

## 2016-2017 Senior Immunization Awards CASE STUDY

## Sioux Falls Family Medicine Residency SMALL INVESTMENT IN PATIENT-PHYSICIAN COMMUNICATION IS KEY TO BOOSTING SENIOR IMMUNIZATION RATES

It's not unusual for older adults to be plagued with multiple chronic conditions and as a result, preventive care for contagious diseases doesn't always get addressed during doctor's visits. Certainly this held true for busy physicians in the Sioux Falls, SD Family Medicine Residency Program (FMRP). "We all know it's important for seniors," conceded second-year resident Matt Cabrera Svendsen, MD. "But the temptation is to go into the clinic and bury ourselves in the immediate work. We forget to look at the broader scope of things we can do beyond addressing the immediate medical issue."

So when the invitation to apply for a 2016-17 Senior Immunization Award came from the American Academy of Family Physicians (AAFP) Foundation, he recognized an opportunity to satisfy residency requirements for completing a Quality Improvement (QI) project while also highlighting preventive flu and pneumonia vaccinations for Sioux Falls' patients ages 65 and older. The announcement also piqued the interest of classmates Anne Healy, MD and Abigail Reynolds, MD.; they soon joined forces to lead the project.

Sioux Falls Family Medicine residents serve patients at two clinics with very different characteristics relative to service population and funding resources, which presented some unique challenges in planning and implementing the grant. Falls Community Health (FCH), a Federally Qualified Health Center in downtown Sioux Falls, provides primary and preventive care regardless of ability to pay. Over half of those served represent racial/ethnic minorities and are uninsured; many are refugees presenting

complex cultural and language barriers to assistance. In contrast, the Center for Family Medicine (CFM) is located on the campus of the Avera McKennan Hospital/University Health Center and serves nearly twice the number of elderly patients as FCH; most are insured through Medicare. Both clinics serve large numbers of patients where English is a second language.

In 2015, the residency program served 477 seniors age 65 and older at FCH and 860 at the CFM. Based on these numbers and previous vaccination rates, the team set project goals to increase immunization rates in CFM and FCH senior patients to 70% for influenza and 90% for pneumococcal during the 2016-2017 flu season. Outcomes would be measured by electronic health record (EHR) database queries consistent with how baseline vaccination rates were determined.

Early on, the team recognized that no single strategy or small group of people could possibly get the job done. "So we tried to involve everyone in grant-related meetings—faculty, staff nurses, front desk, interpreters—to make sure everyone understood our goals, why they were important and how they could participate according to their roles," said Dr. Healy. Team huddles and monthly staff meetings provided opportunities to bring non-clinical staff up to speed on project targets and activities. Working together, the project team developed a PowerPoint presentation for residents, faculty physicians, and clinical staff that they then shared at regularly-scheduled noon conferences at both CFM and FCH. Lecture content covered CDC vaccination guidelines, efficacy, safety, implications of influenza and pneumonia, and commonly-held vaccination myths. Drs. Reynolds and Cabrera Svendsen did most of this training (Dr. Healy was assigned to night duty at that time) and used case studies to help clarify the often-confusing recommendations for administering the Pneumovax 23 and Prevnar 13 vaccines. But perhaps the most useful component centered on how best to persuade reluctant patients to accept vaccinations. "How we communicate with patients during office visits is critical for fostering patient confidence in the decision to accept vaccinations," said Dr. Healy.

While the noon presentations were well attended and enthusiastically received, the project team knew that maintaining momentum would and focus require continual reinforcement. "Throughout the project, we sent strategic reminders to staff emphasizing expected behavior--for example, administration guidelines for the residents, and prompts to nurses to consistently offer the vaccines," said Dr. Cabrera Svendsen. Frequent updates on progress during monthly topics meetings helped maintain interest while also giving staff the opportunity to ask questions and provide feedback. As awareness and understanding continued to build, some staff began to reexamine their own attitudes. "We discovered that even people we worked with had biases about vaccines," added Dr. Healy.

Not surprisingly, misconceptions about vaccinations were even more prevalent among the clinics' patient population and particularly engrained in the attitudes of the senior population. In an attempt to increase general public awareness, Dr. Reynolds developed a PSA (public service announcement) stressing the importance of getting vaccinated which aired on several local radio stations. At the start of the flu season, staff sent reminders specifically targeting senior patients to all FCH patients and those CFM patients who had not received an influenza or a pneumonia vaccine. The letters provoked a flurry of phone calls; staff at both locations made follow-up phone calls to the "hold-outs" who had failed to respond. Both strategies seemed to bring in patients. As an added incentive, CFM offered transportation assistance by way of bus fare and taxi vouchers. (Patients already had access to transportation assistance at FCH).

