



**SENIOR IMMUNIZATION GRANT AWARDS  
SAMPLE APPLICATION #2: QI-CB Project**

[www.aafpfoundation.org/immunizationawards](http://www.aafpfoundation.org/immunizationawards)

THIS SAMPLE APPLICATION IS DERIVED FROM AN APPLICATION FUNDED IN 2015

**I. APPLICANT INFORMATION**

Name of FMRP: **XXXX** Website URL: **XXXX**

Name of project lead (if different from Program Director): **ABC** Program Director's name: **DEF**

I certify that the Program Director has approved submission of this application.

Street Address including city, state, and zip code: **XXXX** Email: **XXX**

Setting of FMRP (please mark all that apply)  Rural  Urban/Inner City  Suburban

Number of residents in your program: **27**

Type of Senior Immunization Project you will be implementing (mark all that apply):

Quality Improvement  Community-Based

Has your residency previously conducted quality improvement or community outreach projects to improve immunization rates?  No  Yes If yes, what aspects did the project address?

**II. CLINICAL POPULATION DATA**

**Please describe the methodology used to obtain the data/information below (e.g., electronic health records data base query, billing records, paper chart extractions, use of state immunization registries, etc.):** Query of electronic medical record (EPIC) and electronic scheduling (IDX) by looking at procedure codes for pneumovax and influenza from 9/2/14-12/30/14, race data as self-identified by the patient and financial class.

**Total number of patients served by your residency in the past year:** 12,975

**Number of seniors, age 65 and older, served by your residency in the past year:** 2,040

**% Male** 37 **% Female** 63

**% by Racial/Ethnic groups:** African American 31.7% Asian 3.5% Caucasian 54.2% (identified as White in our EMR) Hispanic or Latino not an option in race data questions to patients Native American 0.2%

Other (please define your groups): 9.8% (this includes Hispanic/Latino data by our EMR data)  
Unknown 0.5%

**% Medicaid insurance** 4.3% **% Medicare insurance** 84.9% (1.0% Medicare supplement)

**% Private insurance** (includes commercial, BCBS, HMOs, PPOs) 9.8% **% Uninsured** 0.7%

**If patients are vaccinated in settings other than your residency, how does your residency get notified?** Pharmacies and acute care clinics may notify us by faxing records. Patients may notify as well during their office visit.

### III. **COMMUNITY POPULATION DATA** (This section required only if project is community-based)

**Summary of methodology used to obtain the data/information below (e.g., US Census Bureau, American Community Survey, American Fact Finder, etc.):** On February 25, 2015 the US Census Bureau was accessed at <http://quickfacts.census.gov/qfd/states/20/20209.html>, searching for data specifically from WXY County. Additional data regarding vaccination rates was obtained from KDHE BRFS data at <http://www.xxx.gov/brfss/Questionnaires/quest2013.html#Immunization>.

**Describe the geographic area that defines your community population:** The Family Medicine Residency (FMR) serves a wide geographic area both in STATE and STATE2. The clinic and hospital are both in STATE City, WXY County, STATE, which is where the largest proportion of the clinic patients reside.

**Total number of seniors age 65 or older in your defined community:** 17,483 reside in X County, 15,307 reside specifically in CITY, STATE

**Demographic data on seniors in community (such as income, racial/ethnic groups, and other important factors):** Seniors > 65 make up 21.3% of the population. 9.1% are male and 12.2% are female. Racial distribution: White--54.6%, African American--25.2%, Asian--2.5%, Other--13%. Hispanic--26.4%. Education: < 9th grade--9.5%, some high school--12%, high school--35.2%, some college--21.2%, associate degree--7%, bachelor's degree--10.1%, graduate or professional degree--5%. Income (household): < \$10,000--11.1%, \$10,000-\$30,000--27.3%, \$30,000-\$60,000--31.2%, \$60,000-\$100,000--21.1%, > \$100,000--10.5%.

According to BRFS data, in the state of STATE adults ages 65 and older, 34.9% of the insured do not get a influenza vaccine, 53.8% of uninsured do not receive this vaccine. 49.3% of Black or African American, 33.1% urban, and 37.4% of those with only a highschool degree or GED do not receive the influenza vaccine. There is no documented data for the pneumococcal vaccine.

