Parental Declination of School-Located Vaccination Services

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Abstract
Objectives: To identify barriers to childhood and adolescent school-located vaccinations
Methods: Parents were provided the opportunity to explain why they did not consent to the vaccines offered.
Results: During Fall 2013, 805 forms indicating declination of vaccination services were received of which 445 (55%) provided reason for decline. Just over half (51.7%) of parents indicated their child was up to date on vaccines while 10.1% of these forms were unclear or incomplete.
Conclusions: Incomplete consent forms and lack of knowledge on what vaccines a child needs may highlight that completing consent documentation is a barrier for parents and parents’ understanding of their child’s vaccination status is limited.

INTRODUCTION
School-located vaccination (SLV) has a long history in the United States and has successfully contributed to lower morbidity and mortality associated with vaccine-preventable disease [1]. In addition to serving as an immunization coverage-net for the school-aged population, SLV clinics are able to reach adolescents, a population shown to access preventative healthcare infrequently [2] resulting in missed opportunities for vaccination [2]. Health4Chicago (H4C) is a school-located adolescent vaccination program in Chicago, Illinois that provides education about recommended vaccines, facilitates Medicaid enrollment for uninsured students, and encourages families to establish care at a medical home. Students age 10 years and under are offered influenza immunization while those over 10 years of age are offered all four recommended adolescent immunizations: Tdap (Tetanus, Diphtheria, and Pertussis), MCV4 (Meningococcal Conjugate Vaccine), HPV (human papillomavirus), and Influenza vaccine. As part of a quality improvement initiative, H4C provided the opportunity for parents and legal guardians who declined school-located immunization to explain their reasons for decline. These declinations were analyzed in order to better understand obstacles to adolescent vaccination in Chicago schools when known barriers including access to care and payment were removed.

MATERIALS AND METHODS
During fall 2013, 1,680 vaccines were administered to Chicago area students. Health4Chicago received 805 forms indicating declination of vaccination services of which 445 (55%) provided reason for decline. The 445 forms providing a reason for declination were qualitatively assessed under Institutional Review Board approval at both the University of Illinois at Chicago and University of Chicago Medicine. Reasons for declination were coded into ten qualitative categories, shown in Table 1, using Excel 2010. Additional covariates collected include the age of the child and zip code of the child’s residence. The coded data was analyzed using summary statistics, stratified by both age and zip code.

RESULTS AND DISCUSSION
Just over half (51.7%) of parents who provided a reason for declination of immunization indicated their child was up to date with vaccines. Some specific reasons for declination included “My child has a doctor” (8.3%), “I prefer my child be immunized by our doctor” (3.4%) and lack of clarity on what vaccines the child needs (1.3%). An additional 1.6% of parents cited vaccine concerns such as “I don’t want that poison that in my son” while 10.1% of forms were incomplete or illegible. H4C protocol requires parents to be contacted in the event of an incomplete form; therefore, the 45 parents included in this study were unreachable by telephone.

No significant patterns were identified when stratified by zip code. A larger number of consent forms were submitted as incomplete or illegible for children less than 10 years of age (11.2%) compared to adolescents aged 11-19 (4.5%). Parents of younger children were more likely to give reasons such as,
“My daughter doesn’t need vaccines, and” while parents of older children were more likely to state “I don’t have my child’s immunization records”. Over half of parents declining school-located immunization reported their child did not need any vaccines.

Anecdotal evidence from programmatic experience shows significant confusion among Chicago-area parents regarding vaccinations their child needs to be “compliant” with school requirements for matriculation compared to vaccinations "recommended" for their child/adolescent by medical oversight bodies such as the Centers for Disease Prevention and Control (CDC). This large percentage of parents responding that their child is “up to date” may reflect this gap in knowledge. In some cases, vaccines were withheld due to incomplete or illegible forms. In other cases, consent was given, but when the student’s records were reviewed by the program nurse, it was determined the child up to date with their vaccines. Of note, there were no restrictions on a parent filling out a declination form for multiple children, all of which are included in this analysis.

**CONCLUSION**

While nearly half of parents declined SLV services with the belief their child was up to date with CDC- recommended vaccines, H4C was unable to verify whether these children were in fact immunized. Factors prohibiting this verification include the protection of student records under the Family Educational Rights and Privacy Act (FERPA) and the voluntary status of the Illinois Comprehensive Automated Immunization Registry Exchange (I-CARE) at the time of this study. The ability to compare parental reports of adolescent vaccination coverage to medical records would provide valuable information, particularly since 17.4% of adolescent students (age 11-19) who were provided parental consent to receive vaccines were found by clinical staff to be current with recommended vaccinations. Further studies assessing parental understanding of required (for school matriculation) compared to recommended (by the CDC) immunizations may be necessary to influence health education around school-located vaccination services.

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**Conflict of interest**

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**REFERENCES**