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Increasing vaccination rates in the Latin X communities through a public health initiative for
increasing education and vaccination.

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Abstract

Background: The COVID-19 disease has been found to cause an estimated 570,003 deaths in the United States (Centers for Disease Control and Prevention [CDC], 2021). Statistics showed that the elderly, immunocompromised, and vulnerable populations are the most at risk for this disease. Vaccination is an important aspect of disease prevention in healthcare issues around the world. Vaccination against the COVID-19 prevents this communicable disease from the spread and serious adverse health outcomes.

Problem: The Latin X communities in the Tenderloin District in San Francisco city are confronted with multiple factors that affect their willingness to receive the COVID-19 vaccine. Factors include the distrust of the healthcare system and the lack of support.

Methods: This project implementation plan is to focus on engaging gaps and limitations by conducting educational sessions with leading organizations to promote, educate and distribute the COVID-19 vaccine to this vulnerable community in settings that are comfortable, community-oriented, and culturally tailored. Concentrating vaccination efforts in communities most heavily impacted by COVID-19 will significantly bend the disease curve. The research demonstrated that there is a direct correlation between proper patient education and increment in vaccination rates through community outreach.

Intervention: This implementation project is focused on the use of influencers to help promote awareness about the benefits of the COVID-19 vaccine. The influencer style of engaging communities at risk can facilitate a change in clinical practice and can improve vaccination acceptance among the Latin X population.

Results: Influencers reported an increase in knowledge acquisition and improved confidence in providing community-oriented and culturally tailored education to the Latin X communities.

Results demonstrated that the number (n=50) of participants who agreed to vaccinate was increased to more than 40%. COVID-19 vaccination rates among Latin X showed an increase from 30 to 50 vaccines per day.

Conclusion: With this public health initiative, the project team members, as well as the influencers, demonstrated that disseminating information through one-on-one, social and media improved vaccination rates for the Latin X population. Overcoming barriers that affect vulnerable populations. As information regarding the COVID-19 continues to evolve, updating community outreach approaches to ensure more communities can promote vaccinations with an influencers approach.

Increasing vaccination rates in the Latin X communities using influencers

Section II: Introduction

Problem

The Coronavirus Disease 2019 (COVID-19) pandemic has taken an alarming impact on San Francisco's Latinx community, as well as individuals who are indigenous and Mayan. The Latinx population makes up 15% of San Francisco's city population (United States Census Bureau, 2020) and accounts for roughly 41% of the city's COVID-19 infections (DataSF, 2021). It is estimated that Latino individuals are four times higher for COVID-19 exposure and infection due to a range of disparities, barriers, and social determinants of health (Clay et al., 2021). The COVID-19 vaccine is intended to provide immunity against the effects of a respiratory infection (Graham, 2020). The Latino population in the city of San Francisco has shown to be at a higher risk for COVID infection. Implementing an educational and delivery plan about the COVID vaccine for the Tenderloin Latinx community will decrease vaccination hesitancy and promote knowledge about vaccine benefits.

Vaccinating communities with the highest prevalence of COVID-19 is an effective measure to decrease the propagation of this disease (San Francisco Department of Public Health & COVID Command Center, 2021). Since COVID-19 prevalence across Latinx communities within the city is 1.3x higher than non-Hispanic communities, concentrating vaccination efforts in these communities will significantly bend the disease curve, while also saving lives (San Francisco Department of Public Health & COVID Command Center, 2021).

The Latinx communities of San Francisco's Mission District are the most impacted by COVID when comparing cases and deaths of COVID-19 in the city. The Latino population data reported 41.4% infection rates with COVID compared to 18% in the Asian community and, 21.5% in the white community (DataSF, 2021).

According to Salgado de Snyder et al., (2020), the reason Latinos decline vaccination are (1) insufficient information, (2) lack of trust, and (3) a lack of interest or motivation. Salgado de Snyder (2020) suggests that adult Latino men will not get the COVID vaccine due to limited information, cost, and not knowing where to get the vaccine. The limited information provided during the study was not sufficient, although they understood the need for vaccinations, there was not a proper educational plan to inform them about the COVID-19 vaccine. Not being properly informed can create healthcare difficulties. According to Salgado de Snyder (2020), these barriers include language barriers and a lack of trust in the healthcare system.

Understanding the necessity for vaccination is important. Without the proper understanding, the patients will have fears about the safety of the vaccine (Fisher et al., 2020). One of the gaps identified was the need to increase vaccination campaigns to provide supplemental immunization educational activities to the communities to increase vaccination rates and provide the necessary services (Fisher et al., 2020; Guzman-Holst et al., 2020; Olorunsaiye et al., 2020).

Project Aim

Over the period of February 2021 through August 2022, the project team members implemented a successful COVID-19 vaccine educational intervention for the Latinx communities in the San Francisco Tenderloin area. There are three goals to accomplish in achieving a 90% vaccination rate in this population. First, a COVID-19 community outreach campaign will be developed that is culturally and linguistically sensitive. Second, the vaccine will be offered along with testing, health access, and other support services. Finally, the project team will partner with school, faith-based, childcare, business communities, and trusted community-based organizations to reach the community.

