & Roussel, 2022). This proposal planned to increase the utilization of student health services through diverse outreach and was founded on theoretical knowledge of diversity, equity, and inclusion (DEI), and implementing this into practice ultimately improves patient outcomes by improving college student health. “A higher quality of care is attained when theory guides practice” (Hall & Roussel, 2022, p. 272). So, the theory that inclusive practice encourages students to seek care at the health center ultimately puts theory into practice.

Evidence-Informed Practice

A transdisciplinary model of evidence-based practice is centered around three core ideas. These ideas include environmental and organizational factors, developing a cultural context that facilitates understanding and utilization of an intervention alongside balancing implementation (Hall & Roussel, 2022). This requires maintaining decision-making at the center of healthcare team collaboration. This collaboration occurs between practitioners, clients, and other stakeholders (Hall & Roussel, 2022). Diverse outreach partnered with an inclusive healthcare setting that boasts privacy and provider understanding of inclusive practices and then implements

these methods to promote better outcomes for patients.

Inclusive Practice

The theme of inclusivity has been discussed throughout this entire proposal. Health is considered a basic human right. “Awareness of health inequities has led to the development of inclusive, person/patient-centered healthcare practices which are practices tailored to individual identities, beliefs, and needs” (Marjado et al, 2023). This project facilitated inclusivity by doing specific outreach to diverse populations on campus to increase awareness and promote the utilization of clinic services. This project incorporated these themes through the development of a task force that fosters diverse and inclusive healthcare settings and services. This addresses the gap of decreased utilization that has been discovered.

Project Aims

Diversity, equity, and inclusion are hot topics in our society, and they have quickly made their way to the healthcare setting. Our culture is diverse and requires understanding and flexibility to successfully care for patients. Having a workforce representative of the potpourri of people in the community it serves that includes race/ethnicity, gender, sexual orientation, immigration status, physical disability status, and socioeconomic status allows rendering of the best possible inclusive care to those diverse patient populations (Stanford, 2020).

College student populations lack engagement in preventive medicine. This may in part be related to a sense of “invincibility” where young adults don’t perceive themselves to be at risk for poor health (James et al, 2020). Young adults do suffer from high rates of morbidity of chronic illness and mental health conditions and high mortality of suicide and unintentional injury (James et al, 2020). Additionally, when considering healthy lifestyles across ages, college student populations present a special opportunity to promote health education and facilitate the

development of positive health behaviors for a lifetime (James et al, 2020).

The CSU SHS provides healthcare services to enrolled students and offers a variety of services to meet the needs of student health. Upon review of practices at a central California CSU SHS, it was found that utilization has dropped significantly over the past two to three years. This quality gap has a significant impact on student health as well as local community population health (James et al, 2020). This project aimed to address this gap by increasing outreach targeting diverse populations on campus to increase utilization of this CSU SHS. Additionally, to improve staff awareness of providing inclusive care.

Project Objectives

In the timeframe of this DNP Project, the host site will:

1. Increase utilization of this central California CSU SHS by 50% within a five-week implementation period.
2. Improve access through spreading awareness of services offered at this central California CSU SHS.
3. Develop a task force to provide specific education through targeted outreach to diverse populations on campus.
4. Encourage a volunteer training program for staff to be more aware of inclusive practices.
5. Prove increased staff awareness of inclusive care by having 50% of staff become diversity ambassadors.

Implementation Framework

The framework chosen to support this project is the Plan Do Study Act Model (PDSA). This model was originally developed by Walter Shewhart and was evolved by Edward Deming as a model for quality improvement. This was a learning approach utilized to adapt changes to

facilitate improvement (Hall & Roussel, 2022). It is widely used in quality improvement projects. The PDSA model works well for this project. It allows for planning outreach to diverse populations, completing the outreach, studying the outcomes, and then deciding how to adjust activities for future improved outreach.

Application to DNP Project

The tenets of the PDSA model are plan, do, study, act. The various levels of application are discussed here.

Plan

In this phase, the problem is identified or defined and possible causes and solutions are hypothesized (Hall & Roussel, 2022). The plan for this project is defined specifically in two parts. These are the education of both staff and students. On an internal level, a program for staff development was encouraged. This required staff to take part in five trainings. These trainings were centered around topics like implicit bias, trauma-informed care, and gender-affirming care. Once completed, the staff obtained a pin to wear on their name badge to recognize them as diversity ambassadors. Most of this training had taken place before the implementation period of this project, so during the five-week implementation period, the success of staff education was evaluated.

