



# A nationwide intervention to improve pneumococcal vaccination rate among immunocompromised individuals

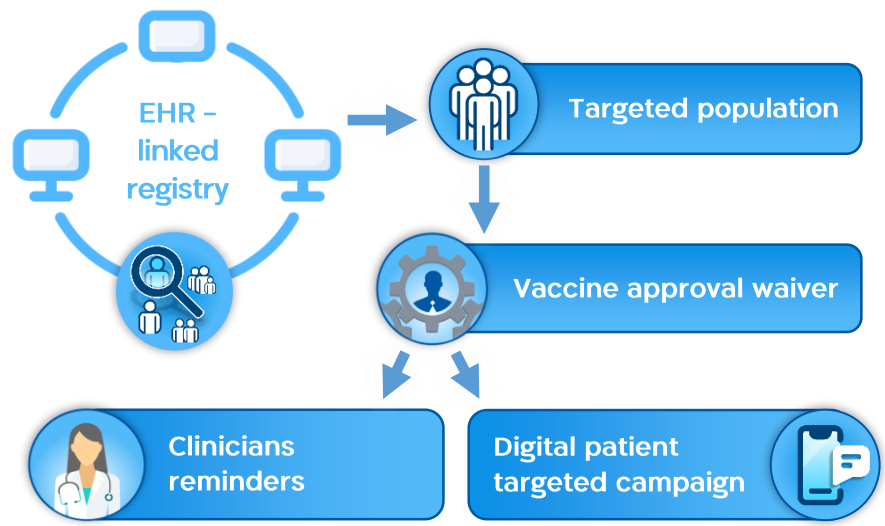
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## Background:

Immunocompromised individuals (ICI) are at high risk for infections, some of which are preventable by vaccines. The Israeli MOH recommends PCV13 and PPSV23 vaccines for ICI, but vaccine coverage is suboptimal. The aim of this study was to assess the effectiveness of a national intervention to improve pneumococcal vaccination rate among ICI in outpatient settings.

## Methods:

A nationwide quality improvement project aimed at improving pneumococcal vaccination was implemented and began in October 2019. An automated validated, electronic health record (EHR) linked, population-based registry of patients with ICI was developed in an Israeli health organization, Maccabi Healthcare Services, serving over 2.5 million members.



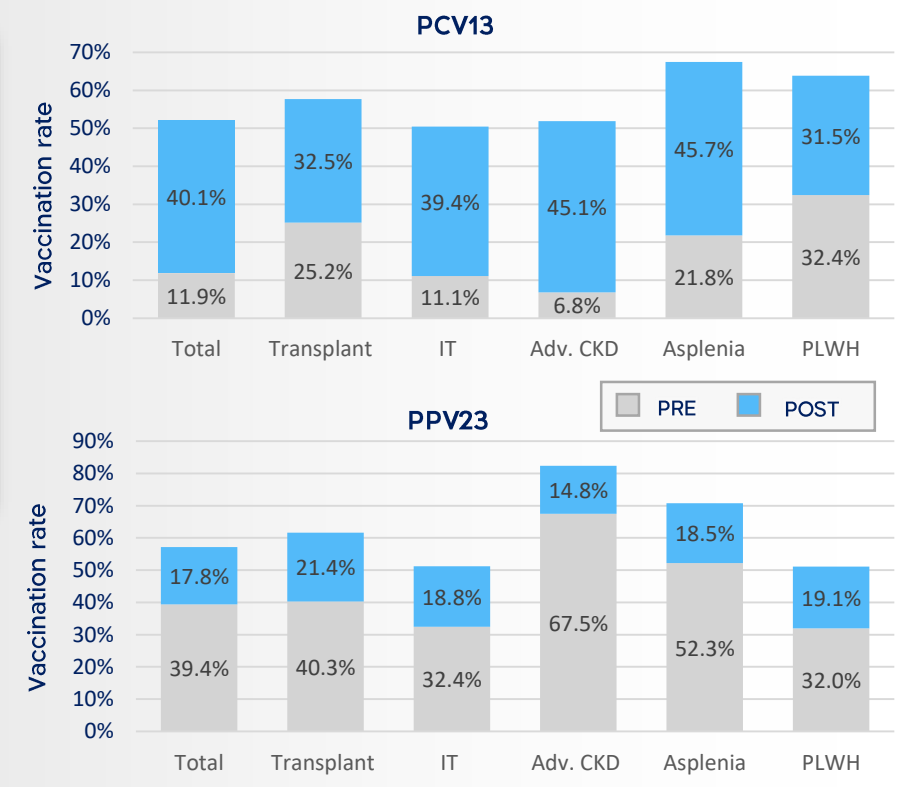
## Results:

A total of 32,637 ICI were identified

ICI population	No.
Transplant	1,824
Immunosuppressive treatment (IT)	22,851
Advance chronic kidney disease (CKD)	5,462
Asplenia	2,354
Patient living with HIV (PLWH)	1,647

During October 2019 to September 2021, PCV13 vaccination rates among ICIs went up from 11.9% to 50.1% (p<0.0001), and PPSV23 vaccination rate improved from 39.4% to 57.1% (P < 0.0001).

Pneumococcal vaccination rate pre and post intervention



## Conclusion:

Using one of the first real-world automated registries for ICI and implementation of targeted automated patient and clinicians reminders, markedly improved pneumococcal vaccine uptake in this vulnerable population.

