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An Approach to Increase Education in the Flu Vaccination Clinic Process

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University of San Francisco

Fall 2019

Abstract

The Health Ministries Program, located in Orange County, is supported by a large faith-based community hospital and provides community resources such as flu vaccinations that are overseen by the Faith Community Nurse (FCN). In collaboration with the program, University of San Francisco (USF) nursing students researched and developed an implementation of a multi-purpose educational flyer to increase education and better streamline the process at flu vaccination clinics throughout Orange County faith-based organizations. Research shows that many individuals still do not get vaccinated due to misconceptions, misinformation, and lack of knowledge on the importance of flu vaccinations. The cost of flu-related illnesses and deaths upon individuals, families and the overall healthcare system is a great burden on society. The expected outcomes to emerge from the project are that by providing access to simple, easy to read educational materials, individuals will experience decreased skepticism and increased willingness to get vaccinated, which will ultimately result in higher flu vaccination rates.

An Approach to Increase Education in the Flu Vaccination Clinic Process

The expansive Health Ministries Program has existed in Orange County through the support of a large faith-based hospital since 1987. Welcoming every faith institution, Faith Community Nurses (FCNs) oversee this spiritually based wellness program with the purpose to sustain spiritual, mental, as well as the physical health balance of their congregations. The Health Ministries work with FCNs to provide the proper resources and educational programs including training and flu (influenza) vaccines. In this way, FCNs play a crucial role in delivering preventative health services, empowering spiritual health, and educating people of faith to become a healthier community (“Health Ministries,” 2019).

Statement of the Problem

Each year, the impact of the flu varies in the United States placing a significant burden on the health of people. It is estimated that hundreds of thousands of hospitalizations, millions of flu-associated sickness, and between 12,000 - 79,000 deaths annually are attributed to influenza (Centers for Disease Control and Prevention [CDC], 2019). A crucial way to prevent illness and mortality caused by the flu is to get vaccinated. However, less than half of Americans get vaccinated due to broader misconceptions including the value of receiving a flu vaccine, the cost of flu vaccines, as well as the concerns about the safety and efficacy of the flu vaccination (CDC, 2018; National Opinion Research Center [NORC], 2018).

In coordination with FCN, a large faith-based community hospital provides annual complimentary flu vaccines throughout Orange County during the fall season to adults ages 18 and over as well as children 6 years and over depending on the flu clinic sites. The process includes screening clients by asking them a set of questions (see Appendix A) before administering the flu vaccine and distributing the vaccine information statement (VIS) titled,

“Influenza (Flu) Vaccine (Inactivated or Recombinant): What you need to know” handouts (CDC, 2019). It was observed by nursing students at the University of San Francisco (USF) that during the flu clinics, volunteers would simply offer the clients the CDC’s VIS without explaining the content of what was being distributed. It was then determined that the current process lacks “teaching” of the educational resources provided using the ineffective VIS handouts. The purpose of this project is to improve education in the process of the flu vaccination clinic throughout Orange County faith-based organizations by arranging pre-screening questions, facts about the flu, and a flu vaccination receipt into three different stations while utilizing a multi-purpose educational flyer.

Rationale

The rationale for creating an improved education process and multi-purpose educational flyer originally grew from informal assessment data collected during observed flu clinic participation. Each USF student attended at least one flu vaccination clinic held at varying locations throughout Orange County. These sites were typically outpatient clinics, local churches or community centers and allowed clients and student volunteers diverse and unique experiences. USF students observed and conducted informal interviews with the staff, volunteers, and clients to identify strengths and possible areas of improvement. After a collaborative meeting with the Outreach Program Manager, the agreed consensus was to focus the project on client education. After synthesizing all observations within the flu clinic microsystems, a root cause analysis (RCA) was created, out of which five major needs drove the development of a multi-purpose educational flyer (please refer to Appendix B for the RCA and Appendix C for the educational flyer).

The first major need developed primarily from a collective agreement that there was not enough staff or volunteers to properly facilitate and improve the current patient education implemented during the flu clinic operating hours. Planning for the implementation of large-scale community flu vaccination clinics throughout Orange County is a time-consuming and difficult process that requires coordination of materials, resources, and personnel. Staff involved had little time to launch a project aimed at improving client education despite a desire to create one. Similarly, during flu clinic hours, priority was given to vaccination administration and client safety. There were not enough personnel to properly educate every client that received a vaccination. In total, this drove the rationale for the creation of a multi-purpose flyer that provided basic information summarized from the CDC VIS.

The second need observed was an overall unclear organization and flow of client processing. At church and community center locations, the organization and flow of the clinic were efficient and manageable. However, at the larger outpatient clinics, it was more difficult to discern which clients had or had not been screened and educated. A group screening and education method were adopted wherein volunteers read aloud screening questions to a handful of clients and distributed the CDC's VIS (please refer to Appendix A for screening questions). After group screening was completed, a volunteer would either move on to the next group of individuals in line or wait until enough clients gathered before conducting screening again. This method was not always effective and at times, some clients would miss the screening. For example, part of the screening process at the outpatient clinics was to ask if the client was pregnant or under eighteen. If they were, they were ineligible to receive a flu vaccine at the clinic out of safety concerns. Several pregnant and underage clients appeared at the front of the line after waiting for thirty to forty-five minutes. They stated an unawareness of the screening

criteria, indicating a shortcoming of the group screening and education method used by volunteers.