Secondly, outreach to students was increased. Although outreach is done currently, it does not target specific health disparities in specific groups. A task force was created called Health Equity Accessibility and Leadership (HEAL). The HEAL task force was made up of SHS staff members including the assistant director, Family Nurse Practitioner, and Registered Nurse. These members were primarily responsible for planning activities and meeting with members of the campus community to gain knowledge of the needs of students. A subcommittee was formed that

included campus community members to plan and partner for outreach activities. The primary focus of HEAL was to research health disparities among diverse populations represented on the Central California CSU campus and partner with student community groups on campus called affinity groups. During their group's celebration days, months, or weeks associated disparities were addressed. The members of these affinity groups gave input on activities and how the HEAL task force could support them. During the five weeks of this project, multiple communities were partnered with. Since February was American Heart Month, the task force provided education and screening opportunities surrounding heart health within the populations that have a high incidence of these disparities including the Hispanic and African American populations. February is also Black History Month and this population represents a high risk for cardiovascular disease, so blood pressure, glucose, and cholesterol screenings were performed. During this month, sexual responsibility week was also celebrated. Education was given to all students about STI screenings including HIV screenings. Lastly, March is National Nutrition Month, so education was provided about healthy eating and lifestyle which included knowledge of nutrition services provided at the center.

Do

This step in the model is focused on the implementation of the solution proposed (Hall & Roussel, 2022). During this phase, the outreach was performed. The HEAL task force set up tables in high-traffic areas on campus for three hours on seven separate days during the month. During this time, students had the opportunity to stop at the table, receive information about the purpose of the HEAL task force, receive education about the community health disparity topic, and partake in the screening provided for the day. Students were also given information on services provided at this CSU SHS and had questions answered. These sessions took place at

different sites on campus, the number of students reached was tracked, and incentives were offered at the table for participating. The incentives were in the form of stickers for water bottles with the HEAL logo, useful items like bento boxes with the SHS logo on them, and flyers with information about the services provided. This allowed students to gain information about specific disparities, how the task force is working to address inequities, meet staff from the center, and understand what services are available to them through this CSU SHS. The goal was to foster inclusivity by having students feel welcomed, and free to discuss information, ask questions, and understand what is being done in the SHS to promote inclusivity.

Study

During this phase of the model, the results were evaluated (Hall & Roussel, 2022). The outreach project was evaluated. Analysis of the statistics of how many students were reached and whether there was a subsequent increase in visits to the SHS in the days or weeks following was performed. Follow-up visits were tracked in the electronic medical record. The intake questionnaire asked how the student heard about the center and HEAL outreach was an option. Staff also asked the patients to confirm when triaging the patients. This data was compared with the number of students that were reached during the outreach and an analysis was performed. This analysis also included a comparison of rates of visits in the previous month before outreach.

Act

In this step, it is important to note if the project was successful or not and why. Once this is determined the next step can be taken. If the plan is successful, then a standardized procedure for outreach can be developed based on the results. If the plan is unsuccessful, the process is repeated with changes based on analysis. So, once the analysis has taken place and interpretation of the data can be completed, success or failure is determined. Once this determination has been

made, decisions can be made about how outreach can be adapted for future missions. For instance, it may be determined that certain areas on campus have more traffic which increases the number of students reached. So, for subsequent outreach opportunities that area would plan to be utilized. It would be important to know if outreach numbers correlate with increased utilization and then make plans to further improve future outreach to further improve utilization.

In this phase, it would also be important to review the success of staff training. Determine how many staff members participated in the training and how many chose to become diversity ambassadors. If the success rate is low, a consideration can be made as to whether this training should become mandatory for all staff with the ability to choose whether to become a diversity ambassador. If this training is successful, a process can be implemented for regular routine training.

Population of Interest

The direct population of interest consists of important staff members within the health services center. These members included the health center health education staff consisting of a registered dietician, certified health educator, and health education assistant. These staff members are responsible for helping to plan, supply, and execute outreach activities. Additionally, the patient care staff is needed to obtain training on diverse and inclusive care and provide care to patients. This part of the team includes a registered nurse, a family nurse practitioner, two medical doctors, and two medical assistants. The clinical lab scientist was needed to perform necessary laboratory tests. Lastly, the assistant director of the clinic was important for clinic operations, funding, and approval of outreach activities. The staff had to be employed by the clinic, licensed according to their designated area of expertise, English speaking, and willing to provide care and education that is inclusive.

