

INTRODUCTION

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. Initial goals, along with increasing vaccination rates, was to provide community outreach to individuals affected by health disparities, provide patient education, increase resident knowledge of health disparities, and provide residents with a robust Community Medicine curriculum – complete with a working knowledge of the PDSA cycle.



METHODS

Participants: 21 residents, 3 med students, 2 MPH grad students, 1 education coordinator, 1 behavioral science coordinator, 7 faculty physicians, 1 clinical pharmacist, 2 pharmacy residents, 1 BSN clinical educator, 3 LPNs, 1 MS quality liaison, 1 BS Information Services Specialist, (Vigo Co. Dept. Health – Nurse, Director, Public Health Educator), 20 BSN students from Indiana State University School of Nursing, 2 ISU School of Nursing PhD Faculty, Valley Professionals Community Health Center front office & nursing staff

Key Program Components:

- Held 19 Dine with a Doc events to educate seniors in the community and provide free vaccinations. Dine with a Doc is an event sponsored by Senior Education Ministries, a local faith-based organization. The program was designed to encourage seniors to get out of their homes, provide fellowship with peers, and educate them on preventive health care while providing a free meal and wellness screenings. During the Dine with a Doc events, residents and faculty physicians:
 - Ate lunch with the seniors
 - Provided education on vaccines
 - Provided handouts on immunizations and other health topics
 - Engaged in a question and answer session
 - Provided an educational presentation on a health topic of the seniors' choice
 - Provided flu & pneumonia vaccines
- Set up booths at 2 large health fairs in the community offering free flu and pneumonia vaccines
- Set up booths at 2 Mini Medical School presentations open to the public
- Monthly meetings with residents, faculty, and nurse practitioners to talk about the immunization project and importance of talking to patients about getting vaccinated
- Monthly education sessions with residents and faculty on QI methods and the PDSA cycle
- Redesigned office workflow
- Residents and clinical pharmacist did 1-minute talks periodically on local television news about the importance of flu and pneumonia vaccines. They mentioned seniors could stop by our office to receive a free flu or pneumonia shot.



OUTCOMES

FMC Immunization Rates - Seniors (Age > 65)			
	2013-2014	2014-2015	2015-2016
Influenza Vaccine	23.85%	22.03%	45.87%
Pneumococcal Vaccine	47.75%	54.31%	49.79%

- 102 influenza vaccines given to seniors in the community
- 30 pneumococcal vaccines given to seniors in the community
- 1,655 Seniors served in the community through outreach by community events, presentations, healthcare screenings, and educational resources
- Improved immunization practices and ongoing education for residents
- Partnership with local health department, Senior Education Ministries, Indiana University School of Medicine, and Indiana State University School of Nursing
- Creation of an internal Quality Committee
- Increased patient awareness of immunizations
- Increased patient education on preventive care
- Increased patient education on full spectrum family medicine
- Improved communication between patients and providers
- Improved Community Medicine curriculum
- Improved resident and faculty knowledge of PDSA cycle
- Improved resident and faculty understanding of QI steps and methodology
- Improved resident public speaking and presentation skills
- Introduced residents to individuals in the community affected by health disparities
- Residents were able to provide community outreach to seniors without a PCP
- Residents learned how to run reports and look at quality data
- Residents, faculty & nursing staff worked together to improve office workflow
- Residents utilized social media and local radio and television to raise awareness of immunizations and educate the public
- Residents rated the immunization project extremely high as a valuable experience related to community engagement
- Residents voted to continue the project after the official project period ended to be included as part of their Community Medicine curriculum



2016-2016 Senior Immunization Grant Awards RESULTS & FINDINGS: FINAL REPORT Form

Instructions

- Provide the information and data requested including Appendices 1-3.
 - Your Final Report is due by May 5, 2016.
 - Please include any attachments, graphs, pictures (jpg, if possible) or other items that capture the essence of the outcomes realized by your project.
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Name of Family Medicine Residency Program

Union Hospital Family Medicine Residency

Contact Information

1. Name, Title, Email of person completing the report.

Nicole McGuire, DHSc
Education Coordinator
nmcguire@uhhg.org

2. Project Contact information if different from above.

same

Title of Project- Working in Teams: A Community Effort to Improve Senior Immunization Rates

Statement of Goal(s) Include your Primary Metrics:

Our projected impact on immunization rates at the start of the grant was to provide flu vaccines to approximately 1,250 seniors and 125 pneumococcal vaccines to senior patients. We proposed that 5 residents would lead efforts throughout the project period. The remaining 16 residents would have an integral part as the plan was carried out. The expectation was for all 21 resident physicians to be involved in the QI project in some capacity.

