Adult Immunization Resource Guide

This Resource Guide was made possible through support from Pfizer Inc.
The collection of strategies documented in this resource guide shows that where there is a will, there is a way. We hope this guide will increase programmatic activity even higher to raise adult immunization coverage rates and reduce preventable disease in adults.”

— Claire Hannan, AIM Executive Director
Introduction

After decades of focus on childhood immunization, public health officials are now challenged to improve adult immunization. However, unlike the extensive federal and state infrastructure support around childhood immunization, public health funding for adult vaccine purchase and programming initiatives is more limited. As a result, Immunization Programs face substantial challenges as they work to develop and implement strategies to strengthen adult immunization delivery in their states, cities and territories.

The AIM Adult Immunization Resource Guide characterizes a selection of the varied activities and strategies that Immunization Programs have employed to enhance and improve the delivery of immunizations to adults. These featured activities offer a menu of adult-focused strategies that Immunization Programs can adopt, adapt, or use as inspiration in planning or brainstorming exercises. Recognizing that Immunization Programs vary substantially in the resources available for adult immunization efforts and in their public health infrastructure, the Resource Guide offers activities at three levels:

- **GETTING STARTED** activities are generally targeted to a narrow purpose, and require minimal immunization program staffing, funding, or infrastructure.
- **MOVING FORWARD** activities are more expansive in their purpose and scope, often leverage relationships with partner organizations, and require some staffing support and/or dedicated funds.
- **TAKING IT TO THE NEXT LEVEL** activities have greater complexity, build on earlier efforts and/or leverage existing infrastructure, often include multiple partners, and require considerable staffing and funding.

Beyond offering a plethora of ideas to consider, the activities featured in this Resource Guide also reflect lessons in leadership — the approaches used by Immunization Program Managers to move from the shaping of ideas and opportunities to tangible action. For many of the featured activities, the leadership of the Immunization Program Managers
aim adult immunization resource guide

created a climate and programmatic perspective that allowed ideas and partnerships to flourish. Key aspects of program leadership include the following:

- **CHARTING THE COURSE** – Prioritizing adult immunization to reach new providers, understanding different systems and policies, and establishing new partnerships. The magnitude of the task can feel overwhelming. Leadership is essential to help program staff recognize internal strengths and resources, and begin a long-term process of planning, implementing, and refining a series of adult immunization strategies.

- **IDENTIFYING INITIATORS** – Opportunities to expand adult immunization activities arise in many forms: a policy change related to insurance coverage for immunization, funding announcements that could support a new idea or a motivated provider interested in promoting immunization among peers. Leadership recognizes initiators and begins the discussion of how best to take advantage of new opportunities.

- **KEEPING SIMPLE THINGS SIMPLE** – Several featured strategies emanated from program staff identifying repeated requests for clarification and information. Transforming technical information into simple, clear and accurate communication tools allows programs to meet the needs of providers in an efficient manner.

- **DRAWING ON PERSONAL RELATIONSHIPS** – Many of the featured strategies were derived from personal connections, both within government and through partner organizations. Leadership encourages Immunization Program staff to develop personal relationships within and outside the program, and to draw upon those relationships to support adult immunization activities.

- **FINDING THE WIN-WIN** – By encouraging and prioritizing the development of strategies to facilitate provider compliance with concurrent initiatives such as Meaningful Use requirements and HEDIS quality measures, Immunization Program leadership creates “win-win” opportunities for providers to benefit from their expanded involvement in adult immunization.

- **SUPPORTING THE EFFORTS OF PARTNERS** – Working with partners can present challenges related to differing priorities, messages and expertise. Leadership bridges those gaps through consistent opportunities for communication between program staff and partners, and sufficient technical support from the program for partner activities.

- **BEING REALISTIC** – Planning, implementing and evaluating new activities can be daunting. Leadership facilitates this process by encouraging staff to work through imperfect conditions, establishing realistic goals for participation or impact, and debriefing with staff to expand successes and mitigate weaknesses.

In alignment with the AIM Leadership Institute, AIM offers this Resource Guide as a way for Immunization Programs to learn and grow from their collective experiences while utilizing leadership principles as they promote adult immunization.
How to Use This Guide

The AIM Adult Immunization Resource Guide contains descriptions of and lessons learned from recent adult immunization activities in selected Immunization Programs. The Resource Guide provides a snapshot of these efforts and serves as a guide for Immunization Program Managers to generate ideas and inform management strategies for promoting adult vaccinations across the nation and territories.

The Adult Immunization Resource Guide covers the following topics, each with its own dedicated chapter:

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Each chapter first provides topic-specific background information, including relevant national standards and an overview of related programmatic activity across all Immunization Programs. Next are the detailed narratives of three adult immunization-related activities, one for each level of engagement (Getting Started, Moving Forward, and Taking It to the Next Level). Each activity summary includes lessons learned, relevant resources used or created by the Immunization Program, and who to contact for more information. Throughout the Resource Guide, call-out boxes, charts, maps, and figures are displayed to share additional information on programmatic activities and the adult immunization landscape.

An online version of this guide is available at www.immunizationmanagers.org/adults. Users can find direct links to resources mentioned in this Resource Guide, and can download and print single chapters.
About This Guide

This Resource Guide was made possible through support from Pfizer Inc. It was prepared by AIM staff Katelyn Wells, PhD and Anu Bhatt, MPH in collaboration with Sarah Clark, MPH and Anne Cowan, MPH from the Child Health Evaluation and Research (CHEAR) Unit of the University of Michigan. The Immunization Program narratives are based on interviews conducted in Fall 2015.

