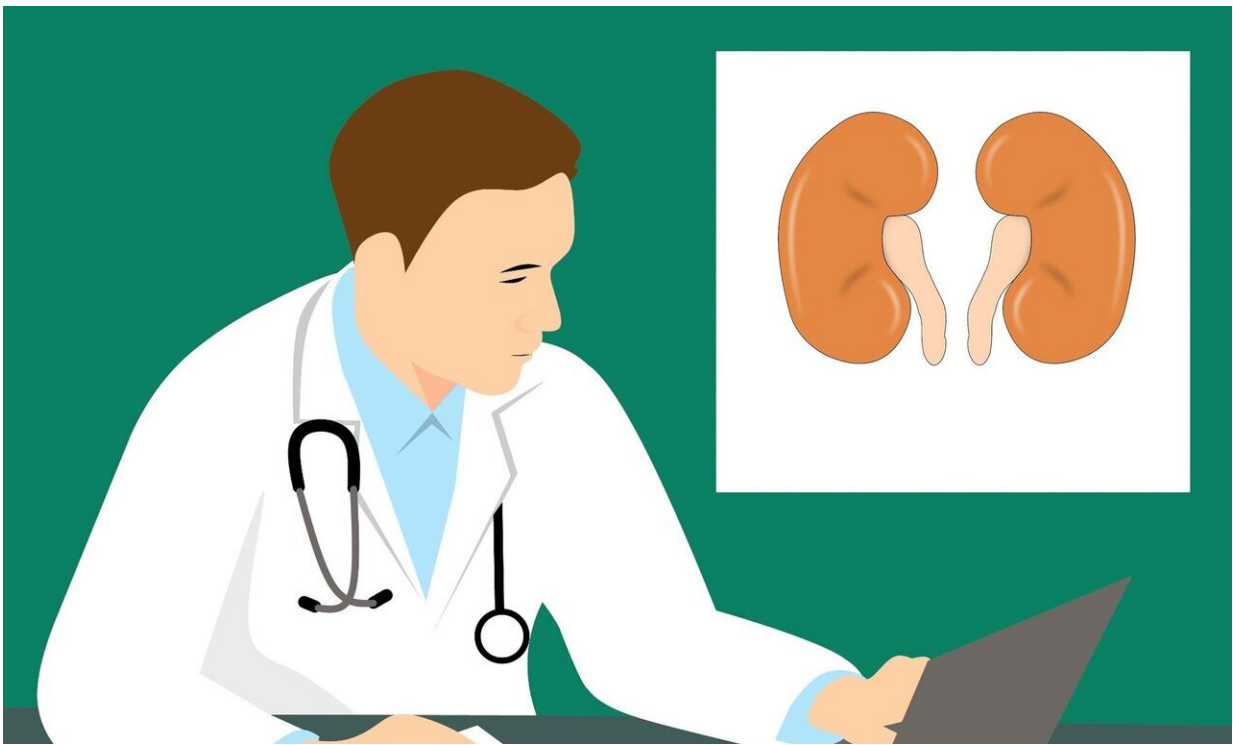


Quality improvement program increases pneumococcal vaccination in adults with advanced kidney disease

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In a study published in the *American Journal of Kidney Diseases* (AJKD), a quality improvement program that utilized electronic best practice alerts within the electronic medical record boosted

pneumococcal vaccination rates from 53% to 70% (P

Pneumococcal vaccination (PV) rates are low in patients with chronic [kidney disease](#) (CKD) stages 4 and 5 and nephrotic syndrome, despite higher incidence of pneumococcal pneumonia and increased mortality and cardiovascular complications in these patients compared to patients without CKD. Researchers at the University of Pittsburgh implemented a quality improvement (QI) project involving a best practice alert (BPA) implementation in CKD clinics to improve PV rates amongst these high-risk patients over a 2-year period.

The [intervention](#) consisted of a BPA designed to electronically screen patients for PV eligibility based on diagnosis, age and vaccination status using a predetermined algorithm for eligibility criteria. The BPA appeared on the Electronic Medical Record (EMR) screen at the beginning of the patient encounter, as the medical assistant (MA) reviewed patient medications. The BPA allowed the MA to order the [vaccine](#) or document the reason for vaccine refusal or deferral. If the PV was deferred for any reason, then the BPA reappeared in 6 months. If the patient refused the vaccine, an alert was sent to the clinician to further educate the patient and the BPA was disabled for one year.

In the post-intervention group, 617 (53.8%) patients had been vaccinated prior and BPA appeared for 529 patients. There was a statistically significant increase in the percentage of patients who received at least one dose of the PV in the post-intervention group compared to the pre-intervention group (70.2% vs 62.7%, $P = 0.0008$) primarily due to increase in PV from 53% to 70% in patients between 18-64 years of age (P

These data suggest that follow-up in CKD clinic is a missed opportunity to administer PV, particularly amongst stated high-risk individuals between 18 and 64 years. The authors demonstrated that implementation

of a MA-led intervention, namely a decision aid as a BPA, can bridge this gap with minimal disruption of workflow or increase in physician workload burden.

More information: Sanjana Kapoor et al, Best Practice Alerts in Electronic Medical Records to Improve Pneumococcal Vaccination in CKD, *American Journal of Kidney Diseases* (2022). [DOI: 10.1053/j.ajkd.2022.06.010](https://doi.org/10.1053/j.ajkd.2022.06.010)

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