



# Providing Interdisciplinary Academic Detailing to Improve Pneumococcal Immunization Rates

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## Background:

Academic detailing is an evidence-based approach designed to change clinical practice and improve decision making, whereby customized, tailored material is developed and shared among providers through an educational outreach.<sup>1</sup> The academic detailing model was started in the 1980s by Jerry Avorn of Harvard Medical School.<sup>1</sup> For the model to be successful, there must be a focused problem and a well-defined target audience. Learning should occur in an interactive environment, where repetition and reinforcement are key, and graphical material is used to highlight significant points.<sup>2</sup>

We used the academic detailing model to improve low rates of pneumococcal vaccination in rural Washington State communities. Interprofessional academic detailing was chosen as our approach since practitioners in many different health disciplines can offer pneumococcal vaccinations. The target intervention we chose for our enhanced academic detailing effort was developing interprofessional educational material about pneumococcal immunization guidelines and then using this material to provide education to local physicians, pharmacists, physician assistants, nurses, medical assistants, and office staff. Since academic detailing is an educational outreach by healthcare providers (HCPs) for HCPs to promote best practice, we concluded that an academic detailing intervention was ideal for addressing barriers to vaccination.

## Objectives:

- To develop academic detailing material and to provide academic detailing to physicians, nurses, clinic staff, pharmacists, and pharmacy staff in rural areas.
- To improve pneumococcal immunization rates in rural Washington state counties.