The authors would like to thank the AIM members and partner workgroup participants who provided expert guidance into the content and format of the guide: Columba Fernandez, Washington State Immunization Program; Courtnay Londo, Michigan Immunization Program; Betsy Rausch-Phing, MD, New York State Immunization Program; Jennifer Dillaha, MD, Arkansas Immunization Program; Karen Donoghue, New Hampshire Immunization Program; Margaret Jones, Kentucky Immunization Program; Nisha Gandhi, California Immunization Program; Ronald Balajadia, Hawaii Immunization Program; Sarah Royce, MD, California Immunization Program; Stephanie Borchardt, Wisconsin Immunization Program; Ann Cowan, CHEAR; Sarah Clarke, CHEAR; LaDora Woods, CDC; David Kim, MD, CDC; Aparna Ramakrishnan, CDC; Carolyn Bridges, MD, CDC; Laurel Wood, IAC.

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National Adult and Influenza Immunization Summit (NAIIS)

The NAIIS brings together a wide range of immunization stakeholders with the goal of reducing barriers and increasing education on adult and influenza vaccines in the US. NAIIS working groups meet throughout the year, and the NAIIS meeting is held annually in Atlanta, GA. Products of the NAIIS include the development of the Adult Immunization Standards of Practice, a guide to messaging for adult vaccines, and other resources. Visit the NAIIS at www.izsummitpartners.org

Vaccine Facts and Policy.Org (VFAP)

VFAP is a collaborative website for sharing information on a wide range of immunization topics. VFAP contains dedicated information on adult immunizations including program practices, policies and priorities, adult vaccination coverage rates, partnerships with nontraditional partners, and use of immunization information systems. Visit VFAP at www.vaccinefactsandpolicy.org
Engaging the Public

CHAPTER 1
Introduction

Adult immunization rates have remained well below target immunization rates despite increased availability of adult vaccines. The Advisory Committee on Immunization Practices (ACIP) recommends that adults receive influenza, pneumococcal, whooping cough, and shingles vaccines. Adults are also recommended to receive other vaccines based on age, risk status, and job type. Women are also recommended to receive specific vaccines during pregnancy. The Healthy People 2020 target for seasonal influenza vaccination for adults is 70%, however only 43.6% of adults received a flu vaccine in the 2014-15 influenza season. Similarly, the HP2020 target for pneumococcal vaccination for adults over age 65 is 90%, but only 61.3% received the vaccine.

One reason for low adult vaccination rates is that vaccines are typically associated with childhood health care, and are not part of regular adult preventive care—many adults are simply unaware that they should be vaccinated. Fifty-eight percent of Americans admit to a gap in awareness of their own vaccination needs, and 19% of Americans think vaccination (except for influenza) is generally not recommended for adults.

By engaging the public, Immunization Programs have the opportunity to increase adults’ understanding of the risks of vaccine-preventable disease and the benefit of recommended vaccines. The highlighted activities related to engaging the public are:

- **Getting Started**: Collaborating with a statewide immunization coalition as a resource-efficient way to develop public education materials
- **Moving Forward**: Using existing connections to conduct outreach via presentations to community groups
- **Taking It to the Next Level**: Creating a dedicated staff role for communicating with providers and the public through both traditional and new media routes

Communicating with the Public about Adult Immunization

Many organizations provide tips and tools for communicating with the public about adult immunizations, including:

- **Quick Guide to Adult Vaccine Messaging** from NAIIS:
- **Communication Toolkit for Adults** from the National Public Health Information Coalition:
  [https://www.nphic.org/niam-adults](https://www.nphic.org/niam-adults)
- **Resources such as infographics and radio PSAs from the National Foundation for Infectious Diseases**: 
- **Resources such as fact sheets, videos, and PSAs from the CDC**: 
  [http://www.cdc.gov/vaccines/adults/resources.html](http://www.cdc.gov/vaccines/adults/resources.html)
- **Adult vaccination resources from the Immunization Action Coalition (IAC)**: 
  [http://www.vaccinenformation.org/adults](http://www.vaccinenformation.org/adults)
- **Resources for vaccinating the family from Every Child by Two (ECBT)**: 
  [http://www.vaccinateyourfamily.org](http://www.vaccinateyourfamily.org)
IMMUNIZATION PROGRAMS

use of general media and/or social media to promote General Adult Vaccination (2014)\textsuperscript{7}

2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey

*The promotion of vaccine specific information can be found at www.vaccinefactsandpolicy.org

- **34%** General Media (22)
- **17%** Social Media (11)
- **14%** Both (9)
- **25%** None (16)
- **9%** No answer (6)
OVERVIEW OF ACTIVITY
The Arizona Partnership for Immunization (TAPI), with support from the Arizona Immunization Program, created a flyer on vaccinating all family members.

BACKGROUND/IMPETUS FOR THE ACTIVITY
TAPI is a statewide coalition and non-profit organization that supports immunization efforts in the state. The Immunization Program has worked very closely with TAPI for many years, and designates funds to them for developing and distributing educational materials.

DESCRIPTION OF ACTIVITY
A consumer-friendly flyer was designed by TAPI that described vaccines needed for all family members from babies to grandparents, including pets. The inclusion of pets was an effort to try a different way of talking about vaccines. Workgroups and subcommittees within TAPI provided feedback on the flyer’s content.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
This activity was predominantly a TAPI activity, with input and funding from the Immunization Program. In addition, the flyer was approved by the Department’s Public Information Officer, which means it can include the Arizona Department of Health Services (AZDHS) logo.

