

# Research Centers for Excellence in Clinical Preventive Services

*Working to get the right services, to the right people, at the right time*

## The Center for Advancing Equity in Clinical Preventive Services

<http://prevention-for-all.org/>

### Center Location

Feinberg School of Medicine,  
Northwestern University

### Center Focus

Reduce Disparities

We work to expand and accelerate the development, testing, and dissemination of innovative, practical, effective, generalizable interventions to increase equity of access to and use of clinical preventive services.

### Center Director

David W. Baker, MD MPH

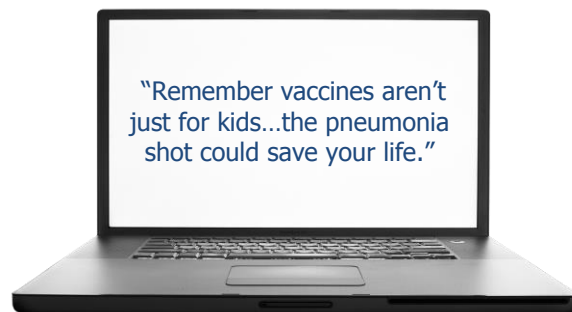


## Understanding and Addressing High Rates of Refusal of Pneumococcal Vaccination Among African-Americans

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Despite recommendations that all adults age 65 and older receive the pneumonia vaccination, the national rate is just over 60% and is even lower for African Americans. In 2011 it was estimated that 65% of older whites, but only 48% of older African Americans received the vaccination.

The purpose of this study was to explore why older African Americans refuse the pneumonia vaccine and understand how education provided during a primary care visit can have an impact on vaccination decisions. We interviewed patients who had refused the vaccine to better understand their knowledge of pneumonia, their perceived risk for the condition, and their thoughts about the vaccine. Based on this information we developed a brief educational video that focused on individual susceptibility to pneumonia and included a powerful testimonial from an African American man regarding bad outcomes related to refusal of the vaccine. The video was embedded in the study clinics' electronic health record (EHR), along with alerts for nurses to play it for eligible patients while they waited to see their primary care doctor.



### Big Questions

1. What are the primary reasons that African American patients may be refusing the pneumonia vaccine when offered by their provider?
2. What are patients' responses to viewing an educational video about pneumonia and the pneumonia vaccine at a primary care visit?
3. How feasible is it to integrate an educational video into an EHR, have the EHR prompt a nurse to show patients the video, and have the video play properly?

## What Did We Learn?

We learned about how patients think about pneumonia and the pneumonia vaccine:

- Strategies to improve rates of pneumonia vaccination may need to include a strong focus on personal susceptibility. Overall, participants understand the severity of pneumonia; however, they do not perceive themselves to be at high risk.
- Participants perceived childhood vaccines to be safer than adult vaccines, and although they believed in the importance of childhood vaccinations, they felt neutral toward the importance of adult vaccinations.

We learned about the feasibility of delivering patient education via and Electronic Health Record:

- Integration of a patient education video into a clinic EHR system was challenging, as EHRs are not designed for patient education.
- Technical barriers (e.g., screen resolution, sound capability, varied operating systems) were numerous, but surmountable.
- Although some nurses felt positively toward the video, the several steps that were required to launch the video presented significant challenges to implementation.

## What Does This Mean?

Patient education materials need to encourage older African Americans to receive the pneumonia vaccine by focusing on personal susceptibility as well as the importance of vaccines across the lifespan (i.e., from childhood through adulthood) to protect health. It is important for all older adults to understand that pneumonia is a serious condition and vaccination is an easy way to help reduce risk.

EHR systems may be effective avenues for patient education, but current technology does not support implementation in the clinical setting. Incorporating patient education materials into an EHR for use at the point of care (e.g., during a physician visit) remains challenging. Questions remain regarding how to best use health care technology to improve communication with patients, both at the point of care as well as at home or outside the primary care setting.

## Where to Learn More

Brown T, Acosta F, Garrett AM, Lee JY, Persell SD, Baker DW, Goldman SN, Cameron KA (2013). Understanding African-American patients' refusal of pneumococcal vaccination. *J Gen Intern Med*, 28, Supplement, S229.

Cameron KA, Brown T, Goldman SN (2014). "Are you afraid of pneumonia?" Patients' feedback on the development of an educational video about pneumococcal vaccination. *J Gen Intern Med*, 29, Supplement, S2.

Goldman SN, Brown T, Persell SD, Patel A, Doan CT, Cameron KA. (2014). Delivering video patient education from the EHR: Promises and pitfalls. *J Gen Intern Med*, 29, Supplement, S64.

For more information on this project and others please visit: <http://prevention-for-all.org/>