

Background

Problem:

- Individuals with inflammatory bowel disease (IBD) are at increased risk for developing herpes zoster (HZ). The HZ vaccine is recommended for those 50 years and older.
- The Minneapolis VA cares for roughly 900 veterans with IBD with an average age of 66 years old. Only 43% of eligible veterans had received the herpes zoster vaccine prior to July 2021.

AIM: Improve the percent of veterans who have received at least one dose of herpes zoster vaccine to 75% by June 2022.

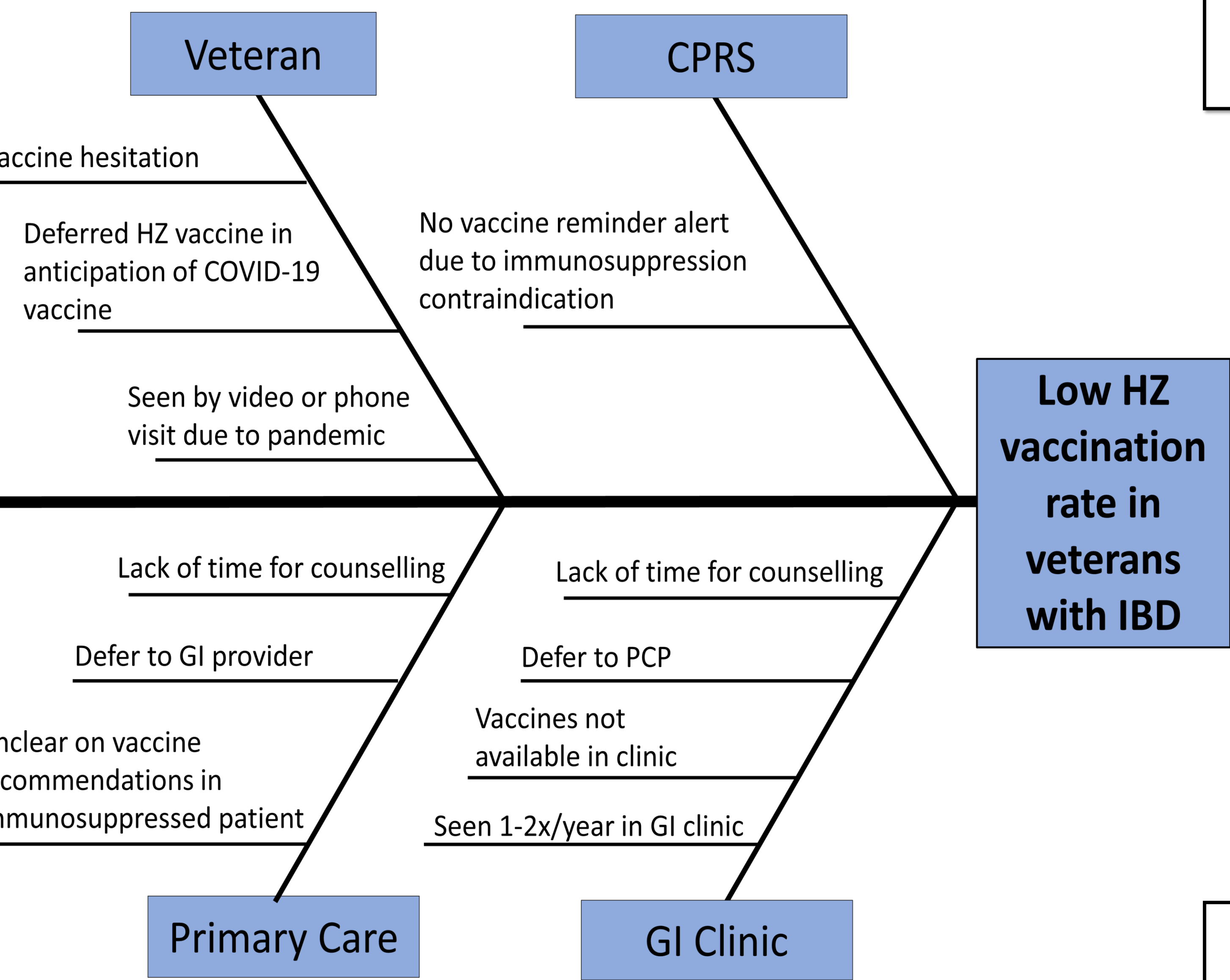


Figure 1. Fishbone Diagram for low HZ vaccination rates

Methods

Data collection

- Identified 904 patients with inflammatory bowel disease cared for by Minneapolis VA Gastroenterology department. Reviewed immunization records for HZ and other common vaccinations.