The indirect population of this project was college students. This student body population is diverse in culture, community, and demographics. This project planned to address the needs of these students through directed outreach that encouraged healthy behaviors in this population of interest. These students had to be currently enrolled, identify with any race, gender, ethnicity, or other, and be English-speaking.

Setting

The setting was a student health clinic located in Central California. The clinic is student-funded through health center fees paid as part of each student's tuition and is also supplemented by a state program for reproductive health services. The center serves students ages 18 and older and operates from 8 am to 5 pm PST Monday through Friday. The clinic currently sees approximately ninety-one patients per month between two medical doctors and one nurse practitioner. All patient medical records are stored in an electronic medical record system called Point and Click.

Stakeholders

Stakeholders play an important role in project implementation. For this project, the list of stakeholders is robust, but the ones with the highest power and influence were the assistant director, the medical director, and the nursing and allied health staff. The medical director and assistant director were responsible for securing funding, aiding in fostering administrative relationships, and approving operations to include outreach. The two physicians and one nurse practitioner were essential in providing diverse and inclusive care. The nursing and ancillary staff were key in data entry, patient education, and resource management along with assisting in the implementation of outreach. Additional stakeholders of note included university administrators for support of outreach opportunities, affinity group leaders who collaborated with outreach staff

to facilitate events, and fellow student leaders. Permission to complete this project was obtained by the assistant director of the clinic.

Interventions

The intervention described in this project proposal is dedicated outreach to diverse populations on campus. For each of the four interventions performed, five to six SHS staff members were present. We partnered with affinity groups for some events and other events were independent but focused on specific disparities. The staff members included were a registered nurse (RN), a medical assistant (MA), a registered dietician (RD), two health educators, the assistant director of the clinic, and invited members of the affinity group being partnered with. Each outreach session was three hours and located in a central, high-traffic location on campus. A set of tables were set up and students began on one end with the pretest. Each student or group of students took part in the activity, completed the post-test, and obtained their incentive gift.

Specifically for the first outreach, there was a general education session surrounding the HEAL taskforce, STI prevalence and detection, and services offered at this CSU SHS for treatment and prevention. The second outreach focused on cardiovascular health. Since it was American Heart Month, attention to heart health and how it affects diverse populations like African Americans and Hispanics was addressed. The HEAL staff set up a table outside of a main lecture building on campus and gave general information about the HEAL task force and information about services offered at this CSU SHS. The staff engaged students and had them complete the pretest. They provided education about services offered at SHS and gave information about upcoming outreaches for screenings of blood pressure. Then the students were provided the post-test and then given their incentive prize. So, the general flow of each outreach was that the students came to the table, completed the pretest, received the information, completed

the post-test, and then received their incentive.

For the next outreach session, the same format applied, but this time staff had planned to partner with the black student affinity group on campus. Since it was black history month, HEAL did set up a table but was unable to partner in a specific activity during this time. Here HEAL discussed the common health disparity of cardiovascular disease and its prevention in the black population. Blood pressure screenings were completed, and each student was logged by student ID number and each reading was recorded into their chart later at SHS. If follow-up was recommended for abnormal readings, appointments were made for further evaluation and discussion. Students who opted not to partake in the blood pressure screening that day were offered walk-in screening at SHS at a time that was convenient for them. So, came to the booth, took the pretest, obtained information on heart health, and the HEAL task force, and had their blood pressure taken and recorded both electronically in their chart and physically on a card given to them.

The next outreach was in the same format at the same high-traffic location on campus. It was another general outreach focused on SHS, HEAL, and cardiovascular health with information on how cardiovascular disease affects many diverse populations. Information was provided about nutrition related to certain groups/cultures and their associated food practices. The nutrition information was developed and executed by the RD.

The final outreach had the same format but, this event took place outside of the CSU SHS building and students were educated on the accessibility of healthcare at student health services. A big inequity for students is not being properly insured. We offered information about basic needs insurance that is offered at the center and government programs for reproductive health access. Registration forms were available and staff was present to help complete the forms if needed.

Students also received information on resources available for students with special individual needs.

