

INSTITUTING A MULTI-PRONGED CLINICAL AND BUSINESS PROTOCOL TO
INCREASE PRIMARY CARE INFLUENZA RATES

A Doctor of Nursing Practice Project Report

by

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Submitted in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF NURSING PRACTICE

Texas A&M University-Corpus Christi
Corpus Christi, Texas

August 2020

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This Doctor of Nursing Practice Project Report meets the standards for scope and quality of Texas A&M University-Corpus Christi College of Nursing and Health Sciences and is hereby approved.

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DEDICATION

This project is dedicated to my late mother, Alley Josey. I miss her everyday. Her sugar and butter-laden desserts (and inappropriate humor) were some of the best things that got me through the last two years. I love you, Momma.

ACKNOWLEDGEMENTS

I would like acknowledge my husband, Randy, for his support and love. He kept the home fires burning when I was burning the midnight oil. I would also like to acknowledge my boys, Reed and Calvin, for always putting a smile on my face and reminding me to take a break and enjoy my family. To my Framily: Audrey, Erica, Chrissy, Sharon, Tanya, Crystal, and Haley; who are an amazing group of women that I could count on for love, laughter, food, and wine. To my Coven, Gail and Lorie. They are my sisters of the heart and inspire me daily. And to my Pop, Josey, who is the kindest, most selfless person I know.

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ABSTRACT

Low immunization rates put the herd immunity of communities at risk. Illness from influenza is responsible for a large number of hospitalizations and deaths annually. Influenza vaccination is the best way to reduce flu-related illness and death. Higher influenza vaccination rates within a population can reduce the potential of a flu outbreak and offer protection for vulnerable populations. This quality improvement (QI) project focuses on improving late-season flu immunizations from January through March 2020 in an adult urban primary care office by maximizing existing clinic resources. Guiding conceptual and theoretical models for the QI project were the Plan-Do-Study-Act (PDSA) model and the Health Belief Model (HBM). Upon completion of the QI project, no single intervention stood out as the best method to improve influenza immunization rates. The improvement in influenza rates seemed to be secondary to all the interventions being used together: provider and patient education, walk in immunization availability, social media promotion, and a late season push to capture unvaccinated patients.

Keywords: flu, flu shot, herd immunity, immunization, influenza, influenza immunization, primary care, vaccinations, vaccine

Instituting a Multi-Pronged Clinical and Business Protocol to Increase Primary Care Influenza Rates

Introduction

In 1918, a global influenza pandemic killed between 50-100 million people (Strauss, 2019). Preventing medical complications of influenza by receiving an influenza immunization (flu shot) is simpler than treating medical complications of influenza such as encephalitis, myocarditis, and pneumonia (Strauss, 2019). Surveillance information reported by the Centers for Disease Control and Prevention (CDC) from the 2018-2019 influenza season, indicated approximately 7.3 million Americans contracted influenza between October 1 and January 5 (Ducharme, 2019). The state of Texas reported 19,223 influenza cases as of September 7, 2019 for the influenza season (Fluview, 2019). In Corpus Christi, Texas, the Nueces County Health Department (NCHD) reported 6,417 cases of influenza in the 2018-2019 influenza season (NCHD, 2019). Influenza immunization rates in the United States (US) are low in the adult population (about 65% annually) (Wilhelm, 2018). Healthy People 2020 noted a goal focused on advancement in technology and ensuring a cohesive effort among state, local health departments, and nongovernmental agencies working together to try to control the spread of infectious diseases with improved immunization rates (Healthy People, 2017).

Background

Review of the Literature

A review of current literature was done to investigate patient and provider perceptions of influenza immunization. The literature was lacking in recommendations for improvement in influenza vaccination rates specific to primary care clinics or health campaigns regarding vaccination promotion, yet robust in reasons why people were hesitant to receive vaccinations.

The literature suggested that patients' superstitious beliefs predicted higher perceived barriers and lower perceived benefits of immunizations, which in turn predicted a lower desire to receive the influenza vaccine in the next year and/or a lower probability of ever taking the influenza vaccine (Lu et al., 2019). Low immunization rates are a public health risk. Non-vaccinated persons were noted to have a lower level of perceived vaccine benefit and were less likely to get recommendations from health care providers and trust authoritative information sources, like the CDC (Xie, Grady, Cacciatore, & Nowak, 2019). Lack of perceived vaccine benefit, in turn, leads to more vaccine hesitancy and a lower desire to get vaccinated in the next flu season (Xie et al., 2019). Utilizing technology, like electronic health records (EHRs) to identify influenza vaccine eligible patients and alert them of vaccine availability was a low-cost method of improving vaccination rates in primary care offices.

A review of the literature was also done to investigate the problem of low influenza vaccination rates in primary care clinics and what interventions could be utilized to address and improve this issue. Illness from influenza is responsible for over 700,000 hospitalizations and up to 56,000 deaths annually. Influenza vaccination is the best way to reduce flu-related illness and death. Additionally, higher vaccination rates within a population offers "herd immunity," which can reduce the potential of a flu outbreak and offers protection for vulnerable populations, such as infants and people ineligible for the influenza vaccine (Cunningham, Stoeckle, Diaz, Valco, & Arenson, 2017).

A large private practice in downtown Philadelphia with 35,000 patients joined an Accountable Care Organization (ACO) in 2015 and were tasked with improving their flu vaccination rate of 66%, which was below Healthy People 2020 goals. They were able to improve their flu vaccination rate to 82% by utilizing five key tactics: identifying a champion,

using standing orders, optimizing documentation, providing regular reminders, and giving ongoing feedback (Cunningham et al., 2017). Increased social media presence had also been shown to improve immunization rates. The Milwaukee based Community Health Improvement for Milwaukee Children (CHIMC) was able to improve their immunization status from 45 percent baseline to 82 percent over a four-year time frame by utilizing increased community-wide social media messaging that included posters, brochures, and social media platform posts (Willis et al., 2016).