The third need assessed was to present educational material in a visually stimulating and engaging way. It is required by law to give all patients, regardless of age, a VIS which contains answers to seven most frequently asked questions about the flu vaccine (please refer to Appendix D for the CDC's VIS). Many clients returned the CDC VIS to volunteers despite instruction and encouragement to keep and take home, a common observation noted across all flu clinic locations. The reasoning for clients returning the CDC VIS was unclear but after review of its aesthetic and color, it was decided that the sheets were excessively wordy and monotone. The use of visual and colorful learning materials is often the most effective method for catching learner attention and retaining interest (Bastable, 2014). Therefore, the rationale for the use of an educational flyer was to incorporate color, pictures, and gain client interest.

The fourth need that drove the development of a visually stimulating educational flu vaccination flyer was to ensure clients who did not speak English either had a Spanish-translated version of the flyer or visuals to follow. The clinics attracted a diverse array of families. Initial observations found that a majority spoke or understood English, however, there were many who also or only spoke Spanish, Hindi, Korean, and Japanese. During education and screening, volunteers spoke English, necessitating the need to bridge the language barrier. Creating a visually stimulating, easy to follow educational flyer is the first step in addressing a key barrier to education.

The fifth and final need grew from the amount of flu vaccination questions asked by clients to nurses and volunteers. Clients commonly asked if influenza was a live attenuated virus, if they could contract the flu from the vaccine or if family members with chronic diseases like

diabetes should get vaccinated. This was an important observation that addressed a need within the community to educate clients on accurate information regarding their health. A large part of the rationale for creating an educational program is to clarify flu misconceptions and empower patients with the knowledge to make informed decisions about their health.

Literature Review

Faith-based organizations (FBO) have a history of working with healthcare facilities and promoting vaccinations to their surrounding communities within the United States (Kiser & Lovelace, 2019). The Interfaith Health Program (IHP) was formed in 1992 to join networks to fight health disparities. In 2009, the Influenza Initiative was initiated to organize existing local faith and health groups to provide specifically 2009 H1N1 prevention services to priority populations. Studies have shown that a vaccination program, in collaboration with FBOs, increase vaccination rates (Kiser & Lovelace, 2019). The importance of the network that Health Ministries created and supported among a diverse number of faith communities is visible among the organized flu clinics witnessed by USF nursing students.

Beginning in 2010, within the United States, annual flu vaccination was recommended for all individuals between the ages of six months and older (Logan et al., 2018). Despite this universal recommendation and the Health People 2020 target to vaccinate 70%, the CDC estimated that only 45.6% of the population were vaccinated against influenza during the 2015-16 influenza season (Logan et al., 2018). Although rates of flu vaccinations have somewhat improved in the last few years, there is still much work to be done. To continue lowering flu-related hospital admissions and deaths, studies have taken place to better understand why certain populations do not get vaccinated. Mills, Charlton, and Rowley (2016) conducted a study at the University of Central Arkansas proving education was one of the main factors in influencing

participants to receive the vaccine. Through their implementation of educating clients, they noticed that “the information needs to be approachable by the general public and not just to those with science, biology, or immunology backgrounds” (Mills, Charlton, & Rowley, 2016, pg. 171). Understanding what influences an individual’s decision is a big component in determining the educational approach for the population on vaccination.

Subsequently, education has been paramount in increasing flu vaccination rates. With education, patients are more likely to understand the rationale behind immunity and seek out vaccination. In one randomized controlled trial, implementation of a three-minute face to face client education dialogue increased flu vaccine uptake by 8.6% compared to a group of clients receiving usual care (Leung Mui, Chiu, Ng, Chen, Ho, Kwok, Lam, Wong, Wong, & Pang, 2017). Therefore, face-to-face education in an outpatient flu clinic is key to raising vaccination rates and clearing misconceptions as stated in the needs assessment.

Moreover, a quality improvement project conducted at a Floridian clinic used handouts, posters, patient phone calls, and an educational video to enhance client understanding of the flu vaccination and increase administration rate (Falcone, Vess & Johnson, 2019). All information used in this clinic was pulled from the CDC’s Influenza Tool Kit. An educational video featuring a patient and the program director played on repeat to patients waiting (Falcone, Vess, & Johnson, 2019). The results of this evidence-based QI project were extremely successful. Thirty-five patients were given vaccinations at the clinic during the 2017-2018 season which increased the following year to two-hundred and forty-four total vaccinated, indicating a 597% increase in vaccine administration (Falcone, Vess, & Johnson, 2019).

Falcone’s (2019) systematic review examined ten evidence-based reviews to evaluate the most effective measures to improve flu vaccination rates in uninsured individuals. In one study,

an opt-out policy, standing orders, CDC posters, and handouts caused a 1.4-fold increase in the number of vaccinations given (Falcone, 2019). Another study found that creating strong, personal narratives and connections with clients during education sessions resulted in higher vaccination administration rates (Falcone, 2019). Similarly, properly educating staff to communicate information effectively with vaccination patients helped combat public misconceptions. The systematic review advocated for the need for personalized and tailored communication during patient education as patients were more likely to respond and retain information (Falcone, 2019). Overall, therapeutic communication, personal narratives, and face-to-face client education is key to improving vaccination administration rates and providing quality client care.

