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Implementing a Health Services Google Classroom in a High School Setting

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N670-15: Internship

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Abstract

Problem: The present study investigated the use of Google Classroom and the impact of providing students with basic self-care information on nurse office visit times.

Context: A School nurses are often responsible for multiple schools and a large population of students. These demands pose challenges for school nurses to appropriately serve the student population.

Interventions: Disseminate basic health information on self-care to students via Google Classroom.

Measures: The outcome measure is to make nurse's office visits less than ten minutes. The data source being chart reviews and the target is 80% of students. The process measure is to increase students' self-care education. The data source for the process measure is from evaluating student post-test scores from Google Classroom. The balancing measure is maintaining student enrollment in Google Classroom, nurse's office visits less than ten minutes, and increase student's self-care education by evaluating student post-test scores. The data source for these balancing measures will be from the Google classroom participation test scores from the Google Classroom and chart reviews. The target for these measures will be to have 10% of students participate and obtain scores of 75% or better and have 80% of nurse office visits less than ten minutes per student. Out of the 80 students chosen, 90% participated in this study.

Results: 94.4% of students scored a 75% or higher on post-tests. 90% of the office visits stayed less than 10 minutes.

Conclusion: The implications of implementing health services Google Classroom showed a decrease in the nurse visit times by 10 minutes or less and an increase in self-care knowledge.

Keywords: adolescent health education, technology use in schools, high school attendance rate

Implementing a Health Services Google Classroom in a High School Setting

According to Willgerodt et al. (2018), over the past 20 years, the school nurse practice has changed drastically. It is not only infectious disease screening but entails prevention and management of various acute and chronic conditions and care coordination. School nurses are usually the steady mediator between the students and health care professionals. The School Act states that elementary and upper secondary schools should have health services that include psychosocial, psychological, and medical components to focus on prevention and health promotion (Okan et al., 2018). Those components support a student's development.

This improvement initiative would assist health services in student educational outreach, grant more time for health services professionals to help more students, and offer students autonomy. Part of caring for students is guided by evidence-based practices and data to facilitate how to care for students. This paper will explain the potential of using Google Classroom to decrease nurses' office visits and student stay time.

Problem Description

In the old days, school nurses usually just bandaged a minor scrape or handled an occasional emergency. However, now nurses have different metrics that matter. School nurses are often responsible for multiple schools and large populations of students, along with more students with serious health issues and state-mandated screenings. Unlike the 1:5 Medical/Surgical floor nurse ratio, school nurses do not have a law establishing an appropriate ratio. According to the California School Nurses Dashboard, in the 2018/2019 school year in Imperial County, the average school nurse to student ratio was 1:7,541 (CSNO, 2020). Using the baseline data, these ratios pose challenges for school nurses to serve the student population appropriately. For this improvement project, the focused school district's school nurse to student

ratio is 1:4,027. The focused school district is comprised of three high schools. Currently, the focused school district does not use any form of technology in health services to do student outreach.

Health services in the schools aim to provide medical services to students. Chief complaints range from headaches, dizziness, fatigue, and abdominal pain, to sprained ankles. There are also students with chronic illnesses, such as Attention Deficit Hyperactive Disorder (ADHD), Asthma, and Diabetes. The average nursing visit time with individual students varies. The length of time can vary between 15 minutes to hours. If the student arrives with minimal complaints, their stay can be shorter than those with a more complex issue. For diabetic students, their time is usually 15 minutes unless their blood sugar is below 70; they must remain in the nurse's office until their blood sugar is above 70. Since the beginning of the 2021/2022 school year, health services have daily seen multiple students with Covid-19-like symptoms. The number of follow-up phone calls to parents, contact tracing, and absences have increased significantly due to Covid-19. The proposed project will explore whether a Google Classroom for health services might facilitate more self-care for students. This, in turn, might reduce the time and frequency of school nurse visits versus not having a google classroom.

Available Knowledge

Currently, there are no laws protecting the school nurse-to-student ratio. In California, 53% of counties reported no change in their school nurse-to-student ratio (CSNO, 2020). Due to the increase in the enrollment of students, the ratio widens. A school nurse may travel from site to site to combat this disparity. However, traveling to different sites leaves many students without health service coverage. During the recent pandemic, students in the United States attended school virtually, and the demand for technology increased. Now the use of technology

is part of everyday life. The focused school district implemented Google Classroom as the forum for distance learning.

PICOT Question

The PICOT question guiding this search was “In a high school setting (P), does the use of a Health Google Classroom (I) increase student self-care knowledge and decrease nurse visits (C) compared to usual communication (O) over the next three months?”