Setting

The project site was a multi-specialty, private clinic located in an urban area in south Texas. It employs 20 providers: four internal medicine physicians, six family medicine physicians, one hematologist/oncologist, one neurologist, one endocrinologist, and seven family nurse practitioners (FNPs). Influenza vaccination rates at the project site clinic for 2017 and 2018 were 22.6% and 23.1% respectively, which was below Healthy People 2020 goals of 70% for adults younger than 65 years old and 90% for adults 65 years and older (Healthy People, 2017). The clinic did not have an existing plan or policy to maximize influenza vaccination rates. Seasonal influenza viruses can be detected year-round, but seasonal influenza activity generally runs from October through May, with peaks between December through February (CDC, 2019d). Historically, providers at the clinic offered flu shots to patients who were seen in the fall, starting September 1st, but there was no formal policy in place to ensure this practice was consistent. Clinic patients could also walk-in and ask for a flu shot at any time during the fall flu season, but on hand supply was not always available. There was no intended or overt push for flu shots after January 1st, for those patients who missed or declined the fall inoculation, thus no additional flu shots were ordered after the start of the flu season in the fall. Immunizing patients

throughout the influenza season (from October into January and beyond) and providing access beyond the traditional “fall season” can increase flu immunization rates (Stinchfield, 2008). By improving the clinic’s process of identifying patients eligible for the flu shot, maximizing annual immunizations, and improving documentation of immunizations, there was the potential to not only create a healthier clinic population, which could contribute to a healthier community, but also to increase clinic revenues. Thoughtful evaluation and application of existing clinic resources yielded the desired result of increased flu shot rates without increased direct costs of the clinic.

Project Purpose and Aims

Annual influenza vaccine effectiveness ranges from 30%–60%, which could prevent millions of flu infections, medical visits, and tens of thousands of flu-associated hospitalizations each year in the United States (Blanton et al., 2019). The purpose of this QI project was to improve 2019-2020 influenza vaccination rates in an adult primary care clinic in Corpus Christi, Texas. The main area of focus was to increase late-season immunizations from January through March 2020. Existing clinic resources were utilized to their maximum potential to help achieve this goal. The comparison was the January through March 2019 clinic influenza vaccination rates. Additionally, a clinic policy based on the effectiveness of the EBP interventions was planned to be developed to identify patients who were eligible for immunizations, document immunizations, and meet national HEDIS guidelines. The clinical question guiding this QI project was: In an urban primary care clinic (P), does implementing evidence-based interventions and maximizing existing clinic resources (I) improve January through March 2020 flu vaccination rates (C) when compared to January through March 2019 pre intervention flu vaccination rates and inform policy development that identifies flu shot eligible patients,

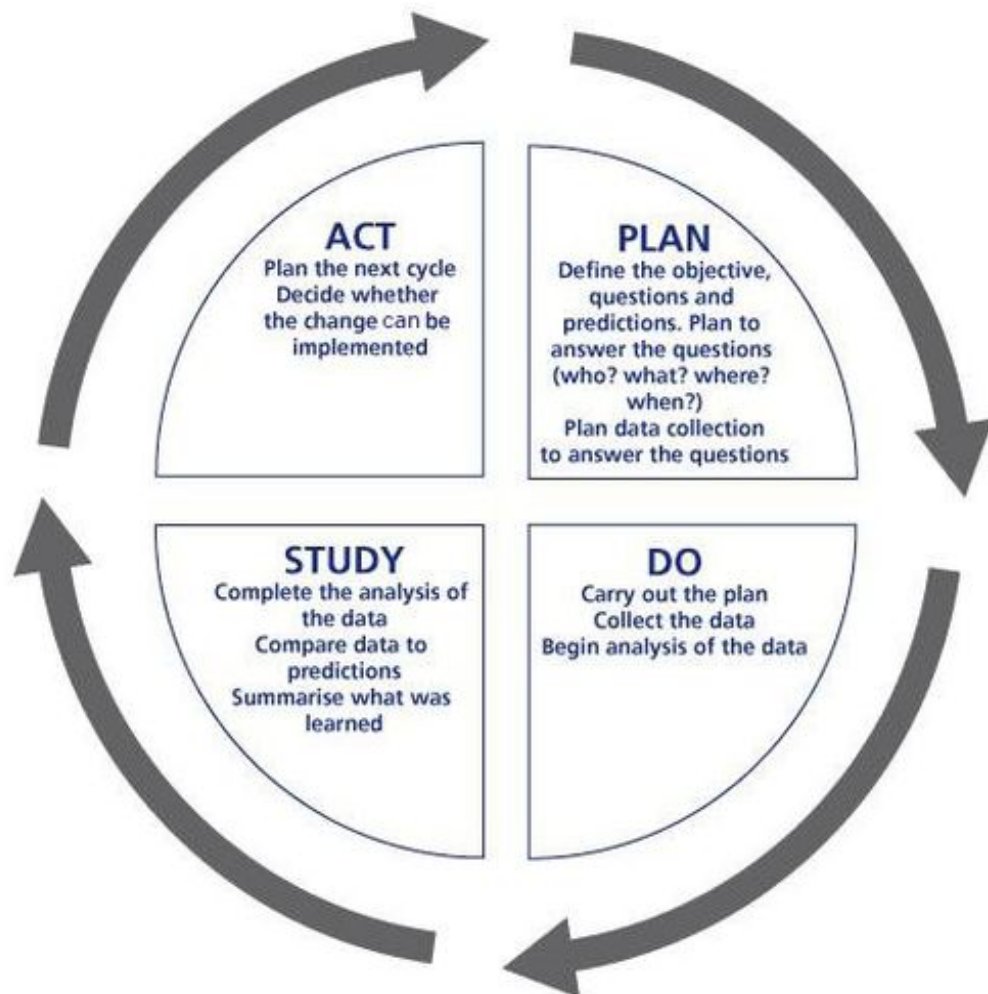
documents immunizations, and meets national reporting guidelines (O)? This project was linked to the American Association Colleges of Nursing (AACN) Essential VII: clinical prevention and population health for improving the nation's health. There is strong evidence in support for annual influenza immunization. A QI project that focuses on one type of immunization, and does it well, could be then applied to other immunizations. The end result of a healthier clinic population is the ultimate goal, and an immunization project had the potential to be a good start.