Impact on Target Population

1. PATIENT DATA – **Complete information in Appendix 1**.
2. KEY OUTCOMES (Please group by bullet points)
 - Improved immunization practices and ongoing education for resident physicians
 - Partnership with local health department
 - Partnership with Senior Education Ministries
 - Partnership with Indiana University School of Medicine
 - Partnership with Indiana State University School of Nursing
 - Creation of an internal Quality Committee
 - Increased patient awareness of immunizations
 - Increased patient education on preventive care
 - Increased patient education on full spectrum family medicine
 - Improved communication between patients and providers
 - Improved Community Medicine Curriculum
 - Improved resident and faculty physician knowledge of the PDSA cycle

- Improved resident and faculty physician knowledge of quality improvement steps and methods
- Improved resident and faculty physician public speaking and presentation skills
- Introduce residents to individuals in the community who are affected by health disparities
- Residents physicians were able to provide community outreach to individuals in the community affected by health disparities
- Resident physicians learned about the social determinants of health during visits to each community
- Resident physician ability to reach out to seniors in the community who did not have a primary care provider
- Resident physician ability to provide resources/referral to the FQHC to seniors in the community who did not have insurance
- Increased flu and pneumonia vaccination rates for impoverished seniors in the community
- Resident and faculty physicians learned how to design a project and break the activities into individual tasks and assignments
- Resident physicians learned how to run reports and look at quality data from the EMR
- Resident physicians, nurses, and front office staff worked together to improve the office workflow to ensure flu and pneumonia shots were offered to patients and administered when appropriate
- Resident physicians utilized social media and local television and radio to raise awareness of immunizations and educate the public
- Resident and faculty physicians rated the immunization project extremely high as a valuable experience related to community engagement
- Resident physicians voted to continue the project after the official project period ends as part of their community medicine curriculum

3. KEY PROGRAM COMPONENTS (Please group by bullet points)

- We held 19 Dine with a Doc events to educate seniors in the community and provide free vaccinations. Dine with a Doc is an event sponsored by Senior Education Ministries, a local faith-based organization. The program was designed to allow seniors to get out of their homes, provide fellowship with their peers, and educate them on preventive health care while providing a free meal and wellness screenings. During the Dine with a Doc events, residents/faculty physicians:
 - ate lunch with the senior citizens at the senior centers, churches, and community centers
 - provided a 5 minute education session on flu and pneumonia vaccinations and allowed additional time for questions
 - provided educational handouts on immunizations and other health topics
 - provided an educational presentation on a health topic to the senior citizens
 - engaged in a question and answer session following the presentation on a variety of health topics
 - after the conclusion of the question and answer session, the physician was available for one-on-one questions with each of the seniors
 - Provided flu and pneumonia vaccines
- We set up booths at 2 large health fairs in the community to offer free flu and pneumonia vaccines to seniors.
 - TV, radio, and social media advertised events
 - Provided educational handouts on immunizations and other health topics
 - Partnered with Indiana State University School of Nursing to provide the immunizations
 - Partnered with the Indiana Minority Health Coalition to obtain booth space
 - Partnered with the Vigo County Dept. of Health to receive referrals (individuals 65 > who were ineligible to receive free vaccines through the county)
 - Sent children to the Vigo County Dept. of Health for vaccinations
 - Borrowed mobile cooler from Valley Professionals Community Health Center
- We set up booths at 2 Mini Medical School presentations. Both presentations were open to the public.
 - TV, radio, and social media advertised events
 - Provided educational handouts on immunizations and other health topics
 - Partnered with Indiana State University School of Nursing to provide the immunizations

