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Increasing vaccination rates of 23-valent pneumococcal polysaccharide vaccine among patients at high-risk for invasive pneumococcal disease

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Background

- Pneumococcal disease causes significant morbidity and mortality in children Routine childhood vaccines provide
- protection via PCV 13/15
 Certain patients are at higher risk of invasive
- pneumococcal disease (IPD)Immunocompromising conditions
 - Chronic medical conditions
- Expanded protection is recommended for those who qualify
 - 23 valent polysaccharide vaccine (PPSV23)

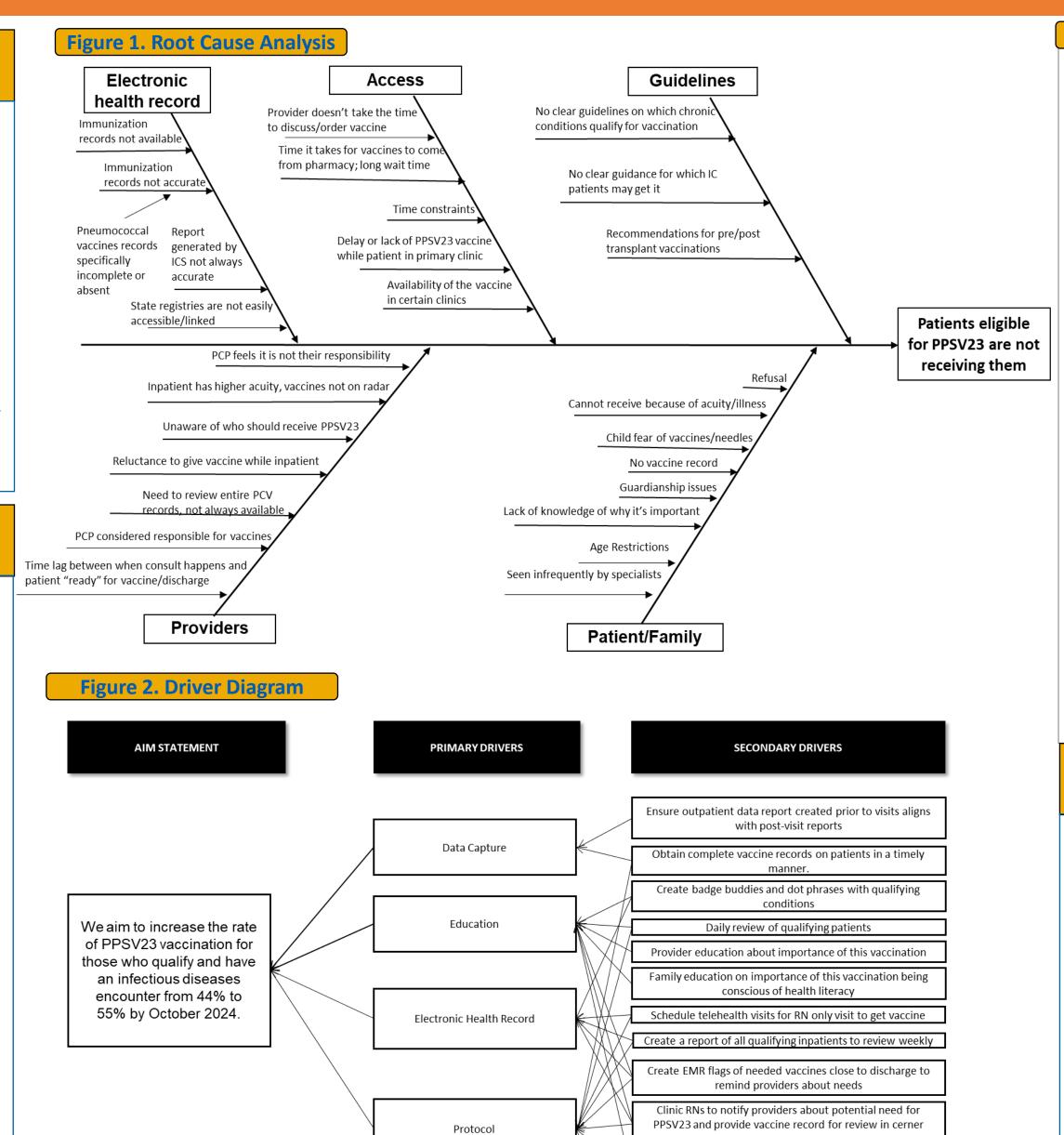
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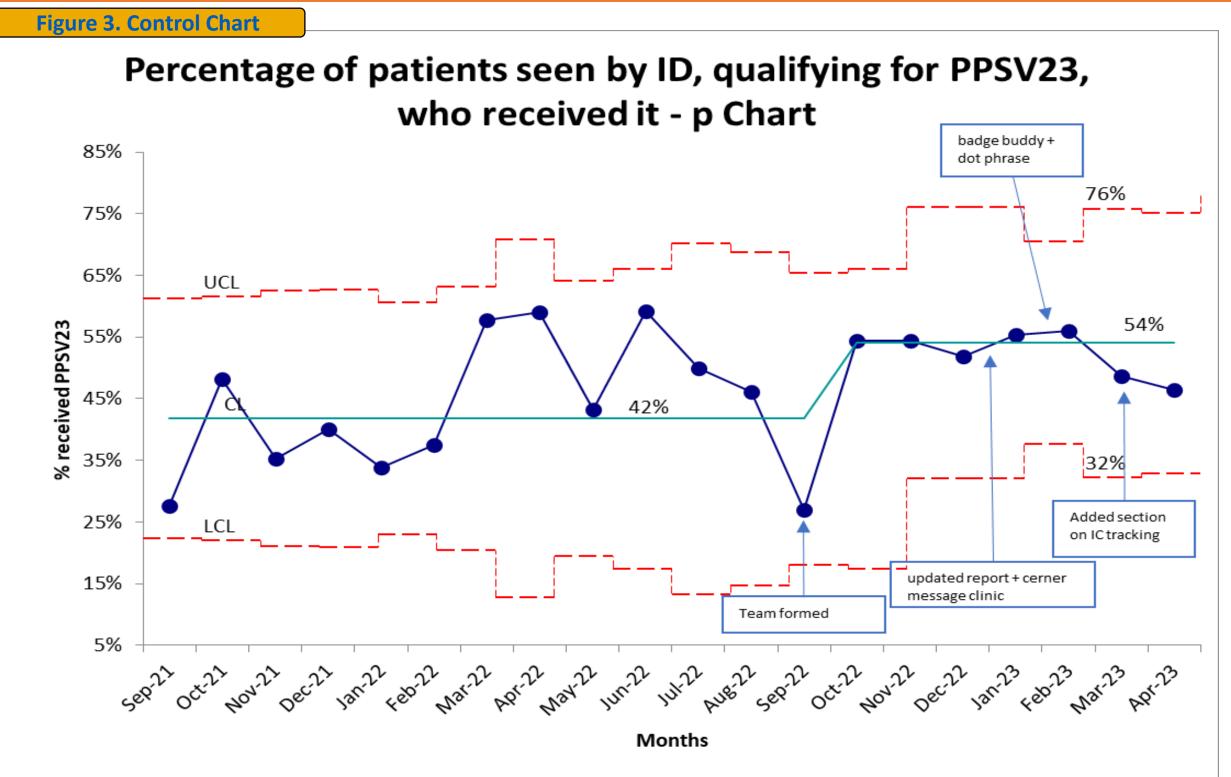
Increase PPSV23
vaccination rates among
eligible patients in both
the inpatient and
outpatient infectious
diseases settings from a
baseline of 44% to 55% by
October 2024