Methods

Conceptual and Theoretical Frameworks

The Plan-Do-Study-Act (PDSA) (Figure 1) was used as an overarching conceptual model for this project. PDSA was initially known, in the 1920s, as Plan, Do, Check, Act, and was introduced by Walter Shewart (AHRQ, 2019). It then became the basis of Dr. W.E. Deming's approach to organizational development and leadership, as PSDA. The PDSA process consists of: a plan for intervention and desired outcome, a list of steps to be taken, resulting observations and study of those results, and acting on the conclusions, noting if the intervention was helpful, or what could be done differently (AHRQ, 2019).

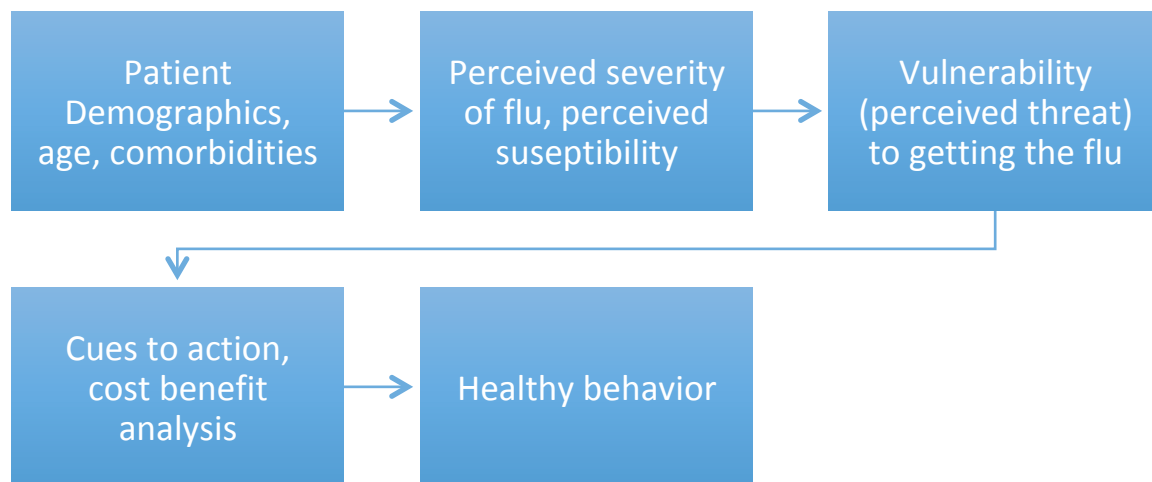
Figure 1: Plan-Do-Study-Act (AHRQ, 2019)



The Health Belief Model (HBM) (Figure 2) is one of the most widely applied theories of health behavior and was used as the theoretical model guiding this project. It is constructed of six predictors of health behavior: risk susceptibility, risk severity, benefits to action, barriers to action, self-efficacy, and cues to action (Jones et al., 2014). In summary, the HBM illustrates that individuals must believe they are susceptible to a problem and understand the severity or risk of the problem before they will act on changing health behaviors. For this QI project, the concepts of influenza risk susceptibility, severity, benefits to action, self-efficacy, and cues to action

guided the patient education literature available in the lobby of the clinic, exam rooms, and through direct communication with the project clinic site providers. Barriers to action were addressed by improving convenience and access to flu shots; which was accomplished by improving the accuracy of the number of vaccines ordered and offering a fast track, walk in flu shot service.

Figure 2: Health Belief Model (Becker et al., 1977).



Design

This quality improvement (QI) initiative planned to accomplished two goals. The first goal was to increase influenza immunization rates at the project site clinic by maximizing evidence-based activities via existing clinic resources including: Electronic Health Record (EHR) technology; printed influenza patient information; social media posts; and walk-in/fast track immunization services to improve patient knowledge of and access to influenza immunizations. The second goal was to develop a clinical protocol for the project site clinic providers based on successful EBP interventions to ensure standardization in patient

identification and documentation of immunizations for future use. This clinical protocol would use the project site clinic's existing EHR features for patient identification, documentation, and reporting services, and would be the first protocol of its kind at the project clinic site.

Ethics

A letter of support for this QI initiative was obtained from the President of the project site clinic (Appendix 1). This project plan was reviewed by the Texas A&M University-Corpus Christi Institutional Review Board (IRB) for project/study classification, and received a determination of "Not Human Subjects Research" and permission to proceed as a Quality Improvement project (Appendix 2). Potentially identifiable Personal Health Information (PHI) was not collected for this QI project; therefore, Health Insurance Portability and Accountability (HIPAA) permissions were not required.