### IV. **DESCRIPTION OF PROPOSED PROJECT** (Information requested in **Section IV** may be submitted as an attachment or in a separate file)

*Reminder: Senior Immunization Grant Awards are intended to recognize FMRPs whose residents implement and report on a quality improvement &/or community-based project that is designed to increase influenza and pneumococcal vaccination rates in patients who are age 65 and older, especially in underserved communities, during the 2015-2016 influenza season.*

**TITLE** Improving Preventive Health of Older Adults in WXY County through Improved Influenza and Pneumonia Vaccine Rates

#### **IMPACT ON RESIDENTS**

**Describe number of residents that will participate and how the project will benefit the residents?** We will identify 2-3 resident physicians who will help lead and implement this project. The residents who help lead this project will learn population management through quality improvement and will be able to implement this into their training, which is required for graduation and to be a successful family physician.

In addition, all 27 residents will be involved in this project by increasing the vaccination rate in the clinic through their patient encounters. We have been continually working to increase resident awareness of vaccination schedules, more specifically children and adolescents, therefore this grant will be an opportunity to do so for immunizations in the older adult. The project will also have a community outreach component that will expose lead residents to community and population health, allowing them to be more intimately involved in the community in which they provide care.

### **TARGET GROUP**

**Define target group for this grant award and the number of patients age 65 and older that will be impacted.**

This project will directly impact our older adults in our Family Medicine Clinic (FMC) and community members who regularly attend Lxxx Center on Aging (LCOA) events. LCOA not only houses the Geriatrics Division for the KU Family Medicine department, but also Neurology which has clinics in this center. The LCOA also hosts scheduled weekly and monthly classes and lunches that are open to the community, target older adults, and are well attended. Therefore the outreach to LCOA will cast a wide net to other departments, as well as community members who regularly attend LCOA events. Lastly, the project will directly impact home bound seniors that have been and are being identified by the WXY/ZAB Aging & Disability Resource Center, previously known as the Area Agency on Aging.

FMC: Currently, 2,345 adults more than 65 years old are seen in the FMC and 634 were seen during the 3 month period of 9/1-12/30/14. The goal would be to increase the number of older adults presenting for influenza vaccination as well as increase the rate 15% from the previous year. The goal would be to have 35% of our older adults vaccinated for PSV 23. For older adults turning 65 in this calendar year, the goal will be to vaccinate 50% with PCV 13 as this is a new guideline and none will have previously been vaccinated.

Lxxx Center on Aging: Previous events have been highly successful at the LCOA as this center has administration dedicated towards coordinating these events. The goal will be to vaccinate 100 older adults, whether influenza, PCV 13, PSV 23, or a combination at two half day vaccination clinics.

Home visit: The Geriatrics Division has a working relationship with the STATE Aging & Disability Center. This center has a homebound program to help older adults in the community get reconnected, whether with health insurance, nutrition, mental health, etc. These individuals are at higher risk of not having had medical care and more unlikely to be vaccinated. We plan to vaccinate 20 homebound older adults with influenza, PCV 13 and PSV 23 during a home visit directed and provided by the STATE Aging & Disability Center homebound program.

**Describe factors that define your target group as a medically underserved population.**

Our core target group includes older adults with transportation issues, low health literacy as well as immigrants with limited knowledge of and access to the health care system. Almost 40% make less than \$30,000/year. Census data has determined that 12.8% of seniors in WXY County live in poverty.

**Summarize recruitment and/or outreach strategies for your target group?** Different strategies will be applied for each of the three identified populations, FMC, LCOA and the homebound population. For the FMC, provider and clinic staff education will raise awareness of vaccination guidelines, while directly contacting the FMC patients through mailers, phone calls or MyChart to recruit. MyChart is the EMR's secure version of patient email with the FMC. Outreach to the LCOA community will be through two vaccination clinics offered during flu season, flyers will be passed out at the scheduled events and posted in the halls so the community is aware. The homebound older adults will be recruited through the WXY/ZAB Aging & Disability Resource Center with the assistance of their assigned case workers, and outreach to these individuals will be to provide the vaccines to them in their homes.

