

Rapid Uptake of 2014 ACIP Pneumococcal Vaccination Recommendations among Adults Aged 65 or Higher at the Veterans Health Administration



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Introduction

- Vaccination of the 13-valent pneumococcal conjugate vaccine (PCV13) for adults 65 years and older was recommended by the Advisory Committee on Immunization Practices (ACIP) in 2014 until it was withdrawn in 2019.
- Overall vaccination coverage rates with both PCV13 and PPSV23 were estimated at ~30% in other report¹, however, it is unclear how rapidly the uptake of this ACIP recommendation in 2014 occurred.
- We investigated the uptake of the ACIP recommendation among the Veterans Health Administration (VHA) population.

Materials and Methods

Study Design Retrospective cohort study

Study period October 2014 to November 2019 (ACIP recommendation period).

Study Population

All patients who were registered in primary care of VHA.

Data Source and collection

- VHA national electronic medical records data warehouse (Corporate Data Warehouse)
- We obtained data about
 - ✓ The first PCV13 and 23-valent pneumococcal polysaccharide vaccine (PPSV23) vaccination
 - ✓ Dropout from primary care follow-up due to death and termination of primary care relationship

Statistical Analyses

We calculated the monthly proportion of PCV13 and PPSV23 vaccination among primary care follow-up patients in VHA.

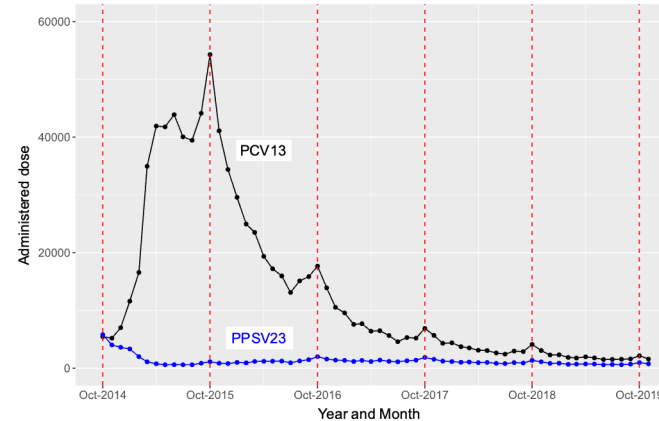
1. Hoehner, Razzaghi, et al. Available at: <https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/pubs-resources/pcv13-medicare-beneficiaries-2010-2019.html>. Accessed 7 June 2022.

Table 1. Characteristics of study population

Study Population (n)	2,166,173
Median age in yrs (interquartile range)	73 (68 ~ 81)
Gender	
Male	2,120,462
Female	44,933

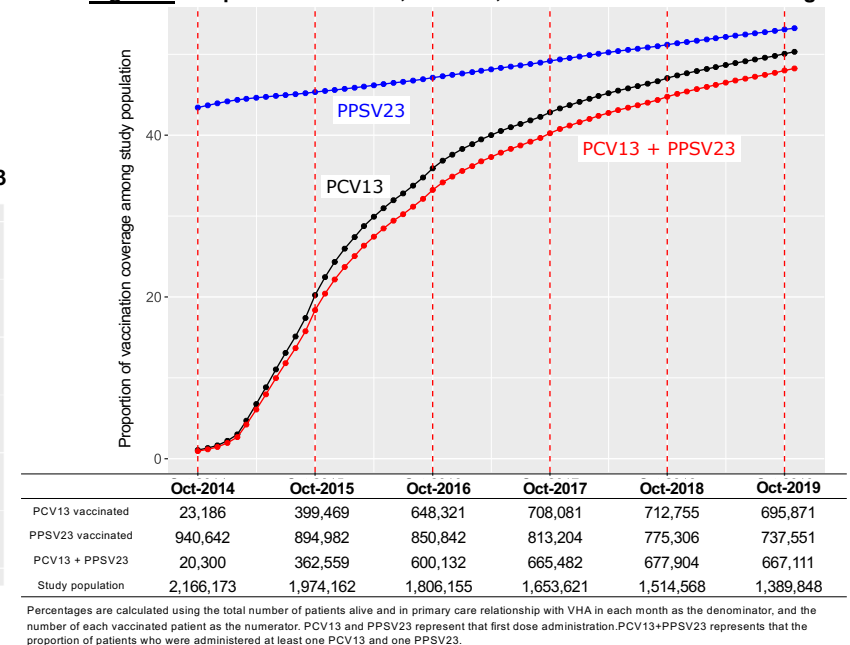
All information was as of Oct 1, 2014

Figure 1. Monthly administered dose of first PCV13 and PPSV23



Results

Figure 2. Proportion of PCV13, PPSV23, and both vaccination coverage



Discussion

- In the VHA population, there was a rapid uptake of PCV13 in the first two years following the ACIP recommendation in October 2014.
- Fifty percent of patients who were indicated for PCV13 vaccination in October 2014 received PCV13 vaccines, nearly equivalent coverage rate as PPSV23.
- These results showed that a comparable or higher vaccination coverage with PCV13 than the previously report¹, and that the ACIP recommendations had a significant impact on PCV13 vaccination implementation.
- In the VHA population, the percentage of patients who had received at least one PCV13 and PPSV23 vaccination by November 2019 was higher than in previous report¹ (48.3% vs 32.3%, respectively)
- System-wide implementation at primary care clinics at the VHA likely resulted in this rapid uptake.
- Further research is needed to determine the patient- and clinic-level characteristics associated with lower uptakes to inform future vaccination implementations.



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