



Children's Subspecialty Services Nephrology Influenza Vaccine Initiative

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Aim Statement

We aimed to 1) screen >80% and 2) vaccinate >50% of eligible, high risk nephrology patients seen in the Children's Physician Group-Children's Subspecialty Services (CPG-CSS) nephrology clinic during the influenza season 2016 – 2017.

Background

- Children with chronic kidney disease are at high risk for complications from influenza infection.
- Immunosuppressive medications as a standard part of treatment for various kidney diseases such as nephrotic syndrome or lupus nephritis, which confer additional risks.
- Infections are the third leading cause of death among patients with lupus.
- Outcomes of influenza infections in patients with kidney disease who take immunosuppressing medications are much worse when compared to the general population.

Measures

- Eligibility is defined as:
 - Age > 6 months
 - Not previously vaccinated during the current season
- High risk population defined as:
 - Children < 5 years
 - Glomerula disease: nephrotic syndrome, IgA nephropathy, post-infectious glomerulonephritis, lupus nephritis

Tests of Change

- ① 9/27/16 – Flu Vaccine Available in CPG-CSS Nephrology Clinic
- ② 10/17/16 – Initiative Start Date
- ③ 10/31/16 – Tray for tracking sheets placed in clinic
- ④ 12/9/16 – Promotion of vaccine initiative at nurse "huddle"
- ⑤ 12/30/16 – Reminder signs posted
- ⑥ 1/30/17 – Pre-clinic initiative screening to identify eligible, high-risk patients

Preliminary Findings

- Prior to intervention, only 30% of eligible, high-risk patients were being vaccinated in the CPG-CSS nephrology clinic.
- Over the course of this project, approximately 73% of patients seen in the CPG-CSS nephrology clinic were found to be eligible for the influenza vaccine.
- 34% of all patients seen in the CPG-CSS nephrology clinic qualified as high-risk patients.

Analysis

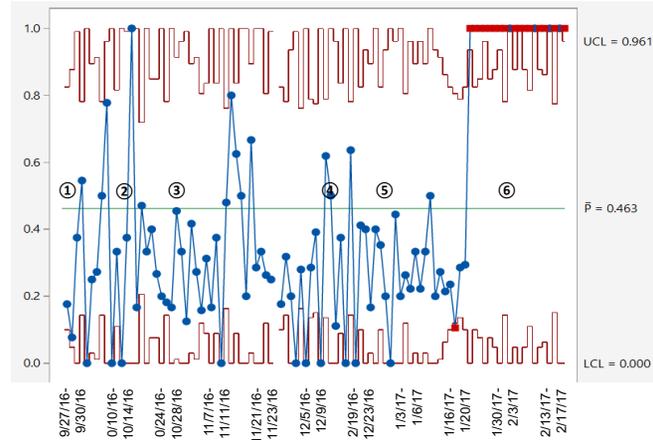


Chart 1: P-chart of All High Risk Patients Screened for Influenza Vaccine

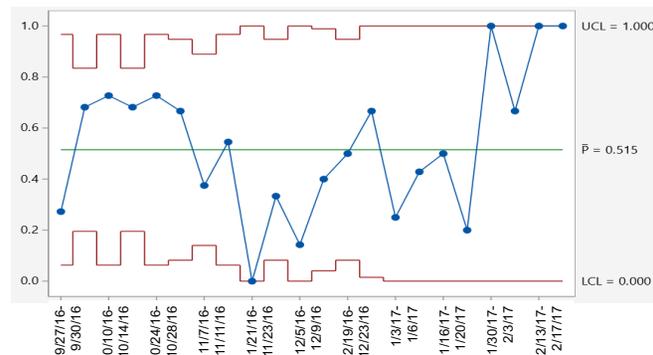


Chart 2: P-chart of Proportion of High Risk Patients Vaccinated for Influenza

Results

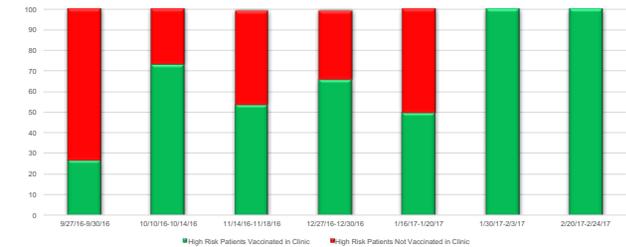


Chart 3: Percentage of High Risk Children Vaccinated for Influenza over Time

Discussion and Reflections

- While temporary responses to interventions were possible, permanent change was not achieved until the scope of the project was narrowed to focus on high-risk patients.
- After initiation of pre-clinic initiative screening, 100% of all eligible, high-risk patients were screened, increasing vaccination rates significantly.
- It is imperative to balance project goals with clinic resources and workflow.
- Reliance on personnel for action makes change difficult to sustain.
- Limitations:
 - Obtaining buy-in from staff (i.e. nursing, medical assistants)
 - Difficulty excluding parents who refuse vaccination

Next Steps

- Build influenza tracking into Epic
- Streamline pre-clinic patient screening

References

*Morbidity and Mortality Weekly Report. "Prevention and Control of Influenza. Center for Disease Control, Vol. 54 / No. RR-823 July 2005. Web. <http://www.cdc.gov/mmwr/PDF/rr/rr5408.pdf>
Lawson, Erica. "Reasons for failure to receive pneumococcal and influenza vaccinations among immunosuppressed patients with systemic lupus erythematosus." *Seminars in Arthritis and Rheumatism*, vol. 44, no. 6, 22 June 2015, pp. 666-671.