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 ≥ 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 ≥ 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

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<tr>
<th>Year</th>
<th># of Pharmacies</th>
<th>Flu</th>
<th>Pneumo</th>
<th>Mening</th>
<th>Tdap</th>
<th>Zoster</th>
<th>Total</th>
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<td>3741</td>
<td>45</td>
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<tr>
<td>2011-12</td>
<td>~100</td>
<td>5439</td>
<td>53</td>
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<td>9</td>
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<td>14965</td>
<td>1120</td>
<td>30</td>
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<td>786</td>
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<td>17009</td>
<td>1331</td>
<td>18</td>
<td>294</td>
<td>692</td>
<td>19344</td>
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*Vaccines doses reported through March 31, 2017
DOHMH Standing Orders Pharmacies: Flu Vaccination Sites

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

<table>
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<th>Participants (n)</th>
<th>Mean Test Score, % (95% CI)</th>
<th>Plan to make Δ (%)</th>
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<td></td>
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<td>Post</td>
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<td>150</td>
<td>81 (75, 86)</td>
<td>87 (82, 92)</td>
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<tr>
<td>10/2016</td>
<td>42</td>
<td>73 (65, 80)</td>
<td>84 (77, 92)</td>
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<tr>
<td>3/2017</td>
<td>132</td>
<td>68 (61, 75)</td>
<td>80 (73, 86)</td>
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Promote Best Practices

- NYC DOHMH Adult Vaccination Health Bulletin

Promote Best Practices

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

NYC Health
Pharmacy Reporting of Adult Influenza Immunizations

Source: CIR data, as of 4/21/2017

Adult Immunizations*
Reported to CIR

*Influenza, Pneumococcal, Meningococcal, Td, Tdap, Zoster

Source: CIR data, as of 4/4/2017
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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