Intervention

- Letter sent to veterans recommending HZ vaccination

Outcomes

- Primary: Rate of herpes zoster vaccination
- Secondary: Days to vaccination, Rates of other vaccines

Results

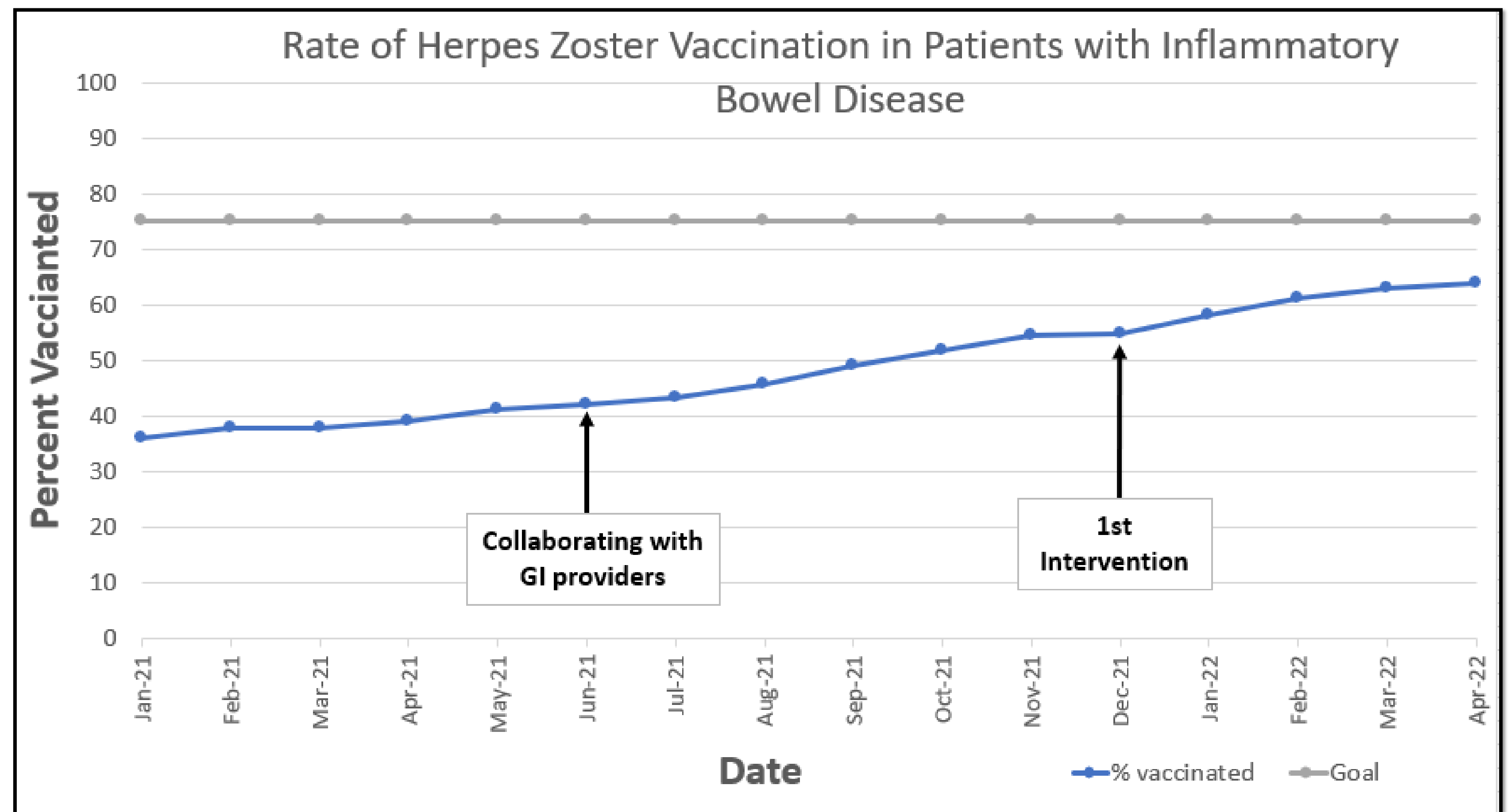


Figure 2. Rate of HZ vaccination in IBD patients per month

On average, 3.5% of eligible veterans were vaccinated each month over the study period. In the two months after intervention, 7.3% and 7.5% of eligible veterans were vaccinated.

Days from letter sent to vaccination: 31-day average (1, 95)