Search Strategy

An electronic search using online databases was conducted using CINAHL and PubMed. The literature search focused on systematic review or meta-analysis, critically appraised research studies, and individual research studies between the years 2015 to 2021. Search terms or keywords included: adolescent health education, technology use in schools, high school attendance rate, and most considerable challenges for high school students. A total of 15 articles came back between the 2018-2022 publication years, and five articles were selected for review.

Synthesis of Evidence

The Individual Evidence Summary Form was the John Hopkins Nursing Evidence-Based Practice tool used as a reference of the evidence found (Dang & Dearholt, 2018). Five articles were chosen to review (see Appendix A). Doherty et al. (2021) was a systematic review of twenty-two randomized controlled trials (RCT). This study was done to help identify mental health interventions before or during the Covid-19 pandemic to help support the general population and healthcare workers. Many of these interventions were done online or by a mobile app. Developing more online mental health care service could be beneficial in better patient outreach.

Huberty et al. (2019) was an RCT study. There was a total of 88 participants and the mean age was 20 years old in the intervention group and 21 years old in the control group. The intervention group used the Calm app to alleviate symptoms of anxiety, depression, and stress. Most students in the intervention group had a reduction in stress while using the Calm app and stated using the app in the future. The Calm app was found to be useful in educating students positive mental health techniques.

Norbe et al. (2021), the goal of this study was guide interventions for promoting mental health literacy in adolescents. A total of 29 articles were used for this study. Most studies showed a baseline of barriers for implementing interventions; short intervention time, limiting interventions to only the English language, the interruption of education curriculum, and lack of participation incentives. The results found interventions that promoted mental health literacy and gave insight to what the interventions should contain.

Okan et al. (2019) was a systematic review of 15 articles. Limited health literacy leads to low health knowledge, poor disease management, poor access to health care, and poor health outcomes. Adolescents have been shown minimal attention in health literacy. Developing an increase in health literacy at a young age will improve the health literacy throughout life.

Singh et al. (2019) was a systematic review of 58 articles on the effects of physical activity on cognitive and academic success in students. Good physical, along with mental, health has known benefits. The studies did support positive effects of exercise in students. Having the knowledge that exercise is beneficial, students were more active or more eager to participate. Students were able to verbalize or demonstrate knowledge in the benefits of physical activity in academic performance. All the articles provided a foundation for this paper. The articles also provided insight into the importance of health literacy which is a primary goal of this study.

Rationale

Having a Google Classroom as a technological platform could benefit students with the health education they need to make healthier life choices (Singh et al., 2019). The electronic platform may guide students towards positive mental or physical health solutions and is relatable to this student population. It can provide instruction on how to take care of their mental health or guidance on a topic that is most relatable to the students. According to Huberty et al. (2019), about 98% of college-aged students use the internet, and about 85% own a smartphone. Many students have stated being highly likely to use online mental health treatments. One study by Huberty showed that college students were more likely to find help online rather than face-to-face.

Choosing the implementation of Google Classroom is because the students in the focused school district have previous experience navigating through Google Classroom. If Google Classroom were implemented for health services, there would be no extra charge to the school or student. A health services Google Classroom could increase students' knowledge of healthcare issues and provide disease management skills. This, in turn, could decrease the duration and frequency of school nurse visits. Another important reason is their lack of health knowledge, poor disease management skills, and poor access to health care services increase the chance of poor health outcomes (Okan et al., 2018). If Google Classroom can decrease the number of student visits or the amount of time the student is in the nurse's office, the nurse may have an increase in the amount of time they can utilize to manage other student health needs.

Lewin's Change Theory

Change can be challenging for some individuals. Being accustomed to one way of providing education to patients may not be as enticing. Lewin's Model of Change theory can

help with this project. This theory involves three phases: unfreezing, moving, and refreezing (King et al., 2019). Unfreezing is when change is needed, as seen by increased nurse office visits and student stay time. Moving is when a Google Classroom is implemented to provide many of the student population with needed self-care education. Refreezing is when the changes are established, and a review has been done on whether the change was beneficial.

Project Aim

Implementing health services Google Classroom is to provide health assistance and education to as many students as possible (see Appendix B). According to Okan et al. (2018), health literacy is an empowering tool for individuals. Providing health-related information allows the students to make informed health decisions in their everyday life. The primary purpose of providing health-related Google Classroom for students to help the students make informed health decisions is to decrease the duration and frequency of school nurse visits. This, in return, would give the health services team more time to be available for other health needs or emergencies. The aim is to facilitate the effectiveness of expedited nurse's office visits and decrease stay time to increase patient volume. Achieving that could shorten nurse's office wait time by providing education to high school-age students via Google Classroom June to December 2022 (see Appendix C and D).