### **BARRIERS AND CHALLENGES**

**Describe challenges and barriers in your target group that deter them from receiving influenza and pneumococcal vaccinations.** Health care access is a barrier, whether through transportation, finances or healthy literacy. Public transportation is fair at best in the STATE City Metropolitan area and the clinic has additional issues with parking. Many older adults live on a fixed income and must make choices in regards to their health based on this factor. Lastly, as health literacy is low and access to care is difficult, knowledge and awareness of the new guidelines for PCV 13 recently released by the CDC is likely limited.

### **GOALS, OBJECTIVES, ACTIVITIES, AND OUTCOMES**

**Describe the proposed project, which will be put in place to achieve improved influenza and pneumococcal immunization rates in seniors age 65 and older during the 2015-2016 flu season Your description should include S.M.A.R.T. goals and objectives; activities that support your objectives; as well as outcomes and how they will be measured.**

Goal 1: Quality Improvement with in the KU Family Medicine Clinic (FMC) to increase vaccination rates through process improvement.

Objectives and Activities:

A. We will develop training sessions for the new CDC Pneumonia vaccination schedule for adults 65 and older, specifically discussing PCV 13 and PSV 23. Training will include educating and improving awareness of CDC guidelines by attending and resident physicians and nursing staff. Training sessions will be held over a lunch hour, meals will be provided as incentive for staff to attend.

- 2-3 residents identified as lead residents to assist in this project will develop the training materials. This will give the residents the ability to improve on leadership skills, teaching skills and improve their understanding of population health.

B. We will work to improve work flow (process improvement) to capture all patients who are 65 and older needing the three different vaccines, influenza, PCV 13 and/or PSV 23 vaccine.

- We will work to support nursing and provider staff to understand how to utilize the EMR to document vaccines appropriately so they may tracked more easily and accurately. As part of EMR optimization, we will ensure that patients are actively aware of the MyChart function within the EMR, a meaningful use

item for our PCMH designation. These process items will be addressed in the training sessions discussed in Item A.

- We will identify the following two sets of older adults through EMR query: patients turning 65 years old between September 1, 2015 and February 29, 2016 and adults who are more than 65.
- Outreach to patients turning 65 years old during flu season will include phone calls made by a research assistant. If the patient has signed up for MyChart, then they will receive a message as well. The outreach will remind them they are due for an influenza vaccine, and will also inform them of the need for PCV 13.
- For patients more than 65 years old, outreach will remind them they are due for an influenza vaccine and will also address the need for PCV 13 or PSV 23. Outreach will be in the form of MyChart messages or mailers being sent to patients. For those patients with MyChart, if they have not responded after 6 weeks we will send a mailer. The mailer will also give the patient the option to state if they have already received either of these vaccines and ask them to complete and return the mailer with when and where so that our EMR may be updated. Mailers will also be translated by fluent FMC staff to at least three languages spoken by patients in the FMC clinic (Spanish, Bhutanese, Nepali) as there is a large refugee population in the area. (The translation will be performed at no additional cost to the study as translation is part of the normal duties of several clinic staff.) The research assistant will go through the returned mailers, tracking responses and updating the EMR.

#### Outcomes and Measurements:

- A. We anticipate improved knowledge of CDC guidelines for vaccinations of older adults as well as retention of this knowledge. We will measure the impact of the training sessions by giving a pre-test, immediate post-test and 6 month post-test to the providers and nursing staff to assess knowledge of CDC vaccination guidelines for older adults.
- B. We expect to see improvement in the vaccination rate for all three vaccines. We will measure the response rate of mailers, phone calls, and MyChart, comparing which is more successful. We will also track the number of older adults receiving the influenza, PCV 13 and PSV 23 vaccines through the EMR. We will survey patients upon arrival about which form of communication was most beneficial to them to determine where efforts should be focused in future years.
- C. Improved utilization of the EMR by correct documentation of vaccines and increased number of patients with active MyChart accounts. We will measure the rate of correct documentation of influenza, PCV 13 and PSV 23 vaccines in the EMR by completing random chart audits of the patients 65 and older who come to clinic. We will measure a baseline in August 2015 prior to the start of flu season, before the training sessions. We will also query the EMR for number of older adults with active MyChart accounts compared to the end of the flu season.