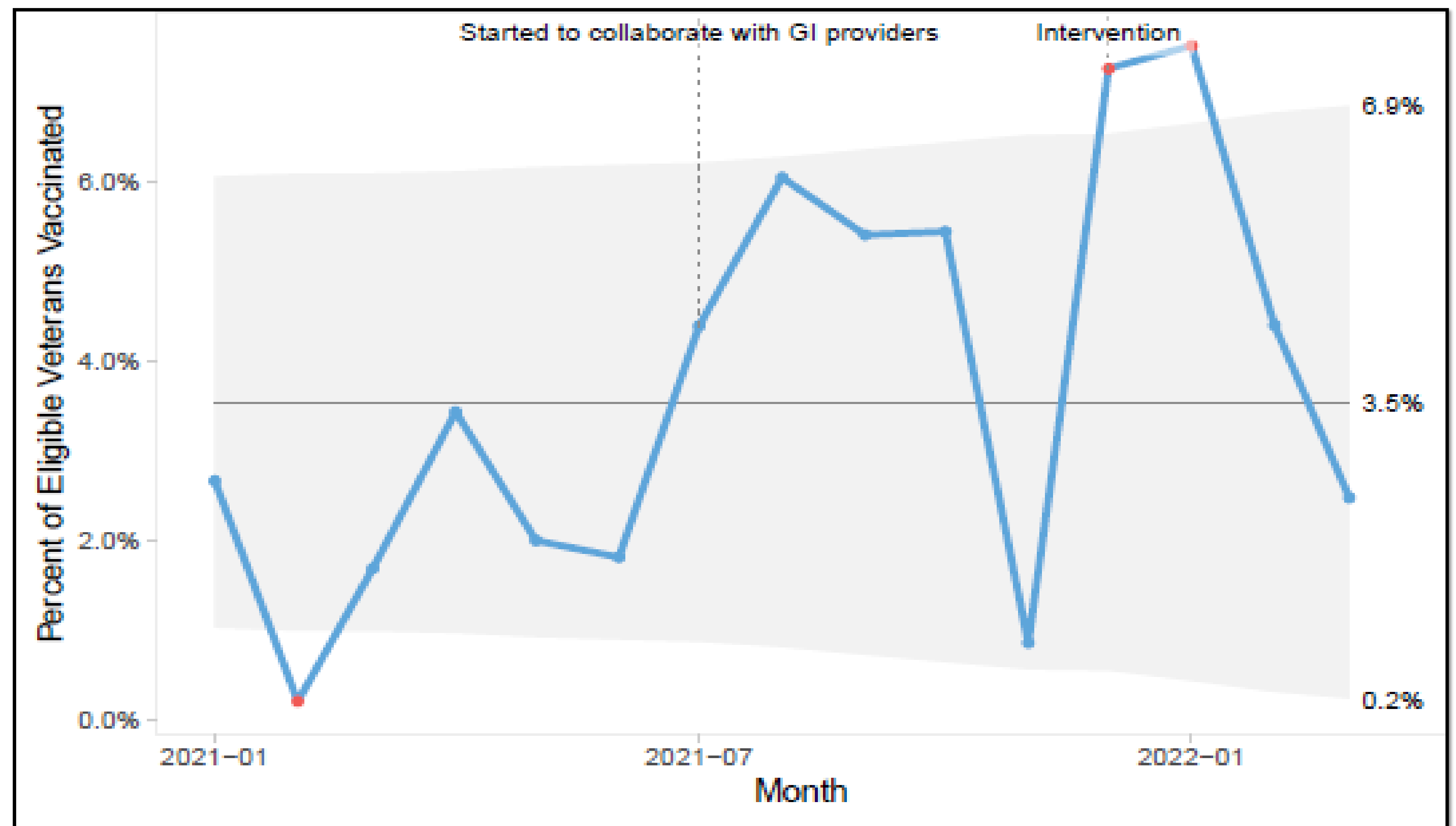


Figure 3. Percent of eligible veterans vaccinated each month

Discussion

Patients with inflammatory bowel disease are at increased risk for herpes zoster infection, however vaccine rates remain low. Over the study period, 3.5% of eligible veterans were vaccinated for HZ on average each month. Using a P-chart, we found evidence for special cause variation in the two months following our intervention. These results suggest that mailing letters was an inexpensive and time efficient way to increase vaccination rates among eligible veterans. No significant increase in other vaccines was observed.

During this project, the Advisory Committee on Immunization Practices (ACIP) and the Centers for Disease Control and Prevention (CDC) updated the herpes zoster immunization recommendations to include immunosuppressed adults 19 years or older. This updated recommendation expands the eligible group for herpes zoster vaccination. The Minneapolis VA updated the vaccine reminder criteria on April 1, 2022.

Conclusion

- Recommending the HZ vaccine to veterans via mailed letter increased the rate of eligible veterans vaccinated each month
- Recent updated to vaccine recommendations now includes those age 19 or older on immunosuppressive medications
- Future work will focus on including these newly eligible patients
- Plan to explore the use of My HealtheVet secure messages as another way to reach veterans

References

- Shingles Vaccination | CDC. <https://www.cdc.gov/shingles/vaccination>
- Khan N, Patel D, Trivedi C, et al. Overall and Comparative Risk of Herpes Zoster With Pharmacotherapy for Inflammatory Bowel Diseases: A Nationwide Cohort Study. *Clin Gastroenterol Hepatol*. 2018;16(12):1919-1927.e3.
- Long MD, Martin C, Sandler RS, Kappelman MD. Increased risk of herpes zoster among 108 604 patients with inflammatory bowel disease. *Aliment Pharmacol Ther*. 2013;37(4):420-429.
- Farraye FA, Melmed GY, Lichtenstein GR, Kane S V. ACG Clinical Guideline: Preventive Care in Inflammatory Bowel Disease. *Am J Gastroenterol*. 2017;112(2):241-258.