- Partnered with Indiana University School of Medicine to obtain booth space
- Borrowed mobile cooler from Valley Professionals Community Health Center
- We held monthly meetings with residents, faculty, and nurse practitioners to talk about the immunization project and the importance of talking to patients about getting vaccinated!!! We met immediately following didactics for 15 minutes to touch base on our interventions.
- Held monthly education sessions with residents/faculty physicians on quality improvement methods and the PDSA cycle. Topics included:
 - Key QI Elements
 - Setting up a project
 - Determining priority areas
 - Completing a project checklist
 - Identifying team members
 - SMART goals
 - Setting expectations
 - Project boundaries
 - Organization
 - Team huddles
 - Execution
 - Reflection
 - Results
 - PDSA Evaluation
 - IHI Model for Improvement
 - EMR Reports
- We redesigned the workflow in the office. The office flow was changed by having the reception staff ask the patient upon arrival if they had a flu or pneumonia vaccine so it could be noted on their check-in sheet. Nurses then asked the patient if they would like to receive a flu or pneumonia vaccine during the appointment. The physician addressed the vaccination as well.
- Resident physicians and residency clinical pharmacists did 1-minute talks periodically on local television news about the importance of flu and pneumonia vaccines. They mentioned that seniors could stop by our office to receive a free flu or pneumonia shot.

4. THINGS THAT WORKED BEST

Having all providers, nurses, and administrative staff focused on increasing vaccination numbers was the single most important factor in the success of the project. Holding the monthly meetings and continually restating our goals kept the project on the forefront. We celebrated every little accomplishment. After each Dine with a Doc presentation, we shared photos and talked about how well our young physicians interacted with the seniors. We praised them and reminded them of the importance of the service they were providing to the community. We increased our numbers in the clinic but the outreach in the community was by far our biggest accomplishment. We were able to reach individuals in rural areas, covering five counties in Indiana and Illinois.

5. LESSONS LEARNED

In our proposal we thought it would be great to partner with specialists including a cardiologist, nephrologist, and pulmonologist but we quickly learned during our planning phase that would not be a simple process. There were many obstacles (staff time, logistics, paperwork, etc.) and although the specialists agreed that it sounded like a great idea, it wasn't something that could be worked out in such a short amount of time. We also thought partnering with large local churches would work out but that also presented incredible challenges. Resident schedules are extremely complex and it was difficult to find days and times that worked for resident schedules as well as the church schedules to hold the immunization clinics. A few of the churches we approached were confused about the goal of the project and wanted us to complete insurance paperwork. We decided it would be best to invite the church members to our Dine with a Doc events instead.

6. **PERSONAL STORY.** Please provide a personal account that shows a difference was made as the result of the work you and your team have done on this project. It can be a story that reflects on a resident or on someone from the patient population you are serving.

At the start of the project, residents decided that Dine with a Doc was the perfect avenue to reach senior citizens in need of immunizations. During the proposal process, residents mentioned that they wanted to be able to interact with patients in their own communities. They wanted a chance to see where they lived and an opportunity to provide education beyond what could typically be covered in a 15 minute office visit. Essentially, the residents hoped to make a difference in the lives of the seniors with this grant. It was the typical altruistic nature of the young family physician. Once the project started, residents quickly realized they were gaining more than just an improved community medicine experience. They were gaining life experience. They were going into community centers, senior centers, and tiny rural churches to eat lunch with seniors with whom they'd never met. They soon began to recognize some individuals attended the events to hear the health information being delivered while others attended to eat a free meal. Healthcare disparities weren't just concepts covered in Wednesday afternoon didactics anymore. It was real life for many of the seniors in these communities. Residents started moving beyond the typical canned speeches prepared for the presentations and moved toward an "Ask the Doc Anything" platform. They encouraged individuals who needed medical care to contact the community health workers at our FQHC for assistance. They offered resources for mental health care and end of life decision making. They began carefully selecting handouts to take to each event and asking health educators to accompany them. Residents took time to listen to their stories and connected with the community members. The "Thank You's" from the seniors were endless and the praise overwhelming. Oftentimes, the seniors couldn't help but show their adoration and gratitude for these young family doctors. On one memorable occasion in Rockville, Indiana, a 92-year-old gentleman approached Drs. Tran and Isawi with tears streaming down his face. He said, *"I can't tell you how much we love having you here. It's such a blessing."* Doubtful any of the residents or faculty will forget that day.

Impact of Interventions – Complete information in Appendix 2.

Impact on Residents and Team Members

1. Provide a general description of those who worked on the quality-improvement and/or community-based project (e.g., 18 residents, 3 medical students, and 2 MPH graduate students).