Available Knowledge

PICOT Question

The PICOT question (population, intervention, comparison, outcome, and time) (Melnik & Fineout-Overholt, 2019, p.777) for this project plan proposition is: In the Latino community in the San Francisco Tenderloin area (P), can a community-oriented education and vaccine drive that addresses barriers and issues that influence vaccination adherence (I) compared to a traditional vaccine drive without culturally appropriate information increase vaccination rates over 3 months (T).

Literature Search

A comprehensive database search was conducted to evaluate how an educational plan provides a positive impact on the vaccination rates in Latino communities. The following databases were used in the search: the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane, ScienceDirect, and PubMed. The search was limited to literature in English or Spanish, research articles, and practice guidelines. Other inclusion criteria were articles involving adults and adolescents (12 and above), journals, and peer review articles. The search terms “vaccination,” “COVID-19 vaccine,” “hesitance” and “acceptance.” The articles selected examined the benefits of implementing an educational plan, particularly in Latino communities. The themes identified were as follows: (a) efficiency of an educational plan in the Latino community, (b) vaccination hesitancy, and (c) infection reduction. These published articles applied to the PICOT question because they presented the effectiveness of an educational plan through an Influencers approach. The articles were leveled between I to V with a rating of “B” or “C.” The John Hopkins Nursing Evidence-Based Practice Appraisal Tools were used to level and rate these articles (Dang and Dearholt, 2018, p. 237).

Synthesis of Literature

The following articles reviewed are fundamental to the establishment of this improvement project and highlight the potential benefits related to the educational plan effectiveness, cost savings, and education management for Latino patients. Salgado de Snyder et al., (2020) described reasons for not getting vaccinated among adult Latino males. The study's findings implied that the limited knowledge about the benefits of vaccines was a great predictor of not getting vaccinated, despite knowing that vaccines are important.

In Guzman-Holst's (2019) systematic review the most frequent barriers to vaccinations were "group influences," followed by "socioeconomic factors, low levels of education, lack of awareness, religious and cultural beliefs." Similarly, Salgado de Snyder (2020) showed the lack of knowledge about a disease and its vaccines are major barriers to vaccination in the Latino population. This determines a gap in understanding as well as a lack of education for the prevention of COVID-19 disease.

A cross-sectional survey completed by Fisher et al., (2020) demonstrated that the main factors for vaccine hesitancy included low levels of education attainment, vaccine concerns, and not enough information about the COVID-19 vaccine as well as lack of trust in the healthcare system. Living in rural areas also had a strong correlation with not getting vaccinated. A systematic review completed by Olorunsaiye et al., (2020) reinstated that starting a vaccination campaign and additional immunization activities can help increase the vaccination rate in low and middle-income communities.

According to Fisher et al., (2020) and Olorunsaiye et al., (2020), the best approach for preventing vaccine hesitancy and achieving herd immunity is to implement an educational approach that addresses the COVID-19 vaccine in a way that people from all educational levels

can understand. Implementing an educational plan consists of expanding the most up-to-date information to patients to address any vaccination concerns and expand immunization services.

The World Health Organization (1978) affirmed that “Promotores,” another word for Influencers, have an important role in promoting the much-needed COVID-19 education and outreach, especially in vulnerable populations such as Latino communities (Caceres et al., 2021). Influencers contribute with cultural appropriateness knowledge for the research, and the benefit of having the community’s trust (Messias et al., 2021). Disseminating accurate information through the use of influencers and outreach has the ability to increase acceptance of COVID-19 vaccines in Latin communities.

Rivera (2013) describes that cultural competence, trust, and acceptance are fundamental concepts for the development of intervention of change, particularly in the Latino population. In addition to trust and acceptance. Influencers are members of the community that can serve as connections between community members and formal resources (Caceres et al., 2021; Rivera, 2013; Messias et al., 2021).

A culturally appropriate educational approach through Influencers has become important, especially by distributing information, connecting community members with appropriate resources, messaging, and providing emotional support (Messias et al., 2021; Caceres et al 2021). Influencers' knowledge and skills are effective in the use of social and behavior theory because they provide culturally appropriate care to help community members to implement positive health practices.

Rationale

The social and behavioral theory to use for this project is the theory of culture care diversity and universality because its main concepts are based on learning and developing

holistic and inclusive culture care that can be used in a population with multicultural factors in mind (Alligood, 2014). The major terms for this theory are human care by facilitating ways to help others with an anticipated need. Culture diversity refers to knowledge of values, lifestyles, beliefs, or groups that are learned from one generation to another (Alligood, 2014).

For these changes to take place to improve patient care outcomes, such as improving vaccination acceptance, the old model of healthcare management must change to accommodate the changing functional responsibilities and demands in the healthcare systems. As a result of transcultural education implementation, there will be less apprehension amongst patients that are reluctant to get vaccinated with the COVID vaccine. Therefore, the general population will be less likely for misunderstanding and hesitation. As a result, vulnerable communities will be less likely to have a higher vaccination rate across their communities.