Intervention

Current project site clinic patients who meet inclusion criteria of: (1) age six months or older; (2) in a healthy state at the time of immunization, were eligible for participation in the QI project for the 2019-2020 influenza season. Participants were excluded if they: (1) had severe, life-threatening allergies to the flu shot or any ingredient in the vaccine, including gelatin, antibiotics, or other ingredients; (3) had a history of Guillain-Barré Syndrome; (4) prior serious allergic reaction to any type of flu shot; or (5) did not meet eligibility for Fluzone or Fluzone High-dose immunization (CDC, 2019e). The recruitment procedure was a verbal query of any project site clinic patient presenting to the office for a scheduled visit or walk in appointment during the months of January through March 2020. Additional recruiting was done via social media postings advertising flu shot availability. The sampling method was convenience

sampling. Other participants were providers and clinic staff who had to implement the 1) EBP intervention and 2) potentially develop and implement the policy.

This QI project began by meeting with project team members in August to evaluate existing resources at the project site clinic. A project timeline of January through March 2020 was established and patient education materials that promoted influenza immunization in the clinic were acquired in September 2019. Promotional and educational materials for flu shots were donated by the vaccine manufacturer (Appendix 3 & 4). Social media marketing posts assisted in improving immunization awareness and immunization rates by increasing public exposure to relevant, positive immunization messages (Willis et al, 2016). Existing project site clinic social media platforms of Facebook and Instagram were utilized for weekly posts promoting patients to get their flu shot at the project site clinic. The social media posts contained information obtained from the influenza vaccine manufacturer website (Appendix 3 & 4). Staff was provided a verbal query form from the vaccine manufacturer (Appendix 5) and were instructed to offer flu shots to all project site clinic patients for the entire 2019-2020 flu season with emphasis placed on January through March 2020.

Some EHRs can be configured to prompt a pop-up alert that notifies the provider if the patient being seen has received the flu vaccine that season and, if not, the reason it was not received. These prompts can potentially increase documented flu vaccine discussions and immunization rates (Cunningham et al., 2017). Existing EHR technology at the project site clinic was evaluated for the potential for use to help identify eligible patients for the flu shot. The EHR had the capability to run reports on patients eligible for the flu shot, but notifying them via text, telephone, or email was an added cost that the project did not have the authority to deploy.

The EHR was also used to document and report immunizations to meet HEDIS and MIPS requirements. All staff at the project site clinic were given training on EHR documentation, including immunization documentation, upon hiring. A formal policy was planned to be developed as a guide for the clinic to meet national reporting guidelines for immunizations. Policy work based on EBP interventions piloted in this QI project was to begin in March, but was put on hold secondary to the COVID-19 pandemic.

Data Collection

Data on influenza immunizations ordered and given, for four of the twenty project site clinic providers, and local influenza prevalence rates were collected monthly, at the end of each month from January through March 2020. Reports for flu shot immunizations provided were run monthly for the four participating providers for both standard dose and high dose flu shots. The Billing Supervisors generated data reports monthly. This QI project promoted flu shots from January through March 2020. The project site clinic began general flu shot promotion in September 2019. This QI project promoted flu shots from January through March 2020.

Measurement Tools

Data for this QI project was collected from existing project clinic site patient charts utilizing the eCW EHR. The data was owned by the project site clinic and had been collected via documentation of flu shots in the EHR and via purchasing receipts from the purchasing department for flu shots. Reports noting number of flu vaccines provided to the project site clinic patients were run by the Billing Department, using eCW. The method of implementation for documentation of influenza immunizations was done via the meaningful use (MU) application of the eCW software platform. eCW has clinical decision support (CDS) reporting tools built into the core of the software system enabling users to create reports based on diagnoses (eCW, 2018).

This means a clinic-wide report can be generated from the registry for specific diagnoses like immunization. Once a user creates a report in eCW, it can be saved with specific filtering criteria, which allows for the report to be run in the future (eCW, 2018). The eCW CDS also has workflow enhancers like pop up alert windows, reminders, disease-specific customized order sets, and online clinical guides to help the provider with decision making. A CDS pop-up alert titled Flu Shot could be created and would require users to check boxes to confirm offering, accepting, declining, or prior inoculation of the flu shot. The eCW information gathered was stored in a data warehouse in eCW for ease in access and retrieval. A data warehouse stores patient data in order to generate trends, compare treatments, and disseminate patient care data (McBride & Tietze, 2016).

Analysis

Data on total number of immunizations provided to the project site clinic patients were compiled at the end of every month via eCW from January 1, 2020 through March 31, 2020. The figures were tallied and compared to January through March 2019 values. A run chart was used to illustrate potential improvement in immunization rates over time (Appendix 6 & 7). Policy work was deferred secondary to the COVID-19 outbreak.

Results

Nature of Setting and Improvement Intervention

The project site clinic has been in operation for over sixty years. It is located in a medical office building adjacent to a level 2-trauma hospital. The clinic culture has well defined roles for administration, physicians, nurse practitioners, nurses, medical assistants, receptionists, coders, information technology (IT), medical records, radiology, and laboratory. Daily operations run

well at the clinic, and the clinic culture is rich in camaraderie and support. It is not uncommon for employees and physicians to have been employed with the clinic for 10, 20, 30+ years.

Four providers, along with their staff, participated in the project intervention of promoting flu shots in the spring season of 2020, January through March. Complications from the COVID-19 health pandemic forced the clinic to alter its operating hours to match those of the adjacent hospital. Saturday clinic was changed to telemedicine visits only and late office clinic hours were not possible, as the clinic had to follow the hospital's visitation ending hour of 6pm. This had the potential to limit patient access to the clinic to receive a flu shot.