The tools utilized in this project were a pretest/post-test (Appendix A). The tests were identical and consisted of three questions. The first question utilized a yes or no answer format and the other two questions utilized a three-point Likert scale for evaluation. This evaluation tool was self-developed and was validated by the project team. Since it was a self-developed tool, no other permissions were required. The tools were developed to assess the knowledge of students before and after outreach education. It was decided that this would be an efficient way to obtain this data and using a three-point Likert scale would be more easily understood than a five-point Likert scale. Utilizing a brief, simple three-question test before and after kept students engaged, was respectful of their time, and served as a simple, fast way to obtain data for analysis.

Data Collection and Analysis

Data was collected using a paper pretest and post-test format. This evaluated student knowledge about the presence of the student health services clinic and the services provided. This test also allowed for assessment of the likelihood of students to utilize the clinic. The tests were provided to each student who participated in each outreach activity. The pretest was given at the first table right as the student walked up. Then the student participated in the activity provided and completed the post-test before being given an incentive gift for participating. The incentive gifts included small boxes of chocolates, heart-shaped backpack clips, travel-size first aid kits, bento boxes, vinyl stickers, and heart-shaped stress balls.

The number of student visits to the clinic in the weeks after outreach was tracked through the electronic medical record. No identifying information was collected. Data was stored in a locked file drawer in an office in the health center. Data analysis was conducted using a paired t-

test. This allowed for a comparison of the clinic visit rates pre-outreach and the rates post-outreach. It also allowed for the evaluation of knowledge pre-outreach intervention and post-outreach intervention. The dependent variable was measured on a continuous scale and random sampling was utilized. The observations were independent of one another. All data was analyzed using SPSS software.

Ethics/Human Subjects Protection

There was no formal recruiting of participants for this study. This outreach was conducted in a public place on campus and students could freely walk up to the table for information and data was collected from them. There were no inherent risks with completing a paper survey. The interventions for this project were formulated using evidence-based guidelines. This process ensured that there were no significant risks to the population of interest. No formal compensation was provided, but incentive prizes described above were available for students to take with them when they had completed the activities. In addition, the electronic medical record was evaluated to assess employee success in diversity ambassador training. This project was registered with Touro University, Nevada and it was determined that full IRB approval was not required.

Summary and Interpretation of Results

Results

There were seven outreach sessions over five weeks which yielded a total of 419 completed pre and post-tests. The project went as outlined without any major changes to the timeline. One outreach location had to be changed last minute secondary to inclement weather. Each session was well attended and well received by students.

The electronic medical record was reviewed to obtain the number of pre-and post-outreach visits. The number of visits for January 2024 (pre-outreach) was 176 visits. The number of visits

for March 2024 (post outreach) was 347 visits. This showed an increase in utilization of 197% between the two months. This is outlined in a bar graph titled Utilization Rates (Appendix B). Additionally, this study found that 11 out of 14 staff members have completed the training required to become diversity ambassadors. This indicates that 78.5% of staff completed ambassador training. However, each member had only completed 5 out of 6 of the trainings which represents 83% completion.

The paired sample t-test evaluated the scores of total knowledge of student health services before outreach (T1) and after outreach (T2). There was a statistically significant increase in total knowledge scores from before outreach (T1) ($M=6.05$, $SD=1.02$) to post outreach (T2) ($M=6.62$, $SD=.71$), $t(418) = -12.73$, $p < .001$ (two-tailed). The mean increase in total knowledge scores was $-.568$, with a 95% confidence interval ranging from $-.656$ to $-.480$. The eta squared statistic (.28) indicated a small effect size. This is reported in the table titled SPSS statistics (Appendix C). Total knowledge scores represent the computation of the raw data from the Likert scale responses.

Summary

There was a significant increase in utilization after the outreach activities occurred as evidenced by the increase in the number of visits for the month. Diversity ambassador training has been successful for 78.5% of staff having completed all but one required training, which was scheduled after the completion of this project. Student knowledge of clinic services also increased between pre-outreach and post-outreach. This study successfully met the goals of increasing utilization through diverse outreach. Students were receptive to the information. The staff was motivated to provide outreach and interact with students. Students gained increased knowledge about services offered to them and how to access these services. Affinity groups were receptive to partnering for outreach.