Our project was a success, largely due to the commitment of our team and the support from our partners:

- 21 resident physician
- 1 DHSc – Education Coordinator
- 1 PhD – Behavioral Science Coordinator
- 7 faculty physicians (including Program Director)
- 1 PharmD – Clinical Pharmacist
- 2 PharmD – Pharmacy Residents
- 1 BSN – Clinical Educator
- 3 LPN – Nurses
- 1 MS – Quality Liaison
- 1 BS – Information Services Specialist
- 3 individuals from the Vigo County Department of Health (1 Nurse, 1 Director, 1 Public Health Educator)
- 20 BSN Indiana State University School of Nursing students
- 2 Indiana State University School of Nursing PhD faculty
- Valley Professionals Community Health Center front office & Nursing Staff

2. Address the current and future impacts of this project on the residents &/or members of the team.

The residents, faculty, nursing students, pharmacy residents, and other team members have learned so much about healthcare disparities from this project. They recognize that disparities exist in their own communities. Residents are much more knowledgeable about community resources available and places to refer patients for assistance. They have all gained experience in constructing a quality improvement project and identifying successes and failures. Residents, faculty, and nursing students want to continue supporting Senior Education Ministries by continuing to facilitate Dine with a Doc events.

Education and Outreach

1. Summary of accomplishments.

- 19 Dine with a Doc presentations
- 2 immunization booths at large health fairs
- 2 immunization booths at mini medical school presentations
- Improved immunization process workflow in the clinic
- A more robust Community Medicine Curriculum for residents
- Increased pneumonia vaccine rates
- Increased partnerships with other organizations, promoting inter-professional education

2. List of clinical & patient education and outreach materials produced or used in this project.

- Alzheimer’s Fact Sheet
- Skin Cancer Presentation
- Depression & PTSD Presentation
- Hypertension Presentation
- Osteoporosis Presentation
- COPD Presentation
- 4Reasons to Learn More about COPD
- Quality Improvement Organization – Atom Alliance – Adult Immunization Record
- Cornerstones4Care – Foot care for people with diabetes – Patient Handout
- How to Lower your BP without Medicine
- WebMD Portion Size Guide
- Serving Size Comparison Chart
- Choose MyPlate.gov tip sheet
- GSK Make healthier snack choices Handout
- Diabetes – Choose MyPlate.gov Handout
- Cornerstones4Care Reading a Nutrition Facts label Handout
- Hidden Sugars and Diabetes Handout
- By the Numbers Handout
- Good Fats, Bad Fats Handout

3. List of presentations with the date(s) and brief description of the audience.

Dine with a Doc - Schedule						
	City	Date	Location	Presentation Topic	Audience	Resident/Faculty
1	Brazil, IN	10/7/2015	Senior Center	Hypertension	avg 20 Senior Citizens	Tothala, McGuire, Mattox
2	West Terre Haute, IN	10/13/2015	Providence Housing Club	Depression	avg 25 Senior Citizens	Baker, McGuire, Mattox

3	Clinton, IN	10/21/2015	Victory Baptist Church	POST Forms	avg 15 Senior Citizens	Hatfield, McGuire, VPCHC Nursing Staff
4	Greencastle, IN	10/26/2015	Putnam County Hospital	Respiratory Care	70 Senior Citizens	McGuire, Mattox
5	Terre Haute, IN	10/28/2015	Wabash Activity Center	Immunizations	avg 50 Senior Citizens	Mattox & Brown
6	Brazil, IN	11/4/2015	Senior Center	Preventive Care	avg 20 Senior Citizens	Tran & Isawi, McGuire
7	West Terre Haute, IN	11/10/2015	Providence Housing Club	Hypertension	avg 25 Senior Citizens	Martin, McGuire, Mattox
8	Clinton, IN	11/18/2015	Victory Baptist Church	Osteoporosis	avg 15 Senior Citizens	Cundiff, McGuire
9	Brazil, IN	12/2/2015	Senior Center	Preventive Care	avg 20 Senior Citizens	Titzer, McGuire & Stangle
10	Rockville, IN	12/3/2015	Rockville 1st United Methodist Church	Chest Pain	avg 45 Senior Citizens	Khalaf & Walker, McGuire
11	West Terre Haute, IN	12/8/2015	Providence Housing Club	Nutrition	avg 25 Senior Citizens	Aber, Stangle & McGuire
12	Paris, IL	12/9/2015	Chester P. Sutton Community Center	Depression & PTSD	avg 45 Senior Citizens	Cadick, McGuire
13	Clinton, IN	12/16/2015	Victory Baptist Church	Immunizations and Preventive Care	avg 15 Senior Citizens	Watt, McGuire & Stangle
14	Terre Haute, IN	12/16/2015	Wabash Activity Center	Polypharmacy	avg 50 Senior Citizens	Dario, Wolf & Slattery
15	Brazil, IN	2/3/2016	Senior Center	Depression & PTSD	avg 20 Senior Citizens	Cadick
16	Clinton, IN	2/17/2016	Victory Baptist Church	Diabetes & Hypertension	avg 15 Senior Citizens	Andonian
17	Marshall, IL	3/11/2016	Trinity United Methodist Church	Skin Cancer	35 Senior Citizens	Hatfield & McGuire
18	Rockville, IN	4/7/2016	Rockville 1st United Methodist Church	Skin Cancer	avg 50 Senior Citizens	Tran, McGuire
19	Paris, IL	5/4/2016	Chester P. Sutton Community Center	Skin Cancer	avg 45 Senior Citizens	Fitzsimmons & Anderson