Cost Analysis

When analyzing the overwhelming cost of flu-related illnesses and mortality rates in the U.S., it is evident that the flu vaccination benefits healthcare facilities, individual families, local communities and nationwide. In a 2015 study by Muscatello, Stockwell, and Newall, the total economic burden of the flu on the healthcare system and society concluded to be around \$11.2 billion. This includes emergency department visits, hospital admissions, outpatient visits, deaths, and days of productivity lost due to the flu. Specifically, the direct medical cost was \$3.2 billion, related mostly to individuals over 65 years of age due to hospitalization, while indirect costs were \$8.0 billion for those between the ages of 18 to 64, largely as a result of influenza-related deaths (Putri, Muscatello, Stockwell, & Newall, 2018). It is important to keep in mind specifically who and where the flu cost is affecting the most to better educate the population of the impact of this burden. The Influenza Hospitalization Surveillance Network reported that from October 1st, 2017 through April 28, 2018, there were 30,453 laboratory-confirmed influenza-

related hospitalizations reported. These reported hospitalizations were the highest ever recorded compared to those reported between 2014 and 2015 (CDC, 2018). This is concerning data depicting the urgent need to continue promoting flu vaccinations and education to the U.S. population.

Goals and Objectives

The plan to improve the process for the Health Ministries flu vaccination program involves the implementation of a multi-purpose educational flyer. The flyer includes quick facts and misconceptions about the flu taken from CDC, FCN's contact information, and a registered nurse's signature for proof of vaccination. Besides, the flyer includes a list of the three stations—pre-screening questionnaires, flu education, and administration of the flu vaccine—which requires stamping by a personnel who screened or educated the clients before receiving a flu vaccination. The multi-purpose flyer will be distributed in both English (see Appendix C1) and Spanish (see Appendix C2). To measure the educational effectiveness of the flyer on client's knowledge about flu vaccines, at least 75% of clients will be able to verbalize two or more facts learned by the end of the educational section. Furthermore, to measure the efficiency of the flu vaccination clinic educational process after the utilization of the multi-purpose educational flyer, it is expected that at least 80% of staff and volunteers will report a score of 4 or higher on the Likert scale satisfaction survey (Appendix E1) at the end of each flu clinic.

Methodology

Data Source

To effectively reach the population without causing disruptions, an approach that would not alter the current process of the flu vaccination clinics was needed. Education must be accurate and desired, which led to the creation of a tool that simplifies the CDC fact sheet while

adding in a visually appealing look. The multi-purpose flyer will be utilized on site at the clinics as a handout to prevent unnecessary complexities with online aspects and to ensure the education is reaching the participants. The creation of the flyer gives flu vaccination participants an easy to read fact sheet with key information that should be known before receiving the vaccination. Due to the simple format of this flyer, it should be easy to implement within the current process and flow of the flu vaccination clinic.

The vaccination sites differentiate in size and turnout, so two methods were discussed to efficiently implement the change. Method A involved in-line education for sites with larger turnouts. The multi-purpose flyer would be distributed to all participants arriving on site before entering the vaccination area. Volunteers will allow them time to review and respond to two to three facts they read. Their flyer will then be marked with an education stamp, which verifies that the participants reviewed the fact sheet. If they were not stamped or were unable to provide facts, then the facilitator at the education area will provide three to four facts to the participant. Once complete they will get stamped for education and sent to the screening area. With this method, participants will be able to educate themselves before entering the clinic, resulting in a low chance of disruption in a steady flow. This method will require more volunteers to assist with distribution of flyers and education.

Method B involves education and screening performed together in the vaccination area for sites with smaller turnouts. The multi-purpose flyer will be given to clients by the facilitators of the screening and education area upon entry into the clinic. The facilitator will tell the clients three to four facts off the fact sheet on the backside of the flyer. The participant will receive a stamp for both education and screening at the same time. With this method, additional resources,

such as extra volunteers, will not be needed and the flow will remain undisturbed. This method may require two to three facilitators at the combined education and screening areas.

These approaches are appropriate and will be effective because it utilizes the strengths and weaknesses of each site. No two sites will be the same, so by creating two methods of educating while combating a high and low turnout and supporting a decent flow, is ideal for the flu vaccination team. It also effectively utilized evidence-based research on education combined with adequate communication. The goal of this change is to increase education about the flu vaccination and by following these methods the flu vaccination team will be able to easily and effectively add education to the process and flow of the clinics.

Timeline

The work done throughout this quality improvement project can be viewed in the form of a Gantt chart (Appendix F). A Gantt chart was used because it is easy to understand and displays, in detail, the time in which events should occur. Two Gantt charts were developed: one shows this season's schedule; the second Gantt chart shows what it is expected to look like next season. The first Gantt chart involved a lot of planning, researching, and evaluating. In comparison, the next season's Gantt chart will involve more implementation. The hope is that next season's Gantt chart will be the ideal timeline of events for the following seasons to come.

Expected Results

The expected results after implementing the educational flyers are increased client education and gradually higher rates of flu vaccinations conducted by the Health Ministries in the following flu seasons. It is expected that at least 75% of clients will report being more informed and be able to verbalize at least two facts about flu vaccinations by the end of the educational portion of the flu clinic. Additionally, at least 80% of staff and volunteers will report

being satisfied with the flow and education process of each flu clinic. The implementation of this project will help educate and clarify flu misconceptions, which in one particular study was found to be “one of the main probable factors that influence people on whether or not to obtain a seasonal influenza vaccine” (Milts, Charlton, & Rowley, 2016, p. 170). The main result that is expected to emerge from the project is that providing access to simple, easy to read educational materials will decrease skepticism and increase the willingness of individuals to get vaccinated, which will result in higher flu vaccination rates, decrease preventable hospital admissions, and lower mortality rates due to flu-related symptoms. By following the process improvement recommendations, the flu vaccination clinics also have the potential to improve flow and increase safe vaccination administration practices among healthcare personnel.

