

2016-2017 Senior Immunization Awards CASE STUDY

North Mississippi Medical Center Family Medicine Residency Center

PATIENT & RESIDENT EDUCATION DELIVERS SHORT- AND LONG-TERM INCREASE IN VACCINATION RATES

Although many factors can influence a patient's decision to be vaccinated, the recommendation of his or her physician is one of the most important. And the young physicians in the North Mississippi Family Medicine Residency Center (FMRC) were certainly aware of their responsibility to clearly communicate the hazards and benefits of vaccinations to their patients. "For as long as I can remember, I've had a personal focus on preventive care," affirmed second-year resident Emily Landrum, MD. "One of the primary reasons I wanted to become a doctor was to help educate patients on their disease processes and options for a healthy lifestyle. But now, as a physician, I struggle to incorporate preventive health into my clinic visits as often as I would like. Many patients come in with more pressing issues that must be addressed, and this often takes priority over prevention."

So when the FMRC Program Director, Dennis Smith, MD, circulated information about a 2016-17 Senior Immunization Award opportunity available through the American Academy of Family Physicians (AAFP) Foundation, Landrum quickly volunteered for the project. She was joined on the project leadership team by the North Mississippi Medical Center's Clinical Pharmacist, James Taylor, PharmD.

The North Mississippi Medical Center draws patients from a 100-mile radius in rural

Mississippi. The vast majority of these patients ages 65 and older are covered by Medicare, with nearly half also on Medicaid. Some have transportation barriers and many have low levels of health literacy.

Based on historical data from the Clinic's Meridios electronic medical records (EMR), Drs. Brandon and Taylor established the goal for increasing the influenza vaccination of patients 65 and older at 75% (263 patients). The target for increasing pneumococcal vaccination for the same group was set at 80%, with 30 patients (8%) receiving the Pneumovax 23 (PPSV23) vaccination, and 120 patients (26%) receiving the Prevnar 13 (PCV13) vaccination. Vaccine rates would be measured monthly through Meridios and compared to rates from the previous year.

Early on, patient and staff education regarding each vaccine became a focal point for the project. "To be quite honest before this project if a patient refused a vaccination, the nurse just accepted it and that was that", admitted Dr. Taylor. We needed to get staff throughout the entire clinic more aware of the importance of these vaccinations." So Dr. Landrum developed a training lecture for providers, which reviewed baseline data for immunization rates and included the most recent industry recommendations concerning indications and administration. The presentation, offered in August 2016 during Core Curriculum education sessions, also covered some of the myths that are

barriers to vaccination for patients, and how to dispel them. That same month, clinic staff were given a vaccination overview that also covered changes to clinic work flow and assigned duties. Dr. Taylor helped reinforce lecture content by conducting in-service training focused on indications at quarterly department meetings. In addition, “pocket wheels” provided by Pfizer further guided decision-making regarding if/when a vaccination was needed. The guides were kept at nursing stations and found their way into physicians’ pockets as well.

Drs. Landrum and Taylor also viewed patient education as critically important. “Having a patient understand what a vaccine is for and why it’s needed is the best way to ensure that they participate in safeguarding their own health,” said Dr. Landrum. The project team pulled out all the stops, employing colorful posters, flyers, videos in the patient waiting room, a display board near the check-out desk, and screen savers in the exam rooms. Each format promoted a consistent message highlighting the risks and benefits of vaccinations while directly confronting common patient fears and myths. “We got most of the materials from the Centers for Disease Control and Prevention (CDC),” said Dr. Taylor. “We had our marketing department print the handouts in color and they looked great.”

To help ensure these educational efforts reached their target audience, clinic staff mailed reminder postcards to all patients 65 and over who had been identified as needing flu and/or pneumonia vaccinations. “A Pfizer representative had dropped by and mentioned a couple programs they had aimed at increasing immunization rates,” said Dr. Taylor. “He offered us pre-stamped postcards that conveyed the general message, ‘Our records indicate you are

missing an important vaccine,’ and ‘please schedule an appointment with your doctor today.’” Although patient response to the mailing was not specifically tracked, “Anecdotally, I know that some patients did mention to nursing staff that they’d received them, said Dr. Taylor. “so they must have had at least some impact.”