DISSEMINATION
The flyer has been distributed at community events, such as health fairs. Intersection with other program activities. Educational materials developed by TAPI help support the public education activities of the Immunization Program.

FUNDING
TAPI activities are funded through the Arizona Immunization Program’s Centers for Disease Control and Prevention (CDC) grant funding, as well as foundations, community grants, and counties.

STAFFING
Immunization Program staff provided input on the flyer through participation on TAPI workgroups and subcommittees.

IMPLEMENTATION STATUS
The flyer has undergone some revision based on stakeholder feedback. The current version can be found on the TAPI website.
**SUCCESSES**
- TAPI provides the Immunization Program with copies of flyers and other educational materials and makes the materials available for free on the TAPI website. This is a win for the Immunization Program, which has a very limited budget for printing educational materials.

**CHALLENGES**
- TAPI members include provider organizations, such as the state chapter of the American Academy of Pediatrics and pharmacy associations, whose priorities may not always align with those of the Immunization Program.
- Similarly, the state has rules for materials, while TAPI and its stakeholders may have ideas for messaging that don’t match with state rules. Constant communication has helped.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**
- Having a strong relationship with this statewide immunization coalition has been invaluable. To keep the relationship strong, it is important to maintain consistent communication. The Immunization Program meets with TAPI once a week.
- In addition to making sure that materials contain accurate vaccination information, Immunization Programs can ensure that materials are consistent with other public health messages. For example, a graphic included in this flyer originally showed a boy riding a skateboard without a helmet, but the Immunization Program pointed out that he should be wearing one.

**RELEVANT RESOURCES**

**FOR MORE INFORMATION**
Contact Dana Goodloe, Chief, Immunization Program Office at (602) 364-3639 or Dana.Goodloe@azdhs.gov.
OVERVIEW OF ACTIVITY
The medical director of the Arkansas Immunization Program gives immunization-related presentations to community organizations, such as the local Rotary Club.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The medical director for the Arkansas Immunization Program is a member of a local Rotary Club. Local Rotary Clubs, affiliates of Rotary International, bring together local business and professional leaders for regular meetings, often with a guest speaker, and Rotary has a history of being involved with global immunization efforts. The medical director has used this platform as a way to promote adult immunization in the community.

DESCRIPTION OF ACTIVITY
Together with another Rotary member who is a polio survivor, the medical director for the Arkansas Immunization Program gave a presentation to her Rotary club on the successes of immunizations. This presentation led to invitations to present to other Rotary clubs, and to a variety of other service clubs (e.g., Kiwanis, women’s luncheon groups). At some presentations, the medical director reviews an easy-to-read version of the immunization schedule and answers questions.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The medical director of the Immunization Program develops and conducts these presentations.

DISSEMINATION
These presentations are an informal way for the Immunization Program to take advantage of opportunities to raise awareness among service-minded community members.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
The purpose of these presentations is mainly to raise awareness, rather than focus on specific activities conducted by the Immunization Program.

STAFFING
The medical director is the only Immunization Program staff person involved in this activity.

IMPLEMENTATION STATUS
This activity is ongoing.
SUCCESES

- Though the current talks have focused mainly on childhood vaccines, attendees have had questions that are applicable to themselves, and the presentations could easily be adapted to focus on adult immunization. Groups like Rotary attract civic leaders as members; these members can help “spread the word” in their workplaces, through their involvement in service projects and other community organizations, and within their own family (i.e., themselves, their children and grandchildren).

CHALLENGES

- Not applicable so far.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

- In preparing this type of presentation, it is important to adjust the content (e.g., history of immunization vs. vaccine Q&A) based on the type of audience and meeting. Speakers should be prepared to answer questions, including those that may reflect common immunization misconceptions. Also, speakers should refer those seeking medical advice for individual-specific situations to their own provider. It is helpful to have an easy-to-understand handout.

- Groups like Rotary Club that have a history of involvement in immunization-related service activities are a good place to start.

RELEVANT RESOURCES

- A presentation similar to the Rotary presentation was given on April 9, 2015, at Public Health Grand Rounds, which is hosted each week at the Arkansas Department of Health. A video of that presentation can be found at: https://vimeopro.com/healthyarkansas/20150409.

- An example PowerPoint presentation that was given at a Rotary Club in northwest Arkansas: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/AR-Jonesboro-Immunizations-10-13-15_(Read-Only).pdf The resources used for preparing the presentation are listed on the presentation slides.

FOR MORE INFORMATION

Contact Jennifer Dillaha, MD, Medical Director for Immunizations at the Arkansas Department of Health at (501) 661-2864 or Jennifer.Dillaha@Arkansas.gov.
OVERVIEW OF ACTIVITY
The Philadelphia Immunization Program created a position for a dedicated, in-house Communications Coordinator, to improve public and provider communication around childhood and adult immunization topics.

BACKGROUND/IMPELUS FOR THE ACTIVITY
The impetus to create this position was two-fold. The first was to modernize the way the program communicates with providers and the public by incorporating electronic and digital communications (e.g., social media). The other was to streamline the process for getting communications approved and released. At the time this activity was initiated, the usual process to post new information on the website or send information to providers or the public required going through multiple levels of clearance through the press office for the City Department of Health.