Nursing Relevance

Nurses work at the forefront of healthcare and have a major role in preventing disease. The flu is an infectious disease “that is responsible for an estimated 3–5 million cases of severe illness and 250,000–500,000 deaths each year primarily among young children, the elderly, and pregnant women” (Logan et al., 2018). Vaccines and health promotion through education are both forms of primary prevention, and it is within the scope of nursing practice to educate individuals on the importance of flu vaccination to protect the health of not only the person receiving the vaccination but for everyone else in the community. This will, in turn, increase the chances of achieving herd immunity, which leads to decreased risks for infection and transmission rates within the community. Increased flu vaccine acceptance will result in a decrease in not only the number of deaths that result yearly from the flu but also the number of hospital admissions as well as costs related to treating the preventable disease. In order to break

down the barriers to flu vaccination, nurses should first be knowledgeable about the flu themselves and keep up to date with information from the CDC.

In addition, to effectively educate individuals, “information [should] to be approachable by the general public and not just to those with science, biology, or immunology backgrounds” (Milts, Charlton, & Rowley, 2016, p. 171). The multi-purpose educational flyer created for this project is simple, easy to read, and made for those with different literacy levels and educational backgrounds. With this implementation, nurses will be able to increase annual flu vaccination rates and promote the health of the public more effectively.

Summary Report

Educating clients is an important step when administering medication to ensure safe practice. By adding an educational section for clients in the process of flu vaccination clinics, clients’ literacy about flu vaccines will increase. In collaboration with Health Ministries, USF nursing students experienced a delay at the beginning of this project. In preparation for the flu vaccination clinics, the Health Ministries staff had difficulty scheduling a time to meet with USF students. When a meeting date availability was agreed upon, it was then postponed to a later week. Although the journey to start the project was later than anticipated, there were little to no changes in the process of the project. The meeting with the Health Ministries staff validated that the project was on the right track with the implementation of a multi-purpose educational flyer for distribution at the flu vaccination clinics.

There were several ways the Health Ministries were able to spread awareness regarding the free flu vaccination clinics. Flyers were distributed to staff, volunteers, and areas of faith-based communities which included the time and location of the different flu clinics that would take place around Orange County (see Appendix G). However, in addition to the flyer, one main

difference was that nursing students and FCNs were given a link to register to volunteer for the flu clinics.

During the flu vaccination clinics, it was observed that clients were just handed a CDC VIS. The CDC VIS handout was filled with texts on both the front and back pages (see Appendix D). However, with this project implementation, clients instead received a multi-purpose educational flyer for use throughout the clinic process. Overall, the multi-purpose educational flyer has bigger fonts, less but pertinent facts, and a more effective visual (refer to Appendix C).

The only contingency was the lack of distributing the multi-purpose educational flyer to other flu clinic sites due to delayed finalization of the flyer. Once feedback was provided by the flu clinic leads, only a single flu vaccination clinic site remained to test-run the handout. The last flu clinic of the season was a small site; thus, it was a suitable size to complete a pilot test of the multi-purpose informational flyer. Thirty flyers were distributed to provide an adequate sample size. Due to technical issues, flyers were not prepared prior to the start of the flu clinic as intended, but rather, right before the administration of the flu vaccine. Education was therefore done alongside screening which was more convenient for smaller sites. Many clients enjoyed the education and reported they felt well-informed about the flu vaccine. An ex-doctor from Russia expressed her eagerness to see that education was being provided. She truly believed that education was important and that everyone should be educated on what they're receiving. In addition, she disliked flu myths and those who spoke out against life-saving vaccines because they reduced the effect of herd immunity.

Evaluation

Evaluating the process and outcome of the flu clinic is a valuable component for the Health Ministries to accurately gauge the effectiveness of the educational flyer. The Health Ministries

an internal evaluation process but does not involve the participation of student volunteers or nurses. In understanding the valuable input that the volunteer students may have on the use of the flyer for educational purposes as well as organization of the clinic, USF students created a survey to gather both their qualitative and quantitative input. The clinic that implemented the educational flyer received a few clients' verbal feedback, but no formal evaluation was done. To improve the process, a second survey was also created to give to clients who receive the vaccination to evaluate how they viewed the effectiveness of the educational flyer (see Appendix E2). Due to possible time constraints, providing clients with a link to access at home could be an alternate option. These surveys must be taken into consideration that each flu clinic is set up differently when reviewing the evaluations.

Recommendation

After the implementation and evaluation of an educational flu vaccination flyer, three recommendations would strengthen the success and sustainability of the flu vaccination flyer project. One recommendation is to create a supplemental vaccination educational video to play while patients are waiting in line. This would not only offer a personal narrative that might emotionally appeal to patients but also include a mixed media approach that would grab and retain patient attention. Another suggestion would be to create a system for training new volunteers to utilize the newly implemented educational flyer and help them prepare answers to the questions clients may ask. It may be helpful to review the CDC Influenza Toolkit which contains materials, pdfs, posters, handouts and PowerPoints aimed at training medical professionals on how to educate clients. Lastly, while the educational flyer was translated into Spanish, there is still a need to have it translated into other languages like Chinese, Korean and Hindi to suit the needs of the surrounding Orange County population.