Health Fair - Schedule

	City	Date	Location	Event	Audience	Resident/Faculty
20	Terre Haute, IN	10/24/2015	Boys and Girls Club	IUSM Community Health Fair & Union Hospital Children's Classic Run	500 - The health fair was open to the public and consisted of individuals from the Wabash Valley (covering 5 counties in Indiana and Illinois). Young adults to senior citizens stopped by our booth.	McGuire, McDonald, Williams, Kigorwe, Mallari, Anderson, Wolf, ISU School of Nursing
21	Terre Haute, IN	11/20/2015	Booker T. Washington Community Health Center	Minority Health Coalition Community Health Fair	350 - The health fair was open to the public and consisted of individuals from the Wabash Valley (covering 5 counties in Indiana and Illinois). Young adults to senior citizens stopped by our booth.	McGuire, ISU School of Nursing, Vigo County Dept. of Health
22	Terre Haute, IN	3/1/2016	Landsbaum Center for Health Education	Mini Medical School - Health Screenings and Presentation (Heart Disease)	100 - The health fair was open to the public and consisted of individuals from the Wabash Valley (covering 5 counties in Indiana and Illinois). Young adults to senior citizens stopped by our booth.	Anderson & McGuire, ISU School of Nursing
23	Terre Haute, IN	3/8/2016	Landsbaum Center for Health Education	Mini Medical School - Health Screenings and Presentation (Depression in the Senior Population)	100 - The health fair was open to the public and consisted of individuals from the Wabash Valley (covering 5 counties in Indiana and Illinois). Young adults to senior citizens stopped by our booth.	McGuire, ISU School of Nursing

4. Include the materials developed and implemented as an attachment (in a jpg or pdf format) or provide the web address where they can be accessed.

Sustainability: Discuss how the FMRP and residents will carry best practices and gains into the future.

The Union Hospital Family Medicine Residency will continue to focus on increasing flu and pneumonia vaccination rates each year. We will maintain our change in office workflow and continue monthly updates on progress. We will put together a planning team each season to ensure the project stays on track. We are planning friendly competitions for each of our health care teams next season as an additional intervention. As a program, we have renewed our commitment with Senior Education Ministries and will be continuing to support them by facilitating monthly Dine with a Doc events. We are also planning to partner with a local indigent care clinic to provide flu and pneumonia vaccinations for the upcoming season.

Case Study Information– Complete contact information in Appendix 3.

Project Impact Statement for Funders: What would you like those who supported this project to know about this project and the benefit you, your patients, and/or your Family Medicine residency program derived from receiving this grant?

Not only did this project provide an incredible learning opportunity for our residents and faculty but it also enabled them to engage in inter-professional partnerships. They worked with the Indiana Minority Health Coalition, the Vigo County Department of Health, ISU School of Nursing, pharmacy residents, nurses, community health workers, health educators, pharmacists, psychologists, receptionists, information services staff, and quality personnel. By partnering with these healthcare professionals, they were able to put together more resources for the seniors and in the process they built connections. They traveled throughout 5 counties in Indiana and Illinois and had the chance to see why we are designated as a medically underserved population (MUP). It was an eye-opening experience for many of our residents. Prior to starting this project, residents desired the opportunity to do community outreach that would make a difference – engagement in activities that would make them feel good about being family doctors. We achieved that and much more.

Appendix 1: PATIENT DATA for 2015-2016 Senior Immunization Grant Award

PLEASE PROVIDE THE DATA IN THE FORMAT THAT IT IS BEING REQUESTED. If you want to express your results in a different way, please complete the info below, as requested, and then include the additional information labeled, "Attachment to Appendix 1".

