

The purpose of the Immunization Awards Poster presentation at National Conference is to encourage resident-designed and driven projects intended to overcome barriers to immunizations, and to provide a venue to share best practices with colleagues. This year's six presenters offer valuable information on quality improvement and community-based projects aimed at improving flu and pneumococcal immunizations rates in seniors.

**IZ-1 Working in Teams: A Community Effort to Improve Senior Immunization Rates**

*Nicole McGuire, DHSc, Laura Watt, MD, Danielle Cundiff, DO, Andre Anderson, MD, and Amy Laib, MD*

*Union Hospital Family Medicine Residency Program*

Union Hospital Family Medicine Residency, located in Terre Haute, IN, implemented a multifaceted intervention to increase influenza and pneumococcal vaccination rates for the senior population in the Family Medicine Center (FMC) and in the community. Along with increasing vaccination rates, our initial goals were to provide community outreach to individuals affected by health disparities; provide patient education on a variety of healthcare topics; increase resident knowledge of the social determinants of health; and provide residents with a robust Community Medicine curriculum – complete with a working knowledge of the PDSA cycle. All 21 residents participated in the interventions which included redesigned office workflow for vaccinations, health fairs, Dine with a Doc community events, 1-minute talks on local television on the importance of flu and pneumonia vaccinations, and an increased practice-wide focus on vaccinations. Residents who went out into the community soon realized that healthcare disparities weren't just concepts covered in Wednesday afternoon didactics anymore. It was real life for many of the seniors in the community. We succeeded in more than just increasing vaccination rates. We developed a Community Medicine experience that allowed residents to connect with the community and lend a hand to those who truly needed it.

**IZ-2 Improving Access to Immunizations for Seniors**

*Angela Plucker, MD and Gretchen M Dickson, MD*

*University of Kansas School of Medicine- Wichita Family Medicine Residency at Wesley Medical Center*

Immunizations are of critical importance, particularly for adults older than 65 years of age. In 2015 we identified several challenges in our Family Medicine Center with ensuring our adult patients older than 65 years were receiving influenza and pneumococcal vaccines. Barriers such as patient and provider education as well as limited access to our office to receive the vaccine led to only 29% of patients older than 65 years receiving an influenza vaccine in the 2014-2015 vaccine season and only 28% receiving a pneumococcal vaccine. Utilizing the American Academy of Family Physicians Foundation Senior Immunization Awards Grant, we implemented several changes for the 2015-2016 vaccine season including increased provider education and feedback on performance in administering vaccine, increased patient education and increased patient access to vaccine services. The interventions were well received by all parties and resulted in 63% of our patients older than 65 being vaccinated for influenza (34% increase over previous year) and 38% being vaccinated for pneumococcal illness (10% increase over previous year) during the 2015-2016 vaccine season. Interventions which most improved vaccination rates will be implemented into the clinic operations and will be expanded to other vaccine initiatives to improve immunization rates across all demographic categories.

### **IZ-3 Pneumococcal and Influenza Vaccination Rate Improvement Initiative for Elderly Patients**

*Krishanth Perinpanathan, MD, Nada Al-Hashimi, MD, Sherly Abraham, MD and Vasantha Kondamudi, MD*

*The Brooklyn Hospital Family Medicine Residency Program*

The practice of vaccination of Influenza and Pneumovax in the elderly population is an important concept that has benefits throughout the community. Our target group was people age 65+ living in the borough of Brooklyn, New York. Family medicine residents utilized Eagle View, our proprietary database, to populate the list of seniors aged 65+ who visited our clinic. Improvement in clinic workflow by collaborating with team members and ancillary clinic staff improved our vaccination rate. Phone interventions were increased by 15% and had a major impact on patient awareness. Data was tabulated into a spreadsheet for all patients seen at each encounter who received influenza and/or pneumococcal vaccination. Vaccination records were analyzed at preset intervals and at the conclusion of the project. Reconciliation of data in our EMR ensured a more updated reflection of our immunization rates. By identifying and addressing barriers to vaccination in adults 65 years and older we were able to double influenza and PPSV23 vaccination rates over the previous year. Influenza vaccine rates were given to 62% of eligible patients (up from 28% the prior year). Pneumococcal vaccines were given to 65% of eligible patients (up from 36% the prior year).