DESCRIPTION OF ACTIVITY
The Communications Coordinator, in place since 2008, has multiple functions and responsibilities. The Communications Coordinator serves as the primary web master and provides social media expertise for platforms like Twitter and Facebook. This individual ensures consistent use of the Immunization Program brand on all materials and disseminates information to Immunization Program constituencies (e.g., health advisories for providers). In the event of a public health emergency, the Coordinator assists with preparedness communications duties.

In addition to creating the coordinator position, the Immunization Program was able to secure the necessary permissions to have its own website for housing information for providers, allowing the Coordinator to push out communications and alerts more quickly, with approval from the division director.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
This position is housed within the Immunization Program. The Immunization Program Manager and the Division of Disease Control Director were involved in getting the position and division of responsibilities approved by the City of Philadelphia Public Health Department. The Coordinator participates in other communications personnel meetings within the Mayor’s offices, aimed at establishing communications standards across the city.

DISSEMINATION
The Communications Coordinator is responsible for dissemination of all day-to-day materials coming from the Immunization Program. Urgent issues and requests for information from the media are still routed through the City’s Public Information Officer.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
All program activities with a provider or public education component work with the Communications Coordinator.
FUNDING
The position is funded through the program’s federal Vaccines for Children (VFC) and 317 grants, reflecting the shared responsibility for both childhood and adult immunization materials.

STAFFING
One person holds the position of Communications Coordinator.

IMPLEMENTATION STATUS
This position has been in place for several years, and the program expects that federal grant funding will continue to support it.

SUCCESSES
• Creating this new position was very helpful. This was facilitated by the availability of federal funding to support the position, and the fact that many city government employees are contractors, not civil service staff. Human resources activities have been outsourced mainly to non-profit public health management agencies.
• The program is able to disseminate information more quickly.

CHALLENGES
• Some ongoing challenges include a non-optimal information technology infrastructure/environment (e.g., slow internet speeds, strict firewalls, network volatility issues). Other challenges include barriers to the procurement of advanced software to support ever-expanding communication initiatives and longer wait times for software or hardware procurement due to government “red tape.”
• The software used for the provider messaging system was custom-built for the Philadelphia Department of Public Health as an emergency contact system for the Public Health Preparedness Program. This software is not ideal for the Immunization Program’s purposes. The biggest issue is in contact management. A database of Immunization Program contacts is housed in the city’s immunization information system (IIS), which cannot be linked to the messaging system. There is no way around this issue given currently available resources, so the Immunization Program must maintain two separate contact lists.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
• Because the Communications Coordinator sees materials from multiple areas within the Immunization Program, this individual helps ensure that policies and technical documents are written and distributed consistently.
• The Communications Coordinator looks for opportunities to collaborate with staff in other departments with certain skills (e.g., graphics design) to learn from them and help improve the materials developed by the Immunization Program.

• Immunization Programs considering a messaging system may be best served by building messaging capability into their IIS instead of building a separate system. Programs should refer to people familiar with common email newsletter programs to get more details on the specifications needed for a modern messaging system.

**RELEVANT RESOURCES**


**FOR MORE INFORMATION**

Contact Justin Gero, Communications Coordinator, at (215) 685-6854 or Justin.gero@phila.gov.

**REFERENCES**


7 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April – June 2015.

This Resource Guide was made possible through support from Pfizer Inc.
Engaging Providers

CHAPTER 2
Introduction

Health care providers play a critical role in increasing vaccination rates in adults. Research demonstrates that a provider recommendation is the strongest predictor of adults getting vaccinated. In a study of pregnant women, the rate of vaccination against influenza was 70.5% among patients that received a provider recommendation and offer of vaccination. Without a recommendation or offer from the health care provider, influenza vaccine uptake in this population was only 16.1%.

Providers have the dual role of ensuring that they themselves as well as their patients are up to date on their vaccinations. Healthy People 2020 recommends 90% vaccination of health care personnel against influenza. Currently, 84% of health care personnel were vaccinated in the 2014-15 influenza season.

Lack of knowledge by the provider and patients about the need for vaccinating both healthy and high-risk adults is a barrier to increasing adult vaccination rates. In addition, management of current illnesses by providers usually receives priority over preventive services like vaccination. Some providers do not offer vaccines and others only offer some of the vaccines recommended for adults.

The Standards for Adult Immunization Practice state that all providers should play a role in vaccinating adults. This can be achieved by providers incorporating immunization assessment in each clinical encounter, recommending vaccines to patients as needed, and either providing the vaccine or referring the patient to another provider to receive the vaccine.

The standards also encourage providers to be up-to-date on their own vaccinations. Immunization Programs play a major role in educating providers regarding the need to assess adult patients’ vaccination status and to recommend the appropriate vaccines based on age group, risk status, and job type, as well as encouraging providers themselves be vaccinated. The highlights related to engaging providers are:

- **Getting Started**: Creating a visual, one-page guide to clarify recent changes in national recommendations for pneumococcal vaccines
- **Moving Forward**: Collaborating with other stakeholders to require influenza vaccination for health care workers
- **Taking It to the Next Level**: Conducting a multi-faceted education campaign to promote conversations between providers and adult patients

**Standards for Adult Immunization Practice**

The National Vaccine Advisory Committee (NVAC) Standards for Adult Immunization Practice (the Standards) lay out the roles of all health care providers (HCP) in vaccinating adults. All HCP are encouraged to assess adult patient’s vaccination status at each encounter, recommend and administer needed vaccines and document vaccinations in vaccine registries, as appropriate. Visit [http://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/index.html](http://www.cdc.gov/vaccines/hcp/adults/for-practice/standards/index.html) to learn more and find resources and tools for working with providers.
18% Did not engage/not a priority (12)
26% Did not engage but would like to if resources were available (17)
14% Had some engagement in activity but could not expand because of limited resources (9)
3% Had some engagement which was all that was needed (2)
17% High level of engagement because this is part of our program’s core activities (11)
17% Immunization program does not have the infrastructure and/or policy to support this activity (11)
5% No answer (3)
OVERVIEW OF ACTIVITY
The Oregon immunization program developed a one-page guide to summarize the current national recommendations for pneumococcal vaccines.