There were weaknesses noted in this study. One pertains to affinity group partnership as requests were made to partner with many affinity groups who did not respond. Second, the setup was primarily in one high-traffic area. Third, it would have been helpful to have someone to walk students to the health center to obtain services and to see where the center is located. Fourth, providing a map of the campus might have been helpful as well. Lastly, the three staff members who did not complete ambassador training are key providers of care in the clinic. This works against fostering a supportive environment for diverse students.

Interpretation

The literature stated that providing diverse outreach improves knowledge and access. Utilization of the college health clinics through improving access to care improves health-seeking behaviors (Tran & Sylvestri-Elmore, 2021). This study did find that knowledge and access improved with the outreach design. This also promotes wellness by increasing student body awareness. Additionally, the literature states that diverse students require providers who are diverse and understanding of individual needs while fostering an inclusive environment. Having providers who are understanding of diverse needs and accepting of students helps to foster a welcoming environment that encourages utilization (Boze et al., 2022). This was not completely successful as the 3 staff members who did not complete ambassador training are key patient providers. The project will impact the campus by improving campus awareness and knowledge of services provided, which consequently improves campus health. Increasing utilization means improved health-seeking behaviors and better overall campus and community health. Increasing knowledge of services promotes self-care and health awareness. This study accomplished what it set out to do. Utilization was increased by 197% and the goal was 50%. Additionally, 73 % of staff became ambassadors and the goal was 50%. The success was more than expected.

Limitations

The limitations of this project were the short timeline and the areas on campus that were chosen for the outreach. The timeline of five weeks is very short. It would be helpful to assess the success over a longer period. The project is based on reaching out to affinity groups through their months or weeks of celebrations. Limiting the project to only one month hindered the ability to reach other groups. In addition, the location of outreach could have been adjusted each week. Originally, it was planned to utilize more than one high-traffic area on campus. This would allow the outreach groups to meet students who may frequent different parts of campus. Instead, the outreach was conducted in one primary location because of campus scheduling. This may have limited access to outreach by students who did not frequent the area where it was performed.

Conclusion

Increased utilization of campus health services is vital to maintaining overall campus health. This project proved that carefully planned outreach partnered with affinity groups to educate students on the specific disparities near to them increases utilization rates. This information can be applied across other CSU campuses to improve their utilization rates as well. Providing diverse care and having providers educated on inclusive care encourages students to utilize the center. Focus on these elements improves access to care, utilization of clinic services, and improves patient outcomes. This project will inform policy on CSU campuses about diverse outreach and improved healthcare outcomes. In addition to leading the way for other campuses in outreach and increasing utilization, this project highlights the role the DNP can provide. The DNP-prepared nurse can enhance patient outcomes through leadership, innovation, and education. Application of evidence-based projects such as this one encourage diverse, equitable, and inclusive healthcare practices.

References

- American College Health Association (ACHA)(2019). *ACHA Guidelines: Standards of practice for health promotion in higher education* (4th edition). American College Health Association.
- https://www.acha.org/documents/resources/guidelines/ACHA_Standards_of_Practice_for_Health_Promotion_in_Higher_Education_October2019.pdf
- Banks, B. (2020). Meet them where they are: An outreach model to address university counseling center disparities. *Journal of College Student Psychotherapy*, 34(3), 240-251.
- [https:// doi.org.10.1080/87568225.2019.1595805.](https://doi.org.10.1080/87568225.2019.1595805)
- Basch, C. H., MacLean, S. A., Romero, R. A., & Ethan, D. (2018). Health Information Seeking Behavior Among College Students. *Journal of Community Health*, 43, 1094-1099.
- <https://doi.org/10.1007/s10900-018-0526-9>
- Bose, S., Kowalczyk, B., Aulivola, B., Amankwah, K., & Smeds, M. (2023). Programmatic engagement in diversity, equity, and inclusion in U.S. vascular surgery training programs. *Journal of Vascular Surgery*, 77(3).
- Caron, R., Aytur, Semra, & Foster, Haylee. (2023). The institute of Medicine’s call to action revisited: assuring access to public health education for U.S. college students. *Frontiers in Public Health*. [https://doi:10.3389/fpubh.2023.1185845.](https://doi:10.3389/fpubh.2023.1185845)
- Chism, L. A. (2016). *The doctor of nursing practice: A guidebook for role development and professional issues* (4th ed.). Jones and Bartlett Learning.
- Ciotoli, C., Smith, Allison J., & Keeling, Richard P. (2018) Call to action: Better care, better health, and greater value in college health, *Journal of American College Health*, 66:7,

625-639, DOI: 10.1080/07448481.2018.1431908T

Greenaway, V. & Turetsky, K. (2020). Socioecological diversity and inclusion: a framework for advancing diversity science. *Current Opinion in Psychology*, 32, 171-176.