I. INFLUENZA VACCINE INFORMATION: 2016-2016 Flu Season

- Ia. Total # of seniors (adults aged ≥65) served by your residency who were **eligible** for an *influenza* vaccine from 9/1/15 - 3/31/16: 2,180
- Ib. Total # of seniors who **received** an *influenza vaccine* from 9/1/15 - 3/31/16: 1,000
- Ic. Historical Data – Enter data in the table by clicking on the box and typing in the numbers

Seniors (age 65 and older)	2013-2014 Flu Season (Sep 2013-Mar 2014)	2014-2015 Flu Season (Sep 2014-Mar 2015)	2015-2016 Flu Season (Sep 2015-Mar 2016)
Influenza Vaccine Rate (%)	23.85 %	22.03 %	45.87 %
Numerator/Denominator (absolute numbers used to calculate rate)	606/2541	687/3119	1000/2180

- Id. Summary of methodology used to obtain the data and information:
Electronic health record database query

II. PNEUMOCOCCAL VACCINE INFORMATION: 2015-2016 Flu Season

*Note: New ACIP recommendations for PCV13 and PPSV23 use in adults aged ≥65 were issued on 9/19/14.

- Ila. Total # of seniors who were **eligible for a PPSV23** vaccine who were served by your residency from 4/1/15 - 3/31/16: 1,651
- Ilb. Total # of seniors who **received a PPSV23** vaccine from 4/1/15 - 3/31/16: 822
- Ilc. Historical Data – Enter data in the table by clicking on the box and typing in the numbers

Seniors (age 65 and older)	2013-2014 (Apr 2013-Mar 2014)	2014-2015 (Apr 2014-Mar 2015)	2015-2016 (Apr 2015-Mar 2016)
PPSV23 Pneumococcal Vaccine Rate (%)	47.75 %	54.31 %	49.79 %
PPSV23 Numerator/Denominator (numbers used to calculate rate)	636/1332	681/1254	822/1651
*Number of seniors who received PCV13 during specific time period			Did not track info separately in EHR

- IId. Summary of methodology used to obtain the data and information:
Electronic health record database query

III. COMMUNITY-BASED PROJECTS ONLY: INFLUENZA & PNEUMOCOCCAL INFORMATION: 2015-2016 Flu Season

- IIIa. Total # of seniors served by this project through community outreach from 9/1/15 – 3/31/16: Through our community events and presentations, we reached a total of 1,655 seniors with educational resources, and healthcare screenings.
- IIIb. Total # of seniors served through community outreach who **received an influenza vaccine** from 9/1/15 – 3/31/16: 102
- Is this data included in the data presented in question 1b and 1c? Yes No
- IIIc. Total # of seniors served through community outreach who **received a PPSV23 vaccine** from 9/1/15 – 3/31/16: 30
- Is this data included in data presented in 2c? Yes No
- IIId. Total # of seniors who **received a PCV13 vaccine** from 9/1/15 – 3/31/16: [Click here to enter text.](#)
- Is this data included in data presented in 2c? Yes No
- IIIe. Summary of methodology used to obtain the data and information:
Copies of immunization forms completed by the patient

Appendix 2. IMMUNIZATION INTERVENTIONS: DEGREE OF IMPACT

Instructions:

- Place your cursor on the box and click to check the box.
- Please check only one box per row.
- Evaluate the impact of the intervention on increasing senior influenza and pneumococcal immunization rates.
- Add notes below the table, as needed, if you want to explain further.

IMMUNIZATION INTERVENTIONS	HIGH Impact	SOME Impact	LOW Impact	NO Impact	NEGATIVE Impact	Did NOT Use
Clinic Based Education	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community-Wide Education	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community &/or Local Government Partnerships	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Home Visit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mobile Clinic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Immunization Champion System	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IIS at Population Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IIS at point of Clinical Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Clinic EMR linked with State Immunization Registry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Patient Incentive Rewards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient Reminder and Recall Systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient-Held Paper Immunization Records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provider Assessment & Feedback	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provider Education	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provider Reminders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provider Friendly Competitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Standing Orders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced Cost of Vaccine \$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transportation reimbursement or vouchers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
List Other Interventions Below (not listed or to be more specific about your intervention). Add rows as needed						
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Interventions and Definitions below were extracted from the Community Guide <http://www.thecommunityguide.org/vaccines/index.html>

Clinic Based Education approaches may include the use of brochures, videotapes, posters, vaccine information statements (VIS), electronic bulletin boards, and face-to-face sessions designed to inform and motivate patients to obtain recommended vaccinations in the clinic. These activities are usually delivered in advance of and in addition to the client-provider interaction

Community-wide Education information is disseminated with the goal of informing, encouraging, and motivating individuals to seek recommended vaccinations. Content generally focuses on vaccination risks and benefits, as well as where and when vaccinations can be obtained.