Another framework such as the transtheoretical model (TTM) is an integrative and comprehensive model of behavior change based on various psychotherapeutic theories. Developed in the late 1970s by Prochaska and DiClemente, the TTM describes how individuals alter their behavior through a series of stages, each defined by a distinct change process (Prochaska et al., 1992). The transtheoretical model has been used in the past to explain and comprehend change behaviors in physiotherapies because it showed to be effective in determining to alter behaviors that involve strategies for altering ways of thinking through the different stages (Romain et al., 2018).

The TTM of change is widely used in the context of efforts to help patients cease undesirable behaviors (Linke et al., 2014). The TTM utilizes strategies that help individuals alter their ways of thinking for the better, avoid situations that can be deleterious to their health, and adopt healthy behaviors. The TTM incorporates the core constructs of a range of theories

regarding behavioral change (Glanz et al., 2015). These constructs include stages of change, processes of change (Appendix C), decisional balance, and self-efficacy.

The TTM can be used to promote positive health behaviors, such as increasing vaccination acceptance by evaluating their current stage of change. By assessing a patient's knowledge about vaccines. The TTM can help to recognize positive changes that promote positive health results (Prochaska et al., 1992). The TTM is an integrative and comprehensive model of behavior change based on various psychotherapeutic theories (Romain et al., 2018).

The TTM is widely used in the context of efforts to help patients cease undesirable behaviors (Linke et al., 2014). The TTM utilizes strategies to assess patients' willingness for change and evaluate their understanding of their health. The TTM includes core constructs of theories regarding behavior change (Glanz et al., 2015, p.149).

Ethical and Policy Considerations

On March 1, 2021, the USF DNP department determined that this project met the guidelines for an evidence-based change in practice project as outlined in the DNP project checklist (statement of determination) and was approved as non-research. There are no identifiable issues or conflicts of interest noted for this project. Ethical considerations that reflect the American Nurse Association (ANA) Code of ethics values in this improvement project are autonomy and beneficence. Provision 1.4 "The right to self-determination" (Autonomy) indicates the right of the patient to make their own decisions regarding their care. The educational plan allows the patients the decide for themselves their vaccination needs by establishing a plan of care with the patient that supports vaccination. Provision 6.2 "The environment and ethical obligation" (Beneficence) is "doing no harm," and treating every patient fairly and with respect. This ethical principle is applied when healthcare providers follow the best process guidelines.

Healthcare providers should emphasize ethical values in their practice to employ evidence-based research interventions. Also following the University of San Francisco's mission and values, this project was based on a diverse, multicultural belief through educating and culturally enhancing community members to strive for full, integral development of each person inspired by Catholic tradition.

Section III: Method

Context

Given mounting evidence supporting positive outcomes of education for patients about the importance of immunization, influencers with the help of healthcare providers should provide vulnerable populations with culturally-aware information about the COVID-19 vaccine. Improving a process within a hard-to-reach population requires hard work and dedication. Implementing an educational intervention that involves influencers to better approach and educates about the COVID-19 vaccine and its benefits. The key stakeholders included community leaders, the public head department, residents, school districts, onsite providers, nurses, social workers, religious leaders, public health department staff, and local hospitals and clinics. Progression of the project and communications between stakeholders were important elements of the recruitment of the influencers. Influencers and healthcare providers improved vaccination rates amongst Latino X by providing and distributing educational material to this vulnerable population in the accessible vaccination sites.

Intervention

A vaccination promotion project team committee was formed to optimize COVID-19 vaccination rates to greater than 50% and established standardized techniques regarding patient intake workflows, vaccine counseling, and documentation. The project team (Appendix G)

consisted of the Latin influencers (1- mother and son; 1- mother & daughter), University of San Francisco (USF) Student Project Lead, Community project lead, and San Francisco Unified School District (SFUSD) partner, Department of Public Health (DPH) Lead, Vax branch operation lead, Chief Business Officer (CBO) partner Horizons, and Latino Task Force (LTF). Influencer's responsibility involved promoting the benefits of the COVID-19 vaccine through social gatherings, and social media and gathering feedback about the effectiveness of the intervention. The project lead and the DPH lead focus on conducting educational sessions for influencers and community members to educate and promote the distribution of the vaccine. Among other members of the team The Vax branch lead, CBO partner, and LTF provided operational support. Their support provided the tools and knowledge that facilitated a change in practice. The project team as well as the influencers disseminated information through one on one outreach and supported neighborhood vaccine efforts.

