Implementing a Successful Pharmacy Immunization Program: A CE Web-based Initiative

Ronald Davis, RPh
Owner, Buford Road Pharmacy
J. Tyler Stevens, PharmD
Clinical Service Director
Kelly S. Rea, PharmD
Community Practice Resident
Richmond, Virginia
Faculty Disclosure

Disclosure Declaration
It is the policy of the National Community Pharmacists Association (NCPA) to ensure independence, balance, objectivity, scientific rigor, and integrity in all of their continuing education activities.

Mr. Davis has indicated that he has nothing to disclose.

Learning Objectives
After taking part in this activity, pharmacists should be able to:

- Explain the importance of immunization to the community
- Identify, evaluate, and effectively use the practical elements of a successful pharmacy-based immunization program
- Apply the practical elements to implement a successful community-based pharmacy immunization program
The Importance and Need for an Immunization Program

- Impact of influenza
- Vaccine important for community health
- Vaccine-preventable diseases

The Impact of Influenza in the United States

- Annual prevalence: 5% to 20%\(^1\)
- Hospitalizations due to complications: >200,000\(^1\)
  - Rates highest among children aged ≤1 year\(^2\)
  - Risk also high for persons aged ≥65 years\(^2\)
- Annual deaths attributable to influenza: ~36,000\(^1\)
  - Mortality increased steadily since 1976-1977 season\(^2\)
  - 90% of influenza mortality (~32,000) in elderly\(^2\)
  - Children and persons with chronic medical conditions also at risk\(^2\)

The Impact of Influenza in the United States (cont)

- Influenza kills as many or more Americans than breast cancer\(^1\)
- Influenza kills 2 to 3 times more Americans than HIV/AIDS\(^1\)
- Annual impact of influenza in the United States\(^2\)
  - Infection – 82 million
  - Illness – 65 million
  - Medically attended – 30 million


Healthy People 2010 Influenza Vaccination Program

- Comprehensive set of disease prevention and health promotion objectives\(^1\)
- Goals to achieve by 2010:\(^2\)
  - Increase quality and years of life
  - Eliminate health disparities
- Immunization and infectious diseases: 1 of 28 focus areas
  - Prevent disease, disability, and death from infectious diseases, including vaccine-preventable diseases
  - Increase proportion of adults vaccinated annually against influenza
    - 90% of adults aged ≥65 years and institutionalized adults
    - 60% of high-risk adults aged 18 to 64 years

**US Adult Targets for Influenza Vaccination Have Not Been Achieved**

*Healthy People 2010 Objectives*

- **Population Group**
  - All Adults
    - 18-49 yr: 17.9%
    - 50-64 yr: 35.9%
    - 65+ yr: 64.6%
  - High-risk Adults
    - 18-49 yr: 26.0%
    - 50-64 yr: 45.5%
    - 65+ yr: 45.5%
  - Non-high-risk Adults
    - 18-49 yr: 16.6%
    - 50-64 yr: 34.6%
    - 65+ yr: 34.6%
  - Household Contacts
    - 18-49 yr: 15.4%
    - 50-64 yr: 32.1%
    - 65+ yr: 32.1%
  - Pregnant Women: 12.9%
  - Health Care Workers: 41.9%


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**Nearly Half of US Adults Are at High Risk for Influenza Complications**

- **Population Group**
  - 18-49 yr: 17.6 (13.3%)
  - 50-64 yr: 14.1 (29.5%)
  - 65+ yr: 34.0 (100%)
  - Household Contacts
    - 18-49 yr: 19.2 (14.7%)
    - 50-64 yr: 4.2 (8.8%)
  - Pregnant Women: 4.0 (100%)
  - Health Care Workers: 7.0 (100%)

Critical Need to Educate Patients and Increase Awareness Among Fellow Health Care Professionals

- Although annual vaccination is recommended, the vaccination coverage level is only 42% of all US health care workers
- Benefits of vaccinating health care workers
  - Reduced work absenteeism
  - Reduced transmission to patients


Vaccine-Preventable Diseases

- Infants and Children (≤12 years)
  - Hepatitis B
  - Rotavirus
  - Diphtheria, tetanus, pertussis
  - *Haemophilus influenzae* type B (Hib)
  - Pneumococcal
  - Inactivated poliovirus
  - Influenza (flu)
  - Measles, mumps, rubella
  - Varicella
  - Hepatitis A
  - Meningococcal

- Adolescents (aged 13-17 years)
  - Hepatitis B
  - Rotavirus
  - Diphtheria, tetanus, pertussis
  - *Haemophilus influenzae* type B (Hib)
  - Inactivated poliovirus
  - Measles, mumps, rubella
  - Varicella
  - Influenza (flu)\(^{a}\)
  - Pneumococcal\(^{a}\)
  - Hepatitis A\(^{a}\)
  - Meningococcal\(^{a}\)

\(^{a}\)High-risk groups.