Conclusion

The creation of a multi-purpose educational flyer was a novel method introduced at the Health Ministries to standardize education teaching and combat clientele flu misconceptions in the Orange County community. While there were many positive reactions from the attendees, one enthusiastic flu vaccine client stood out, expressing enthusiasm and stating her support of the flyer and accompanying verbal education by student volunteers to the public. To continue supporting the use of the educational flyer, the current and future cohorts at USF will continue to keep in contact with the staff at the Health Ministries. The nursing students will refer to CDC to keep up to date with the information and learn of any new updates for the upcoming flu season. The post-clinic surveys will be retrieved after the end of the flu season and data will be collected into a chart to evaluate the results and efficacy of the flu process. USF students will then contact the team at the faith-based community hospital, or vice versa, to make any necessary changes to the educational flyer if needed. With continued implementation and improvement of the flu vaccination flyer during the Health Ministries' next flu vaccination clinic season, long term impact can be assessed in greater detail concerning decreased hospital costs and increased vaccination rates.

References

Bastable, S. (2014). Characteristics of the Learner. In P.M Glynn (Eds.), *Nurse as educator* (pp. 189-231). Sudbury, MA: Jones and Bartlet

Centers for Disease Control and Prevention (CDC). (2019). Disease Burden of Influenza.

Retrieved from:

<https://www.cdc.gov/flu/about/burden/index.html###targetText=While%20the%20impact%20of%20flu,79%2C000%20deaths%20annually%20since%202010.>

Centers for Disease Control and Prevention (CDC). (2019). Influenza (Flu) Vaccine (Inactivated or Recombinant): What you need to know. Retrieved from:

<https://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.pdf>

Centers for Disease Control and Prevention (CDC). (2019, April 5). Vaccine Information Statement. Retrieved November 6, 2019, from

<https://www.cdc.gov/vaccines/hcp/vis/about/facts-vis.html>.

Centers for Disease Control and Prevention (CDC). (2018). Estimates of Influenza Vaccination Coverage among Adults—United States, 2017–18 Flu Season. Retrieved from:

<https://www.cdc.gov/flu/fluview/coverage-1718estimates.htm>

Falcone, A. L. (2019). Improving influenza immunization rates in the uninsured. *Journal of The American Association of Nurse Practitioners*, 31(7), 391–395.

<https://doi.org/10.1097/JXX.000000000000166>

Falcone, Aimee & Vess, Joy & Johnson, Emily. (2019). Evidence-based interventions cause multifold increase of influenza immunization rates in a free clinic. *Journal of the*

American Association of Nurse Practitioners. 1. 10.1097/JXX.0000000000000302.

Health Ministries | Hoag Health Network. (n.d.). Retrieved November 12, 2019, from

<https://www.hoag.org/about-hoag/community-benefit/hoag-programs/health-ministries/>

Kiser, M., & Lovelace, K. (2019). A National Network of Public Health and Faith-Based Organizations to Increase Influenza Prevention Among Hard-to-Reach Populations.

American Journal of Public Health, 109(3), 371–377. Retrieved from

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6366510/>

Leung, K.C, Mui, C., Chiu, W.Y, Ng, Y.Y, Chen, M.H.Y, Ho, P.H, Kwok, C.P, Lam, S.S.M,

Wong, C.Y, Wong, K.Y & Pang, H.H. (August 2, 2017). Impact of patient education on influenza vaccine uptake among community-dwelling elderly: a randomized controlled

trial. *Health Education Research, Volume 32, No 5*, pg 455-464. doi: 10.1093/her/cyx053

Logan, J., Nederhoff, D., Koch, B., Griffith, B., Wolfson, J., Awan, F. A., & Basta, N. E. (2018).

‘What have you HEARD about the HERD?’ Does education about local influenza vaccination coverage and herd immunity affect willingness to vaccinate? *Vaccine,*

36(28), 4118–4125. Retrieved from file:///C:/Users/lucit/AppData/Local/Temp/1-s2.0-S0264410X18306571-main.pdf

Mills, S. D., Charlton, S. R., & Rowley, B. M. (2016). Evaluation of Education and Other

Influential Factors on the Perceptions of Influenza Vaccinations. *Journal of the Arkansas*

Academy of Science, 70. Retrieved from

<https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=2198&context=jaas>

National Opinion Research Center (NORC). (2018). 41 Percent of Americans Do Not Intend to

Get a Flu Shot this Season. NORC at the University of Chicago. Retrieved from:

<http://www.norc.org/NewsEventsPublications/PressReleases/Pages/41-percent-of-americans-do-not-intend-to-get-a-flu-shot.aspx>

Putri, W. C., Muscatello, D. J., Stockwell, M. S., & Newall, A. T. (2018). Economic burden of seasonal influenza in the United States. *Vaccine*, *36*(27), 3960–3966. Retrieved from

<https://www.sciencedirect.com/science/article/pii/S0264410X18306777?via=ihub>

Summary of the 2017-2018 Influenza Season. (2019, September 5). Retrieved from

<https://www.cdc.gov/flu/about/season/flu-season-2017-2018.htm>.