BACKGROUND/IMPETUS FOR THE ACTIVITY
Oregon’s immunization program experienced an increase in the volume of questions from immunization providers regarding recent changes in national recommendations for pneumococcal vaccines (PCV13 and PPSV23). Program staff were unable to find a concise resource to help answer providers’ questions.

DESCRIPTION OF ACTIVITY
Oregon’s adult immunization coordinator initiated development of a graphical, one-page summary of current recommendations. This pneumococcal vaccine scheduling guide illustrates the pneumococcal recommendations by age and disease for immunocompetent persons with co-morbidities and for immunocompromised individuals, as well as the recommendations for revaccination. The most recent version was released in October 2015.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The guide was developed within the immunization program. Final approval was given by the medical director of the immunization program. Feedback was solicited from internal partners (e.g., the vaccine forecasting team for the state’s immunization information system, the program’s school-law team), and was also received informally from external users (e.g., physicians, local health departments, schools) who called in with questions.

DISSEMINATION
The guide was distributed to immunization providers (local health departments, private practices, pharmacies) and to organizations involved in medical education (medical assistant programs) through existing immunization and pharmacy listservs, and the immunization program’s website. It was also incorporated into the model standing order for pneumococcal vaccines available on the program’s website.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
The guide was included in Oregon’s pneumococcal vaccine model standing order and pharmacy protocol. Public clinics must use the state’s standing orders for all immunizations, and many private providers use them voluntarily.

FUNDING
There was no special funding stream for this activity; it was done as part of the regular duties of the adult immunization coordinator, whose position is supported by federal CDC immunization grant funds.
The work was done by the adult immunization coordinator, with the final product approved by the medical director of the immunization program. The adult immunization coordinator has responsibility for monitoring changes to pneumococcal recommendations, and identifying the need for updates to the guide.

**IMPLEMENTATION STATUS**
The current version is posted online and being distributed; it is a working document that will be updated as needed (e.g., if Advisory Committee on Immunization Practices (ACIP) recommendations change).

**SUCCESSES**
- The guide has been very well received by immunization providers both within and outside of Oregon, and has made it much easier to address providers’ questions.

**CHALLENGES**
- Distilling the recommendations was not a straightforward task; the guide went through many internal iterations to summarize the information concisely, and also went through several revisions based on stakeholder feedback. Both the IIS vaccine forecasting team and the school-law team found necessary last-minute changes.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**
- Receiving feedback from different types of immunization providers and internal stakeholders was important to ensure accuracy of the information.
- To be better prepared for updating the guide, the adult immunization coordinator tried to stay on top of potential changes to pneumococcal recommendations by listening to relevant discussions held during ACIP meetings and monitoring relevant newsfeeds (e.g., CDC).

**RELEVANT RESOURCES**
- Oregon standing order link (see Section IV for pneumococcal vaccine table): [http://1.usa.gov/OregonStandingOrders](http://1.usa.gov/OregonStandingOrders)
- Oregon pharmacy immunization protocol links (see Section IV within pneumococcal vaccine protocol table): [http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/ImmunizationProviderResources/Pages/pharmpro.aspx](http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/ImmunizationProviderResources/Pages/pharmpro.aspx)

**FOR MORE INFORMATION**
Contact Jeanine R. Whitney, Adult Immunization Clinical Coordinator, at Jeanine.r.whitney@state.or.us.
OVERVIEW OF ACTIVITY
The Rhode Island Department of Health (RIDOH), in conjunction with its Flu Task Force, modified regulations pertaining to health care worker (HCW) immunization requirements to require annual flu vaccination.

BACKGROUND/IMPELTUS FOR THE ACTIVITY
In 2007, a provision was added to Rhode Island regulations requiring health care facilities to offer flu vaccine to all HCWs at no cost, monitor HCW flu coverage rates, and report coverage rates and declination reasons to the department. To support this provision, the state began offering flu vaccine to health care facilities at no cost. Several years later, despite the availability of free vaccine and considerable outreach by facilities to promote HCW flu vaccination, coverage rates had not significantly improved.

In August 2011, the RIDOH Director convened a Flu Task Force to identify barriers and improve access to flu vaccine for all Rhode Islanders. Of concern was the inconsistency inherent in asking people to follow flu vaccine recommendations when HCWs themselves were not being vaccinated. The Flu Task Force’s initial focus was on improving HCW influenza coverage rates.

