Denver's In-School Immunization Project: The Perspective of Denver Public Schools' Personnel

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Abstract

Background: During the 2009-2010 school year, Denver Health (DH) provided in-school vaccination to consented elementary school students (influenza vaccine only) and middle school students (influenza and age-appropriate vaccines) attending Denver Public Schools (DPS).
Setting: Twenty elementary and seven middle schools within the DPS system.
Population: Thirty-four in-depth interviews and four focus groups were conducted with DPS personnel. Interviews were conducted with school system administrators, school principals, and school-based paraprofessionals. Focus groups were conducted with school nurses and project-based paraprofessionals.
Project Description: Interviews and focus groups with principals and nurses indicated strong support for and satisfaction with in-school vaccinations at school and parental levels. However, interviews with system administrators indicated that inter-institutional collaboration between DH and DPS faced a number of interactional difficulties and practical challenges. Interactional difficulties included the legal constraints that affected and shaped project development, the failure to sufficiently forge a cooperative relationship at project onset, and inadequate communication within and across institutions. Practical challenges included difficulty securing adequate supplies to support pre- and post- clinic activities, establishing consistent buy-in from school nurses, identifying ideal sites and times for the clinics, and managing the increased workload of school nurses and DPS administrative personnel.
Results/Lessons Learned: The project resulted in increased expenditure of time and resources at multiple levels of the school system. However, the project was received favorably by parents and school personnel and functioned effectively to minimize disruption of the school day. Lessons learned during the first year of implementation have resulted in changes to the consent process and increased opportunities for parents to learn about the program, which have led to a significant increase in the number of consented students participating in the program. Collaboration and communication, including clarity of mission and role definition, are crucial for the success of such a project.

Background

Vaccine recommendations for school-age children expanded in recent years

- Since 2008, influenza vaccine has been recommended annually for all children 6 months to 18 years of age
- Since 2005, new vaccines for adolescents have been introduced, including Tdap, meningococcal (MCV4), and HPV vaccines
- School-located vaccine programs have been proposed as one solution to overcoming barriers to delivering recommended vaccines to school-age children
- Little is known about public school staff's perspectives about their capacity to expand the role of public schools to include delivery of vaccines

Objective

- To describe the perspective of administrative and school-level staff regarding the challenges and successes of hosting a school-located vaccine program

Setting

Denver Public Schools

- Urban public school system hosted 2 school-located vaccine programs
  - District administration
    - Ensured vaccine program complied with Board policy and state law
    - Communicated with school-level staff about the program, including communication to principals, nurses, and paraprofessionals
    - Hired and managed school-located vaccine program paraprofessionals
  - School-level staff, including school nurses, school-based paraprofessionals
    - Distributed, collected and reviewed consent forms
    - Provided clinic support clinic days

Public Health Department (Denver Health)

- Community vaccinator conducted 2 school-located programs
  - Delivered vaccines to consented students during school hours
  - Billed 3rd party payers for services delivered
  - Families were not billed

Teen Vaccine Jam School-Located Vaccine Program

- 7 middle or K-8 schools randomly selected
  - Median free/reduced lunch: 72%
  - 3057 6-8th grade students, median per school: 277
  - 11 vaccines offered, including Tdap, MCV4, and HPV (girls only)
  - 3 clinics/schools during '09-'10 spring semester

Flea Fly Flu School-Located Vaccine Program

- 20 elementary schools
  - Median free/reduced lunch: 87%
  - 9814 ECE – 5th grade students, median per school: 505
  - Seasonal and H1N1 influenza vaccines offered
  - 2 clinics/schools during '09-10 influenza season

Data Sources & Population

Qualitative Assessment of School-Located Vaccine Program

- In-depth key informant interviews
- Focus groups
- Conducted in spring and summer 2010, following completion of most clinics

Participants

- Denver Public Schools
  - District administration
  - School-level staff, including principals, nurses, and paraprofessionals
  - School-located vaccine project paraprofessionals

Interview and Focus Group Questions

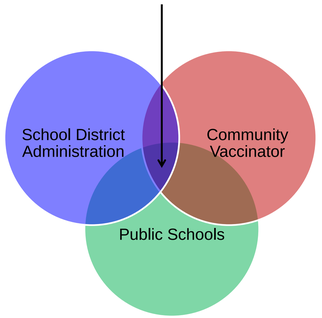
- Assessed participants' views of the feasibility of school-located vaccine programs, with particular attention to legal, practical, and administrative issues
- Included focus on processes related to obtaining consent and billing 3rd party payers for vaccines delivered

Analysis

- Interviews and focus groups were digitally recorded, transcribed, and coded using ATLAS.ti software
- Analysis was completed in collaboration with Denver Public School staff, highlighting the administrative and school-level experience of hosting a school-located vaccine program

Project Description

School-Located Vaccine Program



Interview and Focus Group Participants

School District Administration (n = 6)

School District Position	Number
In-Depth Interviews	
Department Manager	1
Department Supervisors	2
General Counsel	1
School Health Specialists	2

School-level Staff (n = 48)

Professional Title	Number
In-Depth Interviews	
Elementary School Principals	18
Elementary School Paraprofessionals	3
Middle School Principals	6
Middle School Nurse	1
Focus Groups	
Elementary School Nurses	12
Middle School Nurses	4
Project Paraprofessionals	4

PARTNERSHIP BACKGROUND: THE PROJECT IN CONTEXT

A major factor related to the challenges experienced by the In-School Immunization Project was the complicated history between Denver Health (DH) and Denver Public Schools (DPS).

