Being Ready for the Next Pandemic: 
Coordination Between Public Health and Pharmacies for 
Expanded Access to Pandemic Vaccines

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Background

- Pharmacists are increasingly important routine vaccinators
  - ~260,000 vaccinating pharmacists in U.S.
  - 1 in 4 seasonal influenza vaccinations given to adults were administered in a pharmacy or retail setting

- Pharmacists also offer expanded access to vaccinations during pandemics
  - Pharmacist provided 2009 H1N1 vaccinations
  - Underutilized as H1N1 vaccine was not broadly available in pharmacy settings until after the peak of disease and public demand had waned

- During a severe pandemic, widespread vaccination not beginning until peak of disease would have little impact
  - Expanded use of pharmacist vaccinators early in a pandemic response represents an important mechanism for rapidly vaccinating the public

2 Koonin et al., Disaster Medicine and Public Health Preparedness 2011
3 Biggerstaff et al., Clinical Infectious Diseases 2015
### Preliminary Illustration of Model Predictions:

**Weeks to 80% Single Dose Adult Pandemic Vaccination Coverage***

- **Without pharmacies**: 19 weeks
- **Traditional providers with pharmacies**: 11 weeks

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### Why Coordination Before a Pandemic is Important?

- **For pharmacies to be fully leveraged, significant pre-pandemic planning and coordination is needed**

- **Vaccine program planning and logistics for pandemic is different than seasonal influenza**:
  - During influenza pandemic, federal government works with vaccine manufacturers to develop pandemic vaccine supply for entire U.S.
    - Pandemic influenza vaccine cannot be purchased directly from manufacturers as done by most pharmacies for seasonal influenza vaccines
  - State public health programs are typically given pro-rata allocations and responsible for managing provider orders within jurisdiction
    - Healthcare providers must relationship with public health to order pandemic vaccine
  - Pandemic vaccine may require a higher level of tracking than seasonal influenza vaccine
    - Tracking may be important for clinical purposes, especially if multiple doses are required, adjuvant needed to be matched between doses, and persons are vaccinated in various settings
Current State of Coordination Between Public Health and Pharmacies for Pandemic Planning

- Most public health programs acknowledge that pharmacists would be valuable pandemic vaccinators

- CDC review of internal state and local planning suggests that significant gaps in coordination remains*:
  - Many programs still report that, even given a scenario of sufficient pandemic vaccine supply, <5% of state pandemic vaccine would be allocated to pharmacies
  - 1/3 of public health programs report that pharmacies would only incorporated in later, rather than earlier, in the vaccine campaign
  - Few programs have formal agreements, such as Memorandum of Understanding, with pharmacies in place to improve pre-pandemic planning and response

* Unpublished internal CDC data, based on Program Annual Assessment and Pandemic Influenza Readiness Assessment

Improving Pandemic Vaccine Program Coordination

- Since 2013, CDC partnered with the Association of State and Territorial Health Officials (ASTHO) to determine best practices to improve coordination between public health and pharmacies
  - Conducted structured interviews and held multiple workshops to obtain input from pharmacy, public health preparedness and immunization leadership
  - National work group formed including public health programs, APhA, NACDS, NASPA, and individual pharmacies

- National work group developed a template Public Health/Pharmacy Memorandum of Understanding (MOU) in 2015
  - Facilitates participation by national/ regional pharmacies by promoting standard approach across states, while allowing for flexibility in implementation given differences between jurisdictions
Pandemic Vaccine Program Template MOU Between Public Health and Pharmacies

- Template MOU outlines specific best practices for pandemic influenza vaccine program planning and response processes
  - [http://www.astho.org/Infectious-Disease/Pandemic-Influenza/MOU-State-Pharmacy-Pandemic-Influenza-Vaccination-Campaign/](http://www.astho.org/Infectious-Disease/Pandemic-Influenza/MOU-State-Pharmacy-Pandemic-Influenza-Vaccination-Campaign/)

- Major topics covered in template include sections on:
  - Pharmacist vaccinator enrollment in state pandemic vaccine ordering system/plan
  - Pandemic vaccine allocation to pharmacies, proposed criteria
  - Pandemic vaccine distribution, coordination between CDC’s contracted distributor and pharmacies’ distributor
  - Pandemic vaccination documentation, including use of the immunization information system (IIS), and tracking of distribution to sites
  - Pandemic vaccine payment issues, given cost of pandemic vaccine is covered by federal government
  - Overall coordination for communications and response leadership

Improved Coordination Between Public Health and Pharmacies for Pandemic Vaccine Program Planning: Next Steps

- CDC, ASTHO, NACDS, NASPA, and APhA are working with pilot states to implement the template MOU
  - Arkansas and Tennessee have been in discussion with a few major chain pharmacies
  - Georgia is working with independent pharmacies

- ASTHO and partners developing MOU implementation toolkit based on pilot results
  - Information in the toolkit will include standard processes and timelines, background slides for informational purposes and promotion
  - Toolkit designed for use by states, pharmacies, and pharmacy associations

- CDC considering making coordination with pharmacies for pandemic vaccine planning a formalized activity for immunization and preparedness programs
Summary

- Pharmacies have potential to significantly expand access to vaccines during the next pandemic.