Goal 2: Improved Community Access to Vaccines through Two Community-based Initiatives

Objectives and Activities:

A. Lxxx Center on Aging Outreach: The Lxxx Center on Aging (LCOA) is a center for older adults affiliated with KUMC . LCOA has frequent outreach programs for older adults that are free to the community, including Brown Bag lunch series, fitness center classes, and arts and crafts classes. Through the proposed project, LCOA Outreach will offer two vaccination clinics during the flu season that will be coordinated in conjunction with the community outreach program through LCOA. The vaccination clinics will be staffed by an LPN, as well as the lead residents on this project. Previously, KUMC offered a drive-through influenza vaccine program that was successful and utilized by older adults. We anticipate success with our proposed vaccination clinic given the history of success in LCOA with advertising to the community and their reported high turnout at planned events.

B. WXY/ZAB Aging & Disability Resource Center: We will provide outreach to the homebound population by working with the WXY/ZAB Aging & Disability Resource Center. This center has multiple homebound adults who would benefit from being offered vaccinations in the home. We will plan to identify twenty homebound older adults by working with the Aging & Disability Resource Center assigned case workers to survey immunization status and need. Preliminary conversations with the center have been positive in regards to the need of this population.

Outcomes and Measurements:

A. The goal will be to vaccinate 100 individuals at the vaccination clinics held at LCOA, whether influenza, PCV 13 or PSV 23. We will track our advertisement at LCOA events and survey patients who present for the vaccination clinic to ask them how they heard about the clinic.

B. For outreach, the goal will be to immunize 20 older, homebound adults 65 and over against influenza and the appropriate pneumococcal vaccine, whether PCV 13 or 23.

C. We will improve access to primary care for homebound older adults. We will track the number of these older adults who do not have an identified primary care physician and work to connect them with the Home Visiting Program through the LCOA.



**IMPLEMENTATION PLAN EXPRESSED AS A TIME LINE WITH MAJOR MILESTONES**

[NOTE: In addition to major milestones your project will achieve, please include the following six important activities & dates in your timeline: 1) Detailed Project Outline to AAFP Foundation by August 1, 2014; 2) Interim Report to AAFP Foundation by December 15, 2014; 3) Mid-Evaluation Conference Call January 2016; 4) Final Evaluation Report to AAFP Foundation by May 5, 2016; and 5) Poster Abstract by May 16; 6) Presentation of Results at National Conference July 28-30, 2016]

- 1) We will identify lead residents (2-3) for the project; we will have a planning meeting with lead residents, vaccination nurse and research assistant to develop the final points of implementation; and we will prepare and submit Detailed Project Outline to AAFP Foundation by August 15, 2015
- 2) By August 30, 2015: Educational and training materials developed by lead resident with Drs. H and K. Completed random chart audit to determine rate of correct EMR use and MyChart active accounts.
- 3) By mid-September: Mailer development and design finalized with print order placed. MyChart "smart phrase" developed. Develop and distribute vaccination clinic advertisement materials at Lxxx Center.
- 4) By September 30, 2015: Identify all patients 65 and older in the clinic and separately those turning 65 during the flu season (between 9/1/2015 and 2/29/2016). All three separate training sessions will have been held for nursing staff, attending physicians, and resident physicians.
- 5) By October 1, 2015: Mailers sent out or MyChart notifications sent to ALL patients identified in item 4; Call only patients identified in item 4 who are turning 65 during the flu season. Identify 20 eligible homebound patients through the WXY/ZAB Aging & Disability Resource Center
- 6) October 15, 2015: Half-day vaccination clinic at Lxxx Center on Aging
- 7) By November 15, 2015: Identify patients who received MyChart notifications and have not responded via MyChart or have no record of receiving influenza and/or pneumonia vaccines in their records. These patients will be sent mailers.
- 8) December 1, 2015: Half-day vaccination clinic at Lxxx Center on Aging
- 9) By December 15, 2015: Administer vaccinations at home visits to 20 homebound patients. Submit Interim Report to AAFP Foundation by December 15, 2015
- 10) Complete Mid-Evaluation Conference Call January 2016
- 11) By April 15, 2016: All vaccination rate data will be finalized and evaluated.
- 12) Submit Final Evaluation Report to AAFP Foundation by May 5, 2016
- 13) Poster Abstract by May 16, 2016
- 14) Presentation of Results at National Conference July 28-30, 2016