Context

The contextual elements are the focal point of the environment where the focus school district is a small agricultural area in southern California. According to the United States Census Bureau, as of April 1, 2020, the focused school district is in a city of 44,322 residents. The cultures that make up this area are 87.3% Hispanic, 35.9% Caucasian, 2.7% African American,

and 1.9% Asian (United State Census Bureau, 2021). Out of this population, 24.2% live in poverty.

Purpose/Patients

The purpose of implementing a Google Classroom is to provide self-care education to as many of the student population as possible to decrease nurse office visits and student stays time. According to Doherty et al. (2021), specific groups, such as children and young people, ethnic minorities, and low incomes individuals, could be more vulnerable to mental health issues associated with mass disease outbreaks and may require interventions. The focused school district comprises three high schools and one virtual academy. In total, the student population is 4,027 students.

Professionals

Within this school district, one Registered Nurse is a Credentialed School Nurse and two Health Assistance (see Appendix E). Due to the demographic and economic factors in which the focused school district is located, there is a lack of health literacy. There is a low number of medical doctors and specialists in this area. Considering the high poverty rate in this area, the project's aim could benefit the student population, which could also benefit the families of these students.

Day to day, the number of nurse office visits varies. However, students seek the assistance of health services daily. The visits vary from minor assistance to disease management. Time is taken with each student and can lessen the availability of health services professionals due to a lack of resources. The health services professional will assess the student and provide short-term interventions when available. If there is no health status change, the student's parent or guardian is called to pick up the student.

SWOT Analysis

A strengths, weaknesses, opportunities, and threats (SWOT) analysis was used to examine the strengths and weaknesses of the microsystem that may impact the project (see Appendix F). Strengths are that staff are willing to provide student education and follow up with educational needs and assessments. Weaknesses are that there may not be enough health services staff to manage the student population. Opportunities are that administrators are on board with this trial, and health services staff will be involved in providing primary self-care education to students and making it enjoyable. The threat is no student participation.

Cost-Benefit Analysis

Financial analysis was utilized to determine whether implementing a health services Google Classroom will be cost-effective (see Appendix G). After reviewing the financial analysis, it was determined that the implementation would be cost-effective because Google Classroom is a free service provided by Google. No additional equipment or technical support would be needed. There would be no additional costs for staff due to staff being equipped with the needed technology. An in-service would be done for health services staff on a contract day before students are on campus, so no additional pay for service would be needed.

Intervention

As an intervention, health services will develop a Google Classroom that can be accessed anywhere. The Google Classroom is an app-based tool that will allow the health services team to post educational information for students. The health services team will develop the information and activities that will be uploaded, and the same information will be provided to the students at the different school sites. Acquiring the health services Google Classroom code could be provided during the advisory period. The code is needed to be able to have access to

Google Classroom. The advisory period is class time that allows students to work on schoolwork, participate in tutoring, and make up missing schoolwork. The information will be in different forms (see Appendix H), such as interactive slides, short videos, word matching, and short answer questions.

The variety of presentation of the information catches the students' attention and focus. When the information has the student's attention and focus, the more the student is to be able to retain the information that is presented. These components are expected to produce changes in the performance of health services due to student outreach and student education. Health services need to attempt to be more involved with the students. Students would be involved in topic decision-making. Having student involvement will make the education topic more relatable and relevant. Implementing health services Google Classroom provides the student's privacy and confidentiality. Students could direct message the nurse with questions or ideas on new topics they would like more information on. The Google Classroom is an additional way students see the nurse face to face virtually by Google Meet or allowing the student to see and hear the nurse but keep their camera off. The Google Classroom is available 24 hours a day, seven days a week. If a student is at home and has a question, they could direct message or post their question on the classroom board and have it answered quickly.

Study of Intervention

The approach for assessing the impact of the interventions will be assessing if the students retained the information provided and if there is a decrease in the time a student is in the nurse's office. A post-survey would be given via Google Classroom to ensure that the students retained any of the information provided (see Appendix I). The post-survey will contain questions about the information the student just reviewed. The other approach for assessing the

interventions is reviewing the time a student is in the nurse's office based on their chief complaint. Reviewing the time will show if the student could attempt to implement what was taught before going to the nurse's office.

Measures

The measure chosen for studying the outcome measures of the interventions are the students are to have a score of 75% or better on the post surveys, and the time the students are in the nurse's office will decrease to 10 minutes or less. The rationale for students scoring 75% or better on the post-surveys is to show that the students are retaining the information being provided. A 75% or better score indicates that the students are learning new content. The rationale for the decrease in time in the nurse's office indicates the students' ability to apply what they learned from the information in real-life situations. The student being in the nurse's office for 10 minutes or less implies that the student was able to think critically before going to the nurse's office and implement steps to improve their condition. The reason for seeking assistance could be that the interventions implemented before did not work, and they were only there to call home to be picked up.