Immunization information systems (IIS) are confidential, computerized, population-based systems that collect and consolidate vaccination data from vaccination providers that can be used in designing and sustaining effective immunization strategies.

Patient Incentive Rewards may be monetary or non-monetary, and they may be given to patients for keeping an appointment, receiving a vaccination, returning for a vaccination series, or producing documentation of vaccination status. Rewards are typically small.

\$ Reduced Cost of Vaccine examples include paying for vaccination or administration or reducing co-payments at the point-of-service.

NOTES:

For our project, physician suggestion or encouragement to the patient to get a vaccination had the greatest impact – in the office, out in the community, at the health fairs, and even when our physicians spoke about vaccinations on the news.

Union Hospital Family Medicine Residency

RESIDENTS GAIN NEW OUTLOOK THROUGH POTENT OUTREACH

It was evaluation time for the Union Hospital Family Medicine (UHFM) residents, and the reviews were mixed at best. Under discussion was a recently completed community medicine assignment. It was clear that the residents craved a community medicine experience that allowed them to serve the community in a meaningful way.

Residents' feedback served as a call to action for UHFM's Education Coordinator Nicole McGuire, DHSc, and UHFM faculty. So when Dr. McGuire saw the AAFP Foundation's 2015 Senior Immunization Grant Award announcement, she spotted a means for taking residents outside hospital walls to engage with the community's older population.

The AAFP Foundation Senior Immunization Grant Awards recognize Family Medicine residency programs whose residents implement and report on a quality improvement and/or community-based project designed to increase influenza and pneumococcal vaccination rates in patients age 65 and older.

"I took this opportunity to our Program Evaluation Committee (comprised of Family Medicine residents and faculty) and received enthusiastic endorsement," Dr. McGuire said. She then recruited residents to develop a quality improvement plan for providing flu vaccines to approximately 1,250 patients age 65+ and pneumococcal vaccines to 125 seniors

(an increase in vaccination rates of 30% and 25%, respectively).

"From the beginning, it was important to make everyone feel a part of the team." A redesign of the office work flow brought front office and nursing staff on board almost immediately. "Since reception staff make the initial patient contact, it made sense for them to inquire about the patient's flu and pneumonia vaccination status at check-in," said Dr. McGuire. Vaccinations previously received at the clinic or elsewhere were recorded in the patient's Electronic Medical Record (EMR). Patients not current with vaccinations were flagged for follow-up by the nurse via a notation on the registration cover sheet. For most patients, "standing orders" from the physician gave the nurse authority to administer the vaccine(s) with the patient's approval. In all cases, the nurse would alert the physician if the patient expressed concerns or needed additional information about either vaccine.

To keep efforts focused on increasing vaccination numbers, monthly meetings to touch base on interventions and progress were held immediately following didactics. All staff—providers, nurses and administrative personnel—were included in these regular discussions. "We also adopted a strategy of celebrating every accomplishment (no matter how small), praising with photos, sharing statistics on progress, and constantly

reinforcing the message, ‘We can’t do this alone! It’s not just about the physicians—it’s also about the nurses on the front line and staff who know our patients well and can identify who needs vaccines,’” said Dr. McGuire.

Quality improvement (QI) methods were an integral part of the project’s execution and evaluation. During Wednesday afternoons, didactic time was reserved for monthly sessions educating residents and faculty physicians on the PDSA cycle of continual improvement (Plan, Do, Study, Act). “Once the basics were covered we tried to apply the model to each stage of the project’s execution,” said Dr. McGuire. A disconnect between proposed activities and what actually happened during implementation provided a perfect learning opportunity.

According to Dr. McGuire, “We thought partnering with specialist physicians (e.g., cardiologists, nephrologists, pulmonologists) who serve a large geriatric population but do not offer flu or pneumonia vaccinations during office visits would be a no-brainer. But we quickly learned that this would not be a simple process. There were many obstacles (staff time, logistics, paperwork, etc.) and although it sounded like a great idea, it could not be easily worked prior to the beginning of flu season. In applying the whole PDSA model to this component, residents decided to go back to the drawing board. ‘Maybe we can’t use specialists to help us reach our immunization goals so let’s use health fairs instead and have the specialists hang posters in their offices as well.’ They learned to link PDSA cycle concepts to every piece of their work. Consequently, everyone stayed clear on what they were doing and why they were doing it.”