The COVID-19 pandemic also changed how patients were screened for entry into the clinic. All patients were given a health and travel questionnaire and a tympanic temperature was taken. Patients with a positive screen and/or a fever >100.4 , were worked up in a separate COVID-19 exam room with the provider in full personal protective equipment (PPE). Initially, there were limited COVID-19 tests available, so positive screened patients were first tested for influenza with a rapid flu swab, with results in 20-30 minutes. Influenza positive patients were treated with antiviral medication. Influenza negative patients with upper respiratory symptoms, fever, and/or a travel history to a COVID-19 hotspot or exposure to a known COVID-19 positive person were then tested for COVID-19 with a nasal swab, and sent home to self quarantine for two weeks, or until negative test results were received. COVID-19 test results took 3-10 days to result, based on volume of testing being done.

Despite the COVID-19 pandemic affecting daily operations of the clinic and establishing a presence in the community, the integrity of the project was essentially preserved and the project could be completed with minor changes to the original plan, like changes in office hours.

On a positive note, an increased awareness of viral illness and more opportunities to discuss herd immunity was created.

Changes in Care Processes and Clinical Outcomes

The purpose of this QI project was to improve 2019-2020 influenza vaccination rates in an adult primary care clinic from January through March 2020. High dose and low dose flu shot totals for the four participating providers in January, February, and March 2020 exceeded 2019 totals. Additionally, flu shot totals clinic wide (all providers) from January through March 2020 exceeded 2019 totals. Influenza vaccination rates for the four participating providers increased by 51% during the project timeline. Influenza immunization rates clinic wide increased by 84% during the project timeline. Nueces County typically sees peaks of influenza activity from December through February. Nueces county 2020 influenza prevalence rates began to fall below 2019 rates starting in week three of February 2020 and remaining lower than 2019 rates until end of data collection in week four of April 2020. COVID-19 appeared in week three of March 2020, and steadily increased until week four of April 2020, where COVID-19 almost equaled 2019 influenza rates, at 94 and 99 persons affected respectively (NCHD, 2019).

A clinic policy based on the effectiveness of the EBP interventions was planned to be developed that would identify patients who were eligible for immunizations, document immunizations, and meet national HEDIS guidelines. Due to the COVID-19 pandemic, policy work was unable to be done. Additional staff time and resources were directed towards clinic COVID-19 preparations.

Discussion

Summary

The purpose of this QI project was to increase late-season immunizations from January through March 2020 at an adult primary care clinic. Existing clinic resources were utilized to their maximum potential to help achieve this goal. The comparison was the January through March 2019 clinic influenza vaccination rates. Staff was trained upon hiring how to use the existing EHR to document influenza immunizations. A brief staff in-service and a verbal query prompt sheet was provided to participating project staff at the start of the project flu shot promotion in January 2020. The clinic's EHR was also assessed and noted to have the ability to identify and notify patients of flu shot eligibility, but that feature was not authorized for this project. It could be used, with administrative approval, at a later date. Influenza immunization promotional materials and patient education materials were donated by the vaccine manufacturers and placed in high traffic areas of the clinic. Additional educational materials were ordered free from the CDC website for placement in patient exam rooms. Weekly "Flu Friday" social media promotions were done via the clinic's two social media accounts on Facebook and Instagram during the project timeline. All patients were screened for flu shot eligibility upon being brought to an exam room. Finally, any clinic patient could walk in, no appointment needed, and receive a flu shot upon request, as part of the clinic's fast track flu shot promotion.

Relation to Other Evidence

Upon the completion of the QI project, no single intervention stood out as the best method to improve influenza immunization rates. The improvement in immunization rates seemed to be secondary to all the interventions being used together: provider and patient

education, walk in immunization availability, social media promotion, and a late season push to capture unvaccinated patients. Standing order sets would be a useful tool for the clinic to consider; as would utilizing the vaccine tracking and patient alert features of the EHR.

A non-randomized study evaluating multicomponent primary care-based interventions on influenza rates was done from 2013 through 2015 by a large health care organization with a focus on internal medicine and family medicine (Loskutova, et al., 2020). The study site, which had a similar set up as the clinic project site, utilized multiple interventions to improve influenza immunization rates: provider reminders, quarterly provider-level performance reports, provider education, patient visual aids, and standing orders. Provider reminders were the most effective tool, either in harmony with the other interventions or used alone (Loskutova, et al., 2020). In a nurse practitioner led QI project aimed at increasing influenza immunization rates for retail employees during the 2015 influenza season, multicomponent approaches were also noted to be effective, including: patient and provider education, improved access to immunizations, and no cost immunizations (Montejo, Richesson, Padilla, Zychowicz, & Hambley, 2017). The project site clinic also sees cash pay patients. A 2019 systematic review examined measures to improve immunization rates among the uninsured, which included free vaccines, use of standing orders, vaccine tracking with EHR, and provider recommendations for the vaccine (Falcone, 2017).

Limitations

The data collected via the EHR is objective. That is the beauty with run charts and numerical comparisons, being a clean comparison. With a planned annual influenza promotion campaign, the project site clinic could continue to have improved influenza immunization numbers. Potential barriers are patients getting their flu shot at a local pharmacy or having reservations or personal objections to flu shots. The barrier of a competing provider providing flu

shots prior to the patient receiving their immunization at the clinic could be mitigated by earlier or heavier promotion of flu immunizations, continued social media postings, utilizing the EHR for patient notification, and conducting drive through flu shot venues for clinic patients. Personal barriers for hesitancy or objections to flu shots could be resolved with well-tailored patient educational material and continued social media outreach.

