



Background

- The CAPiTA trial demonstrated 45.6% efficacy of pneumococcal conjugate vaccine (PCV13) against vaccine-type pneumococcal pneumonia.⁵
- Pneumococcal polysaccharide vaccine (PPSV23) has shown effectiveness rates of 60-70% against invasive vaccine-type pneumococcal disease.⁵
- Most patients who receive a pneumococcal vaccine exhibit an immune response within 2 to 3 weeks.⁵
- Salina Regional Health Center (SRHC) discontinued pneumococcal immunization screening on admission after fiscal year 2013 due to increased complexity of the Centers for Disease Control and Prevention (CDC) patient selection algorithm and introduction of CMS reimbursement to the outpatient setting.⁴
- Pneumonia readmission became an identified disease-state by Hospital Readmission Reduction Program (HRRP) in fiscal year 2012.¹
- The pneumonia readmission rates at SRHC for fiscal years 2014 and 2019 were 14% and 16.5%, respectively.²
- The Kansas Immunization Registry (KSWebIZ) is a statewide, web-based registry containing lifespan immunization records.³
- On November 21, 2019, the CDC's Advisory Committee on Immunization Practices (ACIP) updated their PCV13 vaccine recommendations for adults 65 or older.⁶

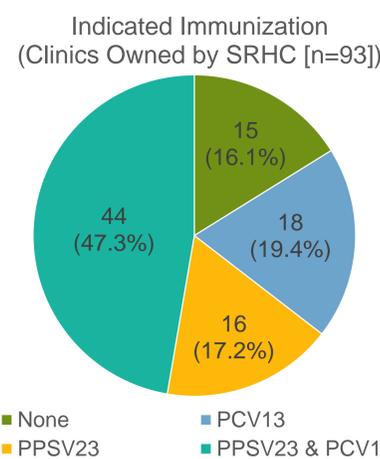
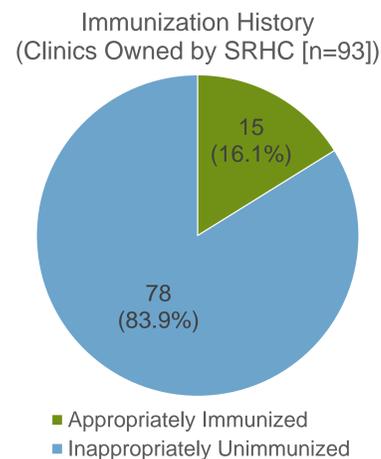
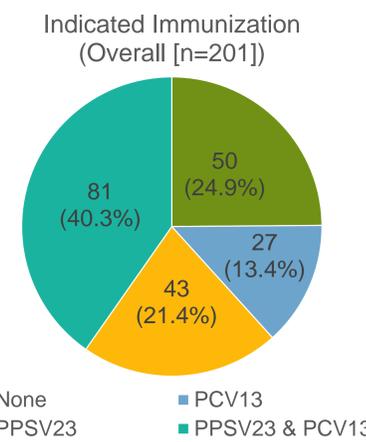
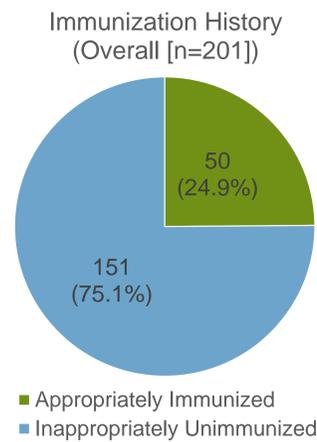
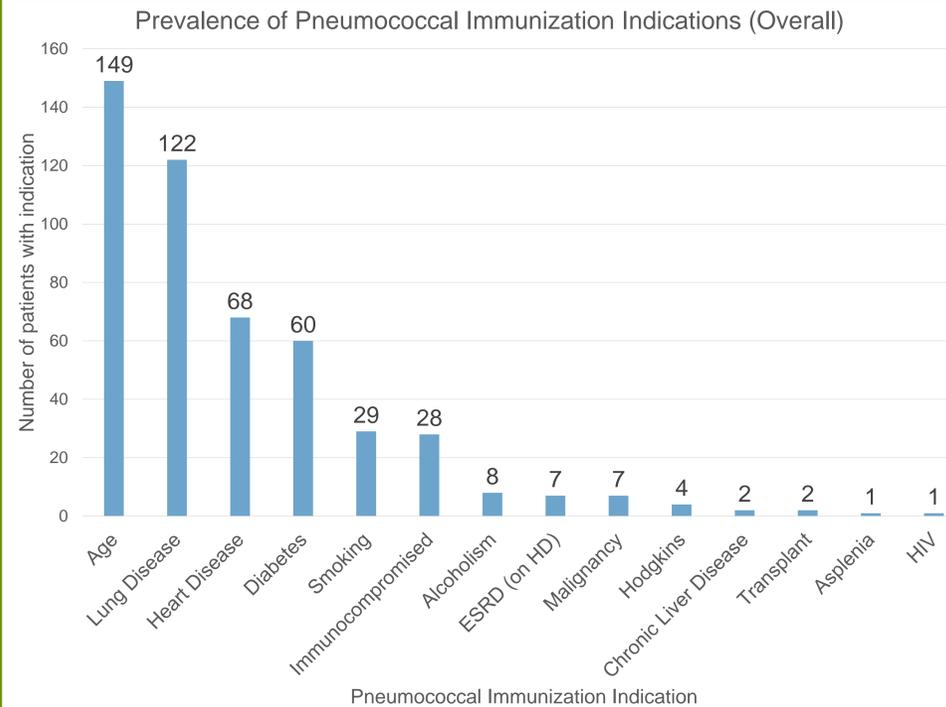
Objectives