**V. INFLUENZA AND PNEUMOCOCCAL VACCINE RATES for AGE 65+**

VACCINES for 65+	2012-2013 Flu Season (Sep 2012-Mar 2013) %	2013-2014 Flu Season (Sep 2013-Mar 2014) %	2014-2015 Partial (Sep 2014-Jan 2015) %
<b>Influenza</b> (65+ y.o)	46.00	53.00	59.60
<b>Pneumococcal</b> (65+ y.o) Percent of population who has ever received one pneumovax	25.00	28.00	32.00

**Summary of methodology used to obtain the data above (e.g., electronic health records data base query, billing records, paper chart extractions, use of state immunization registries, etc.):** Queried our EMR using the procedure code for influenza vaccine and pneumococcal vaccine given from 9/2/14-12/30/14. There has been some difficulty identifying vaccination rates in our clinic due to inconsistencies in how different providers and staff use the EMR. We feel the influenza data is more accurate, the pneumococcal rate was calculated using previous years data. We are able to state with certainty that 9.5% of older adults over 65 received the pneumococcal vaccine during the influenza season (9/2/14-12/30/14), therefore it is likely that 32% were vaccinated during the 2014-2015. Through process improvement with this project, we will be able to have more accurate numbers for our vaccination rates, as well as other meaningful use items moving forward.

PROJECTIONS FOR THE 2015-2016 FLU SEASON

**Summary of methodology used to obtain the numbers and percentages in the data below (e.g., electronic health records data base query, billing records, paper chart extractions, use of state immunization registries, etc.):** Query of the EMR for FMC numbers. Using the number of older adults seen in clinic last year during flu season (634), this will be our denominator when calculating exact numbers from the percents we anticipate for influenza vaccine. For pneumococcal, our denominator is the total number of adults 65 and older in the FMC (2345).

Separately for Goal 2, the community outreach projects, we will track number of patients receiving vaccines.

**Estimate the number and percent of seniors in your target group that will receive an influenza vaccine during the 2015-2016 flu season due to your project:** In the FMC, we hope to increase the number of older adults seen for influenza vaccine by 25%, for a total of 475 patients. If the same number of older adults come to clinic (634), this would make our influenza vaccination rate 75%. Calculated by taking 75% of the number of patients seen during flu season last year (634). In Goal 2, we estimate to vaccinate 120 older adults.



**Report or estimate the number and percent of seniors in your target group that are *currently immunized to pneumococcus*:** In the FMC: 750 patients (32% of the total older adult population of 2,345)

Estimate the number and percent of seniors that will receive pneumococcal vaccines (either PPSV 23 OR PCV 13) during the 2015-2016 flu season due to your project: We know that 208 patients will turn 65 during 2015 in the FMC. The main focus in the FMC will be on the new guidelines addressing PCV 13. For patients turning 65 in this calendar year, 100 (50% of those turning 65 years old) will receive PCV 13. Of the 750 patients already immunized to PSV 23, we will attempt to give PCV 13 to 225 (30% of this specific subset). Of those older than 65, not immunized to PSV 23, (~1600) we will give PCV 13 and attempt to immunize 480 (30% of this specific subset).