<https://doi.org/10.1016/j.copsyc.2019.09.008>

Gyamfi, P. A., PhD (2022). Communication effectiveness: Examining interactions between college health professionals and students on university campuses. *Journal of American College Health*, 70(3), 750-757. <https://doi.org/10.1080/07448481.2020.1763367>

Healthy People 2020 (2020). U.S. Department of Health and Human Services.

<https://wayback.archive->

[it.org/5774/20220415230635/https://www.healthypeople.gov/2020/about/foundation-health-measures/determinants-of-health#](https://www.healthypeople.gov/2020/about/foundation-health-measures/determinants-of-health#)

Hall, H. R. & Roussel, L.A. (2022). *Evidence-based practice: An integrative approach to research, administration, and practice*. (3rd ed.). James & Bartlett Learning.

James, T., Sullivan, M., Dumeny, L., Lindsey, K., Cheong, J., & Nicolette, G. (2020). Health insurance literacy and health service utilization among college students. *Journal of American College Health*, 68(2), 200-206.

<https://doi.org/10.1080/07448481.2018.1538151>.

Janssens, O., Embo, M., Valcke, M., & Haerens, L. (2023). When theory beats practice: the implementation of competency-based education at healthcare workplaces. *BMC Medical Education*, 23, 484. <https://doi.org/10.1186/s12909-023-04446-3>.

Marjadi, B., Flavel, J., Baker, K., Glenister, K., Morns, M., Triantafyllou, M., Walsberger, S., Qiao, X., & Gardiner, P. (2023). Twelve tips for inclusive practice in healthcare settings.

International Journal of Environmental Research and Public Health 20, 4657.

<https://doi.org/10.3390/ijerph200554657>.

Perrault, E. K. (2018). Improving student knowledge and perceptions of primary care providers at campus health centers. *Journal of American College Health*, 66(8), 813-816.

<https://doi.org/10.1080/07448481.2018.1434781>

Pfledderer, C. D., Bai, Y., Brusseau, T. A., Burns, R. D., & King Jensen, J. L. (2022). Changes in college students' health behaviors and substance use after a brief wellness intervention during COVID-19. *Preventive medicine reports*, 26, 101743.

<https://doi.org/10.1016/j.pmedr.2022.101743>

Stanford, F., MD (2020). The Importance of Diversity and Inclusion in the Healthcare Workforce. *Journal of National Medical Association*, 112(3), 247-249.

<https://doi.org/10.1016/j.jnma.2020.03.14>

Taylor, M., McNicholas, C., Nicolay, C., Darzi, A., Bell, D., & Reed, J. (2014). Systematic review of the application of the plan-do-study-act method to improve quality in healthcare.

British Medical Journal, 23, 290-298. <https://doi.org/10.1136/bmjqs-2013-001862>.

Tran, D. T., & Silvestri-Elmore, A. (2021). Healthcare-seeking behaviours in college students and young adults: a review. *Journal of research in nursing: JRN*, 26(4), 320–338.

<https://doi.org/10.1177/1744987120951594>

Appendix A

HEAL Outreach Pre-Test

Do you know there is a health center on campus?

No
Yes

Do you know about the services offered by the health center?

1	2	3
No Knowledge	Not Sure	Knowledgeable

How likely are you to seek care there?

1	2	3
No Knowledge	Not Sure	Knowledgeable

HEAL Outreach Post-Test

Do you know there is a health center on campus?

No
Yes

Do you know about the services offered by the health center?

