

University of Kansas-Wichita Family Medicine Residency at Wesley**TEAMWORK & ACCOUNTABILITY PAY OFF IN IMPROVED IMMUNIZATION RATES**

When the announcement for 2015 Senior Immunization Awards crossed the desk of Gretchen Dickson, MD, MBA she knew she wanted to submit an application—but this time, she'd go about it differently. "We had applied for this grant in previous years but had not been successful," she acknowledged. The awards, offered through the American Academy of Family Physicians (AAFP) Foundation, support the efforts of Family Medicine residency programs to implement quality improvement projects that increase influenza and pneumococcal vaccination rates in patients age 65 and older.

This time around, Dr. Dickson was determined to construct a project that included the participation of *everyone*—all 14 faculty physicians, 25 resident physicians and nearly 30 staff members—who worked at The University of Kansas School of Medicine-Wichita's Family Medicine Residency Program at Wesley Medical Center. As Program Director (and then Acting Medical Director), Dr. Dickson easily appropriated time during a monthly clinic-wide meeting to brainstorm project ideas. "That drew broad support from staff right off the bat," she said.

What emerged was a multi-faceted approach that integrated patient education strategies with four distinct methods of vaccine delivery to senior patients—traditional office visits, walk-in vaccination clinics, a drive-up after-hour vaccination clinic and home visit vaccinations. By offering these alternatives to their patients,

the Family Medicine Center (FMC) hoped to increase flu immunization rates from 28 percent to at least 55 percent and pneumonia immunization rates from 28 percent to at least 55 percent for their 770 eligible seniors. The project anticipated that at least 15 percent of these patients would receive the vaccine in the drive-up clinic, and another 15 percent would participate in the home visit program. "And through our outreach activities, we hoped to connect with at least 95 percent of our target group to inform them of the benefits of vaccination and their options for vaccination within the FMC," said Dr. Dickson.

As the launch date drew near, teams were formed, each charged with implementing a distinct component of the project. "I asked the residents to join the group whose 'mission' most interested them," said Dr. Dickson. "For example, some were drawn to the marketing aspect, while others wanted to help plan the drive-up clinic."

The "patient education" team was among the first to kick off their activities with a marketing campaign that used direct mail postcards and email messaging to stress the importance of timely immunizations. Patients were also reminded to either come in or inform staff if they had been vaccinated elsewhere. Posters ordered from the Centers for Disease Control and Prevention (CDC) soon embellished walls throughout the FMC to encourage flu and pneumonia vaccinations; safety sheets provided by the vaccine manufacturer were also made

available. The energy invested in building patient awareness also served to energize staff. “We all wore our ‘I got vaccinated’ stickers,” said Dr. Dickson, “and the patients definitely took note.”

Project leadership was put in the hands of an existing Patient Centered Medical Home Team, which served to increase ownership. “This team includes representatives from across the spectrum of clinic staff – reception, nursing, medical records, x-ray, as well as the resident and attending physicians—a very good group,” explained Dr. Dickson. The Medical Home Team was given updates at regular monthly meetings regarding plans, progress and ongoing outcomes. “They were also a sounding board for anticipating/evaluating the impact of certain proposed interventions.”

Dr. Dickson explained one of the beneficial suggestions to come out of the Medical Home Team. “In the past, we didn’t track patients who had refused immunizations, and the nurses were reluctant to push the patient further,” said Dr. Dickson. “But one of the nurses on the leadership team figured out a way to document these refusals, so now we can find out what the barriers are and address them. She also suggested providing the nurses with a script to use with patients in these circumstances, and this has worked very well.”

A certain amount of confusion raised by the guidelines for sequencing and administering the two pneumonia vaccines also brought helpful lessons. “We found that we needed more education and a clearer workflow to best implement the new pneumococcal vaccination recommendations. A faculty member has since taken this on as a project.”

The realities of serving an older population gave rise to additional process improvements. “Transportation is so often an issue, and some of our patients struggle to come into the

office,” acknowledged Dr. Dickson. “If we didn’t have the needed vaccine available on the day they came in, they may not get it at all. So, we saw that we had to think and plan ahead by running lists of who we needed to see and what vaccines they were missing so we could plan how to get the vaccine to them.”