The approach to assessing the process measure is providing the students with a post-survey after each informative post. This provides feedback on the student's participation and if the student is retaining the information provided. The post-survey will be developed via Google Form or Google Slide and comprise questions related to the information that was just reviewed. The scores will be visible to the health services team. Balancing measures as students enter the nurse's office, their names and the time they arrived are noted. The chief complaint and time the student left are also noted. Maintaining records of the time in and out provides health services with the length of stay for specific chief complaints. If there is consistency in the length of stay

for a specific chief complaint, a plan can be developed to improve the students' knowledge of how to care for themselves and decrease the time the student is in the nurse's office. The plan developed improves the health outcome of the students.

Ethical Considerations

This project has been approved as a quality improvement project by faculty using quality improvement (QI) review guidelines and does not require Institutional Review Board (IRB) approval. According to the American Nurses Association (2015), this project relates to provisions three and seven. Provision three is when the nurse promotes, advocates for, and protects the rights, health, and safety of the patient. School nurses treat students equally regardless of their health, race, gender, age, socioeconomic status, gender identity, or religion. Implementing the health services, Google classroom does not discriminate. The student body will be included in participating. School nurses are meant to promote students' health, safety, and self-worth. The Google Classroom will be used to educate the students on how to improve their health, safety, and self-worth. The focus should be on implementing or constructing interventions that provide knowledge on achieving and maintaining good mental health (Norbe et al., 2021).

Provision seven is when the nurse, in any setting, advances the profession through research, professional development, and the nursing and health policy (American Nurses Association, 2015). The research conducted for this project improves the profession of school nursing. The data gathered develops new ways school nurses can make patient outreach to provide education. Implementing a Health Services Google Classroom is an added tool for school nurses to provide services to students through technology.

The student's privacy is also to be maintained by the school nurse. The health services team will be the only staff member to access the information. Each staff member will be assigned a designated school to decrease the chances of a breach of confidentiality. School nurses work in a school setting to illustrate the standard nursing practice and develop health programs and interventions. The idea of implementing the Google Classroom illustrates the work ethic of the school nurse in developing a program that will benefit the student's health and the intervention to achieve the primary goal. There are no potential conflicts of interest.

This study relates to the Jesuit values by advocating for patient autonomy and providing patient education. The Jesuit values are based on personal development. One way a patient can reach personal development is with education. The Jesuit values align with the American Nurses Association Code of Ethics provision seven by increasing personal development (American Nurses Association, 2015). School nurses can provide education to students who would add to their personal development. Personal development can lead to patient autonomy. The more knowledge the patient has, the more confident they are to make important health decisions for themselves.

Outcome Measure Results

This study began during summer school 2022 with a total of 80 students. Out of the 80 students, 10% (8) did not participate in the post surveys. However, 72 students did participate in the post surveys. Out of the 90% of students who participated in the post-surveys, 5.5% (4 students) did not pass the post-surveys with a 75% or better.

There were 30 nurse visits during summer school. From the 30 visits, seven students were from the 80 students that participated in the study. That is 8.75% of students that made

nurse visits. Of that 8.75%, those visits were less than ten minutes. Out of the 30 student visits, 76.67% of those visits had a more than a minute stay.

The findings of this study were expected. Summer school was an optimal time to begin implementing the health services Google Classroom. Summer school provided an adequate number of student participation to pilot this intervention. The number of student participation was manageable and had the potential for additional student participation. The amount of time the student stayed in the nurse's office was decreased due to the student being able to manage their symptoms independently with limited assistance from health services.

Summary

With 80 students chosen to participate in this study, 90% of those students did participate. After interventions were implemented, 94% of students received a 75% or higher score in the post-surveys. Only four students did not pass the post-survey with a 75%. By 94% of students passing the post-surveys, the students are retaining the information provided and have gained basic self-care skills. Also, a combined number of 30 students made nurse office visits during summer school 2022. Out of those 30 students, seven were from the 90% that participated in the study. All seven of those student nurses' office visits were less than 10 minutes, indicating that the students were able to think critically before needing assistance and had the knowledge to attempt self-care before seeing the nurse. The intervention was successful during summer school. However, the results from the regular school year with a larger student population and more time to provide more education would show more accurate results.

