Using an Electronic Medical Record Tool to Improve Pneumococcal Screening and Vaccination Rates for Older Patients Admitted with Community-Acquired Pneumonia

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Despite use publication of guidelines and recommendations for Pneumococcal Vaccination only 59% of adults over 65 had ever received a dose in 2009. This provides the authors with an opportunity to improve the vaccination rate of their inpatients at the University of Washington (Harborview Medical Center). The article is published as a “Tool Tutorial” and as such uses patient cases to describe the tool, its development and limitations.

The Tool: A reminder system (alert) that is triggered based on age of the patient, prior vaccination and allergy to vaccination. This then triggers a Pneumococcal Screening for Vaccine Powerform which asks screening questions, if the answer to all the questions is no then the nurse clicks “Administer pneumococcal vaccine” box which orders the vaccine from the pharmacy. (CPOE was not available in the EMR at the time of this study, so this process was nurse driven.)

The Results: Prior to implementation the Pneumococcal Vaccination rate was 44% and this rose into the 90% range (There is a nice control chart on page 423 that shows the intervention did lead to a significant change in vaccination rate.)

The Limitations: Historical vaccinations were a problem as there was not a central repository for the patient’s inpatient/outpatient vaccinations. Handoffs from nurse to nurse, from ordering nurse to dispensing nurse were an issue solved by decentralized distribution of the vaccine. The authors state that “technology alone is not the solution” meaning that education about vaccinations and the importance of vigilance for the inpatient population is needed.

Conclusion: This is an interesting article that shows EMR’s by themselves will not solve all patient care issues, but the EMR can increase the compliance with established guidelines. Education is still needed concerning the “why” of vaccination.

Read full article

Reviewer: Cort Garrison, MD, MBA