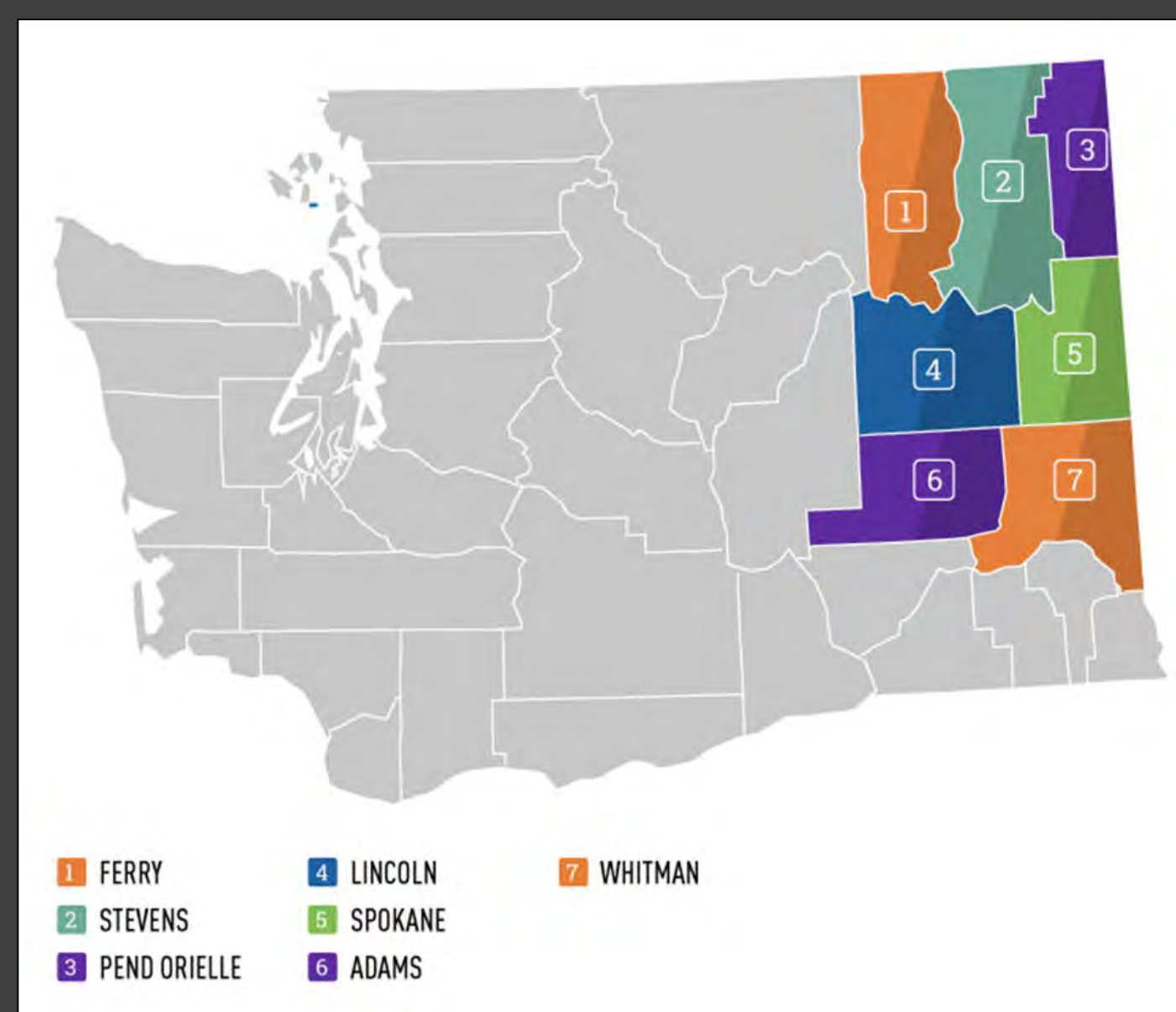


Figure 1. Rural Eastern Washington Counties.

## Methods:

An interprofessional team of faculty and students lead by clinical pharmacists was trained in academic detailing. The team performed needs assessments and clinic workflow assessments; developed educational materials including a patient-centered exam room poster and a provider-targeted guideline based handout; delivered training including best practices for incorporating pneumococcal immunizations into workflow using an electronic health record; and presented information regarding EHR use to medical personnel at two rural medical clinics (see Table 1).