Interpretation

The Plan-Do-Study-Act (PDSA) was used as an overarching conceptual model for this project. The PDSA process consisted of: a plan for intervention and desired outcome, a list of steps to be taken, resulting observations and study of those results, and acting on the conclusions, noting if the intervention was helpful, or what could be done differently (AHRQ, 2019). By following these linear steps, mapping out a project plan was clear and organized. A global health pandemic was not expected to be a part of this project. It was noted, that some patients who had originally declined influenza immunization had returned to the clinic once the presence of COVID-19 was in the community, seeking comfort and or protection with additional viral immunity. Annual influenza promotion will continue at the clinic, especially in the spirit of herd immunity.

The Health Belief Model (HBM) was used as the theoretical model guiding this project, as the HBM illustrates that individuals must believe they are susceptible to a problem and understand the severity or risk of the problem before they will act on changing health behaviors (Jones et al, 2014). For this QI project, the introduction of COVID-19 to the community triggered patients to question viral risk susceptibility and severity. There was a late surge of patients receiving flu shots in 2020, which did not happen in 2019. A potential barrier to action was lack of flu shot availability and a limited clinic hours, but both were addressed by improving

convenience and access to flu shots; which was accomplished by improving the accuracy of the number of vaccines ordered and offering a fast track, walk in flu shot service during the new modified clinic hours.

Conclusion

A global health pandemic of the proportions of the 1918 Spanish Flu has not yet been demonstrated, but the current COVID-19 certainly has the potential. We must not take the concept of herd immunity or the potential of the severity of viral illness lightly. The project site clinic has taken advantage of the opportunity to immunize patients who were previously vaccine hesitant, and hope the trend will continue. The importance of identifying an influenza champion and using clinic resources to the fullest potential must be paramount. Additional QI projects addressing cost versus benefit ratio of EHR patient notification utilization and increased immunization revenue could be beneficial. Also, QI projects focused on herd immunity, influenza immunization, and COVID-19 infection rates could be helpful in trending viral activity and herd immunity information. In summary, clinics need to continue to be vigilant about influenza immunizations. If anything, COVID-19 has been a grim reminder about how viral pandemics can invade our communities and global pandemics remain a real threat.

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APPENDIX 1: Facility Support Letter

Thomas Spann Clinic
7121 South Padre Island Drive, Suite 300
Corpus Christi, TX 78412
361-696-6200

October 2, 2019

Dr. Sara Baldwin
Associate Dean for Academic Progress
College of Nursing and Health Sciences
Texas A&M University-Corpus Christi
6300 Ocean Drive
Corpus Christi, TX 78412

Dear Dr. Baldwin,

The purpose of this letter is to provide Melanie Chipman, a Doctor of Nursing Practice student at Texas A&M University College of Nursing and Health Sciences, support in conducting a quality improvement project at Thomas Spann Clinic. The project, Improving Injectable Influenza Immunization Rates in an Urban Primary Care Setting, entails creating a drive through or fast track influenza immunization clinic, as well as creating a clinic policy for identifying eligible patients, documentation and reporting of immunizations, per national guideline measures.

The purpose of this project is to improve 2019-2020 influenza vaccination rates of patients in an urban primary care clinic, by offering fast track or drive through influenza vaccination services. Thomas Spann Clinic was selected for this project, because the 2018-2019 influenza vaccination rate for the clinic was 24%, well below the HealthyPeople 2020 goal of 70%-90%. Melanie is employed at this institution and has an interest in improving care at this facility.

I, Dr. Orel Michael Everett, President of Thomas Spann Clinic, do hereby fully support Melanie in the conduct of this quality improvement project, Improving Injectable Influenza Immunization Rates in an Urban Primary Care Setting, at Thomas Spann Clinic.

I also approve Melanie to access data from the Electronic Health Record at Thomas Spann Clinic for purposes of conducting this quality improvement project. The statistical data she needs will not have identifiable Protected Health Information (PHI), so a HIPAA release form is not necessary.

Sincerely,

Dr. Orel Michael Everett, President

APPENDIX 2: IRB Letter

OFFICE OF RESEARCH COMPLIANCE

Division of Research and Innovation

6300 OCEAN DRIVE, UNIT 5844

CORPUS CHRISTI, TEXAS 78412

O 361.825.2497

Human Subjects Protection Program Institutional Review Board

DATE: January 28, 2020

TO: Yolanda Keys, College of Nursing and Health Sciences

CC: Melanie Chipman, Student

FROM: Office of Research Compliance

SUBJECT: Not Human Subjects Determination

Activities meeting the DHHS definition of research or the FDA definition of clinical investigation and involves human subjects are subject to IRB review and approval.

On January 28, 2020, the Texas A&M University-Corpus Christi Institutional Review Board reviewed the following submission:

Type of Review:

Not Human Subjects Determination

Title:

Improving Influenza Immunization Rates, Documentation, and Reporting in an Adult Primary Care Clinic Using Existing Resources

Project Lead:

Yolanda Keys

IRB ID:

NHS 69-19

Funding Source:

None

Documents Reviewed:

01_22chipmanNHSRR form

12_17ChipmanQIPTform

Texas A&M University-Corpus Christi Office of Research Compliance determined that the proposed activity does not meet the DHHS definition of research or the FDA definition of a clinical investigation.

Therefore, **this project does not require IRB approval.** You may proceed with this project.

This determination applies only to the activities described in the documents reviewed. **Any planned changes require submission to the IRB to ensure that the research continues to meet criteria for a non-human subject research determination.**

Action required: Click *here* to access the IRB submission form to submit for IRB review.

Please do not hesitate to contact me with any questions at irb@tamucc.edu or 361-825-2497.