Conclusion

With a ratio of 1:4,027, it could seem impossible for a school nurse to provide adequate care to the students in need. Implementing a health services Google Classroom would positively

impact school nursing. A health services Google Classroom would help provide basic self-care techniques and reach many of the student population. According to Singh et al. (2019), cognitive skills are essential for school preparedness and academic performance. The sustainability plan would increase the students' knowledge of self-care. This, in return, could be practiced in the home, increasing a family's knowledge of self-care. When more families have increased knowledge regarding their health, it impacts the community as a whole in a positive way. Despite the benefits of implementing a health services Google Classroom, the evidence is limited. The study highlights further research involving a larger student population with more intervention attempts. The implications for others regarding this study are that implementing a health services Google Classroom improved student self-care knowledge and decreased nurse office visits. However, more research with multiple educational interventions could provide a tangible outcome.

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Appendix A

Evaluation Table

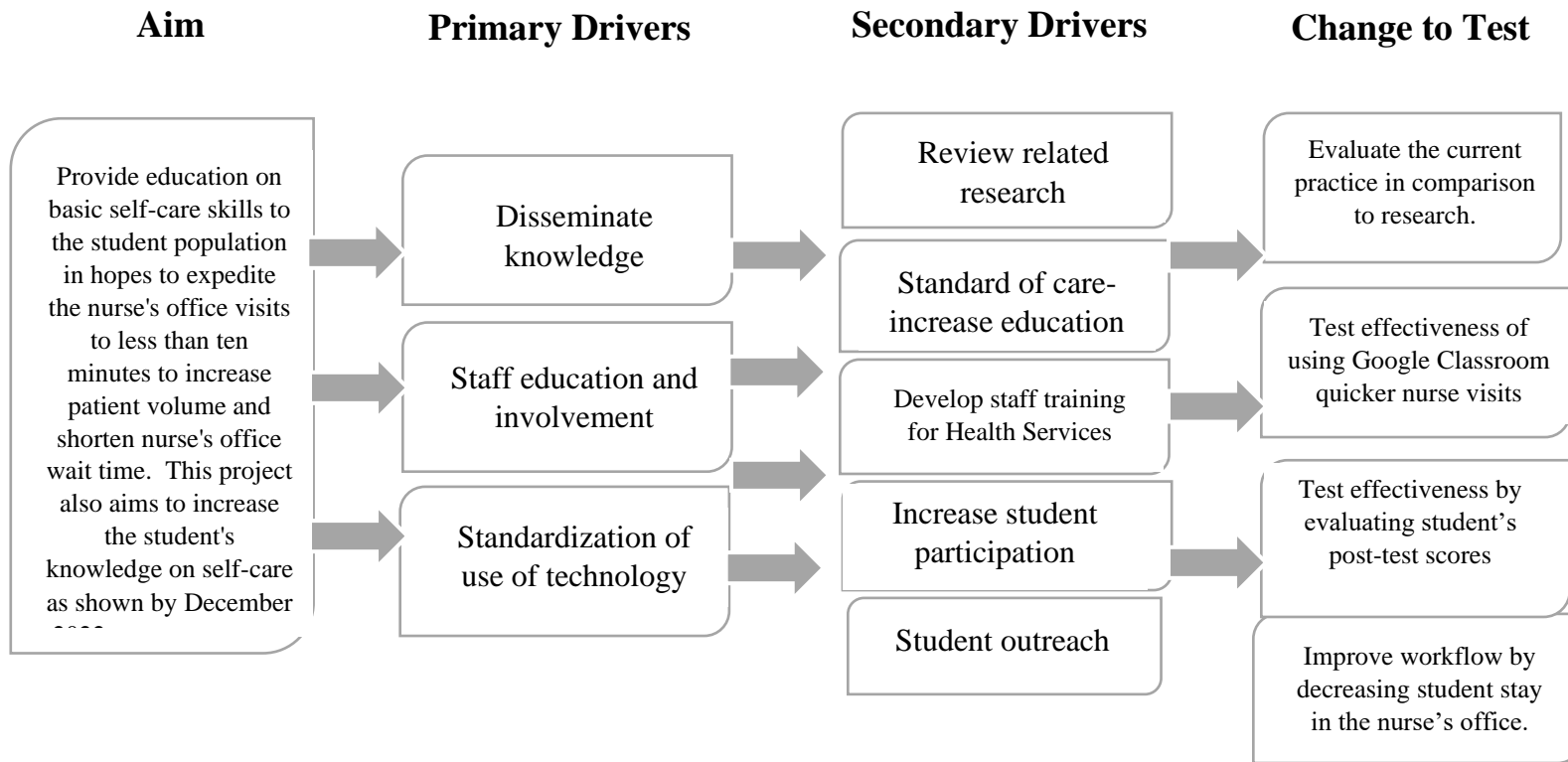
Study	Design	Sample	Outcome/Feasibility	Evidence Rating
Nobre, J., Oliveira, A.P., Monteiro, F., Sequeira, C., Ferré-Grau, C. (2021). Promotion of Mental Health Literacy in Adolescents: A Scoping Review. <i>Int. J. Environ. Res. Public Health</i> 2021, 18, 9500. https:// doi.org/10.3390/ijerph18189500	Review	29 articles	Configure and develop programs and interventions for promoting mental health literacy in the school setting.	III B
Doherty, A., Benedetto, V., Harris, C., Boland, P., Christian, D., Hill, J., Bhutani, G., Clegg, A. (2021). The effectiveness of psychological support interventions for those exposed to mass infectious disease outbreaks: a systemic review. <i>BMC Psychiatry</i> (2021) 21: 592. https://doi.org/10.1186/s12888-021-03602-7	Systemic Review: Randomized Controlled Trials (RCT)	22 RCTs	Looks into the different types of psychological support interventions and their effectiveness on the general population that were exposed to mass infectious disease outbreaks.	I A