Major Intervention:

- a. Set up a vaccination clinic in a community setting using culturally appropriate education, influencers, available vaccine, and support.
- b. Train and educated Influencers to disseminate information through one-on-one outreach, media social, and support neighborhood vaccine efforts.
- c. Conduct a community outreach around the community site to enhance and support the vaccination site.
- d. Promote vaccinations for all family members 12 and older, also in preparation for 2 years and older for future events.
- e. Provide an incentive (Gift cards, blanket, gloves, mask) to the Latin X members that get vaccinated.

e. Post-survey for influencers and for the participants to measure how well this outreach program worked

Proposed outcomes:

1. The community-based education drive will allow for a culturally sensitive space for the Latin X community to ask questions, learn about vaccines, and get vaccinated for at least 100 members.
2. At least 50% of the attending community members will get vaccinated.
3. The Latin-X community members will express comfort with the knowledge attainment and vaccination process through survey questions.
4. The participating staff will rate the effectiveness of the community approach model through the post-implementation survey.

This intervention was implemented in the Latinx community in the Tenderloin Clinic in the city of San Francisco to increase COVID-19 vaccination rates. The goal was to focus on improving patient knowledge of COVID-19 vaccinations and develop a community outreach campaign that is culturally and linguistically sensitive to this population using influencers. The key stakeholders that affect the success of the vaccination program include community leaders and residents, health care providers, religious and public health regulators, and other vulnerable populations in the area.

Gap Analysis

The public health department in San Francisco has been providing resources to the communities in need during this pandemic. Despite the many resources public health provides, there is a reluctance from the Latino communities to seek public health. According to the public health department, Latino people in the Tenderloin community face multiple factors that affect

their willingness to receive the COVID-19. Some of these factors include the distrust of the healthcare system, and the lack of support for vulnerable populations (San Francisco Department of Public Health & COVID Command Center, 2021). To engage these gaps and limitations the project team conducted informational sessions with leading organizations to obtain the best information about the distribution of the COVID-19 vaccine (Appendix A). They are currently setting up the foundation for a network of high-volume vaccination sites with community leaders to gain the trust and support of the people of the community.

GANTT Chart

An important measure utilized for this project was a Gantt Chart. This timeline was used as a guide to show the project's progression and implementation. According to Agency for Healthcare Research and Quality (AHRQ), a timeline can also help structure and prioritize tasks to facilitate the accomplishment of the improvement project (Appendix A).

SWOT Analysis

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and Work Breakdown Structure (WBS) were conducted to analyze the factors that implement a vaccination plan. A SWOT (Appendix B) analysis and a WBS (Appendix C) are tools that help identify strategies to build upon the improvement project.

Strengths identified for this implementation project include a decrease in the current SARS- 19 infections, an increased population's knowledge about the COVID-19 vaccine, and Herd immunity. Additionally, the strategies such as patient outreach for the COVID-19 vaccine implementation are into consideration the community's needs. The weaknesses identified include a lack of healthcare resources for the Latino communities, lack of healthcare access, vaccination hesitance, and budget limitations. According to Salgado de Snyder et al., information campaigns addressing uncertainties about the COVID-19 vaccine can help alleviate vaccination hesitancy.

Opportunities for improvement included increasing the implementation of a comprehensive educational strategy that can contribute towards building awareness about the COVID-19 vaccine campaigns and their health impacts. The threats identified with this improvement project concerning sustainability, specifically due to lack of trust and the spread of misinformation that can easily circulate among close communities (Appendix B).

Work Breakdown Structure

A Work Breakdown Structure (WBS) provided information regarding the application of the COVID-19 vaccination plan as an intervention to reduce vaccination hesitancy in the Latino community in the city of San Francisco. The WBS lists the three phases of the implementation project. Phase I: Conduct literature research and review, including project planning, development, and evaluation. Phase II: Kick-off meetings to propose methods, outcomes, and measurables with stakeholders for the COVID-19 vaccine project. Including executing the plan, reviewing, gathering feedback, set clear goals, and objectives. Phase III: Evaluate deliverables (outcomes), collect data, analyze data, and disseminate findings. Project deliverables such as collecting and analyzing data, events, and gathering information must be measured to improve the project's success when moving to the next phase (Appendix C).

Cost-Benefit Analysis

The cost-benefit analysis (Appendix D) aims to highlight potential losses and profits, which are associated with effective patient vaccination in the Tenderloin community in San Francisco city. According to Cohen et al., (2020), Chernew et al., (2020), Melnick and Maerki (2020), and Fielder and Song (2020) COVID-19 has been a key reason for hospitalization in people older than 65 years old in the United States. Accounting for estimation of more than 100,000 confirmed cases and more than 2,000 deaths as of March 28, 2020 (CDC, 2020).

According to the Kaiser Family Foundation, the estimated direct and indirect costs of COVID-19 infections in the United States can be more than \$20,000 and over \$88,000 per patient.

The expectation is that this project improvement project, by improving clinical vaccination outcomes and access to care, will significantly reduce healthcare expenditures on patients with COVID-19 related admissions, urgent care/emergency department/primary care visits, along with long-term institutional care, and unnecessary cost of admission such as hospital-acquired infections. Thus, projected costs (Appendix D) associated with these expenditures were used in the financial analysis of this business plan based on the data from Cohen et al. (2020), Chernew et al. (2020), Melnick and Maerki (2020), and Fielder and Song (2020) projected data information.

