

Practice-Based Education Program to Increase Vaccination Rate in Patients on Immunotherapeutic Agents

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Practice-Based Education Program to Increase Vaccination Rate in Patients on Immunosuppressive Agents

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Problem

- Immunosuppressive agents have changed the course of debilitating autoimmune conditions, but come with an increased risk of vaccine preventable infections¹
- Vaccine indications and dosing recommendations are not being adhered to regularly by primary and speciality practices

Background

- Multiple organizations recommend scheduled influenza and pneumococcal vaccinations in all patients on chronic immunosuppression^{2,3}
- According to the Center for Disease Control (CDC) in 2014, vaccination adherence remains low amongst high-risk persons aged 19–64 years⁴

Aim

- Implement a protocolized vaccination program for patients on immunosuppressive medications to increase influenza and pneumococcal vaccination adherence by at least 15% for each vaccine

Measures

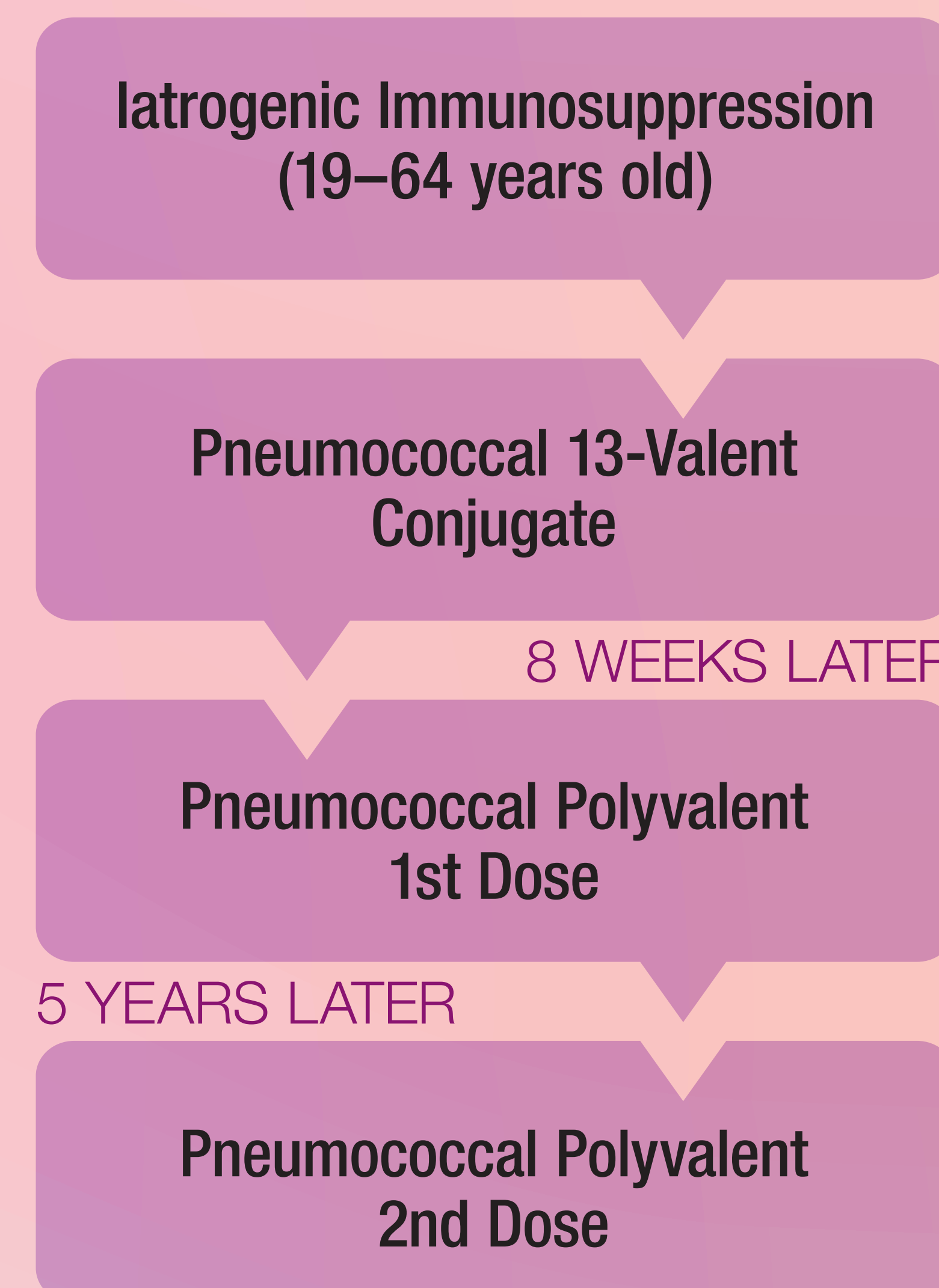
- Retrospective chart analysis of 756 patients on biologic agents in a primary care setting
- Patients were evaluated for compliance with CDC guidelines for immunocompromised individuals for the 3 vaccines listed below:

