

Experience with an Influenza and Tdap Clinic as Part of Project Homeless Connect Omaha

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Background and Purpose

As part of Project Homeless Connect Omaha 2016 (PHCO) held at Creighton University, pharmacy and nursing student / faculty / staff volunteers provided free immunization services. Immunization status screening, education, and promotion of optimal adult immunizations were provided, with Influenza and Tdap vaccinations given where indicated.

Design

- Student volunteers screened clients to learn about prior immunizations, and about conditions where additional vaccinations might be needed.
- Student Health volunteers utilized NESIIS (Nebraska State Immunization Information System) and IRIS (Iowa registry) to check for documented immunizations. Administered vaccines were entered into NESIIS.
- Where indicated, clients were offered a free Influenza and/or Tdap vaccination. Based on reported conditions (e.g., asthma, diabetes, etc.) or health behaviors (smoker), clients were also referred for additional vaccines.



Status Screening Form & Event Demographics

Immunization Status Screening: **Maya Community HE** 2/20/16

Please complete the following form:
Your age group (check one):
 12-17 18-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-89 90-94 95-99 100+

Gender (check one):
 Male Female

Your race or ethnic background (check one box only):
 African American Hispanic/Latino Caucasian/White Other: _____

Status Issues (circle or write in):
 Asthma Diabetes Smoker Hepatitis positive

Vaccines:
Hepatitis A: Yes (and Date) No Don't Know (and Date)
Hepatitis B: Yes (and Date) No Don't Know (and Date)
Pneumococcal (PPSV23): Yes (and Date) No Don't Know (and Date)
Pneumococcal (PCV13): Yes (and Date) No Don't Know (and Date)
Tdap: Yes (and Date) No Don't Know (and Date)
Tetanus, Diphtheria, Pertussis (Tdap): Yes (and Date) No Don't Know (and Date)
Shingles: Yes (and Date) No Don't Know (and Date)

Project Homeless Connect – Omaha: Creighton University (9th Year)
April 1, 2016: 8 AM – 3 PM

- * 481 total Event participants
- * 386 received Health Services
- * 54 received Immunization Services
- * Shelters in Omaha, Council Bluffs, and Fremont brought clients to the event
- * Participants could see up to 40 different service providers; Exps: Hairscuts-Housing-Vision-Immunizations

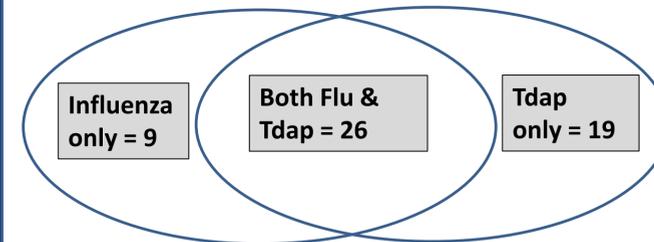
Interprofessional Teamwork

- * 4 Pharmacy Faculty
- * 2 Nursing Staff (Student Health)
- * 5 Nursing BS and DNP Students
- * 10 PharmD Students

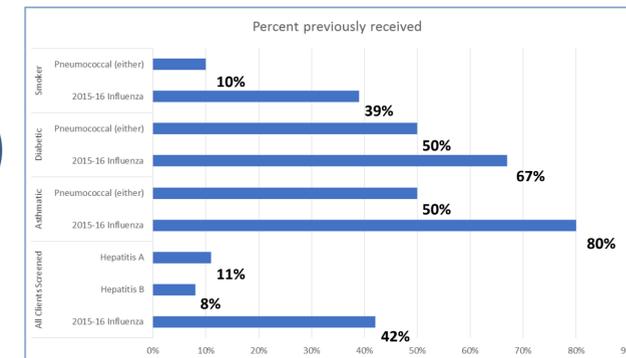
Client Demographics

- * For 52 complete records available, 36 (68%) males and 16 (31%) females were screened
- * Thirty-five (67%) of 52 with complete records were white, 10 (19%) black, and 6 (12%) of Latin ethnic group
- * One client under 19 yrs was screened, but could not be vaccinated due to lack of guardian consent. The youngest age of vaccination was 20 yrs and oldest 59 yrs, with 8% < 21 yo, 64% 22-49 yrs, and 25% 50-59 yrs.
- * A total of 54 clients were vaccinated with either or both influenza (35; 65%) and/or Tdap (45; 83%) vaccines.