When each patient entered the clinic, office and nursing staff were prepared to keep the immunization ball rolling. At check-in, each patient was handed a “Flu Vaccine Tracking” form to initiate the screening process for influenza vaccines. Developed by Dr. Landrum, this sheet traveled with the patient from check-in to the doctor visit, and served as a reminder to consider pneumococcal vaccination. Each staff member had a role in asking the patient if they wanted the vaccine and if not, why. It also prompted the physician to follow-up, further educate as needed, and to document if the patient had a change of heart.

“Broad participation from clinic staff was and continues to be vital,” Dr. Landrum maintains. “The patients hear about the importance of vaccinations from front desk and nursing staff in addition to me, as a physician. Sometimes repetition is key to the success we have in treatment.” Dr. Taylor kept all staff up-to-date on project progress via monthly emails reporting percentages of all three vaccinations administered. The emails also gave him an opportunity to reinforce the immunization guidelines covered in previous training sessions, and to offer encouragement (“Keep up the good work!”) as project activities continued.

To further tighten up patient flow, Dr. Taylor and his pharmacy team initiated monthly screenings of patient charts to identify patients eligible for vaccinations. If an influenza or pneumococcal vaccine was

needed, a reminder flag within the patient's chart was sent to the physician and/or written on their exam boards. These reminders proved very helpful to the physicians and highly effective in catching patients whose vaccination status may otherwise have been overlooked. "I definitely plan on continuing these reminders as part of our routine reporting," said Dr. Taylor.

While project results fell somewhat short of meeting project goals, the FMRP did increase the influenza vaccination rate from the previous year from 57.5% to 69.3% and combined pneumococcal vaccination rate from 67% to 73.6%. Given that many of the patients had already received the PCV 23 vaccine, increasing vaccination rates for PCV 13 became the focus and resulted in an increase from 32.3% to 59.4%.

Overall, the project was widely viewed among physicians and staff as very positive, leaving the clinic well-positioned for future gains. Drs. Landrum and Taylor cite several areas where the Senior Immunization Award will have lasting impact. In addition to reminder flags within patient charts, the patient education materials will continue to improve patient health literacy as they are updated for use from year to year. The Flu Vaccine Tracking Sheet was so effective in ferreting out the most common reasons our patients were refusing their flu vaccine that it is definitely here to stay. "We collected tracking surveys on over 3,500 patients and gained some valuable data that can be used in the future to help us better educate our patients," said Dr. Landrum. In addition, the form served as a tangible reminder to staff to address each patient's vaccination status because, according to Dr. Taylor, "they had to keep up with that piece of paper!"

The dedicated lectures and in-service sessions developed and utilized specifically for this grant will now be integrated into the Core Curriculum to benefit future family medicine residents. "In the past, staff would get lectures on preventive health which included some training in this area," said Dr. Taylor. "But as far as anything dedicated to immunizations, this was the first one." He notes a marked change in confidence among the residents when making immunization-related decisions. "This year's group has a clear grasp on flu and especially pneumococcal vaccination guidelines. Before we did this project, they would frequently come in and ask, 'Which one?' But rarely do I get that question now," said Dr. Taylor. "From here on out, residents will graduate with an equally solid foundation."

"There's no doubt that this focused education has helped all of us become more comfortable with guidelines and addressing vaccination issues with our patients," agreed Dr. Landrum. "I've used this information to educate my patients, to help them appreciate and weigh the costs/benefits of receiving a vaccine."

Perhaps most importantly, the changes and additions enabled through this grant have encouraged all North Mississippi FMRP staff to participate in the shared goal of increasing patient immunization rates. The end result: the physicians are now able to use precious one-on-one time with their patients to the fullest. "I've realized that it doesn't have to take *that* much time to do additional education in preventive measures," says Dr. Landrum. "This project has energized me to think of new ways to incorporate preventive care in visits with my patients, and ensure that it remains a priority."