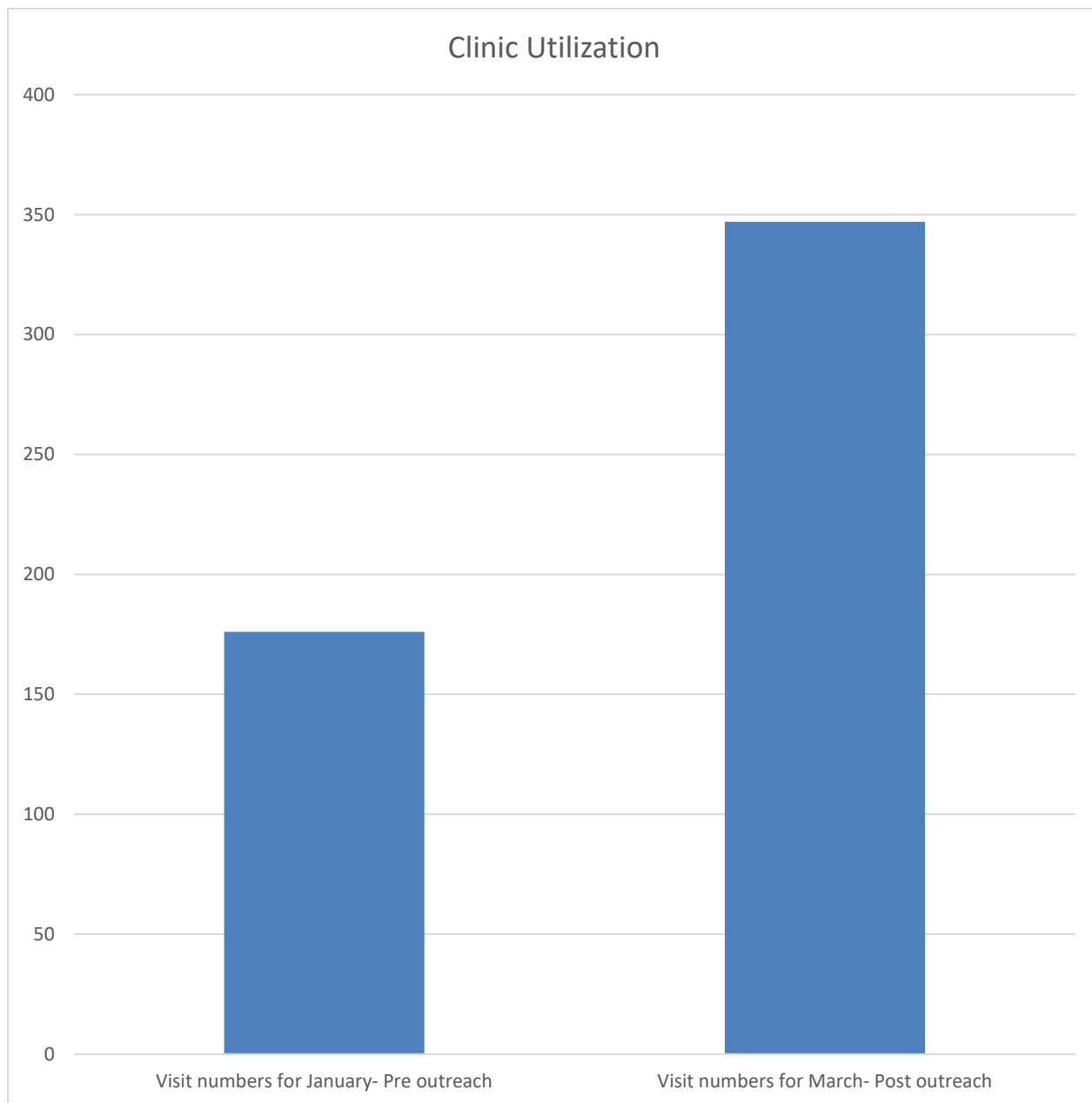
1	2	3
No Knowledge	Not Sure	Knowledgeable

How likely are you to seek care there?

1	2	3
No Knowledge	Not Sure	Knowledgeable



Appendix B



Appendix C

T-Test

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 T1Total	6.05	419	1.015	.050
T2Total	6.62	419	.710	.035

Paired Samples Test

		Paired Differences				t	df	Significance		
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			One-Sided p	Two-Sided p	
					Lower					Upper
Pair 1	T1Total - T2Total	-.568	.913	.045	-.656	-.480	-12.728	418	<.001	<.001

Paired Samples Correlations

	N	Correlation	Significance	
			One-Sided p	Two-Sided p
Pair 1 T1Total & T2Total	419	.486	<.001	<.001

Paired Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Pair 1 T1Total - T2Total	Cohen's d	.913	-.622	-.726	-.517
	Hedges' correction	.915	-.621	-.725	-.516

a. The denominator used in estimating the effect sizes.

Cohen's d uses the sample standard deviation of the mean difference.

Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.