

Improving Adult Vaccination Practices in New York City Pharmacies

**National Adult Immunization and Influenza Summit
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Disclosures

- I have no relevant financial relationships with any manufacturer(s) or commercial product(s) and/or provider of commercial services discussed in this CME activity
- I do not intend to discuss any investigational use of any commercial product or device in this presentation



Outline

- Background on pharmacy-based vaccinations in New York City (NYC)
- NYC Department of Health and Mental Hygiene (DOHMH) non-patient specific standing orders vaccination program
- Other activities with NYC pharmacists
- Next steps



Introduction

- Adult immunization coverage in NYC adults is low
- Challenges to improving coverage
 - Taking time off from work to go see a doctor
 - Many doctors don't stock or carry adult vaccines
- Pharmacy-based vaccination was already a strategy used nationally to help promote increased access to immunizations



Pharmacists' Authority to Vaccinate in NYC

- Legislation introduced to allow pharmacists to vaccinate in New York State (NYS)
 - Initial opposition from physician and nursing professional societies
- Finally legislation passed in summer 2008
 - Influenza and pneumococcal vaccines
 - Patient-specific or non-patient specific standing order for patients $\geq 18y$



DOHMH Standing Orders Program

- Challenge: Pharmacists had difficulty finding authorized providers to sign standing order
- Solution: DOHMH stepped in to help pharmacies by providing DOHMH standing orders vaccination program
 - Approved and signed by Commissioner of Health
 - Reviewed and approved by General Counsel



DOHMH Standing Orders Program

- Flu and pneumococcal vaccination standing orders program began in 2010-2011
 - ~50 independent and 1 large chain pharmacy participated in the program



DOHMH Standing Orders Program

- Additional legislation for pharmacists:
 - 2012: Zoster vaccine with patient specific order
 - 2013: Meningococcal vaccine
 - 2014: Pharmacists (and RNs) required to report vaccines given to adults ages $\geq 19y$ to the Citywide Immunization Registry (CIR), with patient consent
 - 2015: Td/Tdap vaccine; patient specific order requirement removed for zoster



DOHMH Standing Orders Program: Requirements

- Must be certified to immunize in NYS
- Must attend NYC DOHMH orientation annually
- Must sign Memorandum of Understanding
- Must adhere to proper vaccine storage and handling guidelines
- Must report all vaccinations as per NYS, NYC and programmatic requirements



DOHMH Standing Orders Program: Responsibilities

- Pharmacy responsibilities: purchase & administer vaccines; adhere to all rules, regulations and best practices; report doses administered
- DOHMH responsibilities: provide standing orders; provide guidance on rules, regulations and best practices; ensure dose reporting; advocate for continued and expanded pharmacists' authority to vaccinate



DOHMH Standing Orders Program: Reporting Requirements

- NYC DOHMH Bureau of Immunization (BOI)
 - Aggregate monthly reports of vaccines administered
- NYC CIR
 - Per NYS Public Health Law and NYC Health Code, pharmacists required to report vaccine doses given to individuals 18 years of age
 - 2014: Pharmacists must report all vaccinations given to persons ≥ 19 years of age to the CIR with patient consent
- NYS
 - Aggregate annual report of vaccines administered



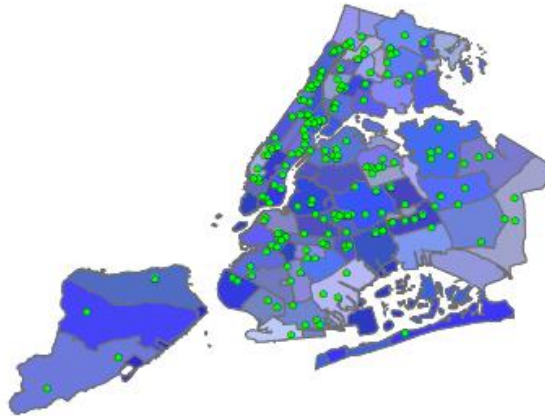
DOHMH Standing Orders Program

	# of Pharmacies	Vaccines					Total
		Flu	Pneumo	Mening	Tdap	Zoster	
2010-11	~50	3741	45				3786
2011-12	~100	5439	53				5492
2012-13	121	11359	149				11508
2013-14	159	14467	245				14712
2014-15	190	17019	414	9			17442
2015-16	193	14965	1120	30	309	786	17210
2016-17*	207	17009	1331	18	294	692	19344

*vaccines doses reported through March 31, 2017



DOHMH Standing Orders Pharmacies: Flu Vaccination Sites



NYC Health

DOHMH Standing Orders Program

- Challenges
 - Large program with limited staff
 - Pharmacists are confused by multiple reporting requirements
 - Storage and handling requirements
 - Providing authorized vaccines other than influenza

NYC Health

DOHMH Standing Orders Program: Lessons Learned

- Improving communications with independent pharmacies early on
- Incorporating quality assurance site visits earlier
- Emphasizing the importance of reporting



Other Activities with Pharmacies

- Partnering with Pharmacist Society of the State of New York (PSSNY)
- Collaborating with NYC pharmacy schools
- Improving pharmacy reporting of adult vaccinations to the CIR



PSSNY

- Largest pharmacy association in NYS
 - >1,300 NYC pharmacists in membership
- Partnership to increase the number of NYC pharmacists educated on and implementing the Standards
- Accredited by the American Council on Pharmaceutical Education to provide Continuing Education (CE)



CE Program

- Improve knowledge of adult coverage rates, ACIP recommendations, Standards, DOHMH standing order program, billing, CIR
- Three trainings complete

Training	Participants (n)	Mean Test Score, % (95% CI)				Plan to make Δ (%)
		Pre	Post	Diff	p-value	
5/2016	150	81 (75, 86)	87 (82, 92)	6	0.04	86
10/2016	42	73 (65, 80)	84 (77, 92)	11	0.02	83
3/2017	132	68 (61, 75)	80 (73, 86)	12	0.01	86



Promote Best Practices

- NYC DOHMH Adult Vaccination Health Bulletin

Adult Vaccination

Adults Need Vaccines, Too

thousands of adult New Yorkers get sick – and so do diseases that can be prevented by vaccines.