- 1 Influenza
- 2 Pevnar 13
- 3 Pneumovax 23

Intervention

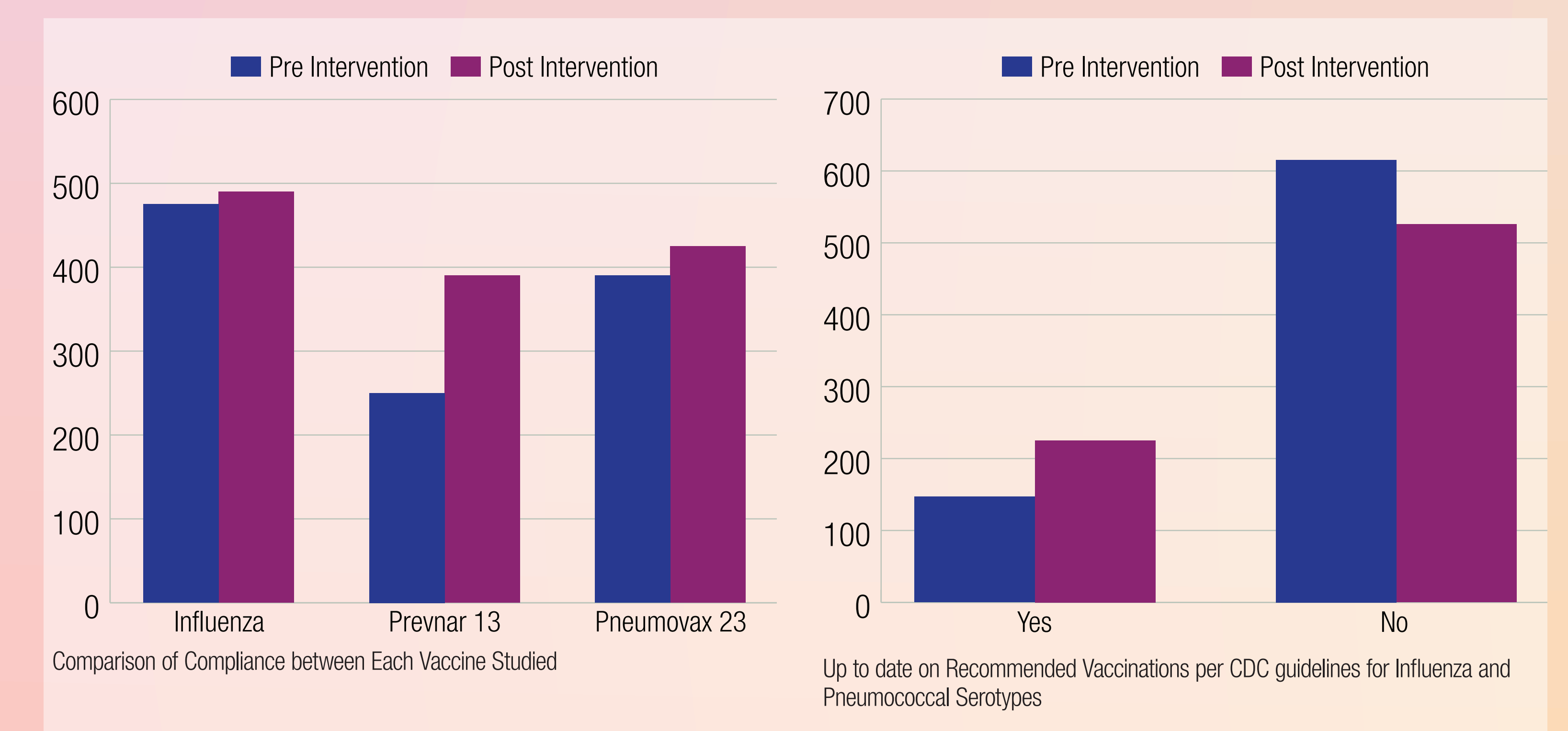
- Educational outreach sessions were performed for all providers of internal medicine and rheumatology practices biannually
- Information sheets were displayed in all involved practices

Pneumonia Vaccination Schedule



Current Results

- There was an increase in overall vaccination adherence by 11% (n=81) in an at risk patient population



Future Steps

- A vaccination clinic is being developed in order to improve access to patients requiring vaccinations
- We will optimize our best practice alert advisory through electronic medical record to notify providers of vaccine schedules for our at risk population

REFERENCES

- ¹Malhi, G., Rumman, A., Thanabalan, R., Croitoru K., Silverberg M. S., Steinhart, A. H., Nguyen G. C., "Vaccination in Inflammatory Bowel Disease Patients: Attitudes, Knowledge and Uptake." *Journal of Crohn's and Colitis*. 2015: 439-444
- ²Farraye, F. A., Melmed G. Y., Lichtenstein G. R., Kane S. V., "ACG Clinical Guideline: Preventive Care in Inflammatory Bowel Disease" (2017) 112:241-258.
- ³Singh, J. A., et. al. "2015 American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis." *Arthritis Care & Research*. 2015. American College of Rheumatology.
- ⁴Williams, W, et. al. "Surveillance of Vaccination Coverage Among Adult Populations—United States, 2014." *Surveillance Summaries*. (2016). 65(1); 1-36.
- ⁵Centers for Disease Control and Prevention (CDC). Reasons reported by Medicare beneficiaries for not receiving influenza and pneumococcal vaccinations—United States 1996. *MMWR Morb Mortal Wkly Rep*. 1999;48(39):886-890.