Respectfully,

Matthew R. Gaynor, J.D.

Office of Research Compliance

BRING MORE FLU FACTS TO LIFE!

Fluency

Share the facts. Not the flu.

Use our free FLU AR app to learn more about the flu while you wait. Simply search FLU AR on the App Store (iPhone) or Google Play (Android). Then download and open the FLU AR app to get the facts!



THE FLU AND **ADULTS 50+:**
NOT GETTING VACCINATED
COULD BE A GRAVE DECISION

A RECENT STUDY SHOWED THAT THE RATE OF
HEART ATTACKS **10X** **1-3 DAYS**
INCREASED **AFTER FLU**
INFECTION



IN THE 2017-2018 FLU SEASON, AN ESTIMATED
3,400 **ADULTS 50+ WERE**
HOSPITALIZED **EVERY DAY**



AND BASED ON CDC ESTIMATES, ON AVERAGE

312 **ADULTS 50+**
DIED **EVERY DAY**
FROM THE FLU
AND FLU-RELATED COMPLICATIONS



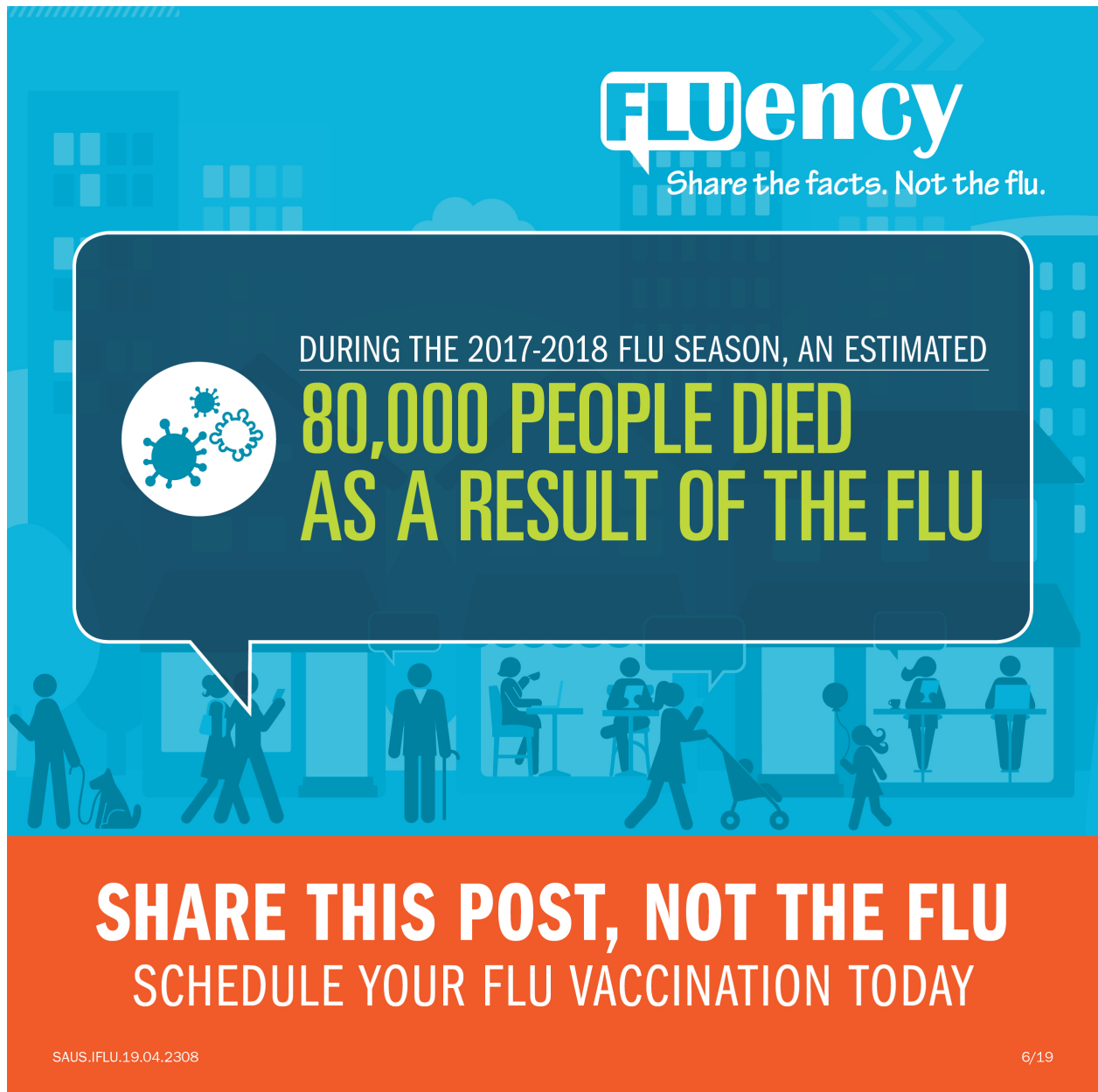
ASK ABOUT THE VACCINE
THAT'S RIGHT FOR YOU

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SAUS.FLU.19.05.3098

6/19

APPENDIX 4: Flu Shot Social Media Posts

A social media post graphic with a blue background featuring a city skyline and silhouettes of people. At the top right is the 'FLUency' logo with the tagline 'Share the facts. Not the flu.' Below this is a dark blue speech bubble containing a virus icon and the text 'DURING THE 2017-2018 FLU SEASON, AN ESTIMATED 80,000 PEOPLE DIED AS A RESULT OF THE FLU'. At the bottom is an orange banner with the text 'SHARE THIS POST, NOT THE FLU' and 'SCHEDULE YOUR FLU VACCINATION TODAY'. The bottom left corner has the code 'SAUS.IFLU.19.04.2308' and the bottom right corner has '6/19'.