Influenza and pneumonia continue to be the leading cause of death in NYC.*

Recommended Vaccines

The CDC recommends more than ten vaccines for adults based on age and risk factors. Of these vaccines, it's especially important that you:

- ✓ **Get the flu vaccine every year.** It is updated every year to protect you against current influenza viruses.
- ✓ **Get pneumococcal vaccines.** If you are 65 or older, or have certain medical conditions. These vaccines protect against pneumonia and other serious diseases.
- ✓ **Get a zoster vaccine** to protect against shingles, if you are 60 or older.
- ✓ **Get a Tdap vaccine.** If you did not get one as a child, to protect against tetanus, diphtheria and pertussis (whooping cough). Pregnant women need a Tdap dose during every pregnancy. Get a Td booster shot every 10 years to protect against tetanus.

* Vaccines are one of the safest and most effective ways to protect your health. They lower your chance of getting sick and spreading certain diseases to your loved ones, and can help keep you healthy.

*Summary of Vital Statistics 2014 City of New York

NYC Health

Promote Best Practices

- NYC DOHMH Adult Immunization Action Kit
 - Provider resources
 - Patient resources

Adults Need Vaccines, Too!

ADULT IMMUNIZATION ACTION KIT

NYC Health

Pharmacy Schools

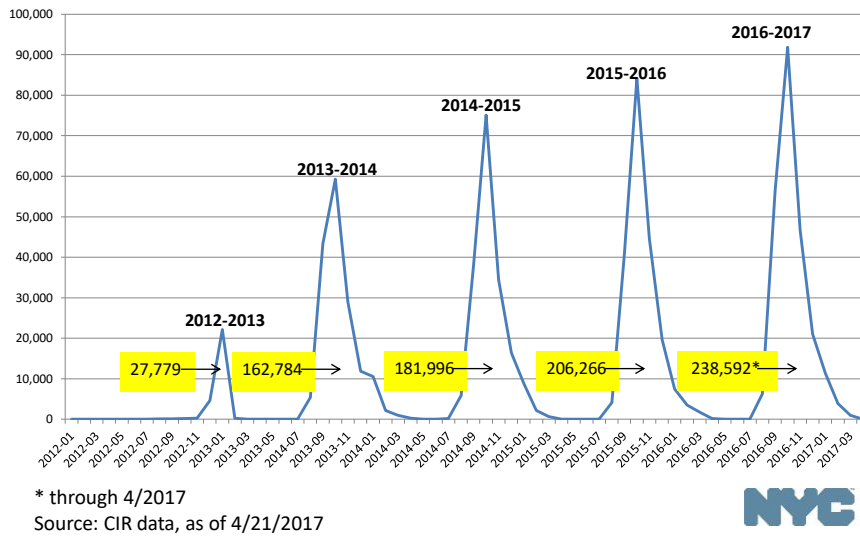
- Training curriculum for pharmacy students on adult immunization and Standards
- “Train the trainer” model
- Slide deck with script, pre/post assessment, evaluation survey, additional resources
- Implementation beginning May 2017



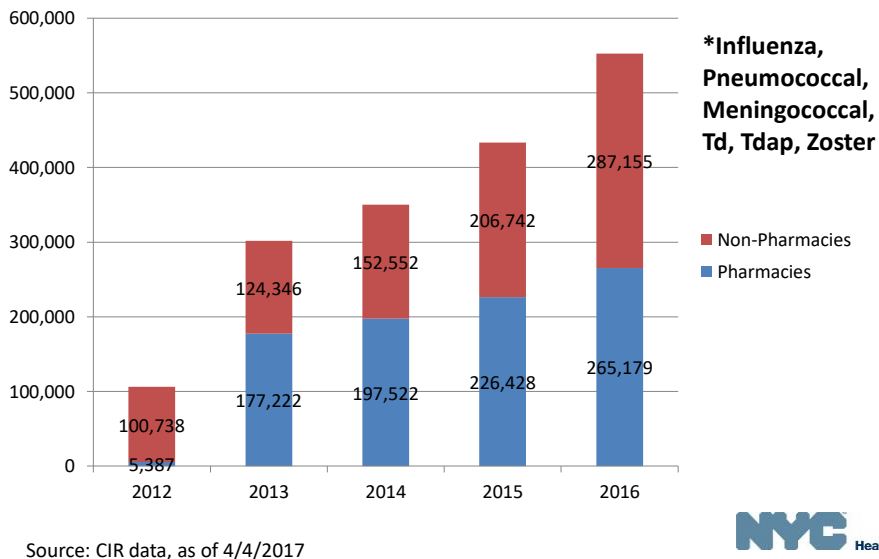
Improving Pharmacy Reporting of Adult Vaccinations to the CIR



Pharmacy Reporting of Adult Influenza Immunizations



Adult Immunizations* Reported to CIR



Next Steps

- DOHMH standing orders for NYC pharmacists
- DOHMH/PSSNY CE programs
 - June 2017 webinar
 - September 2017 in-person
- Curriculum in three NYC pharmacy schools
- Advocating pharmacists authority to vaccinate for all ACIP-recommended adult vaccines



Thank you

Questions?

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