For the pilot project, most of the expenses were utilized in the training and educational resources about the COVID-19 vaccines, purchase of the online zoom accounts, equipment, vaccine incentives, additional devices, and patient management software (Appendix E). The COVID-19 educational project has the potential to provide a reduction in hospitalization costs throughout this pandemic.

Outcome Measures

The influencer led-community health education and vaccination intervention with the partnership of the UCSF were composed of Spanish-speaking bilingual members. Providing direct outreach, including walking around the neighborhood, visiting Latin and Mayan facilities, schools, Spanish language television news, and media announcements, to provide vaccine-related education in Spanish and English to raise awareness about the vaccination site in the Tenderloin.

Proposed Analysis

The analysis was measured by comparing the San Francisco Department of Public Health's (SFDPH) baseline vaccination data with the national benchmarks. Census data was obtained to estimate population estimates in the Tenderloin District. Also, another measure implemented was conducting post-intervention surveys for influencers to assess understanding and gather feedback about the effectiveness of the intervention. The post-survey contained a series of open-ended questions about their experiences and their expectations (Appendix I).

The SFDPH surveillance data was utilized to collect and analyze vaccination coverage and post-survey data. Data analysis for the project was collected in a one-time event on August 21, 2022, in the Tenderloin community. Eligible influencers were Spanish-speaking participants and formed part of the community. Increases in the number of vaccinated participants indicated the effectiveness of this pilot project.

Results

To measure the effectiveness of the project data the number of participants that received the COVID-19 vaccine at the vaccination site was counted and compared to the number of participants before the implementation of the intervention. The number (n=50) of participants who agreed to vaccinate was increased to more than 40%. Totaling 17 on-site and 33 in the walkaround vaccination. According to the vaccination site Director, the number of vaccines given before this intervention was about 30 participants. Demonstrating that community outreach and influencer interventions helped reach a hard to get population in vulnerable Latin X communities (Appendix H). The increase in the percentage of vaccinated members during the event day represents the impact of influencers in vulnerable communities. According to Abidin et al (2021), influencers have become an essential part of distributing information to the people during this pandemic.

Section IV: Discussion

Limitations

Some limitations that were presented throughout this project involved resistance and hesitation from the Latin X community. Including the lack of knowledge about eligibility requirements, such as people with comorbid conditions, and unsure about the availability due to language and its meaning. Mistrust toward healthcare providers and concerns about the impact on their communities was a major barrier that produced delays in communication. Delays due to changes in vaccine eligibility and availability. Recruitment of influencers was difficult due to the lack of resources and accommodations affecting the number of participants (4 influencers).

According to Abidin et al (2021), Influencers' led-community health education and outreach demonstrated that influencer models approach multiple audiences are more likely to spread information through different platforms. Implying that the use of influencers has become crucial during this pandemic due to restrictions on social interactions.

Implication for Practice

Using Influencers for community outreach and providing education can reduce hesitancy and mistrust. These studies measured outcomes that responded to the corresponding PICOT question about the effectiveness of an influencer-based model in Latin X communities by addressing the barriers and factors that influenced communications. These findings guided how COVID-19 vaccine promotion efforts can be developed for Latin X communities, which coincides with the PICOT question of implementing influencers based campaign services for vulnerable communities

Conclusion

The Latino population is at higher risk for COVID-19 exposure. This exposure reveals the need for understanding vaccination efforts. Immunization helps stop the spread of COVID-19 infections. The focus is to immunize and educate the Latino population about the benefits of the COVID vaccine. In doing so, the occurrence of COVID-19 infections will decrease. With the integration of an educational plan in the Latino community, addressing vaccine hesitancy has the potential to increase vaccination rates, and herd immunity and promote protection against the COVID-19 disease. Vaccine hesitancy is a complex issue, and no single strategy will be able to address it. This project can help inform future approaches when designing campaigns to increase trust and confidence and ultimately improved vaccination rates for communities with health disparities.