Quick implementation and late hiring of DPS project staff necessary to run the program (project paraprofessionals) were additional burdens.

❖"Denver Health - I mean, they've been an excellent partner. They certainly know what they are doing. So I think in general, we are very thankful that we have such a credible partner. But it was a challenge that they were not as versed in day-to-day school operations. And so it was a huge learning curve and necessarily a challenge trying to communicate those things." (Administrator)

OVERWHELMING GENERAL SUPPORT FOR VACCINE DELIVERY AT SCHOOL

School District's and Schools' Support for the Program

❖"I think [the program] is a great resource for students. Especially for those who don't have a medical home and don't have any other way to access immunizations. And clearly there is a need because we have a lot of under-immunized students who need their vaccines." (Administrator)

Nurses and school staff communicated that

- Clinic seemed efficient, well-run
- Generally there was good nurse-paraprofessional
- interaction
- Good interaction with community vaccinator clinic staff
- Denver Health very responsive
- Collecting consents not difficult with project
- paraprofessionals hired

❖ "I personally think [the project] is important because if the children aren't healthy, then they can't apply themselves academically in the school. Their health has a direct link on how well I think they are going to perform in the schools. So if there is a piece of the school day where we can support good health habits, i.e. immunizations, so that they are immune to diseases that we experience, then I'm supportive of that." (Principal)

Parental/Community Support for the Program

Administrators described their need to respond to inquiries made by an anti-vaccine group that voiced concern about the program in schools. However, at the level of the school, no principals, nurses, or paraprofessionals reported encounters with anti-vaccine parents (i.e., parents who were angry that vaccines were offered at schools)

❖"I think generally speaking, parents are grateful for the opportunity. You know, the others [anti-vaccine groups] are sporadic and a very small audience." (Administrator)

❖"Because it was offered in such a way that it was a service, I think it was very positive. I didn't hear any parents stating anything about 'this shouldn't be occurring in schools,' because they had the opportunity to choose it or not choose it." (Principal)

PROJECT CHALLENGES

Competing Demands Placed on Public Schools

Participants reported that the expectations placed on schools are great and the challenge of being pulled in so many directions raised questions about the role of the school delivering vaccines to students:

❖"A lot of people don't believe that public schools should be a place or vaccines…and we are mindful of the public response to public schools" (Administrator)

❖"Public schools continue to take on more and more roles and the more things we do, I think the less we do well. And we are being asked to do more and the resources are less and less." (Principal)

❖"With some parents --not all parents, no-- but you do question 'Are we taking away some of their responsibility for taking care of their kids in this way'? And it's just sort of a philosophical question… we've become the nanny." (School Nurse)

Limited Resources of Public Schools for Additional Responsibilities

❖"If we were in a small cramped room, it got stressed…we might be next to an office or another classroom or something, so it was constantly that we needed to keep our voices down." (Project Paraprofessional)

❖"You need extra help… you are only at that school one day a week and now we are supposed to conduct this clinic? " (Nurse)

❖"It depended on the school. Some of the schools, we had teachers thank us and had the students thank us. And then we had schools where we were resented the minute they saw you. And they made it known. The secretaries were nasty. They did not want you on their premises. They were very suspicious and questioning… they were terribly territorial and they made it very clear they weren't going to help, and they just wanted me not there." (Project Paraprofessional)

Barriers to Student Participation in Program

Complicated consent forms and process:

❖"[Some of] the parents don't understand. They sign for the child to have the [vaccine] but when someone at church or someone in the community makes some comment about it, then they are fearful about what was given, which just tells us it is not fully-informed consent." (Administrator)

❖"[The consents] were very technical and way too much. Above the education level of many of the people they were dispensed to." (Nurse)

❖ "I know all the legal departments had to contribute to it, that all the language there is for a reason. But it is just so long, so many words, you just get lost" (Project Paraprofessional)

❖"I had a couple of instances where there was confusion about 'Did the kid bring it [the consent form] in? Did the teacher hand it in? Did it get to us?' And I mean even up to the very last clinic... you know, you go back to the teacher and she goes 'That's not my responsibility to empty out that basket of forms.'" (Nurse)

Lack of opportunities for parents to ask questions:

❖"I would have liked to have seen, at one of our parent meetings, that this is what we are doing and this is how we are doing it. These are your options. And more on a one-on-one basis. So they would be able to talk with a person." (Principal)

Language barriers:

❖"Are we nuts or what? One of us might have been the only Spanish speaking person there. Sometimes it would be like 'What is this little child saying?' It was just like… we were juggling so many balls. "(Nurse)

Results

- The project resulted in increased expenditure of time and resources at multiple levels of the school system
- The project was received favorably by parents and school personnel
- The project functioned effectively to minimize disruption of the school day
- Collaboration and communication, including clarity of mission and role definition, are crucial for the success of projects like this one

Lessons Learned

RECOMMENDATIONS FOR IMPROVING THE PROJECT

The need to improve communication was the most persistent theme across recommendations including:

- communication between clinical and school staff, eg. Information sessions with school secretaries and schools staff regarding information they may be asked by parents
- Communication from school and clinic staff to parents including:
  - Conduct early information session for parents where they can ask questions and provide consent
  - Establish early dates for clinics and advertise early
  - Establish channels to communicate with and distribute consents to parents that do not rely on students or teachers
  - Further clarify for parents that they would not be billed for vaccines

Additional recommendations included:

- Increase clarity regarding roles and responsibilities of project paraprofessionals, school staff and vaccinators
- Schedule clinics before or after school rather than during school day

Acknowledgments

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