FLUency
Share the facts. Not the flu.

DURING THE 2017-2018 FLU SEASON, AN ESTIMATED
**80,000 PEOPLE DIED
AS A RESULT OF THE FLU**

SHARE THIS POST, NOT THE FLU
SCHEDULE YOUR FLU VACCINATION TODAY

SAUS.IFLU.19.04.2308 6/19

APPENDIX 5: Staff Verbal Query for Information

Verbal Query for Influenza Immunization: Office Script for FAQs

Query to every Clinic patient for every office visit during the Flu Season (September – March)

- “Would you like your flu shot today, or have you received it at a different pharmacy, clinic, or provider’s office?”
- “When did you get your last flu shot?”
- “Do you have any questions about the flu shot?”

Answers/Office Script for FAQs

***“I am concerned about the flu vaccine. Is it safe?”**

“Yes, according to the CDC, the flu vaccine is safe and also the best preventative measure we have to help protect against this serious and potentially deadly disease. In fact, flu vaccines have been available in the United States for more than 50 years, and there is extensive research proving their safety. In addition, the CDC, along with the U.S. Food and Drug Administration (FDA), regularly monitors the safety of vaccines that are used in the United States. Vaccines go through extensive research before they are deemed safe by the FDA and made available to the general public.”

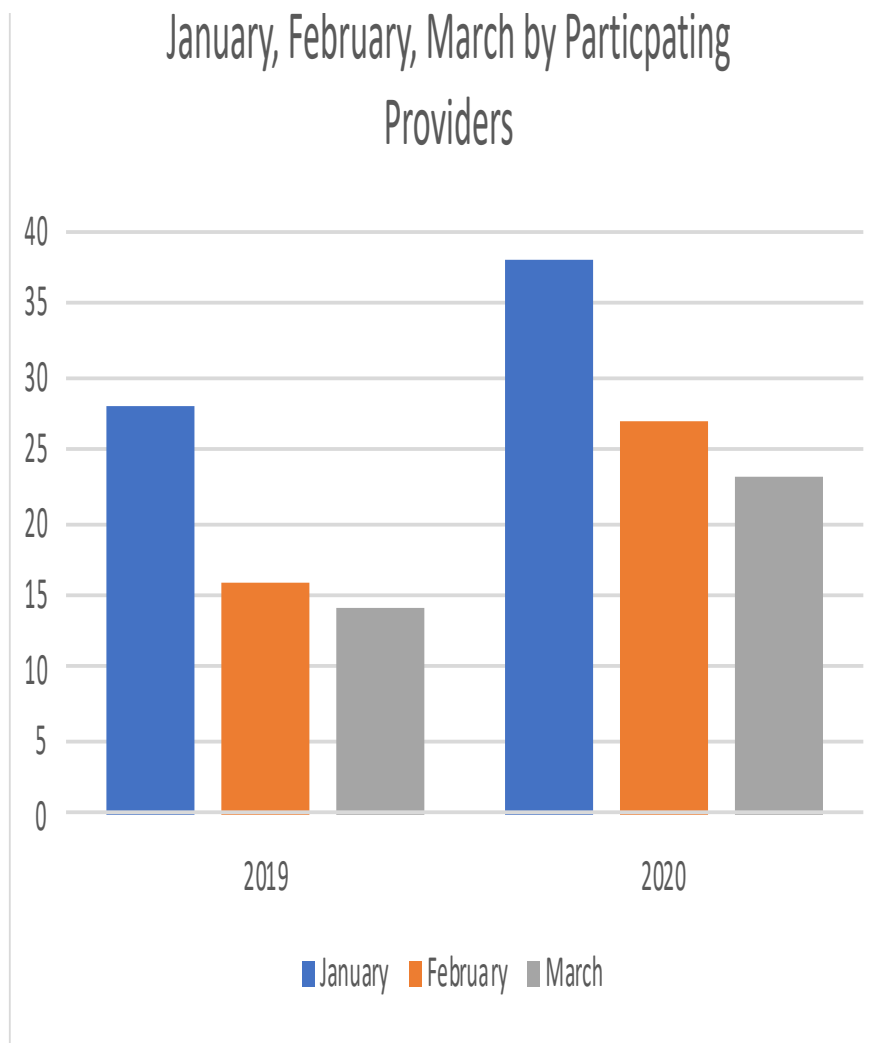
“Additionally, the flu vaccine cannot cause the flu because it contains an inactivated virus or does not contain a flu virus at all.18 Common side effects that can be associated with flu vaccination include soreness, redness, and/or swelling at the injection site, fever, headache and/or muscle aches.”

***“I have heard the flu vaccine is not 100% effective. So why should I get the flu shot?”**

“Although the flu vaccine is not 100 percent effective, it’s the best preventative measure we have to help protect ourselves and our families against this serious and potentially deadly disease. Based on the recommendation from the CDC, everyone 6 months of age and older should receive an annual flu vaccination (unless instructed otherwise by a healthcare professional) to not only help protect themselves, but also to help reduce the spread of flu in the community. Did you know that by getting a flu vaccination, you are actually helping to lower the risk of flu spreading throughout our communities?”

“The flu vaccine has been found to prevent death in otherwise healthy children by as much as 65 percent. Also, the flu vaccine has been shown to reduce the risk of flu illness by up to 60 percent.”

APPENDIX 6: Influenza Rates by Participating Providers 2019/2020



APPENDIX 7: Influenza Rates for the Clinic 2019/2020