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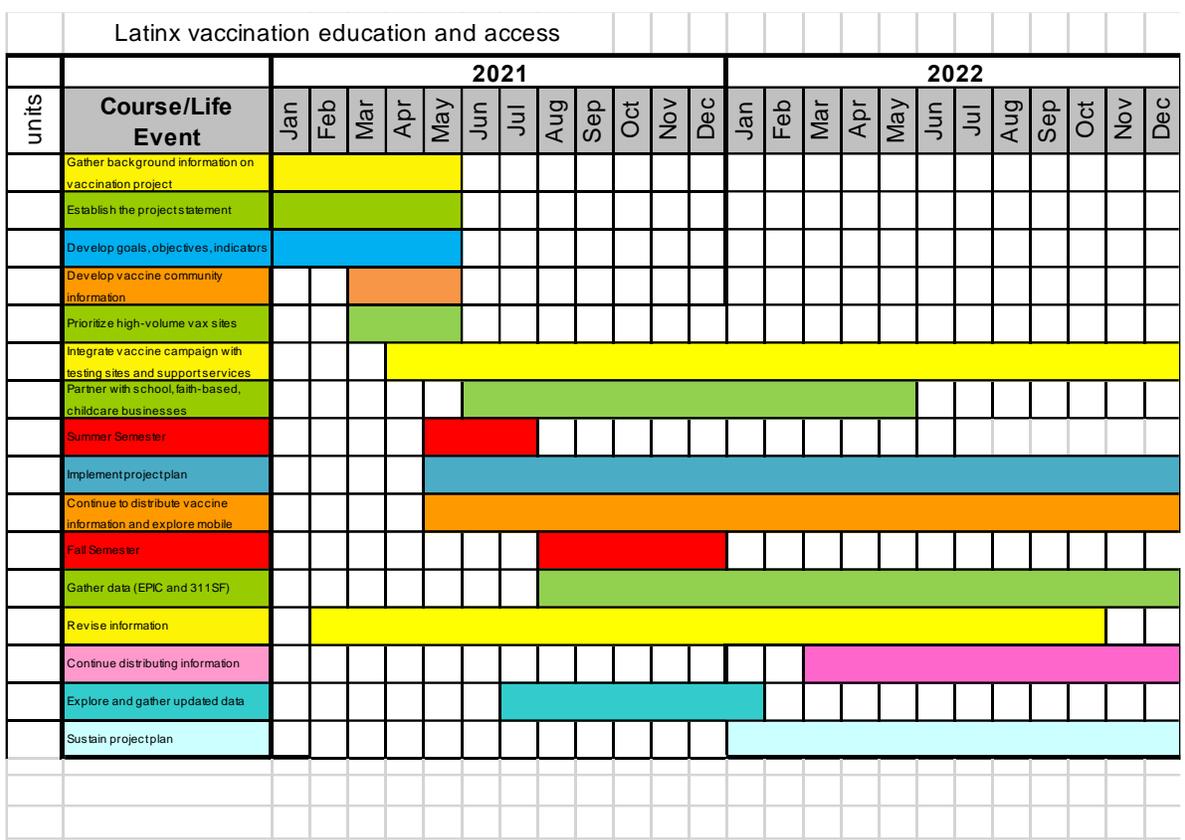
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Appendix A