DESCRIPTION OF ACTIVITY
After reviewing data on HCW coverage rates and deliberations by the task force, the Director promulgated regulations requiring flu vaccination for all HCWs at certain facilities (e.g., hospitals, nursing homes, ambulatory care facilities), with medical exemptions allowed. Two public hearings were held, which were generally positive. However, the Department received other, negative feedback from many HCWs and their attorneys regarding the inability to decline flu vaccine. After additional public input and task force discussions, including research into best practices regarding masking, the Director of Health issued amended regulations in October 2012. The final regulations require that by December 15 of each year all HCWs be vaccinated against the flu, file a medical exemption, or file a refusal form. Medical exemption and vaccine refusal forms are to be filed with the HCW’s employer. Unvaccinated workers must wear a surgical face mask when in direct patient contact during periods in which the Director of Health declares influenza to be widespread. Those who fail to wear the mask when required are subject to a $100 fine for each violation, and a possible finding of unprofessional conduct and disciplinary action by the HCW’s licensing board.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Director of RIDOH convened the Task Force, which has around 50 members representing key immunization stakeholders in the community, including health care providers, health care facility administrators, epidemiologists, pharmacists, and insurers. The immunization program and health care facility licensing program are also members of the task force.
DISSEMINATION
Information regarding the regulations was disseminated to all health care facility contacts via email, through an electronic newsletter provided monthly to all licensed health care providers in the state, and via email to all state-supplied vaccine providers in the state. The immunization program also worked closely with the Division of Facility Regulations and the Division of Infectious Disease and Epidemiology to disseminate information regarding the regulations and assess compliance.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Adult immunization program staff discuss the regulations during regular on-site visits with health care facilities that are enrolled in the state-supplied vaccine program. All sites enrolled in the program are visited annually to review adult vaccines offered by the program and the recommended adult vaccination schedule, and to assess storage and handling procedures and other immunization-related policies.

FUNDING
Immunization program staff time was funded as part of normal, federal grant-funded duties.

STAFFING
Immunization program staff helped organize the task force meetings and participated in meetings as members of the task force.

IMPLEMENTATION STATUS
These regulations are final. The task force continues to meet, though it has shifted from RIDOH to the Ocean State Immunization Collaborative, a 501(c)(3) organization partially funded by the state to help improve immunization rates over the lifespan.

SUCCESSES
- HCW flu coverage rates increased from 69.7% in 2011-2012 to 87.2% in 2012-2013 (the first flu season the regulations were in effect), and to 88.1% in 2013-2014. There were no complaints filed against unvaccinated HCWs for not wearing a mask in 2012-13.
- Health care facility reporting rates have improved dramatically, and the number of HCWs with an unknown vaccination status has decreased significantly.

CHALLENGES
- An initial challenge was addressing the concerns about the wording of the amended regulation (e.g., lack of a religious exemption). In response, following additional research and discussions, the masking provision for unvaccinated HCWs was put in place.
- Determining the range of facilities to be included in the regulation required careful thought; for example, the task force determined that assisted living facilities should
be included. All facilities licensed by RIDOH are included; however, determining who is licensed by RIDOH and who is not licensed is not always broadly understood. The program continues to field questions from facilities wondering whether they are supposed to report; a list is provided on the program’s website.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

- Before choosing to change rules or regulations, it is important to understand the process (e.g., what actions require legislative action vs. regulatory action). In Rhode Island, the Director of RIDOH has the authority to put regulations in place related to public health.
- It is important to identify the relevant stakeholders upfront. For Rhode Island, it was important to include the state staff responsible for licensing and monitoring health care facilities, since enforcement of these regulations is their responsibility.
- Once regulatory changes are drafted, as many stakeholders as possible should be given the opportunity to review them, even prior to public meetings, to address potential issues early in the process.
- Many health care facilities are required to report their HCW vaccination rates to the federal Centers for Medicare & Medicaid Services (CMS), so this regulation introduced some degree of duplicate reporting. It is important to consider whether there are opportunities to build on data collection for other reporting requirements. In this case, Rhode Island decided that the federal CMS reporting was not sufficiently timely nor detailed, and chose to implement its own (online) data collection.

RELEVANT RESOURCES

- Rhode Island Immunization Information for Health Care Workers: [http://www.health.ri.gov/immunization/for/healthcareworkers/](http://www.health.ri.gov/immunization/for/healthcareworkers/)

FOR MORE INFORMATION

Contact Denise Cappelli, Adult & Influenza Coordinator, Rhode Island Department of Health, at (401) 222-6737 or Denise.cappelli@health.ri.gov.

“Immunization program managers can serve as an important conduit of information in helping providers implement standing orders. Using these simple tools can streamline immunization delivery to protect more patients, free up physician time to manage acute and chronic health problems, and empower nurses to handle the practice’s immunization program.”

— Deborah L. Wexler, MD, Executive Director, Immunization Action Coalition
IAC Resources for Standing Orders

The Immunization Action Coalition (IAC) has developed a wealth of materials on the importance of using standing orders to increase adult immunization rates.

IAC’s Standing Orders website [www.immunize.org/standing-orders] includes:

- Using Standing Orders for Administering Vaccines: What You Should Know
  www.immunize.org/catg.d/p3066.pdf
- Ten Steps to Implementing Standing Orders for Immunization in Your Practice Setting
  www.immunize.org/catg.d/p3067.pdf
  *(Great handout for use in both public and private settings)*
- Standing orders templates for individual vaccines, which may be used as written or modified to meet local needs.