Study	Design	Sample	Outcome/Feasibility	Evidence Rating
Singh, A., Saliasi, E., van den Berg, V., Uijtdewilligen, L., de Groot, R., Jolles, J., Andersen, L., Bailey, R., Chang, Y., Diamond, A., Ericsson, I., Etnier, J., Fedewa, A., Hillman, C., McMorris, T., Pesce, C., Puhse, U., Tomporowski, P., Chinapaw, M. (2019). Effects of physical activity interventions on cognitive and academic performance in children and adolescents: a novel combination of a systemic review and recommendations from an expert panel. Br J Sports Med 2019; 53: 640-647. Doi:10.1136/bjsports-2017-098136	Systemic Review	11 studies	Summarizes recent evidence of the effects of physical activity on the cognitive and academic performance of children.	IV B
Okan, O., Lopez, E., Bollwen, T.M., Broder, J., Messer, M., Bruland, D., Bond, E., Carvalho, G., Sorensen, K., Saboga-Nunes, L., Levin-Zamir, D., Sahrai, D., Bittlingmayer, U.H., Pelikan, J.M., Thomas, M., Bauer, U., Pinheiro, P. (2018). Generic health literacy measurement instruments for children and adolescents: a systemic review of the literature. BMC Public Health (2018) 18:166. Doi:10.1186/s12889-018-5054-0	Systemic Review	15 studies	How to measure the health literacy of children and adolescents.	IV A

Huberty, J., Green, J., Lee, C. (2019). Efficacy of the mindfulness medication mobile app “Calm” to reduce stress among college students: randomized controlled trial. JMIR Mhealth Uhealth. 2019; 7(6):e14273.	Randomized Controlled Trial	88 random participants: Eligibility: full-time undergrad, at least 18 years of age, owned smartphone.	Test the efficacy and long-term effects over an eight-week period using the mindfulness meditation app, Calm.	I A
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Appendix B

Drivers Diagram and Change to Test



Appendix C

CNL Project: Statement of Non-Research Determination Form



CNL Project: Statement of Non-Research Determination Form

Student Name: Christina Wilkinson

Title of Project:

Expedited Nurse Office Visits using Google Classroom for High School Age Students

Brief Description of Project:

- A) Aim Statement:** To facilitate the effectiveness of expedited nurse's office visits to increase patient volume and shorten nurse's office wait time by providing education to high school age students via Google Classroom by December 2022.
- B) Description of Intervention:** Have students join Nurse's Office Google Classroom where educational information will be posted, and health services team could be reached virtually. To increase the availability and outreach of the health services team.
- C) How will this intervention change practice?** The information will help increase the student's knowledge on self-care which may decrease the length of nurse's office visits so health services team would be able to care for more patients throughout the day.
- D) Outcome measurements:** To reach 80% of the student population and have students score a 78% or better on post-tests. Outcome can be measured by the decrease in time of length of stay during nurse's visits, increase in number of patients seen during the day, and increase in students' knowledge of self-care.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:

(<http://answers.hhs.gov/ohrp/categories/1569>)

☒ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☒ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:



EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and is a part of usual care . ALL participants will receive standard of care.	X	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."</i>	X	

ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.