## VI. SUSTAINABILITY

**Once your proposed project is complete, how does your FMRP intend to ensure that immunization best practices will be carried into the future, and that gains made in improving senior immunization rates will be maintained or extended to other populations served by your program?**

Goal 1: Quality Improvement in KU Family Medicine Clinic

As FMC already has an identified immunization nurse whose efforts have proven effective by prior improvements in HPV vaccination rates through a similar grant awarded by the AAFP Foundation, she will continue her role as a champion of current vaccination guidelines. If there is an improvement in vaccination rates, as we anticipate, then an administrative staff member will be identified to annually conduct phone calls to patients turning 65 years old during the flu season. If this is done annually, then the number of mailers or MyChart messages sent out each year to those not vaccinated will be reduced from the current need. This grant will also allow FMC to put in place processes to update the back log of patients without the appropriate pneumonia vaccine. The research assistant is being used here to track mailers, phone calls and MyChart messages to prove the utility of this process. Once this process is proven successful, we will plan to assign those tasks to a clinic administrative staff who is already well versed in utilizing the EMR.

Goal 2: Community-based Initiatives

A. Lxxx Center on Aging Outreach. This outreach initiative will be sustainable in that LCOA already has a large positive impact on the older adult community in WXY County with the free resources offered. The vaccination clinic is intended to be offered in the already established Geriatrics clinic where insurance can be billed so vaccination cost and supply should not be a problem as the vaccines are already carried in the clinic. Cost will be having an LPN to staff the clinic and administer vaccines. However increased vaccination rates with this program may encourage other departments within the LCOA (such as neurology) to offer similar clinics, making availability and resource use more diversified at the LCOA and not just targeted to the Geriatrics Division of KU Family Medicine.

B. WXY/ZAB Aging & Disability Resource Center. This outreach initiative will be sustainable in that the center already identifies the older adults in the community and assigns case workers, also setting them up with health insurance. The case workers will identify older adults in need of vaccination, potentially many

will not have an identified primary care physician. The LCOA has a home-based program that sends providers to the older adults home, by coordinating with the center to identify the older adults in need the provider can then provide vaccines to the adult. Eventually, the cost of the vaccine will be covered as the patients are enrolled in Medicare by the Center. For this grant, however, we will provide the vaccines to ensure that the outreach is successful while we implement the coordination between LCOA and the Center.

**VII. PROJECT BUDGET**

The Senior Immunization Grant Award totals \$11,200, which includes a \$10,000 grant provided to the FMRP whose innovative project is selected; and a \$1,200 for a travel scholarship to allow one or more resident(s) to present their results at AAFP’s 2015 National Conference. Funding from the grant award may only be used for costs directly related to immunization projects and may include the cost of medical supplies, equipment rental or purchase, software purchase or lease, patient education materials, communication expenses, patient incentives/reimbursement, mileage/transportation, and costs associated with presenting results at AAFP’s 2015 National Conference. Only high-level budget reconciliation will be required for the Final Report.

Expense Category	Amount
TRAVEL SCHOLARSHIP	\$ 1,200
STAFF & ADMIN	\$ 2,607
SUPPLIES (may include vaccine cost)	\$ 4,600
EQUIPMENT	\$
OTHER	\$ 2,793
<b>TOTAL</b>	<b>\$ 10,000</b>

**BUDGET NARRATIVE - For expense categories above please provide a line item description of costs and how it was estimated:**

Staff & Admin (\$2,607):

\$2,046 to support 5% effort from a Research Assistant (RA). The RA will prepare mailers, send messages via MyChart, enter data from returned mailers, make phone calls to patients, and assist with minor study tasks as needed.

\$297 for 0.5% of the clinic's vaccine nurse's support of the project as needed

\$264 to support the effort of an LPN nurse at two half-day clinics at the Lxxx Center (estimated to be 0.5%)

Supplies (\$4,600):

\$320 for Influenza Vaccines for 20 homebound patients (\$16 each)

\$1,400 for PSV23 Vaccines for 20 homebound patients (\$70 each)

\$2,880 for PCV13 Vaccines for 20 homebound patients (\$144 each)

Other (\$2,793):

\$480 for lunches at three training sessions

\$2,110 for postage (outgoing and incoming for 2,100 patients; accounting for approximately 5% of returned mailers needing to be resent to different addresses)

\$203 for printing of mailers, labels, educational materials for training sessions, and fliers