Vaccine-Preventable Diseases (cont)

- **Young Adults** (aged 18-24 years)
  - Tetanus, diphtheria – acellular pertussis (Tdap)
  - Meningococcal
  - Human papillomavirus (HPV)

- **Adults** (aged >24 years)
  - Tetanus, diphtheria, pertussis
  - Human papillomavirus (HPV)
  - Measles, mumps, rubella
  - Varicella
  - Influenza
  - Pneumococcal
  - Hepatitis A
  - Hepatitis B
  - Meningococcal


Vaccine-Preventable Diseases (cont)

- **Travelers**
  - Yellow Fever
  - Meningococcal
  - Rabies
  - Typhoid
  - Japanese encephalitis
  - Smallpox

- **Health Care Workers**
  - Hepatitis B
  - Influenza
  - Measles, mumps, rubella
  - Varicella
  - Tetanus, diphtheria, pertussis
  - Meningococcal

Rationale for a Pharmacy Vaccine Program

Influenza is one example of a preventable disease for which community pharmacists can play a major role in by immunizing the public.

States Authorized to Administer Immunizations\(^a\)

Pharmacies Play a Growing Role in Immunization Efforts

Consumers Cite Several Factors that Give Pharmacy-based Influenza Vaccination Programs an Advantage

- Accessibility
- Trust
- Convenience


Influenza vaccination accounted for majority of immunizations administered, which also included hepatitis A and B, Lyme disease, tetanus, and chicken pox.

Benefits of a Community Pharmacy Immunization Program

- Pharmacists are a trusted source of health information
- Preventative health initiative for community members
- Financial incentives for the community pharmacy
- Providing value-added services to patients

Implementing a Successful Immunization Program: Important Considerations
Store Operations

- Accessibility and commitment
  - Prior to immunization day
    - Send waiver forms and vaccine information to facility
    - Obtain copies of Medicare cards if applicable
  - Set aside appropriate times for large numbers of immunizations
- Flu Clinic: Monday – Friday, 9-1 PM and 3-6 PM

- Adequate facilities
  - Clinic or private area for administration
  - Storage of vaccine
Inventory Management

- Start early
  - Order vaccines 3 months before
    - For example, order flu vaccines in June/July for October administration
    - Leading manufacturers include Novartis Vaccines, Sanofi pasteur, and GlaxoSmithKline
- Do not over-estimate or under-estimate
  - Assess patient population

Key Elements for Successful Implementation

- Consider the overall program
- Most popular immunizations
  - Which available immunizations would be administered most often?
- Instill enthusiasm among employees for the new program
- Begin preparation early
- Establish goals and milestones to measure the success of the program
Ideal Staffing and Training

- **Staffing**
  - Pharmacists, clinical resident, student pharmacy interns, pharmacy rotation students, registered nurse
  - Adjust staffing based upon number of immunizations administered
  - Need for bilingual skills

- **Training**
  - Completion of APhA Certified Immunization Program
  - CPR certified

- **Billing**
  - Bill prior to immunization day
  - Medicare
  - Third-party payers
  - Fee for service

Maximize Efficient Workflow With Defined Responsibilities

- **Designated tasks**
  - Vaccine waiver assistance
  - Data entry
  - Cashier
  - Vaccine preparation
  - Vaccine administration
Ideal Facility Elements

• Adequate space
  – Counseling rooms (patient friendly)

• Comfortable seating
  – Available seating needed for proper administration of immunizations

• Efficient client-flow management
  – Smooth transition from entering clinic to final processing
Marketing/Promotional Tactical Elements

- Fliers
- Store posters
- Store banners
- Bag stuffers
- Local newspapers, newsletters, radio, and television advertisements
Extending the Program
Reach Beyond the Pharmacy

- Long-term care facilities
- Retirement communities
- Department of Health referrals
- Schools/colleges/universities
- Private companies
- Other pharmacies
- Prisons
- Other health care providers

Summary

- Given the impact of influenza in the United States, a community-based immunization program is vital
- Pharmacists can play a major role in implementing a successful immunization program
- Proper planning and an early start can help ensure a successful program
- Plan to have adequate staff to maintain a smooth flow during the program
- Market the program with promotional materials and expand the program beyond your pharmacy to include surrounding institutions
- Financial rewards can be achieved with a successful program
You have successfully completed the educational portion of our program.

To receive credit for your participation in this educational activity, please proceed to the Evaluation.

Upon successful completion of the Evaluation you will be granted immediate access to print your own CE certificate.

Thank you for your participation!
References:


Suggested Readings:


**Links:**

• On this Web site, you will be able to download vaccine application packages, view current regulations regarding select agents, and access additional resource information
  [www.cdc.gov](http://www.cdc.gov)

• Comprehensive information about specific diseases and the vaccines that prevent them
  [www.immunize.org/vis](http://www.immunize.org/vis)

• The National Foundation for Infectious Diseases (NFID) provides information for the public and health care professionals about the causes, treatment, and prevention of infectious diseases
  [www.nfidi.org](http://www.nfidi.org)

• Offers PAHO materials on the influenza virus that includes surveillance, prevention and control, PAHO activities, and general information/links
  [www.paho.org](http://www.paho.org)

• WHO is the directing and coordinating authority for health within the United Nations system
  [www.who.int](http://www.who.int)

• Fact sheet on flu vaccines for consumers, physicians, pharmacists, registered nurses, and educators
  [www.webmd.com](http://www.webmd.com)

• Information on flu prevention from the American Academy of Family Physicians
  [www.familydoctor.org](http://www.familydoctor.org)

• Vaccines and Immunizations is an online resource for clinicians, researchers, and educators with an interest in vaccines and immunizations
  [www.cdc.gov/vaccines/vpd-vac/flu](http://www.cdc.gov/vaccines/vpd-vac/flu)