GANTT Chart



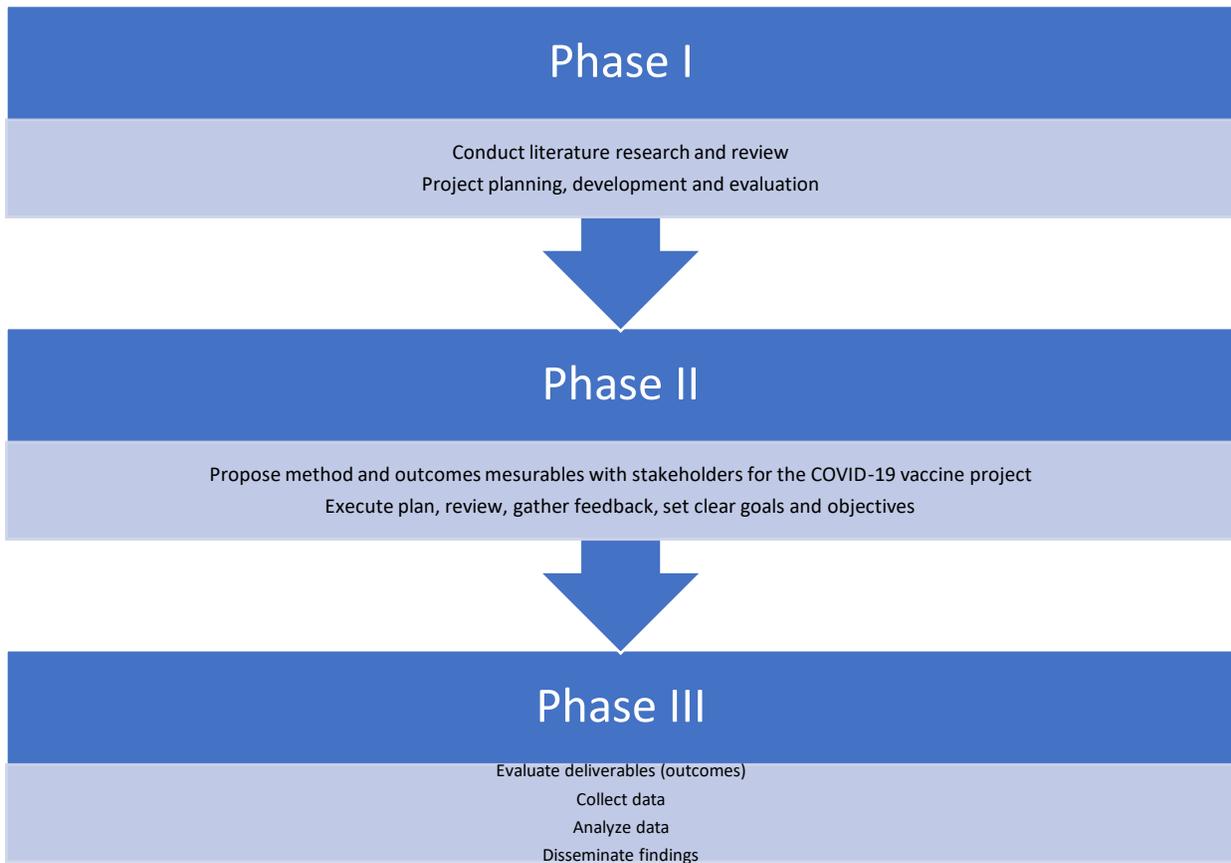
Appendix B

SWOT Analysis

| | Favorable/Helpful | Unfavorable/Harmful |
|--|--|---|
| Internal (attributes of the organization) | <p>Strengths</p> <ul style="list-style-type: none"> • Vaccines decrease infections and complications • Increase knowledge through frequent vaccination campaigns by public health and medical personnel • Direct patient education | <p>Weaknesses</p> <ul style="list-style-type: none"> • Government system mistrust due to lack of resources • Lack of healthcare access • Vaccine hesitancy • Budget limitation |
| External (attributes of the environment) | <p>Opportunities</p> <ul style="list-style-type: none"> • Implementation of a comprehensive and strategic system to better communicate vaccines effectiveness • Build awareness about the impact of vaccines movements and their health impacts | <p>Threats</p> <ul style="list-style-type: none"> • Anti-vaccine movements due to lack of research and misinformation • Vaccines becoming scarce due to a lack of supply • Rumors and misinformation can easily be circulated among close communities |

Appendix C

Work Breakdown Structure



Appendix D

Budget

The proposed budget for the project

| <i>QI project element</i> | <i>Cost charged to project</i> |
|-----------------------------|--------------------------------|
| Equipment | \$500.00 |
| Participant zoom account | \$500.00 |
| Whiteboards | \$40.00 |
| Nursing Research Office Fee | \$500.00 |
| Launch meeting materials | \$500.00 |
| Lead coordinator and staff | \$0 |
| Travel expenses | \$250.00 |
| Training and Education | \$250.00 |
| Cost per vaccine | \$0 |
| <hr/> | |
| <i>Total</i> | \$2540.00 |

Appendix E

Doctor of Nursing Practice

Statement of Non-Research Determination (SOD) Form

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

General Information

| | | | |
|----------------------------------|------------------------------|-----------------------|----------------------------|
| Last Name: | Carrico | First Name: | Gabriela |
| CWID Number: | 20288317 | Semester/Year: | Summer 2021 |
| Course Name & Number: | NP 749A/B Qualifying Project | | |
| Chairperson Name: | | | Advisor Name: |
| Second Reader Name | Neda Afshar DNP, FNP-C | | Sandhu, Prabjot DNP, FNP-C |

Project Description

1. Title of Project:

Increasing vaccination rates in the Latin X communities through a public health initiative for increasing education and vaccination.

2. Brief Description of Project

Vaccinating communities with the highest prevalence of COVID-19 is one of the fastest ways to decrease the spread of the disease (San Francisco Department of Public Health & COVID Command Center, 2021). COVID-19 prevalence across neighborhoods and communities within the city and county, concentrating vaccination efforts in communities most heavily impacted by the disease will significantly bend the disease curve, while also saving more lives (San Francisco Department of Public Health & COVID Command Center, 2021).

The project will implement an educational plan to educate the Latinx community about the benefits and importance of vaccination.

The project team, together with the Tenderloin Health Clinic providers and staff will:

- 1) provide community members with COVID-19 vaccination information during routine clinic visits,
- 2) explain vaccine risks, and benefits, including side effects management, and
- 3) promote vaccinations for all eligible members.

3. AIM Statement: What are you trying to accomplish?

Over the next six to nine months, the project team will implement a successful COVID-19 vaccine educational intervention for the Latinx communities in the San Francisco Tenderloin area and increase vaccination rates to 95%.

4. Brief Description of Intervention (150 words):

A project team committee will be formed to optimize COVID-19 vaccination rates to greater than 95% and established standardized techniques regarding patient intake workflows, vaccine counseling, and documentation. The intervention will also implement a post-survey to identify facilitators and barriers to the Latinx community's uptake of the COVID-19 vaccine. Based on the results of this survey, changes to the interventions will be implemented. The post-intervention survey will assess the effectiveness of this quality improvement project.

4a. How will this intervention be implemented?

This intervention will be implemented in the Latinx community in the Tenderloin Health Clinic in the city of San Francisco to increase COVID-19 vaccination rates. The goal is to focus on improving patient knowledge of COVID-19 vaccinations and develop a community outreach campaign that is culturally and linguistically sensitive to this population.

The key stakeholders that affect the success of the vaccination program include Community leaders and residents, health care providers, religious and public health regulators, and other vulnerable populations in the area.

5. Outcome measurements: How will you know that a change is an improvement?

The outcome measures include:

- 1) comparing the Tenderloin Health Clinic's baseline vaccination data to national benchmarks, and
- 2) including a post-intervention survey for clinic participants to assess understanding and gather feedback about the effectiveness of the intervention.

