



Staying Ahead of Catch-Up Immunizations at the Washington Irving School-Based Health Center

Fidela Chiang, FNP, MPH; Tatiana Alicea, RN; Nicole Jones, MOA; Rimma Iskhakova, MOA; Jeanne Flynn, FNP; Katherine Bednarczyk, FNP; Rachel Evans, BA

The Washington Irving School-Based Health Center, The Institute for Family Health, New York, NY 10003



Background

Every year, the Washington Irving School-based Health Center (SBHC) encounters the challenge of administering a large volume of catch-up immunizations. Contributing factors include: limited access to healthcare, lack of health insurance, and ongoing international student enrollment. The Department of Education (DOE) requires that students meet vaccine requirements to attend school. Therefore, students who fail to meet these requirements are excluded from school and may fall behind in classwork.

Objectives

This quality improvement project aimed to effectively and efficiently administer catch-up immunizations to students at risk either of school exclusion due to incomplete immunization status for required vaccines, or of getting sick from lack of immunization.

Setting and Participants

The Washington Irving SBHC is comprised of six schools with over 2500 students that range from ages 5-19. These schools include:

- Gramercy Arts High School
- Union Square Academy for Health Sciences (USA)
- Academy for Software Engineering (AFSE)
- High School for Language and Diplomacy (L&D)
- International High School, and
- Success Academy, a charter elementary school.



Advantages of being housed within the school include easier communication with patients and school staff, as well as centralized outreach for patient tracking. The SBHC medical staff implemented the project, in collaboration with school staff. The federal Vaccines for Children (VFC) program supplied all vaccines.



Design and Implementation

For optimal patient flow, the SBHC staff implemented the following process:

- Reviewed/translated vaccine records, reconciled them with NY state database
- Generated and collected parental vaccine consent forms
- Scheduled up to five vaccine appointments per day
- Administered vaccines according to the CDC's catch-up immunization schedule¹
- Ensured follow-up vaccine appointments prior to departure
- Encouraged school staff to bring excludable students to the clinic
- Communicated with school staff for streamlining of paperwork

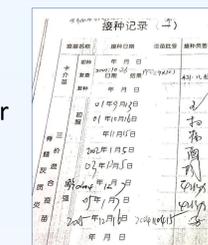


Discussion

To date, a total of 241 students have received over 800 catch-up immunizations, with 60% of students being at risk of school exclusion. Compliance rates for the International High School are at 100% currently, and no students have been excluded from school attendance.

The following challenges were encountered:

- Receiving clinic parental consent forms without vaccine consent forms
- Receiving vaccine records in foreign languages
- Estimating how many vaccines to order from VFC supplier on a monthly basis
- Patients not showing up for appointments
- Patients not returning to the clinic for additional vaccine doses at catch-up vaccine intervals
- Being unable to draw vaccine titers at the SBHC
- Being unable to obtain vaccine records when patients report being "up to date", when moving either from another state or another country



Future recommendations for delivering catch-up immunizations at SBHCs include:

- Consistently utilizing and updating the New York state database for vaccines (Citywide Immunization Registry)²
- Utilizing text reminders for follow-up appointments
- Distributing vaccine consent forms early in the school year
- Translating vaccine consent forms into multiple languages
- Partnering with each school for specific vaccine needs
- Utilizing the Center for Disease Control and Prevention's (CDC) nationwide vaccine tracking system, Immunization Information Systems (IIS)³

This ongoing quality improvement project has demonstrated that coordinated SBHC vaccine outreach efforts can provide valuable healthcare access and improve school attendance.

Results

Figure 1 (right). The overwhelming majority of vaccines were given to students attending the International High School due to a higher percentage of students with incomplete immunization status. This can also be attributed to a lack of vaccine records, or an inability of SBHC staff to translate vaccine records. Students attending Gramercy, AFSE, L&D, and USA largely obtained their influenza and meningococcal vaccines. Five of the six schools at Washington Irving surpassed last year's total number of vaccines given.

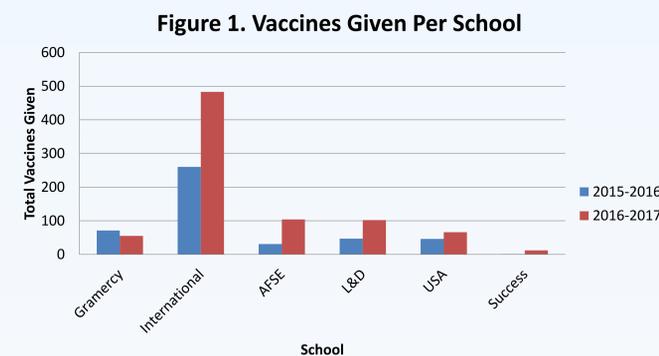


Figure 2. Distribution of Vaccines Given

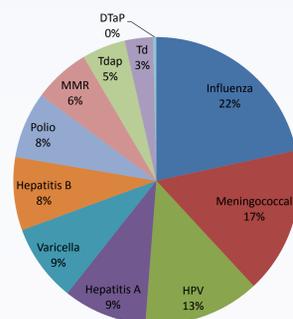


Figure 2 (above). More than half of the vaccines given included the newly required meningococcal booster vaccine for high school seniors, the influenza vaccine, and the human papillomavirus (HPV) vaccine. The remaining vaccines were a near even distribution of both the school-required and recommended vaccines.

Required: Tdap/Td/DTaP, MMR, varicella, Hepatitis B, polio
Recommended: Hepatitis A, influenza, HPV

Figure 3. Vaccines Given Per Month

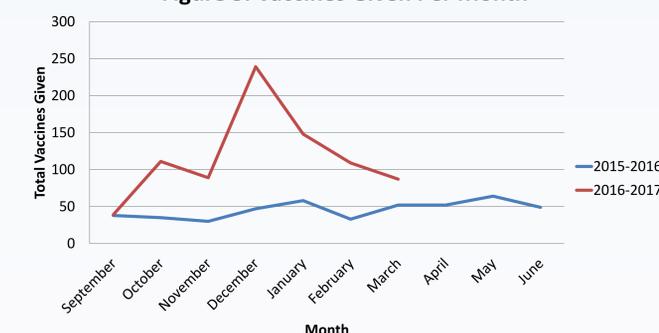


Figure 3 (above). The months experiencing the highest number of vaccine administrations were December and January, with a total of 387 vaccines given. To date, the SBHC has administered over 800 vaccines for the 2016-2017 school year. This year's quality improvement process demonstrates a significant difference in vaccine administrations compared to the 2015-2016 school year, which experienced minimal fluctuations in vaccine administrations.

References

1. Centers for Disease Control and Prevention. (2017, February 6). Catch-up Immunization Schedule. Retrieved from <https://www.cdc.gov/vaccines/schedules/hcp/imz/catchup.html>
2. NYC Health. (2017). The Citywide Immunization Registry. Retrieved from <https://immunize.nyc/provider-client/servelet/PC>
3. Centers for Disease Control and Prevention. (2015, May 19). Immunization Information Systems (IIS). Retrieved from <https://www.cdc.gov/vaccines/programs/iis/strategic.html>