Efforts at advance planning placed even greater emphasis on documenting the patient’s vaccination history—but achieving greater accuracy proved challenging. “Sometimes we’d ask a patient about getting, for example, the pneumonia vaccine and we’d hear things like, ‘Oh, I got this from my lung doctor two years ago.’ We always intended to comb through the medical records of patients we suspected weren’t covered to ferret out the information. But when things got really busy in the clinic, the easy default would be, ‘Oh, I’ll just do it next time.’ So, we started doing chart analysis for patients with low rates of pneumonia vaccinations and saw a big increase in vaccinations when staff took the time to do this. Now, if we do have a ‘next time’ moment, we’ll be ready when it comes.

“We now have a better way of capturing and recording information in the patients’ charts. We changed where we enter vaccines in the medical record no matter where they are received,” Dr. Dickson continued. “We hadn’t been as diligent at capturing this information, but now we hunt it down.” Consistent requests for patient vaccination records have improved cooperation from other providers, whether it be the Sedgwick County, Kansas Health Department or the local pharmacy at the grocery store. “We now have individuals at these locations who understand what we need, so we often don’t even have to ask—they’ll just send the records in.” Dr. Dickson also credits \$5 gift cards offered as an incentive to patients for reporting off-site vaccinations as beneficial to this effort.

She considers the involvement of all physicians and staff in the planning and ongoing monitoring of the project as critical to its success. “We celebrated when we got the grant and we highlighted the winners of friendly competitions between the teams by publicizing monthly immunization numbers.” Dr. Dickson stressed how critical this regular posting of the data was to allowing individual physicians to continually improve their own performances.

Not surprisingly, this focus on accountability resulted in monthly provider performance data that reflected a significant rise in vaccination rates for patients seen at the FMC. Other methods for providing senior immunizations—the walk-in clinics, drive-up vaccinations and home visits—offered initial promise but ultimately delivered mixed results.

“Vaccine provided during a walk-in clinic during regular office hours was our second most popular method with patients and gave us our second-highest (20 percent) rate of vaccinations,” said Dr. Dickson. But the attempt to provide vaccines during a drive-up, after hours clinic fell flat. “We utilized a Saturday morning for this event and had poor response from patients,” admitted Dr. Dickson. She identified several factors that fed into this, including bad weather on the selected date, the availability of appointments and other options during regular clinic hours, and easy after-hour access to vaccines at locations such as CVS and Walgreen’s.

The portion of the project involving vaccinations provided during a home visit could not be successfully implemented. “It was a great mission and we thought, ‘This will be great! They shouldn’t be getting out of their homes in this weather anyway – they’ll fall and break a hip!’ But we were surprised when many patients didn’t want us to come into their homes! Further, we hadn’t completely thought

through how we were going to implement this—how we were going to create a schedule, insure the patient(s) would be home, have the right vaccines with us, verify insurance status—all those things. So, with patients not clamoring for it, we just decided, ‘It’s late enough in the season...let’s figure all this out and try it next year.’” Dr. Dickson maintains that this option has value but, “We need to have a system for doing it.”

As the project drew to a close, it became clear that patient interaction with physicians and nurses during scheduled in-office visits (with added support from the mailed reminder cards) had the biggest impact on project results. All of the physicians in the office vaccinated more patients against flu and pneumonia disease in the 2015 season than they had the year prior, achieving a 34 percent increase in influenza vaccination rates and a 10 percent increase in pneumococcal vaccination rates.

In Dr. Dickson’s view, the project allowed the resident physicians to develop best practices in promoting immunizations and to have a real impact on patient care through their focused effort. “Sometimes in residency, you feel you don’t have a lot of control—you get dumped into a system that works a certain way. We wanted the residents to see that they *can* change the process by building, collaborating, and motivating towards a common goal.”

To illustrate, she cited a recent encounter at the FMC. “A patient who just happened to be at the weigh-in station overheard a resident physician commenting that they really hadn’t had much flu or flu complications/hospitalizations this year. Even though he wasn’t her personal physician, the patient chimed in with, ‘That’s probably because you’ve been vaccinating everyone. Maybe you guys really *are* making a difference!’”