

Immunization Incentive Grant Final

Lumberton is located in Robeson county, which is consistently one of the poorest counties in the state of North Carolina. A large percentage of the population are Lumbee American Indians. The major disease states in the area are diabetes and hypertension with much of the population also having a tobacco use disorder leading to higher rates of COPD. Thus, there is a strong need for vaccinations in this population.

Lumberton Drug Company, an independent pharmacy located in Lumberton, NC, has partnered with Lumberton Family Practice and Urgent Care to further advance patient care with the hope of creating a more patient-centered medical home. A clinical pharmacist is integrated into the practice conducting Medical Wellness Visits and Chronic Care Management services. The practice was only giving patients flu vaccines due to the cost of other vaccines. Thus, Lumberton Drug Company offered to supply the pneumococcal vaccines and administer them to eligible patients, with the primary care office billing for the vaccinations. The goal was to increase revenue for both practices through sharing the revenue and ultimately to improve patient care in a rural community.

Project objectives

-Demonstrate the value of team-based care through increasing pneumococcal vaccination rates at Lumberton Family Practice and Urgent Care.

-Generate more revenue for both Lumberton Family Practice and Urgent Care as well as Lumberton Drug Company

Methods

1. Lumberton Drug Company purchased both 1 box of the PPSV23 and P13 vaccines.
2. The clinical pharmacist screened eligible patients by age, disease state, and smoking status. Either the PPSV23 or P13 was offered, depending on patient eligibility. In addition, the CNA was trained to ask patients if they received the vaccine
3. The clinical pharmacist checked the North Carolina Immunization Registry to confirm a patient has not received a vaccine.
4. The patient received the flu vaccine at the same time as the office visit in addition to the pneumococcal vaccine.
- 5.. Vaccines were reported to the North Carolina Immunization Registry

Results

Initially, Lumberton Family & Urgent Care was not giving or recommending patients receive the pneumovax vaccine, causing a need for the clinical pharmacist to educate patients about the difference between the influenza and pneumovax vaccines and their importance in disease prevention. Once the screening process began, it was discovered that the documentation within the clinic's EHR was insufficient to run a report on patients needing a pneumovax vaccine. Thus, instead of running a report on the entire population, patients were evaluated on the day of their appointment, as most patients are

seen every three months at a minimum at the clinic. As there was not an objective way to measure the number of patients asked by the CNA, data pertains to those screened by the clinical pharmacist.

Month	Number of Patients Screened needing PPSV or P13
November	57.1%
December	62.5%

Table 1: Patients that Needed and Accepted Pneumovax Vaccine

The anticipated number of overall vaccines fell far below the anticipated amount due to unforeseen complications. During the grant period, there were billing issues with the provider's practice leading to a delay in provider reimbursement. There were multiple attempts to correct the billing which was done in time. However, it led the provider to not want to purchase the vaccines as the anticipated increasing in revenue was not being seen due to issues beyond the clinical pharmacist's control. The coverage of the vaccines was not covered as anticipated by commercial payers. Thus, the pool of eligible recipients also shrunk.

Conclusion:

Overall, this study proved that Robeson County is underserved in the area of receiving appropriate vaccinations. Buy-in from patients was received well as the patients often knew someone who had pneumonia and they wanted to prevent it from happening to themselves if possible. The benefit to the patients was substantial though with vaccination rates increasing an average of 60% above baseline. In addition, the pharmacy received an additional \$1,304 in revenue above the vaccine cost. Thus, it was a profitable venture for the pharmacy. The delay in reimbursement from the office though caused it not to be a venture worth continuing until costs were caught up from the payment perspective.

Moving forward, the clinical pharmacist screens patients for vaccines and then sends them to their local pharmacy to receive the vaccines so that patient care is not compromised. The patients were extremely appreciative to the comprehensive care received. The incentive grant money helped to jumpstart the program and once billing is fixed completely, the practice is in a financial situation now to sustain vaccines if they desire due to other clinical services provided by the pharmacist.