UNIVERSITY OF
SAN FRANCISCO | School of Nursing and
Health Professions

STUDENT NAME (Please print):

Christina Wilkinson (electronic signature)

Signature of Student: Christina Wilkinson

DATE 4-20-22

SUPERVISING FACULTY MEMBER NAME (Please print): Carol Moreno

electronic signature (preceptor)

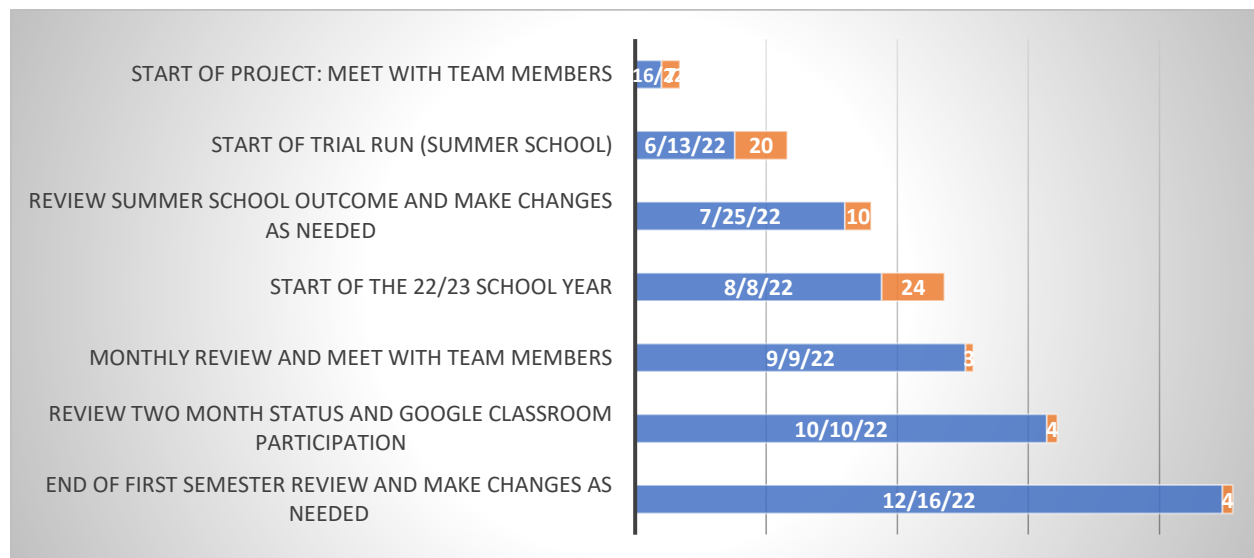
Signature of Supervising Faculty Member:

Carol Moreno

DATE 4-20-22

Appendix D

Project Timeline



Appendix E

Project Charter

Title: The Effect of Implementing a Health Services Google Classroom on School Nurse Visits and Stay Time

Global Aim:

To facilitate the effectiveness of expedited nurse's office visits to increase patient volume and shorten nurse's office wait time by providing education to high school age students via Google Classroom by December 2022.

Specific Aim:

This project aims to provide education on basic self-care skills to the student population in hopes of expediting the nurse's office visits to less than ten minutes to increase patient volume and shorten nurse's office wait time. This project also aims to increase the student's knowledge on self-care as shown by December 2022 outcome survey.

Background Information/Rationale for the project:

Health services aim to provide medical services to high school students. The services provided range from day to day, but most consist of basic first aid, diabetic management, and developing health plans for chronically ill students. The average length of stay for students varies. The length of time can vary between 15 minutes to hours. If the student arrives with minimal complaints, such as menstrual cramps or needing a wound clean, their stay is shorter versus a student with a complaint of stomach pain or vomiting and then the time spent waiting for their parent's arrival. For diabetic students, their time is usually 15 minutes unless their blood sugar is below 70; then, they must remain in the nurse's office until their blood sugar is above 70. According to Carminucci et al. (2021), in the fall of 2020, the average attendance rate for high school students was 89%. That is almost a 20% decrease compared to the fall of 2019. Incorporating a Google Classroom for health services will help students obtain essential health-related information and increase their knowledge on how to care for themselves. This could leave time for the RN or MA to see an increased number of students due to the decrease in the time student's stay in the nurse's office.

Sponsors:

USD Superintendent	
USD HR Director	

Goals for the project:

To be able to efficiently expedite nurse's office visits and increase patient volume by educating students using Google Classroom, the implementation of the following:

1. Educate the sponsors and team members on the evidence using Google Classroom to teach students to provide education on self-care.

2. Meet with the team members to review how to use Google Classroom.
3. Identify with the team what issues should be addressed immediately and the key points to focus on.
4. Increase the education of high school age students on self-care skills.

