



# Improving Herpes Zoster Vaccination and Documentation For Immunosuppressed Rheumatoid Arthritis Patients



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## INTRODUCTION

- Rheumatoid arthritis (RA) patients on immunosuppressed therapy are at greater risk for Herpes Zoster (HZ) infection and related complications.
- The rate of HZ vaccination is low in this population in spite of proven safety.
- The Centers for Disease Control and American College of Rheumatology guidelines recommend HZ vaccination for older immunosuppressed RA patients taking disease modifying anti-rheumatic drugs (DMARDs) or biologic agents.

## CLINIC FLOW



## OBJECTIVE

To improve HZ vaccination rate and e-record captured rate in immunosuppressed RA patients at university-based rheumatology clinics.

## METHODS

**Study design:** Pre- and Post-intervention comparison

- Pre-intervention period: 7/1/2012– 6/30/2013
- Post-intervention period: 1/14/2014 – 7/14/2014

### Inclusion criteria:

- All patients age  $\geq 60$  years with RA diagnoses prescribed DMARD/biologic/prednisone

### Exclusion criteria:

- Patient with prior HZ vaccination, on prednisone  $\geq 20$ mg/day or already on biologic/cytoxin in last 6 months

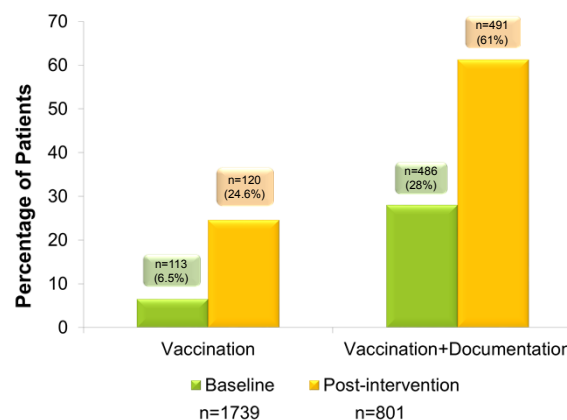
- Best Practice Alert (BPA) identified eligible patients from electronic records and alerted Medical assistants (MA) at the time of rooming process during the patient visit .
- MA verified eligibility and patients would
  - receive the HZ vaccine,
  - refuse the vaccine, or
  - defer the vaccine until after discussion with the physician.
- MA forwarded BPA to the physician for further discussion or confirm the vaccine orders.
- All outcomes were documented in the e-record by MA and the physicians.

### Data Analysis:

Student's t-test and Chi-square test examined the demographic characteristics and the pre- and post-intervention vaccination and captured rates.

## RESULTS

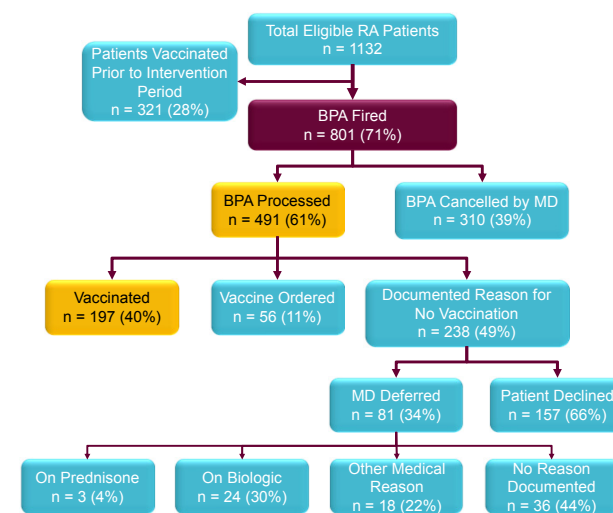
### Herpes Zoster Vaccination and Vaccination+Documentation Rates



- Overall vaccination rate increased from 6.5% to 24.6% ( $p < 0.0001$ ).
- Overall vaccinated+documented rate increased from 28% to 61.3% ( $p < 0.0001$ ).
- Academic clinics improved greater than the community clinics 9.8% vs 4.1% increase for vaccination rates and 43.5% vs 32.3% increase in vaccinated+documented rates respectively

## Acknowledgements

This Quality Improvement project was funded by Pfizer Pharmaceutical.



## CONCLUSIONS

- Implementation of an e-record based BPA and ancillary-staff based intervention significantly improved both vaccination and documentation rates.
- Key components in improving compliance included e-record identification, ancillary staff review, written educational and questionnaire materials, and physician communication.
- Ancillary staff, nursing, and physician workload did not noticeably increase.
- Interventions are generalizable and sustainable.