Figure 2. Interprofessional Academic Detailing Team

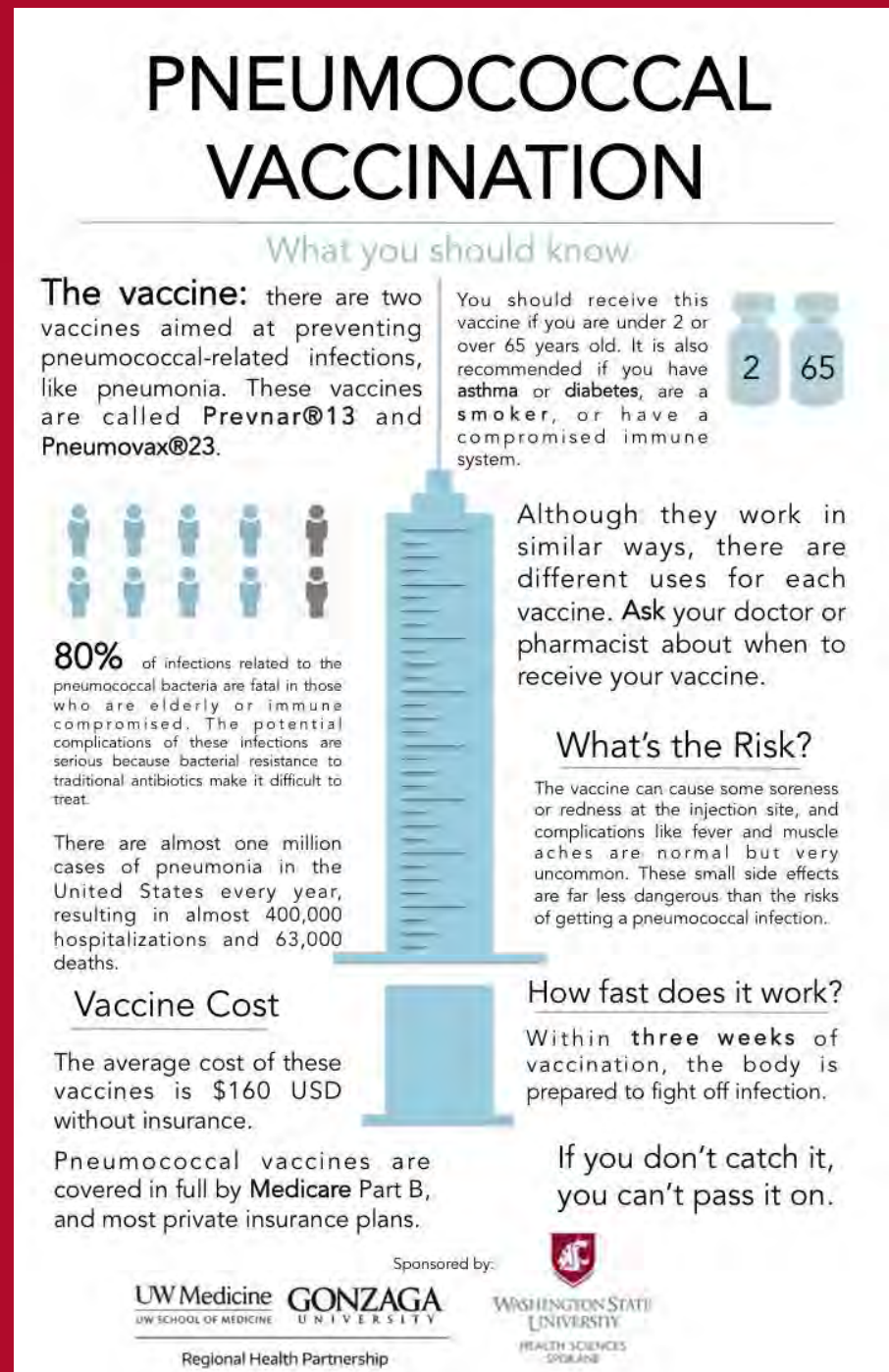
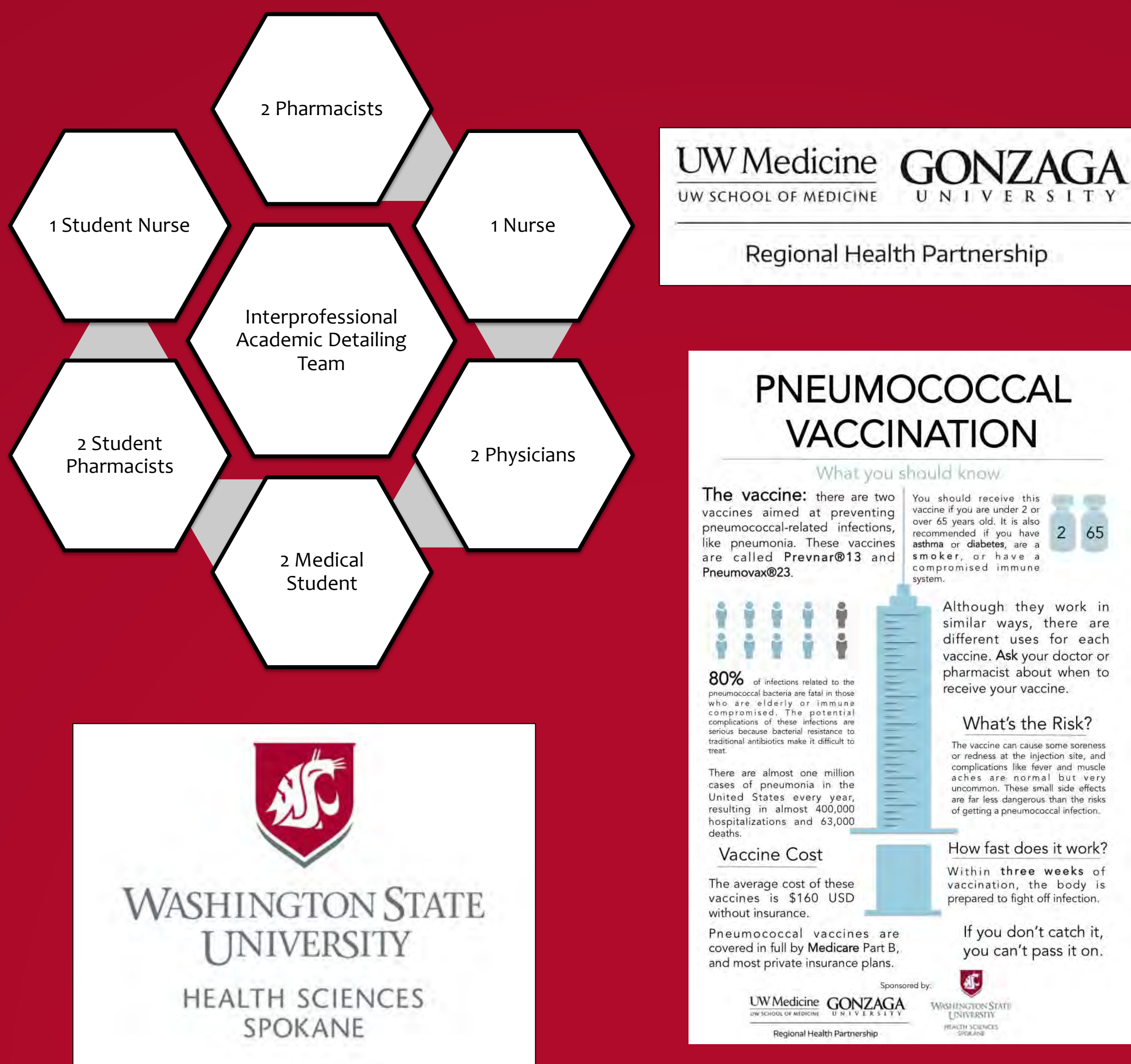


