

Improving Screening and Vaccination Rate for Hepatitis B in Veterans Affairs Primary Care Population: A Quality Improvement Study

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Introduction

- According to Advisory Committee on Immunization Practices (ACIP), acute infection with Hepatitis B virus (HBV) is rising among adults 40 years and older. Hepatitis B (HepB) vaccines have long demonstrated safety and efficacy for decades, however less than a third of U.S. adults reported being vaccinated against HBV in 2018. In 2022, ACIP updated its recommendation and advised vaccinating all adults aged 19-59 and those 60 years and older with risk factors; adults 60 years and older without known risk factors may also be vaccinated. Our project aims to improve HBV screening and vaccination rate among Veterans Affairs (VA) primary care clinic patient population.

Methods

- Data was collected from pre-intervention (October – December 2021) and post-intervention (March – May 2022); all patients seen in clinic during these months were included. Patients were considered immune against HBV from vaccination if they have positive anti-HBsAg; and susceptible to infection if hepatitis panel negative. Interventions include educating each resident group regarding update in vaccination guideline and hepatitis panel interpretation. In addition, reminder for checking HepB status was developed and embedded in VA electronic medical record (EMR) system.

Electronic Reminder

Reminder Resolution: Hepatitis B Serology/Immunization

Hepatitis B Serology/Immunization Version 1.3

Hepatitis B virus (HBV) serology has been done (see results below).

Consider administering the combination Hepatitis B and Hepatitis A vaccine 3 dose series if both immunizations are indicated. HBV/HAV combination vaccine (Twinrix) may be used.

Additional information on HBV testing and immunization

HBV IMMUNIZATION

Order HBV vaccine

Document administration of Hepatitis B vaccine today

Record prior HBV immunization
(Note: written documentation is required to record prior immunizations)

Refusal/deferral of HBV vaccine

Virtual/Telehealth Visit - Patient educated on the need for receiving Hepatitis B immunization either at VA or outside facility. (A reference for outside immunization locations can be found at this link [Find VA locations](#) by searching for Community pharmacies.)

No prior Hepatitis A (HAV) serology found.

HAV and HBV Serology

Collection DT	Spec	HBcAb	HBsAb	HBsAg
05/09/2018 10:48	SERUM	NONREACTIVE		NONREACTIVE
08/07/2014 15:04	SERUM			NONREACTIVE

HBV Serology - order additional or repeat serology/record outside results

Table for Result Summary

	Pre-intervention (October to December 2021)	Post-Intervention (March to May 2022)
Total Veterans Seen in Clinic	1242	1174
Veterans that were screened for Hepatitis B	532 out of 1242 (42.8%)	689 out of 1174 (58.7%)
Screened veterans found to have no immunity against Hepatitis B	378 out of 532 (71%)	402 out of 689 (58.3%)
Veterans without HepB immunity that received HepB vaccine	35 out of 378 (9%)	123 out of 402 (30.6%)

Results

- In the pre-intervention period from October to December 2021, a total of 1242 veterans were seen in primary care clinic. 532 veterans were screened for immunity in the past with 378 veterans noted to have no immunity against hepatitis B. Out of 378 non-immune veterans, only 35 patients were vaccinated against HepB.
- In the post-intervention period from March to May 2022, 1174 veterans were seen. 689 veterans were screened for immunity and 402 have no immunity against HBV on hepatitis panel; 123 veterans received HepB vaccine during clinic visit, which is more than 20% increase compared to prior.

Discussion

- Our data suggest that HBV vaccination rate was suboptimal among veteran population. A low-cost intervention along with the help of technology could be beneficial in integrating new vaccination guideline in VA standard of care. Our project strikes to encourage clinicians to bear the responsibility and offer the vaccine to adult patients proactively, rather than wait for patients to request for it. The goal of this project is to increase awareness of new vaccination guideline and reach for full vaccination rate among veteran population.