### **IZ-4 Improving Preventive Health of Older Adults in Wyandotte County through Improved Influenza and Pneumococcal Vaccine Rates**

*Kelsie Kelly, MD, Shane Austin, MD, Johnathan Mou, MD, Christina Hester, PhD and Courtney Huhn, MD*

*University of Kansas Family Medicine Residency Program*

Older adults in an urban setting are at high risk for not receiving the appropriate vaccines. We decided to address barriers, including physician and patient education on new ACIP pneumococcal vaccine recommendations and patient access. A 3-pronged outreach program was designed to address these barriers. The first aim addressed quality improvement in clinic. The multi-step approach included staff education on influenza and pneumococcal vaccines, directly accessing patients through personal reminders/mailers, and clinic process improvement. The second and third aims involved outreach to the community. We held two vaccine clinics in the KU Geriatrics clinic that increased the number of older adults receiving influenza vaccine to 488, a rate of 82.7% prior to clinic running out of vaccine. 426 older adults received the PCV13. MyChart EMR users had a higher vaccination rate, which has implications to improving vaccine rates for all clinic patients. An additional vaccine clinic held at a Center on Aging was not successful due to health system barriers: only 23 patients were vaccinated. In addition, eight patients were given PCV13 in their homes through the homebound program. Many lessons about clinic infrastructure were learned and outreach with the homebound program will be a sustainable part of residency education.

### **IZ-5 Keeping Seniors Healthy: Improving Senior Immunizations**

*Alison Kole, DO and Arthur Babakhanians, MD*

*Glendale Adventist Medical Center Family Medicine Residency*

Vaccination is an essential aspect of disease prevention in primary care. *Streptococcus pneumoniae* is a leading infectious cause of serious illness, including bacteremia, meningitis, and pneumonia, among older adults. Influenza is also a common cause of serious illness in the US and flu-associated deaths range between 3,000-49,000 people every flu season, 80% of which are adults 65 years and older. In 2014, the Advisory Committee on Immunization Practices recommended routine use of Prevnar (PCV13), in addition to Pneumovax (PPSV23), for seniors. Our family medicine clinic serves over 600 senior patients from both our office and in nursing homes. There are many barriers to vaccination including patient fears/myths, lack of knowledge and provider error. With extensive education provided to physicians and nurses, educational fliers, cultural sensitivity training, and charting updates we were able to improve vaccination rates among seniors in our office over a 1-year period. The vaccination rate against influenza improved from 37% (2014-2015 season) to 43% (2015-2016 season). Prior to 2015, our office had a 60% vaccination rate of Pneumovax and 3% Prevnar, which improved by 2.4% and

35% respectively. With continued education and training to patients and staff we aim to continue improving immunization rates and achieving illness prevention in that population/demographic.

#### **IZ-6 Improving Immunization Rates for UCI FMC Senior Patients**

*Hau Do, MD, Esther Ho, MD, and Rye-Ji Kim, MD*

*University of California, Irvine – Department of Family Medicine*

Influenza and pneumococcal infection can be serious and even life-threatening for senior patients over the age of 65. Therefore, influenza and pneumococcal vaccines are important preventive measures. Data analyses showed that our clinic had vaccination rates of 44.08% and 10.61% for influenza vaccines and pneumococcal vaccines, respectively. Our goal was to improve our vaccination rates for these two vaccines in our disadvantaged patient population. We enlisted all 30 residents in our residency, MAs, RNs and undergraduate volunteers in this project. All of the residents received education about influenza and pneumococcal vaccines during didactics. All MAs and RNs were informed about the vaccination protocol during team meetings. The undergraduate volunteers called all patients eligible for vaccination to come to clinic. We did not accomplish our goal for this year. However, we have gained valuable insight about the barriers and challenges to implement new protocols and procedures at a large academic center. Providing residents and patients with information about the vaccines worked well. The AAFP Foundation grant has allowed us to expand the project for another the year. We plan to use our experiences from this year to improve next year immunization rates.