Methods

- Collaboration with Integrated Care Solutions to generate baseline data for patients who qualify for PPSV23 at the time of ID engagement (outpatient and inpatient)
- October 2022 Multidisciplinary team formed: ID providers (physicians, advanced practice providers and nursing staff, Pharmacist, patient advocate)
- Outcome Measure
 - Rate of PPSV23 vaccination in qualifying patients with ID encounter
- Process Measure
 - Updates on tracking list of PPSV23 and PCV13/15 eligibility
- Balancing Measure
 - Rate of adverse events and delayed discharges

- Root cause analysis (Fig. 1), driver diagram (Fig. 2) and PICK chart developed to understand, and guide planned interventions
- Plan-Do-Study-Act Cycles
 - 1) Formation of team and discussion at weekly divisional huddle
 - 2) Updated electronic medical record report and begin 2-way communication between clinic and provider
 - 3) Badge buddy and shared documentation phrase
 - 4) Add vaccine section to immunocompromised tracking list





Results

- Inconsistency in percentage of qualifying patients being immunized with PPSV23 prior to October 2022
- There was a shift in the rate of patients vaccinated for PPSV23 in October 2022, shortly after out team formed (Fig. 3)
- Most qualifying patients were immunocompromised, and teams were not comfortable administering the vaccine at the time of admission

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Conclusion

- Electronic medical record synchronization with outside systems is difficult, making vaccine recommendations hard
- Multi-step process of eligibility for PPSV23 will be streamlined with the recent approval and introduction of PCV20
- Need for collaborative efforts between all parties caring for high-risk children and adolescents to maximize protection against IPD





terature review/collaboration with Heme/Onc, BMT, SOT teams of when it could be given; AKA get "buy-in"