- While public health programs acknowledge potential role of pharmacists during a pandemic, more work is needed to ensure pharmacies incorporated early:
  - Especially given logistical differences between planning for pandemic and conducting seasonal influenza vaccination.

- Formal agreements, such as Memorandum of Understanding, are important in ensuring efficient coordination for pandemic vaccine response:
  - [http://www.astho.org/Infectious-Disease/Pandemic-Influenza/MOU-State-Pharmacy-Pandemic-Influenza-Vaccination-Campaign/](http://www.astho.org/Infectious-Disease/Pandemic-Influenza/MOU-State-Pharmacy-Pandemic-Influenza-Vaccination-Campaign/)

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Contents of Template MOU: Pandemic vaccine provider enrollment and training

- Pharmacy may enroll/ register all pharmacy sites as pandemic vaccination sites rather than registering each site separately.

- Pharmacy is responsible for ensuring vaccinators have appropriate training, certification and follow all guidance from state/ CDC.

- Pharmacy is expected to sign a Pandemic Vaccine Provider Agreement Form, if and when available and required by CDC.

- State is responsible providing technical assistance, material, information, and resources, as available to assist the pharmacy.

Contents of Template MOU: Pandemic vaccine Allocation to Pharmacy

- Existing vaccination capacity of pharmacy, geography, pandemic epidemiology, supply, and other factors should be considered in making allocation decisions and may vary over time.

- Weekly pharmacy vaccine allocation from state should be considered in advance of response activation.
### Contents of Template MOU: Pandemic Vaccine Distribution

- Once the pharmacy's pandemic vaccine allocation is determined, it may be shipped to one site by CDC's contracted distributor.
- Pharmacy and/or its existing distributor may do secondary distribution to sites/stores, in consultation with the STATE.
- Information on secondary distribution should be shared with the STATE at least weekly or as determined by STATE law/policies for the duration of time requested by the STATE.

### Contents of Template MOU: Pandemic Vaccination Documentation

- Vaccine administration data from the pharmacy sites should be submitted to the vaccine registry/IIS within 1 week of date of administration, if applicable.
- System for assessing prior pandemic vaccination status should be planned for, if multiple doses required.
Contents of Template MOU: Pandemic Vaccine Payment

- Federal government will purchase all pandemic vaccine and constituent products
- Pharmacy may seek payment for vaccine administration, but cannot exceed the regional Medicare vaccination administration rate
- Pharmacy is encouraged to not turn patients away due to inability to pay for vaccine administration payment
- If the Emergency Prescription Assistance Program (EPAP) is enacted by the Federal government, the Pharmacy may utilize the EPAP mechanism, if allowable

Contents of Template MOU: Communications

- **State Responsibility:**
  - Provide planning and technical assistance to the Pharmacy
  - Provide timely updates regarding vaccine allocations, releasable information regarding the emergency, and changes in guidance
  - Coordinate with Pharmacy Association and/or Board of Pharmacy in advance
  - Coordinate with Pharmacy to retrieve and/or dispose of any unused pandemic vaccine

- **Pharmacy Responsibility:**
  - Coordinate with STATE Pharmacy Association, so that a Pharmacy representative participates in STATE Pharmacy Association meetings, if applicable.
  - Coordinate with the STATE to ensure statewide consistency with implementation of screening forms, educational material, billing, and training
  - Participate in all planning discussions and exercises with STATE, as applicable
  - Document vaccinations administered in the State IIS or as required by the STATE
Benefits to Public Health

- Improved coordination between public health and pharmacies helps:
  - Leverage the strengths of all partners
  - Utilize existing vaccine management and distribution infrastructure of the pharmacy to assist in rapidly providing pandemic influenza vaccines to the general public
  - Ensure consistent management and equity among all pandemic vaccinators

- Increases public vaccine access points during response

- Potentially serve as model for partnership in other dispensing and clinical services

Benefits to Pharmacies

- Establishing formal pandemic vaccine program agreements with public health programs helps:
  - Ensure pharmacy has early allocation of federal pandemic vaccine supply
  - Outline expectations and plan for potential information sharing, identify points of contact
  - Develop a distribution approach in advance
  - Educate public health on pharmacy planning and response needs, utilize public health infrastructure as needed
  - Reduce waste and improve use of resources and staff time
  - Promote strong relationship with public health for other public health emergencies and routine healthcare issues

Pharmacies involved in implementation of the MOU will have planning advantage and more likely to ensure a supply of pandemic vaccine early in a response
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References

- Schwerzmann, J. et. al. (2015). Modeling Pandemic Influenza Vaccine Administration (Unpublished CDC data)