The project team also employed several strategies to educate their patients, including the use of teaching aids. Visual aids can be very useful in increasing interest and understanding, but the team found that no "off the shelf" patient education resources could adequately speak to the diversity of the Sioux Falls community. So, they decided to develop their own, adapted from information taken from the Centers for Disease Control and Prevention (CDC) website. Resulting products included a variety of colorful posters emphasizing "Why You should get the influenza/pneumonia vaccine," and pamphlets created for nurses and physicians to use in educating their patients. Unimpressed by the generic nature of stock images, the team elected to feature signed personal photos of the patient's physician in the brochures; local interpreters further customized the handouts and posters by translating them into the most common non-English languages served by the clinics (Spanish, Kunama, Tigrinya and Nepali).

The posters were widely placed throughout CFM waiting rooms, restrooms and in every exam room and electronically in the waiting area at FCH. According to Dr. Healy, the nurses played a huge role in making sure the posters were prominently placed and that the nursing stations stayed well-stocked with customized pamphlets. "They were also responsible for reviewing each patient's vaccination status, introducing the subject of influenza and/or pneumonia vaccination once the patients were roomed, and making sure they had the appropriate handout(s). This made follow-up with patients much more effective for the physicians because the groundwork had already been laid."

The nurses also played a big role in resolving documentation discrepancies in CFM's new

electronic health record (EHR) system which was switched over to a new EHR in July 2016. When preparing the interim progress report later in the year, the project team discovered that the data extracted from the EHR did not accurately reflect the number of influenza vaccinations they knew had been given. "So we looked in different locations and found that nine different headings had been used to chart the vaccine," said Dr. Cabrera Svendsen. Working with information technology (IT) and the head of nursing, they were able to retrain staff in the consistent use of headings and achieve a more uniform process of vaccination documentation.

Ultimately, "we all learned that with everyone working together, we can do a better job of educating our patients and increase the immunization rates that help save lives," concluded Dr. Healy. Final project results showed that influenza immunization rates in age 65 and older population had increased from 35% to 53% (from 348/988 to 531/1,001); PPSV23 vaccination rates increased from 62.5% to 64% (from 848/1,356 to 779/1,188) and most impressively, PCV 13 vaccination rates increased from 40% to 60% (from 539/1,356 to 759/1,188). Although the overall prevalence of PPSV23 only minimally increased, the actual number given was 2.5 times higher than the previous calendar year.

For Dr. Healy, "it all goes back to direct patient-provider communication and how important it is to connect with your patient and build trust." She recalls admitting a patient, "Mr. A," into the ICU in septic shock and with a history of cancer and heart failure. His condition was so dire that it was uncertain he'd pull through. But against great odds, Mr. A eventually rallied. During the several weeks Mr. A spent in the hospital under Dr. Healy's care, "We developed a very healthy patient-physician relationship."

After Mr. A was discharged, he continued to see Dr. Healy in the clinic. "I noticed he had not had an influenza or pneumococcal vaccination and had declined them in the hospital." When she raised the subject during a follow-up appointment, he flatly refused, saying, "I don't

like shots." He went on to claim he'd gotten sick from a flu shot in the past. Dr. Healy explained why the vaccines were so beneficial and invested some time in directly addressing his particular concerns and misconceptions. Although Mr. A was a stubborn man, "I knew he trusted me," she said. "So after he saw how important I thought this would be for his health, he accepted the pneumonia vaccination and agreed to the flu shot at his next visit."

As a result of the training, Drs. Healy, Reynolds and Cabrera Svendsen feel that they, along with the other Sioux Falls residents and attending physicians, are doing a much better job of educating their patients about the importance of vaccinations. "If a patient says, 'Well doc, if you think it's best for me' and willingly accepts it, that's all well and good," said Dr. Cabrera Svendsen. "But if I meet with resistance, I now have specific facts I can share with my patients. I can now even say, 'When I was in residency, we did a year-long project on this." For her part, Dr. Healy concurs. "If we give them the pamphlet with our photo on it to demonstrate how important we think it is, this helps to build trust in the patient-physician relationship. It doesn't take a lot of time—maybe an extra couple of minutes—but it makes all the difference."