Measures: Outcome, Process and Balancing:

Measure	Data Source	Target
Outcome		
Nurse's office visits less than ten minutes.	Chart review-EHR	80% of students
Increase students' self-care education by evaluating student post-test scores.	Student Post-Test Scores	75% or better score
Process		
Using Google Classroom to reach students and provide education and meet with students virtually.	Chart review-EHR Google Classroom participation Student Post-Test Scores	80% of students 75% or better score
Balancing		
Maintaining student enrollment in Google Classroom	Google Classroom participation Student Post-Test Scores	10% of students 75% or better score

Team Members:

Health Services Coordinator/RN	Christina Wilkinson, RN
Health Services Assistant/MA	
Health Services Assistant/MA	

Appendix F: SWOT Analysis

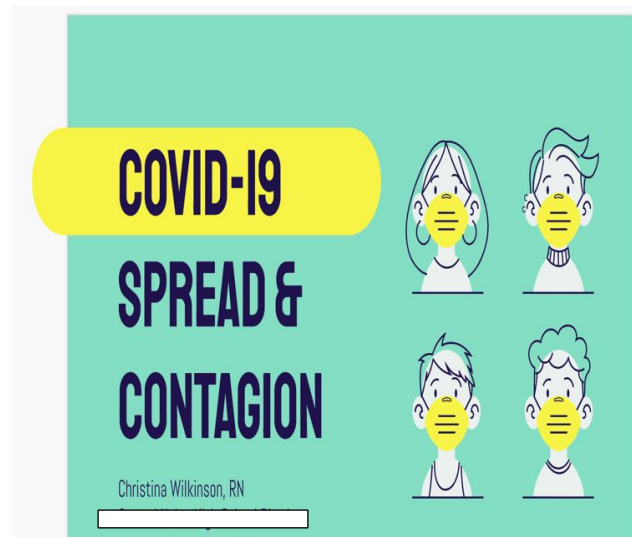
<p style="text-align: center;"><u>Strengths</u></p> <ul style="list-style-type: none"> • Staff are willing to provide student education and follow up with educational needs and assessments. • Increase in students' self-care knowledge. • Health Services will gain time to help more students. • Health Services gains an education tool. • More student outreach. 	<p style="text-align: center;"><u>Weakness</u></p> <ul style="list-style-type: none"> • There may not be enough health services staff to manage the student population. • Students' not having time to do post-tests. • Non-interesting educational topics • Non-engaging educational format
<p style="text-align: center;"><u>Opportunities</u></p> <ul style="list-style-type: none"> • Administrators are on board with this trial and health services staff will be involved in providing basic self-care education to students and make it enjoyable for the students. • Added way to engage student population. • Implement Health Services Google Classroom fulltime. • Work with outside resources to provide information to students. • Allow families to have access to Google Classroom for community education. 	<p style="text-align: center;"><u>Threats</u></p> <ul style="list-style-type: none"> • No student participation. • Possible loss of internet connection at school or home. • Student motivation • No time for Health Services staff to update Google Classroom due to high volume of office visits.

Appendix G**Budget**

<u>Needs:</u>	<u>Cost:</u>	<u>District Pays:</u>
Google Classroom App	Free	\$0
Computers: Health Services Staff/Students	No additional cost: desktops and Chromebook in use already	\$0


Appendix H

Educational Information and Video Examples




Appendix I

Post Evaluation Method: Student and Team Member Surveys



Student Follow-Up

To ensure your Health Service team is helping you appropriately, please answer the following questions.

cmwilkinson2@dons.usfca.edu [Switch account](#)  Draft restored

Your email will be recorded when you submit this form

*** Required**

Was the information provided in the Health Services Google Classroom helpful to you? *


☒ Yes

☐ No

Was the information posted easy to understand? *


☐ Yes

☐ No



Student Post-Test

To ensure you understand the information provided to you, please answer the following questions.

cmwilkinson2@dons.usfca.edu [Switch account](#) 

Your email will be recorded when you submit this form

*** Required**

How many hours should a teenager sleep at night? *

☐ 3-4 hours

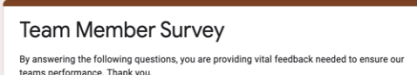
☐ 8-9 hours

☐ 10-12 hours

When should you stop looking at your phone or T.V. before bed? *


☐ 1-2 hours

☐ at least 30 minutes



Team Member Survey

By answering the following questions, you are providing vital feedback needed to ensure our teams performance. Thank you.

cmwilkinson2@dons.usfca.edu [Switch account](#) 

Your email will be recorded when you submit this form

*** Required**

Do you think this Google Classroom is helpful to the students? *

☐ Yes

☐ No

☐ Maybe

Do you think there is a good amount of student participation? *

☐ Yes

☐ No

☐ Maybe

Have you seen a decrease in the amount of time a student is in the nurse's office? *

☐ Yes

☐ No

☐ Maybe

What information should be provided to students in the future? *

Your answer

Do you think anything needs to be changed? *

Your answer

[Submit](#) [Clear form](#)

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