Results



**54 participants vaccinated;
80 total vaccines administered**



Vaccination Status - High Risk Patients

High Risk Groups

- Thirty-eight total clients (70%) reported one of three high risk conditions screened, including asthma (8; 21%), diabetes (4; 11%), smoker (30; 79%).
- Clients were not routinely screened about immune compromising conditions or substance abuse disorders, due to limited available privacy/time.
 - * All clients were considered potentially at risk for a substance abuse disorder.
- There were similar rates of asthma and diabetes across ethnic groups, but white clients had double the rate of smoking (66%) compared to the black (30%) and Latino (30%) groups.

Vaccination Status for High Risk Groups

- Of 48 clients with record information, 22 (42%) indicated they had already received a 2015-16 Influenza vaccination; 35 (65%) of 54 total clients vaccinated received Influenza vaccine.
- Of 52 records with information, only 4 clients screened reported receipt of a pneumococcal vaccine; no pneumococcal vaccines were available for administration.
 - Of 8 with asthma, 80% reported a prior Influenza, and 50% reported a prior pneumococcal vaccine.
 - of 4 with diabetes, 67% reported a prior Influenza, and 50% reported a prior pneumococcal vaccine.
 - Of 30 smokers, 39% reported a prior Influenza, and 10% reported a prior pneumococcal vaccine.
- Due to environmental & lifestyle risk factors, all clients were considered at risk for Hepatitis B disease
 - Only 4 (8%) of those screened reported having received any Hepatitis B vaccinations.
- Due to environmental risk factors, all clients were considered at risk for Hepatitis A disease.
 - Only 6 (11%) of those screened reported having received any Hepatitis A vaccinations.

Discussion

- Those seeking clinic services were typically under-vaccinated, per screening.
- Volunteers provided two commonly indicated vaccines (Quadrivalent Influenza 2015-16 and Tdap), and referred for other recommended vaccinations.
- Three additional vaccines were frequently indicated based on global status screening: Pneumococcal (PPSV23), Hepatitis B and Hepatitis A vaccines.
- These 3 vaccine additions at future events would increase likelihood that high risk clients could be protected against Influenza & pneumococcal disease, and also obtain a needed dose in the recommended series for Hepatitis B & Hepatitis A vaccines. Tdap was also frequently indicated & should be available.
- Utilization of the Nebraska and Iowa immunization registries was helpful in avoiding duplicated vaccinations, with event related additions to the registries providing vital records for future review.
 - 6 Tdap and 11 Influenza vaccination duplications were avoided.
 - 37 clients were already in NESIIS, 4 were in IRIS (1 unique).
 - 17 new clients and a total of 80 vaccinations were added to NESIIS.

Limitations

- Immunization status was primarily self-reported.
 - Immunization status reporting is unavoidably subject to both Acquiescence and Recall bias.
- Other participant priorities, as well as knowledge of and fear/resistance to vaccinations may have limited interest in seeking this service.



Conclusions & Implications

This clinic was able to make two commonly indicated vaccines available to this under-served population. Patients were also provided guidance and referrals for other indicated vaccines. Additional vaccines should be added for future events. Such services have the potential to protect vaccinated individuals directly, while decreasing risk for disease spread among other homeless contacts, and in the larger Omaha populations. Student and professional volunteers also gained knowledge about social determinants impacting the homeless, as well as their daily challenges. This clinic provided an opportunity to practice and learn interprofessionally.