10-2019

Improving Pneumococcal Vaccination Rates in High Risk Patients Across Multiple Specialty Divisions

Rachel Moran
Children's Mercy Hospitals, rrmoran@cmh.edu

Julia G. Harris
Children's Mercy Hospital, jgharris@cmh.edu

Claire Olsen
Children's Mercy Hospital

Rana El Feghaly
Children's Mercy, relfeghaly@cmh.edu

Liset Olarte
Children's Mercy Hospital, lcolarte@cmh.edu

See next page for additional authors

Authors
Rachel Moran, Julia G. Harris, Claire Olsen, Rana El Feghaly, Liset Olarte, Douglas Blowey, and Luke A. Harris

Improving Pneumococcal Vaccination Rates in High Risk Patients Across Multiple Specialty Divisions

Rachel Moran; Julia Harris, MD; Claire Olsen, PharmD; Rana El Feghaly, MD, MSCI; Liset Olarte, MD; Doug Blowey, MD; Luke Harris

Children's Mercy Kansas City, Kansas City, Mo

Introduction

- Pediatric patients with deficient immune systems or certain chronic medical conditions have an increased risk of acquiring invasive pneumococcal disease.
- The 23-valent pneumococcal (PPSV23) vaccine provides protection against 23 pneumococcal serotypes and is recommended for patients aged 2 years or older who are high-risk for invasive pneumococcal diseases.
- Unfortunately, many high-risk patients are not properly vaccinated due to lack of provider knowledge or understanding of accountability between primary care and specialty providers.
- The goal of this project was to improve PPSV23 vaccination rates by 10-20% points across multiple Children's Mercy Kansas City specialty divisions.

Methods

Several improvement interventions between May 2018 and May 2019 (Figure 1)

1. Engaged clinical leaders and quality improvement champions in infectious diseases, pulmonology, and rheumatology

2. Reviewed and finalized definition of patient inclusion criteria for high risk pneumococcal vaccination in alignment with CDC/ACIP immunization recommendations.[1] Confirmed PCPs not administering or stocking PPSV23

3. Partnered with pharmacy to ensure med stations adequately stocked with PPSV23

4. Designed and deployed an automated weekly 'PPSV23 Immunization Status & Scheduling' report to inform pre-visit planning

5. Quarterly quality improvement meetings held to review performance, share best practices, and share lessons learned

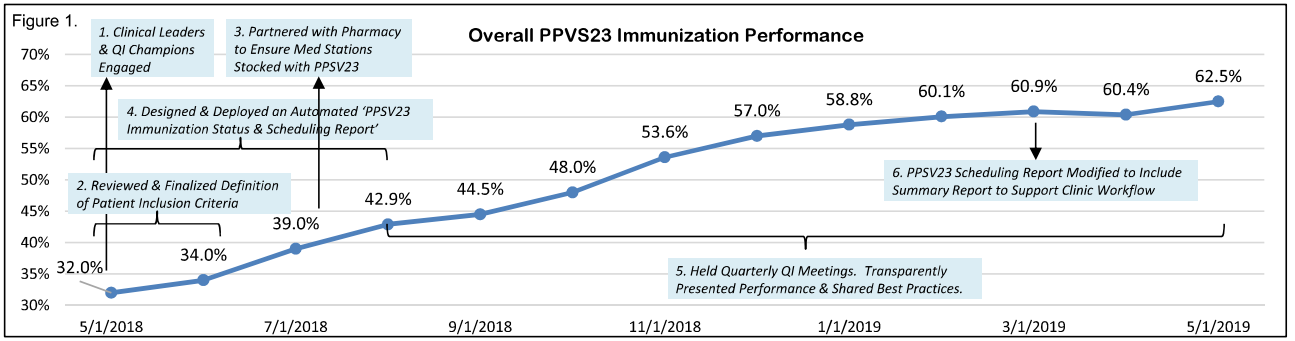
6. 'PPVS23 Immunization Status & Scheduling Report' modified to include summary page to more effectively integrate information into specialty clinic workflow

References

1. CDC. 2019. Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger.

Methods

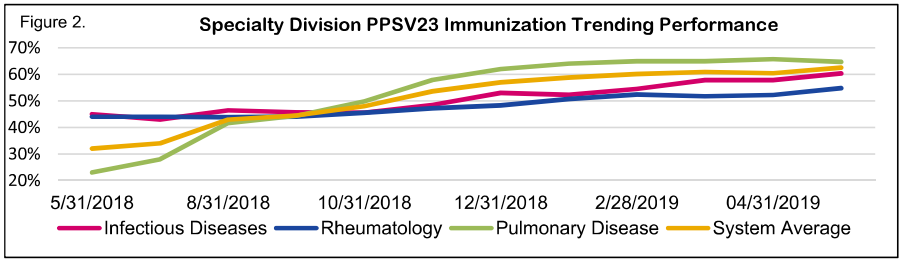
Figure 1.



Results

- PPSV23 immunization rates increased by over 30 percentage points from 32.0% to 62.5% [Figure 1]
- Rheumatology improved by 25%, infectious diseases by 34%, and pulmonology by 181% [Figure 2]

Figure 2.



Conclusions

- In 1 year, PPSV23 vaccination rates almost doubled!
- Best practices will continue to be identified, refined, and integrated across specialty divisions.
- With proven PPSV23 vaccination improvement methods, additional specialty divisions will be recruited.
- To support engagement, team will add opportunity for specialists to receive American Board of Pediatrics Maintenance of Certification Part 4 credit for project participation.
- Initiative will have opportunity to reach more than 10,000 additional high-risk patients in need of protection from invasive pneumococcal disease.

Children's Mercy KANSAS CITY

UMKC School of Medicine