Appendix A

Pre-Screening Questions

SCREENING QUESTIONS:

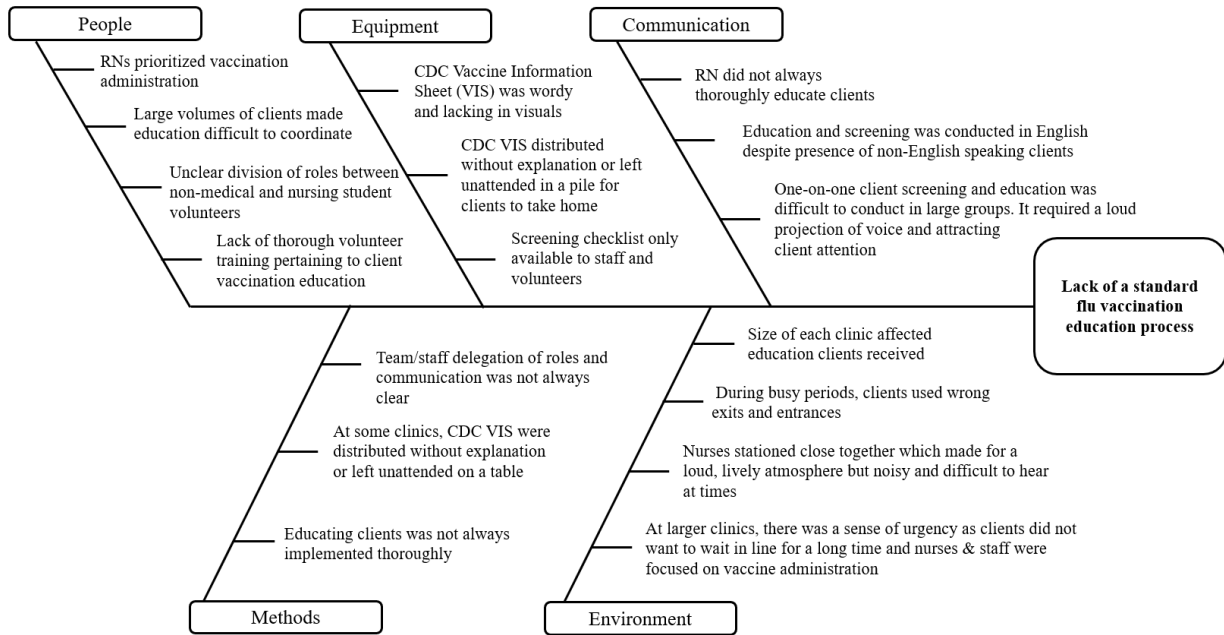
To be eligible to receive a flu shot, response should be 'no' to all questions

1. Are you ill or have a fever today?
2. Do you have an allergy to **eggs** or Thimerosal (a mercury preservative)?
3. Have you ever had a serious reaction to influenza vaccine in the past?
4. Have you ever had Guillain-Barré syndrome (a severe paralytic illness)?
5. Are you pregnant?

* Please note: Vaccines are for ages 9 years or older. Minors under the age of 18 must have a parental/guardian signature.


Appendix B

Root Cause Analysis



Appendix C1


Faith-Based Community Hospital Flu Clinic Multi-Purpose Educational Flyer (English Version)




Proof of Immunization


Date: _____
 Name (Print): _____
I have received a quadrivalent flu vaccination.

Below dotted line to be completed by administering RN only.
 RN Name (Print): _____
 Clinic Location: _____


 SCREENING

EDUCATION






FLU SHOT

Faith Community Nursing (FCN) is a specialized practice of professional registered nursing, which holds the spiritual dimension to be central to practice. FCN is open to all faith traditions.

For more information and/or to connect to local nurses in your area contact:
susan.johnson2@hoag.org or visit hoag.org/healthministries

QUICK FACTS:


- Influenza Vaccine **CAN** prevent influenza (flu)
- Flu vaccine prevents millions of illnesses, deaths, and flu-related visits to the doctor each year
- Children 6 months through 8 years of age may need 2 doses
- Everyone else needs only one dose
- Takes about **2 weeks for protection** to develop after vaccination
- Influenza vaccine **DOES NOT** cause flu
- Soreness, redness, injection site swelling, low grade fever, muscle aches and headache may occur after influenza vaccine injection
- If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call **9-1-1** and get the person to the nearest hospital



(CDC, 2019)

Appendix C2

Faith-Based Community Hospital Flu Clinic Multi-Purpose Educational Flyer (Spanish Version)



Comprobante de Inmunización

Fecha: _____


Nombre: _____


Yo recibí la vacuna de quadrivalent influenza


Debajo de la línea roja será completado solo por la enfermera registrada administrando la vacuna.

Nombre de Enfermera: _____

Nombre de Clínica: _____

 **REVICION**


EDUCACION 

 **VACUNA**

Enfermería de Comunidades de Fe es una práctica especializada de enfermeras registradas profesionales, lo cual mantienen la dimensión espiritual como parte central de su práctica. Esta profesión esta abierta a todas creencias. **Para más información y/o para conectar con su enfermera local comuníquese con:** susan.johnson2@hoag.org o visite la pagina hoag.org/healthministries

Datos Básicos:

- La vacuna de Influenza **PUEDA** prevenir influenza (gripa)
- La vacuna evita millones de enfermedades, muertos, y citas médicas anuales relacionados a la influenza
- Niños de 6 mes a 8 años de edad tal vez necesiten 2 vacunas
- Todas las demás edades solo necesitan 1 vacuna
- Dura alrededor de **2 semanas** para que el efecto de protección desarrolle después de vacunarse.
- La vacuna de Influenza **NO** causa que te de gripa
- Dolor, inflamación, enrojecimiento, baja temperatura, molestia muscular y dolor de cabeza puede pasar después de recibir la vacuna de influenza
- Si nota señales de una reacción alérgica grave (ronchas, inflamación de la cara o garganta, dificultada de respirar, latido de corazón acelerado, mareos o debilidad), llame **9-1-1** y lleve la persona al hospital más cercano. (CDC, 2019)



Appendix D

CDC Handout Distributed at Flu Clinics

VACCINE INFORMATION STATEMENT

Influenza (Flu) Vaccine (Inactivated or Recombinant): *What you need to know*

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vi
 Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vi

4 Risks of a vaccine reaction

- Soreness, redness, and swelling where shot is given, fever, muscle aches, and headache can happen after influenza vaccine.
- There may be a very small increased risk of Guillain-Barré Syndrome (GBS) after inactivated influenza vaccine (the flu shot).