Although workflow changes resulted in increased vaccination in the clinic, outreach in

the community was by far the most successful component. “By capitalizing on existing community partnerships, we were able to reach individuals in rural areas, covering five counties in west central Indiana and east central Illinois,” reported Dr. McGuire.

Community based immunization efforts took a variety of forms and all were successful to some degree. Project team members set up booths at two large community health fairs sponsored by the Indiana Minority Health Coalition and Indiana University School of Medicine to offer free flu and pneumonia vaccines. Collaboration with the Vigo County Department of Health resulted in the referral of individuals 65 and older who were otherwise ineligible to receive free vaccines, and students at Indiana State University School of Nursing provided the immunizations. The team also set up booths at two “Mini Medical School” presentations, both open to the public. Social media posts augmented by newspaper, radio and TV ads placed by Union Hospital’s marketing department helped publicize the events.

Weekly “Dine with a Doc” events sponsored by Senior Education Ministries (a local faith-based organization) presented an almost ideal opportunity for outreach. Held at community centers, senior centers and tiny rural churches, “Dine with a Doc” events offer seniors an opportunity for fellowship and preventive health care education—all with the added incentive of free meals and wellness screenings. In total, UHFM resident/faculty physicians attended 19 weekly Dine with a Doc events where they shared lunch and offered a short presentation on flu and pneumonia vaccinations and a variety of other healthcare topics, followed by time for questions and answers. Flu and pneumonia vaccines were

always available to be administered on the spot. The physicians also made themselves available for one-on-one questions with each of the seniors.

“I have to say that in the beginning, a lot of the residents weren’t very interested in volunteering for the Dine with a Doc events,” Dr. McGuire now ruefully admits. “At first, I had to just assign someone to go to a certain place at a certain time.” Residents felt intimidated, had limited public speaking experience and hadn’t had much interaction with seniors who weren’t their patients. But as the project went along and they got a feel for it, their whole mentality changed. It wasn’t long before the residents started moving beyond the typical canned speeches and toward an ‘Ask the Doc Anything’ platform.”

It was the one-on-one conversations that proved the most transformative, revealing to the residents a host of unmet needs in areas ranging from hypertension and diabetes to mental health care and end of life decision-making. “They began to carefully curate handouts to take to each event, sometimes asking health educators to accompany them,” reports Dr. McGuire. “They encouraged individuals who needed medical care to contact the community health workers at our FQHC for assistance. They came to realize that healthcare disparities aren’t just concepts covered in Wednesday afternoon didactics--this is ‘real life’ for many of the seniors in these communities.”

Residents’ time and attention was met with a well-spring of gratitude. Typical comments were, “Thank you so much for taking the time to talk to me about (fill in the blank),” “I really hope you stay in the area after you graduate from the program,” and even “I’d really like to switch to you as my physician.” On one

memorable occasion, a 92-year old gentleman approached the physicians with tears streaming down his face. “I can’t tell you how much we love having you here. It’s such a blessing.”

Although project immunization results were modest, Dr. McGuire considers this just the beginning. “It’s not all we hoped for but it opened the door for bigger and better numbers in subsequent years.” Looking to the future, the Union Hospital Family Medicine Residency will maintain changes to office workflow and stay focused on increasing flu and pneumonia vaccination rates each year. UHFM has renewed its commitment with the Senior Education Ministries and will continue to support them by facilitating monthly Dine with a Doc events. They are also planning to partner with a local indigent care clinic to provide flu and pneumonia vaccinations for the upcoming season and will involve specialists in the project as well.

Perhaps most significant is the impact the project has had on how residents view their future roles in Family Medicine. Some have discovered “this is what I’m meant to do”. As a result of such potent “real world” outreach experiences these residents are so much more forward-looking, can visualize themselves in leadership roles and see that they personally can have an impact beyond hospital walls.

“Without a doubt, I would say that the residents benefitted greatly from this grant,” concluded Dr. McGuire. “I kid you not, there were a few times I’d see a resident walk away from a Dine with a Doc session completely choked up, so palpable were these interactions. I know the grant was for \$10,000, but the impact on our residents and program was worth millions.”