- Quantify and assess the historical pneumococcal immunization rate in patients discharged with a primary diagnosis of pneumonia in FY2019.
- Identify potential patient populations with suboptimal immunization protection.

Methods

- Population-based, convenience sampled, single-center, retrospective, descriptive chart review.
- Generated a report from our electronic health record (EHR) to identify patients discharged with a primary diagnosis of pneumonia (meeting the CMS measure).
- Exclusion criteria: absence of immunization history in KSWebIZ, age less than 5 years, and pregnancy.
- Patients who met inclusion criteria were analyzed to identify population deficits in immunization rates.

Results



Discussion

- 151 (75.1%) patients who discharged from SRHC with a primary diagnosis of pneumonia were not appropriately immunized with the pneumococcal vaccines.
- 149 (74%) patient visits analyzed, overall, were indicated for both pneumococcal vaccines based on age alone.
- 93 (46.3%) patient visits analyzed reported having a primary care provider who practices at a clinic owned by SRHC.
- The clinics owned by SRHC do not currently have a clinical pharmacist integrated into their team.
- Limitations
 - Pharmacies are the only entity *required* to upload immunization information to KSWebIZ.
 - Inconsistent and incomplete documentation in the health-system's EHR.
 - Clinics owned by SRHC currently use a different EHR than SRHC.

Conclusions

- A majority of the patients (151 [75.1%]) discharged from SRHC with a primary diagnosis of pneumonia in FY2019 were not appropriately immunized with the pneumococcal immunization prior to admission, according to the KSWebIZ database.
- An opportunity may exist to improve immunization rates and documentation in the SRHC primary-care setting.

References

- CMS. Hospital Readmissions Reduction Program (HRRP). Accessed at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>
- SRHC Scorecard Fiscal Year 2019. Last edited 10.22.19.
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- CDC. Vaccines and Preventable Diseases: Pneumococcal. <https://www.cdc.gov/vaccines/vpd/pneumo/hcp/about-vaccine.html>
- CDC. Recommendations, Scenarios and Q&As for Healthcare Professionals about PCV13 for Adults. <https://www.cdc.gov/vaccines/vpd/pneumo/hcp/PCV13-adults.html>

Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation:

John Rosa and Linda Radke: Nothing to disclose