In 2015–2016, IAC conducted standing orders workshops around the country as part of its Take A Stand™ program. Comprehensive resources from these workshops are available to Immunization Program managers at the Take A Stand™ website [www.standingorders.org] including:

- Workshop handouts
  www.standingorders.org/resources/handouts-from-the-immunization-action-coalition-iac/
- Compilation of resources from IAC and other organizations
  www.standingorders.org/resources/resources-from-iac-and-others
- Standing orders for administering vaccines to adults
  www.standingorders.org/standing-orders-templates/
  *(links to IAC standing orders website shown above)*
- Selected journal articles on the use of standing orders
  www.standingorders.org/resources/journal-articles/
- Slide decks from each of the workshops conducted in 2015–2016
  http://www.standingorders.org/resources

These may be used or adapted by program managers conducting presentations on the importance of using standing orders. Topics covered include:

- Why Adult Immunization Matters
- Standing Orders Protocols: How They Work
- State Law and Standing Orders
  *(applicable to individual states where workshops were conducted)*
- How to Implement Standing Orders in Your Practice
OVERVIEW OF ACTIVITY
The New Hampshire Immunization Program (NHIP) developed an adult immunization awareness campaign to promote conversations between health care providers and their adult patients about the importance of being vaccinated.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The goal of this project was to increase adult immunization rates through messaging that promotes a two-way conversation between adults and their health care providers, and stresses the importance of vaccination across the lifespan.

DESCRIPTION OF ACTIVITY
In 2013, NHIP worked with its marketing/media contractor to develop adult-focused materials for the “Start the Conversation” campaign. The contractor used market research and focus group feedback to prepare an outreach marketing plan and to help design the materials. Visual materials focused on showing younger adults (<40 years) engaged in activities in natural, New Hampshire-specific surroundings. Materials were developed around three key messages: routine health care (immunizations are part of routine health care), community immunity (immunizations protect others, not just oneself), and vaccine safety.

A toolkit for providers was developed that includes: an overview of the campaign and its key messages, tips for starting the conversation, evidence-based strategies, a sample standing order for flu vaccine, sample social media posts, a template for newsletter or website articles, campaign posters, a resource list, an evaluation form, and a tent card about the campaign for office reception areas.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
This campaign was coordinated by NHIP and co-sponsored by the New Hampshire Medical Society, the New Hampshire Nurses’ Association, and the New Hampshire Nurse Practitioner Association. Media and marketing materials were developed under contract with the Community Health Institute/JSI Research & Training Institute Inc. In 2014, NHIP began working with internal Division of Public Health Services chronic disease programs to target at-risk populations and subspecialist providers.

DISSEMINATION
Toolkits were mailed to approximately 1,400 internal medicine and family practice providers through the New Hampshire Medical Society. They were also distributed during site visits and at the NHIP Annual Immunization Conference. The nurses’ associations emailed their members with a web link to the toolkit. Monthly emails with immunization education messages were sent to providers through their respective provider organization. Campaign messages were also displayed on city buses and bus shelters, billboards, and signs at the Manchester airport and New Hampshire motor speedway. NHIP also advertised the campaign via press release, public service announcements (PSAs) on the radio, and cable access TV, and on Facebook.
INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Public health nurses disseminated and discussed the “Start the Conversation” tool kits during Vaccines for Children (VFC)/AFIX visits at family practices and community health centers. “Start the Conversation” has become NHIP’s logo to promote vaccines across the lifetime.

FUNDING
This campaign was funded through NHIP’s federal 317 funding. Recently received Prevention and Public Health Fund (PPHF) funds will be used to further support the campaign.

STAFFING
The campaign was staffed by NHIP’s full-time adult immunization coordinator and its education and outreach coordinator, who work directly with the program’s marketing contractor. The outreach coordinator spent about 40-50% of her time focused on the adult campaign.

IMPLEMENTATION STATUS
Most of the outreach and media efforts have been completed. Toolkit materials and related resources continue to be available online. In 2015, as part of NHIP’s expansion of the campaign to patients with chronic diseases and to medical specialists, the program provided chronic disease-focused rack cards to nurse educators for distribution to providers.

SUCCESSES
• This campaign was the first time that NHIP worked so closely with state provider organizations on an adult initiative. These organizations were supportive, and their involvement provided a pathway for disseminating materials directly to providers.
• Developing an outreach plan was very useful for providing structure and insight for the materials developed.

Prevention and Public Health Funds (PPHF)
PPHF is a funding source for immunization programs both as general funds as well as competitive grants in targeted immunization program areas. The PPHF adult immunization grants have provided $20.9 million to 17 states and 3 cities to: implement the Standards of Adult Immunization, expand access to vaccines and reporting of adult vaccinations, improve health care personnel immunization coverage rates, promote hepatitis B immunization, and ensure all adult ACIP-recommended vaccinations are included as preventive benefits by state Medicaid offices. A factsheet on PPHF is available on the AIM website at http://www.immunizationmanagers.org/Publication.
The outreach plan evolved over the campaign from mailing the toolkits to the 1,400 physicians to NHIP staff personally distributing the toolkits to the practices and having toolkits available at the NHIP Annual Immunization Conference.

CHALLENGES
- It is difficult to measure the impact of this type of campaign, and NHIP received a very limited response to its evaluation survey. Additional follow up with providers to get their direct feedback on the materials and how they are using them would be helpful. The program continues to look for ways to expand the campaign, such as through its new PPHF grant.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
- Messages should be targeted to the intended audience. Showing images of young adults being active in local, outdoor settings, while avoiding pictures of needles and medical settings, was a conscious choice by the program based on marketing research findings.
- NHIP used a multi-pronged outreach campaign, with different types of materials disseminated simultaneously in various ways, to maximize the opportunity to reach the target audiences.
- NHIP Public Health Nurse Coordinators conducting site visits provided the “Start the Conversation” materials, which not only provided an opportunity to discuss the campaign in person, but led to discussing routine vaccine recommendations; standing orders; and answering questions.

RELEVANT RESOURCES

FOR MORE INFORMATION
Contact Karen Donoghue, Adult Immunization Coordinator, at (603) 271-4482 or kdonoghue@dhhs.state.nh.us.