Young children who get the flu shot along with pneumococcal vaccine (PCV13), and/or DTap vaccine at the same time might be slightly more likely to have a seizure caused by fever. Tell your health care provider if a child who is getting flu vaccine has ever had a seizure.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

1 Why get vaccinated?

Influenza vaccine can prevent influenza (flu). Flu is a contagious disease that spreads around the United States every year, usually between October and May. Anyone can get the flu, but it is more dangerous for some people. Infants and young children, people 65 years of age and older, pregnant women, and people with certain health conditions or a weakened immune system are at greatest risk of flu complications.

Pneumonia, bronchitis, sinus infections and ear infections are examples of flu-related complications. If you have a medical condition, such as heart disease, cancer or diabetes, flu can make it worse.

Flu can cause fever and chills, sore throat, muscle aches, fatigue, cough, headache, and runny or stuffy nose. Some people may have vomiting and diarrhea, though this is more common in children than adults.

Each year **thousands of people in the United States die from flu**, and many more are hospitalized. Flu vaccine prevents millions of illnesses and flu-related visits to the doctor each year.

2 Influenza vaccine

CDC recommends everyone 6 months of age and older get vaccinated every flu season. **Children 6 months through 8 years of age** may need 2 doses during a single flu season. **Everyone else** needs only 1 dose each flu season.

It takes about 2 weeks for protection to develop after vaccination.

3 Talk with your health care provider

Tell your vaccine provider if the person getting the vaccine:

- Has had an **allergic reaction after a previous dose of influenza vaccine**, or has any **severe, life-threatening allergies**.
- Has ever had **Guillain-Barré Syndrome** (also called GBS).

In some cases, your health care provider may decide to postpone influenza vaccination to a future visit.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting influenza vaccine.

Your health care provider can give you more information.

4 Risks of a vaccine reaction

- Soreness, redness, and swelling where shot is given, fever, muscle aches, and headache can happen after influenza vaccine.
- There may be a very small increased risk of Guillain-Barré Syndrome (GBS) after inactivated influenza vaccine (the flu shot).

Young children who get the flu shot along with pneumococcal vaccine (PCV13), and/or DTap vaccine at the same time might be slightly more likely to have a seizure caused by fever. Tell your health care provider if a child who is getting flu vaccine has ever had a seizure.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5 What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call 9-1-1 and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.


Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at www.vaers.hhs.gov or call 1-800-822-7967. *VAERS is only for reporting reactions, and VAERS staff do not give medical advice.*

6 The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines. Visit the VICP website at www.hrsa.gov/vaccinecompensation or call 1-800-338-2382 to learn about the program and about filing a claim. There is a time limit to file a claim for compensation.


7 How can I learn more?

- Ask your healthcare provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
 - Call 1-800-232-4636 (1-800-CDC-INFO) or
 - Visit CDC's www.cdc.gov/flu



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Vaccine Information Statement (Interim)
Inactivated Influenza Vaccine



8/15/2019 | 42 U.S.C. § 300aa-26

Appendix E1

Staff/Volunteer Survey to Evaluate Effectiveness of Flu Vaccination Clinics Educational Process

Staff/Volunteer Evaluation

Thank you for attending the annual Hoag Flu Shot Clinic. We hope this was an eye-opening and fun time for you.

We want to hear your feedback so we can keep improving the flu clinic process and flow. Please fill this quick survey and let us know your thoughts (your answers will be anonymous).

* Required

The overall flow of the clinic was great. *

1 2 3 4 5

Not so much Very much

Staff, nurses and volunteers communicated well. *

1 2 3 4 5

Not very well Very well

Roles of staff, nurses, and volunteers were well defined. *

1 2 3 4 5

Not very well Very well

Immunization protocols were followed. (sanitation, disposable, injection) *

1 2 3 4 5

Strongly disagree Strongly agree

I felt supported from the clinic team. *

1 2 3 4 5

Not so much Very much

Screening and education are a must before vaccinating. *

1 2 3 4 5

Strongly disagree Strongly agree

An educational flyer would work well in providing education without altering flow

1 2 3 4 5

Strongly disagree Strongly agree

The educational flyer was well developed. *

1 2 3 4 5

Not very well Very well

Will the flyer increase awareness and education? *

1 2 3 4 5

Not so much Very much

Appendix E2

Client’s Survey to Evaluate Effectiveness of Multi-Purpose Educational Flyer

Client Evaluation

Thank you for attending the annual Hoag Flu Shot Clinic. We hope this was an eye-opening and fun time for you.

We want to hear your feedback so we can keep improving the flu clinic process and flow. Please fill this quick survey and let us know your thoughts (your answers will be anonymous).

