



# Pneumococcal Vaccination in Veterans with Rheumatic Diseases

Sarah Homann, MD; Robert Dittus, MD, MPH; Michelle Ormseth, MD, MSCI;  
 Christianne Roumie, MD, MPH  
 Veterans Affairs Tennessee Valley Healthcare System (TVHS), Nashville, TN



## Background

- Patients with rheumatic diseases are at increased risk of invasive pneumococcal disease
- Both pneumococcal conjugate vaccine (PCV13) and pneumococcal polysaccharide vaccine (PPSV23) are recommended in the setting of immunosuppressant use
- However, under-vaccination is common

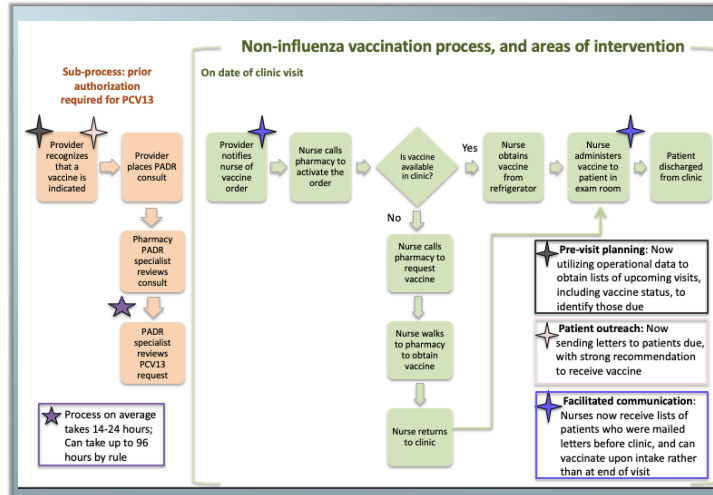
## Aims

- Increase the rate of complete pneumococcal vaccination coverage in TVHS Rheumatology clinic (i.e. decrease the % of patients due for vaccine in a given month by 15% in 6 months)

## Methods

- Analysis of a random sample of completed visits in TVHS Rheumatology clinic showed that ~35% of patients are indicated to receive one of the two vaccines
- Few of those due are vaccinated during their clinic visit
- Barriers were identified and an intervention was designed incorporating patient outreach, provider outreach, and health system components

## Process map and summary of intervention



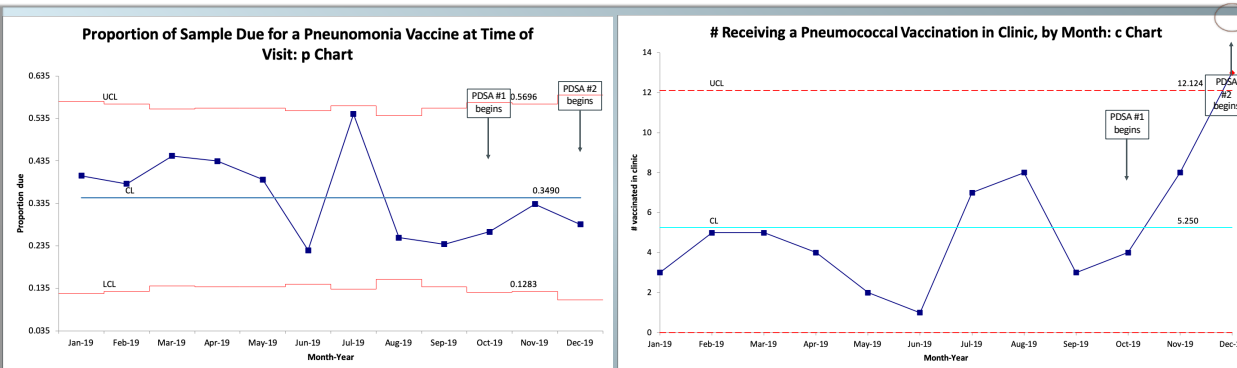
## Summary of PDSA cycles

| PDSA cycle # | Summary  | Lessons/Next Steps  |
|--------------|--|---|
| 1            | Intervention was deployed to a limited number of patients in a single provider's TVHS clinic | <ul style="list-style-type: none"> <li>✓ Nursing staff appreciated a) having a list of patients due and b) not having to call pharmacy to activate the vaccine order.</li> <li>✗ Concerns included staffing shortages, and incorporating vaccination into the busiest clinic day of the week</li> </ul>   |
| 2            | Intervention was deployed to all eligible patients in a single providers' clinic             | <ul style="list-style-type: none"> <li>✗ The timing of pulling operational data to identify upcoming clinic visits had to be adjusted; pulling too far in advance led to inaccuracy as some appointment dates were changed or cancelled</li> <li>✓ Idea is to prompt discussion between patients and providers.</li> <li>✗ Not all nursing staff have adopted use of the card at this point.</li> </ul> |
| 3            | Intervention being deployed in 3 of 10 providers' clinics                                    | <ul style="list-style-type: none"> <li>✓ Gradual rollout planned, adding two providers' patients per month</li> </ul>   |

## Discussion & Lessons Learned

- Administrative barriers can be one of several factors contributing to insufficient vaccination rates
- Increased patient and provider outreach combined with a streamlined vaccination process led to increased vaccination rates in the TVHS Rheumatology clinic
- Next steps include development of an educational intervention for providers regarding the pneumococcal vaccination schedule for immunocompetent versus immunocompromised patients

## Results



## Acknowledgements

- This material is based upon work supported by the Office of Academic Affiliations, Department of Veterans Affairs, VA National Quality Scholars Program and with resources and the use of facilities at VA Tennessee Valley Healthcare System, Nashville TN
- Work is also supported by a grant from the Alliance for Continuing Education in the Health Professions/Pfizer