Moving the Needle with Pediatric Influenza Vaccination

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Introduction

Seasonal influenza results in significant pediatric illness, hospitalization, and mortality. The Centers for Disease Control (CDC) and the American Academy of Pediatrics (AAP) recommend facilitating influenza vaccination at every healthcare encounter including the perioperative period (Bryant, 2023).

Background

Kaiser Permanente Santa Clara (KP SCL) identified a gap in care and missed opportunity to provide seasonal influenza vaccination during perioperative care for our pediatric patient population while under anesthesia. Prior to the 2023-2024 influenza season, KP SCL lacked a process for providing recommended protective influenza vaccine during perioperative encounters to our vulnerable pediatric patients.

Purpose

The purpose of this quality improvement evaluation is to determine if KP SCL Perioperative Services can increase seasonal influenza vaccination volume in our pediatric population by offering vaccination while under sedation or anesthesia.

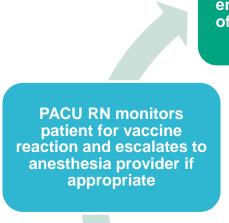
Target population includes children 6-months to 18-years of age undergoing procedure or surgery at KP SCL Perioperative Service venues, including Main OR, Ambulatory OR, and Eye Surgery OR.





Methods

After review from the KP Research Determination Office, dedicated members of a multidisciplinary perioperative team, including anesthesia providers, leaders, nurses, physicians, and pharmacists, developed our Perioperative Pediatric Influenza Vaccination Program to address the urgency of action aimed at increasing influenza vaccination rates.



Anesthesia provider nisters vaccine while patient is unde anesthetic therefore eliminating the pain nd/or anxiety associate



Workflow begins during Preoperative Medicine encounter with provide offering vaccine service during surgery

> Day of Surgery Pre-Op RN confirms with parent/guardian(s) provides screening questionnaire assessment. and rovides CDC Vaccine mation Statement to arent/guardian(s)

ntra-Op RN retrieves th accine, barcode scan he vaccine informatio nto the record, and hands off to the Anesthesia provider

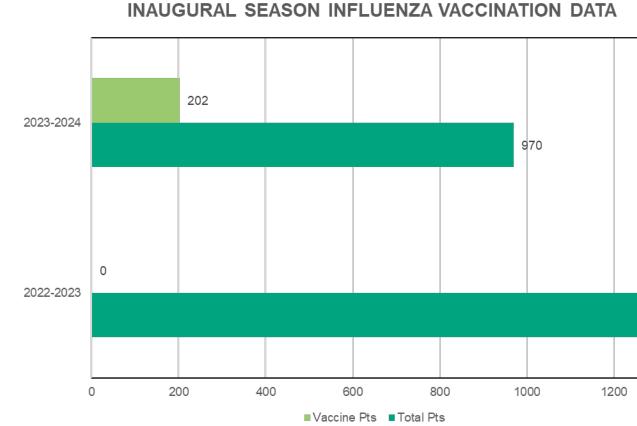
Results/Outcomes

During the inaugural season, our Perioperative Services team provided over 200 pediatric patients with protective influenza vaccination from September 2023 to April 2024. The volume of pediatric surgical patients during the same period is 970.

Insights gained after the close of the inaugural season included:

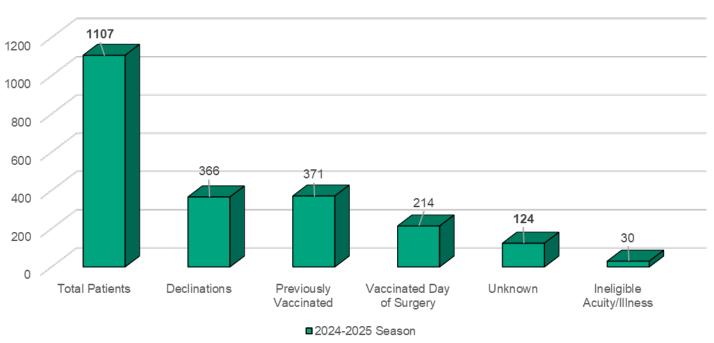
- Post-intervention for the 2023-2024 season demonstrated a 21% pediatric seasonal influenza vaccination capture.
- Identified early vaccination disparities in the developmentally challenged adult population and opportunity to expand the program. The program expanded in support of this patient population in January 2024.
- Identified need for additional information including volume of declinations, volume of previously vaccinated patients (prior to day of surgery), and volume of ineligibility (fever, illness, acuity going direct to OR).

Outcome Data









2024-2025 Season

Discussion

Improvements implemented in season two provided valuable insight into actual volume of eligible patients. The total volume of patients in the 2024-2025 season increased to 1107. The total volume of patients eligible for Day of Surgery vaccine is 341. Disqualifications included previously vaccinated patients, parent/guardian(s) declination, and illness or acuity presentation. Post-intervention for the 2024-2025 season demonstrated a 64% pediatric influenza vaccination capture.

Implications for Practice

The perioperative period is a prime opportunity to increase pediatric influenza vaccinations that will provide protection to vulnerable patients while creating a positive experience. The program can be replicated and holds strong implication for practice change. Every child vaccinated could be life saving.

References

Bryant, K.A. (2023). Recommendations for prevention and control of influenza in children, 2023-2024. Pediatrics, 152(4), 1-29.doi.10.1542/peds.2023-063773.

Grohskopf, L..A.,... (2023) Prevention and control of seasonal influenza with vaccines: Recommendations of the advisory committee on immunization practices - United States, 2023-24 influenza season. MMWR, Recommendations and Reports, 72(2), 1-25.doi:10.15585/mmwr.rr7202 al.

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