* Required

Flu clinic was well organized. *

1 2 3 4 5

Not very well Very well

Staff was approachable, helpful, and knowledgeable. *

1 2 3 4 5

Not so much Very much

I will encourage family and friends to get vaccinated. *

1 2 3 4 5

Strongly disagree Strongly agree

I feel more educated on influenza vaccination better than when I arrived. *

1 2 3 4 5

Not so much Very much

The educational flyer was helpful. *

1 2 3 4 5

Strongly disagree Strongly agree

Which location did you get vaccinated? *

How did you hear about us? *

- Friends
- Family
- Church/Community of Faith
- Clinic/Hospital
- Online Search
- Flyer
- Other: _____

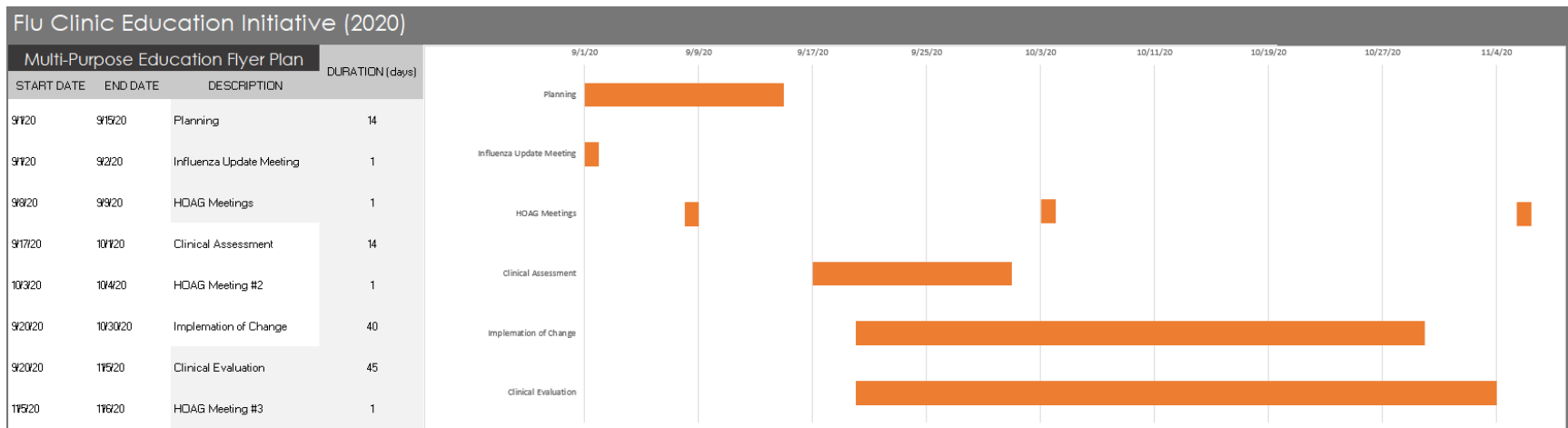
How can we better improve for next year? (Process, flow, educational flyer, etc)

Your answer _____

Additional Comments

Your answer _____

Appendix F



Appendix G

Flu Vaccination Clinics Schedule

Flu Shot Clinics

As your trusted partner in health, we invite you to join us at our Flu Shot Clinics throughout the fall season. In coordination with Hoag Community Benefit – Faith Community Nurses, Hoag is pleased to provide complimentary flu shots for adults 18 and over. For pregnant women, children under the age of 18, and adults interested in the higher dose vaccine it is recommended to consult your Primary Care Physician.

HOAG FLU SHOT CLINIC & HEALTH FAIR

Saturday, September 14, 8 a.m. – 12 p.m.
Hoag Hospital Irvine
16200 Sand Canyon Avenue, Irvine

Saturday, September 28, 8 a.m. – 12 p.m.
Hoag Health Center Tustin Legacy
15000 Kensington Park Drive, Tustin

Saturday, October 12, 8 a.m. – 12 p.m.
Hoag Health Center Huntington Beach
19582 Beach Boulevard, Huntington Beach

Saturday, October 19, 8 a.m. – 12 p.m.
Hoag Health Center Aliso Viejo
26671 Aliso Creek Rd., Aliso Viejo

FLU SHOT CLINICS

Sunday, September 15, 8 a.m. – 1 p.m.
Our Lady of Mount Carmel
1441 W. Balboa Avenue, Newport Beach

Sunday, September 29, 8 a.m. – 1 p.m.
St. Peter's by the Sea Presbyterian
16911 Bolsa Chica Street, Huntington Beach

Tuesday, October 1, 10 a.m. – 2 p.m.
Trinity United Presbyterian Church
13922 Prospect Avenue, Santa Ana

Friday, October 4, 9 – 11 a.m.
Huntington Beach Senior Center in Central Park
18041 Goldenwest Avenue, Huntington Beach

FLU SHOT CLINICS cont.

Saturday, October 12, 9 a.m. – 1 p.m.
Sunday, October 13, 10 a.m. – 1 p.m.
Abiding Savior Lutheran Church
23262 El Toro Road, Lake Forest

Saturday, October 12, 9 a.m. – 1 p.m.
Our Redeemer Lutheran Church
12301 Magnolia Street, Garden Grove

Sunday, October 13, 9 a.m. - 12 p.m.
Episcopal Church of the Messiah
614 N. Bush Street, Santa Ana

Sunday, October 20, 9 a.m. – 12 p.m.
Trinity Episcopal Church
2400 N Canal Street, Orange

Wednesday, October 23, 9 – 11 a.m.
Oasis Senior Center
801 Narcissus Avenue, Corona del Mar

Thursday, October 24, 10 a.m. – 12 p.m.
Costa Mesa Senior Center
695 W. 19th Street, Costa Mesa