Figure 3. Exam room poster

Table 1: Project Academic Detailing Schedule

Visit Number	Audience	Purpose	AD Team
<b>Detailing Visit 1 (Clinics 1 and 2)</b> June 2016	Physician leaders	Enrollment in project, determine what kinds of AD material would be helpful	2 Pharmacists
<b>Workflow Assessment (Clinics 1 and 2)</b> July, August 2016	Physicians, nurses, medical assistants	Shadowed clinicians in two clinics to document immunization practices	1 Nurse
<b>Immunization Training</b>	Community pharmacist	Provided immunization training for pharmacist	1 Pharmacist
<b>Detailing Visit 2 (Clinics 1 and 2)</b> September, November 2016	Medical clinic all personnel meeting	30-minute academic detailing presentation about pneumococcal immunization use	2 Pharmacists 2 Medical Students 2 Student Pharmacists
<b>Detailing Visit 3 (Clinics 1 and 2)</b> June 2017	Physician leaders and nurse managers	Follow up to see how implementation is working; ask what other resources would be helpful	2 Pharmacists, 1 Nurse
<b>Detailing Visit 4 (Clinics 1 and 2)</b> July 2017	Physician leaders and nurse managers	Discussed best practices for using EHR to identify needed immunizations at the request of physician leader	1 Pharmacist, 1 Nurse
<b>Detailing Visit 5 (Clinics 1 and 2)</b> September 2017	Nurses and medical assistants	Provided 30-minute academic detailing presentation to clinic medical assistants at the request of physician leader	1 Pharmacists 1 Nurse

## Results:

Academic detailing presentations and materials were well received. The exam room posters in particular were well liked by providers and patients and are being displayed in clinics and pharmacies in rural Washington. Immunization trends steadily increased year-over-year during the reference period. The following were identified as ideas for improving pneumococcal immunization rates with through EHR use:

- Conduct the immunization review process at every encounter, not just annual visits.
- Create and publish standing orders that would allow MA/RN to administer vaccination when appropriate while rooming patient.
- Utilize clinical decision support tools within the EHR to flag special population patients.
- Re-teach all providers and staff where immunization documentation resides and how to quickly check for a patient's immunization status.
- Conduct quality control checks to ensure that immunizations are being documented discretely (and not in last year's encounter note).
- Utilize health maintenance flowsheet to quickly and visually see when immunizations are due, facilitating early conversations with patients.
- Hand-key immunization records when they are given elsewhere (in order to have them appear in immunization flowsheet).
- Activate or build automated interfaces from state registries to facilitate capture of immunizations given elsewhere.
- Use reporting features routinely (quarterly) to compare year over year rates per provider and discuss at routine meetings.
- Annually conduct short education sessions to review administration guidelines. Build links into EHR for on-demand viewing.
- Use automated messaging through patient portal and secure messaging to inform patients when they are eligible to receive vaccines/to teach about when to have them.

## Implications:

Immunizations, such as pneumococcal vaccine, are a low-cost, high-impact intervention, according to the Task Force on Community Preventative Services. The use of academic detailing as a technique to boost immunizations therefore represents a significant contribution to the literature, demonstrates an approach to utilizing academic skills in community settings, and provides an opportunity to involve health science students in interprofessional research.

## References:

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- Soumerai, S. B., Avorn J. (1990). Principles of educational outreach (academic detailing) to improve clinical decision making. Journal of the American Medical Association, 263(4), 549-556.