DNP Statement of Determination Evidence-Based Change of Practice Project Checklist*

Project Title:

Increasing vaccination rates in the Latin X communities through a public health initiative for increasing education and vaccination.

| Mark an "X" under "Yes" or "No" for each of the following statements: | 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 . <u>All</u> 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.

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>

Appendix F

Cost Analysis

Patient admitted due to COVID-19

Healthcare prices by payer of COVID-19:

For costs comparison Commercial vs Medicare
 Hospitalization Costs per patient
 Hospitalization for ages from 0 to 85+

| Per Patient Hospitalization Costs: | Commercial | Medicare |
|--|---------------|--------------|
| COVID-19 Hospitalization Cost w/ventilator | \$ 108,898.10 | \$ 57,822.00 |
| COVID-19 Hospitalization cost w/o ventilator | \$ 31,662.60 | \$16,812.00 |
| ED visits | \$ 1,583.04 | \$582.00 |
| Office visits | \$ 304.64 | \$112.00 |
| | <hr/> | <hr/> |
| Medi-Cal w/ventilator | \$53,003.50 | |
| Medical w/o ventilator | | |
| | <hr/> | <hr/> |
| | \$15,4111.00 | |
| Uninsured w/ ventilator | \$ 57,822.00 | |
| Uninsured w/o ventilator | \$16,812.00 | |

Appendix G

Project Team Members

| Project Staffing | Role & Tasks | Additional Notes |
|---|---|--|
| Latinx Influencers; 1- mother and son; 1- mother & daughter | <ul style="list-style-type: none"> • Receive Vaccine Ambassador training through UCSF Latinx Center for Excellence • Commit to scheduled outreach schedule for project (4 hour shift) | <ul style="list-style-type: none"> • Meet bi-weekly with project team, complete COVID class |
| USF Project Lead- USF student | <ul style="list-style-type: none"> • Finalize scope of the project • Participate in Ambassador Training • Ensure team adheres to project timeline • Problem-solve issues barriers | <ul style="list-style-type: none"> • DNP proposal project • Meet weekly through zoom • Meet monthly on-site |
| Community Project Lead & SFUSD partner | <ul style="list-style-type: none"> • Identify and recruit influencers • Co-lead project activities on site • Assist with outreach and dissemination of information | <ul style="list-style-type: none"> • Meet weekly through zoom • Meet monthly on-site |
| DPH Lead | <ul style="list-style-type: none"> • Lead project development • Ensure key stakeholders are engaged • Secure additional funding • Reach out to Max-the-Vax for additional youth support | <ul style="list-style-type: none"> • Meet weekly through zoom • Meet monthly on-site |
| Vax Branch Ops Lead/Stakeholder | <ul style="list-style-type: none"> • Provide technical support • Inform planning and implementation process | <ul style="list-style-type: none"> • Meet weekly through zoom • Meet monthly on-site |

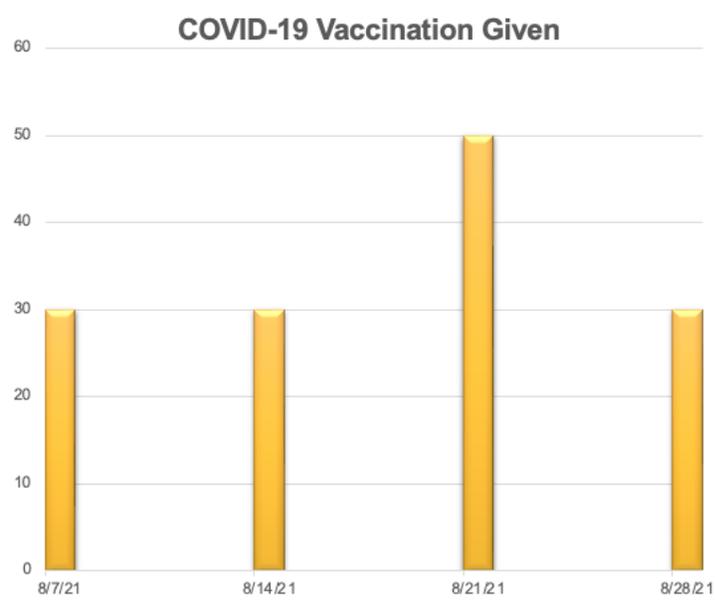
| | | |
|---------------------------------|--|--|
| | <ul style="list-style-type: none">• Provide logistical/operational support-TBD | |
| CBO Partner- Horizons Unlimited | <ul style="list-style-type: none">• Share youth information campaign resource• Provide additional project funding-TBD | |

Appendix H

Comparison Bars Chart

Aug 7,2021: ~30 vaccines
Aug 14,2021: ~30 vaccines

Aug 21, 2021: 50 vaccines
40% Increase!



Appendix I**Influencers Post Survey**

| | |
|---|--|
| What was your direct experience like? | |
| Did everything go well/bad? | |
| Do you feel like you got enough training? | |
| Future Improvements? | |