REFERENCES
6. 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.
Partnerships for Reaching Uninsured Adults

CHAPTER 3
Introduction

Research has found that people without health insurance coverage have less access to care and are less likely than those with insurance to receive preventive care and services for major health conditions and chronic diseases. For example, the influenza vaccination coverage rate in 2012 among adults 18 years and older without health insurance was 14.4% versus 44.3% for those with insurance. It is estimated that 13% of the non-elderly adult population (ages 18-64) was uninsured in 2015.

In a study of Californians, insured adults were more likely to have a usual source of health care (61%) than the uninsured (43%). Safety net providers such as community health centers remain an important place of care for uninsured adults. Since uninsured adults may not have a usual source of health care, reaching this population is enhanced through the use of partnerships that reach adults in all walks of life.

Immunization Programs can improve access to vaccines for the uninsured by partnering with organizations that serve this population, such as public clinics. The highlighted activities related to reaching the uninsured are:

- **Getting Started:** Collating information on patient assistance programs (PAPs) offered by pharmaceutical companies to help community health centers vaccinate uninsured adults
- **Moving Forward:** Working with community health centers to identify quality improvements to support adult vaccination, including electronic health record enhancements
- **Taking It to the Next Level:** Creating a program to provide publicly-purchased vaccine at no cost to safety net providers for administration to uninsured adults

The National Adult Immunization Plan

The National Adult Immunization Plan (NAIP), released in February 2016, is intended to promote coordinated planning and action across all relevant stakeholder groups, both inside and outside the US government. The 4 goals of the NAIP are to:

**GOAL 1:** Strengthen the adult immunization infrastructure

**GOAL 2:** Improve access to adult vaccines

**GOAL 3:** Increase community demand for adult immunizations

**GOAL 4:** Foster innovation in adult vaccine development and vaccination-related technologies

The NAIP identifies specific objectives for each goal, key strategies to guide implementation through 2020, and indicators to track progress. The full plan can be found at [http://www.hhs.gov/nvpo/national-adult-immunization-plan/naip.pdf](http://www.hhs.gov/nvpo/national-adult-immunization-plan/naip.pdf)
Paying for Adult Vaccines

PRIVATE INSURANCE
All Affordable Care Act (ACA) Health Insurance Marketplace plans, self-insured ERISA group health plans, and state-regulated, non-grandfathered insurance plans must cover ACIP-recommended vaccines with no cost-sharing when provided by an in-network provider. Out-of-network coverage is provided at a plan’s discretion and cost-sharing may apply. ACA grandfathered plans do not have to cover vaccines; 25% of US employees were covered by grandfathered plans in 2015 (see: http://kff.org/report-section/ehbs-2015-section-thirteen-grandfathered-health-plans/).

MEDICAID
Vaccination coverage is optional for traditional Medicaid programs; as of 2012, 36 state Medicaid programs covered all ACIP recommended vaccines and all but one state (Florida) covered at least one vaccine for adult Medicaid patients. Under ACA Medicaid expansion, states have the option to expand coverage to non-elderly persons with incomes up to 133% of the Federal poverty level. States that opt to expand must cover immunization services with no cost-sharing for newly eligible enrollees and have the option to provide the same benefits to existing enrollees. As of March 2016, 31 states and DC have opted to expand Medicaid. Data from 2012 show that Medicaid cost-sharing and reimbursement policies vary widely by state (see: http://www.izsummitpartners.org/content/uploads/2016/05/2b-1-Stewart-Medicaid-Adult-Vax-Coverage-and-Reimbursement.pdf).

MEDICARE
For adults aged ≥65 years enrolled in Medicare, Part B covers influenza, pneumococcal, Td (for wound management), and hepatitis B (if at increased risk) vaccines. Part D covers all other vaccines. Some Medicare Advantage Plans (Part C) also may offer vaccine coverage. Cost-sharing and reimbursement policies vary by Part and plan.

STATE/LOCAL IMMUNIZATION PROGRAMS
Some state/local immunization programs are able to offer publicly-funded vaccine for eligible adults in certain settings. These initiatives vary widely in scope (e.g., vaccines offered) across programs. Vaccines are provided at no cost, though administration fees may be charged. Funding support for these initiatives is generally from federal (317, Prevention and Public Health Fund [PPHF]) sources, but sometimes also from state/local or other sources.

VACCINE MANUFACTURER PATIENT ASSISTANCE PROGRAMS
Uninsured adults may be eligible to receive certain vaccines at no charge through vaccine manufacturer patient assistance programs; program details vary by manufacturer. For more information: https://www.michigan.gov/documents/mdhhs/Helping_Adults_Pay_Vaccine_514117_7.pdf

OTHER RESOURCES
http://www.izsummitpartners.org/content/uploads/2016/05/O-Pre-a-2-Shen-Tan-Vaccine-Financing-ACA-and-Immunizations.pdf
OVERVIEW OF ACTIVITY
The Rhode Island Immunization Program works with Community Health Centers to utilize vaccine companies’ patient assistance programs to secure vaccines for uninsured adults.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The Rhode Island Department of Health (RIDOH) provides childhood vaccines universally, and has worked to provide all vaccines for adults as well. Immunization providers enroll in the State-Supplied Vaccine (SSV) Program to receive vaccines at no cost from the state. Vaccine funding for the insured population, both children and adults, comes from an assessment on health insurance plans. Federal 317 funds are used for uninsured and underinsured adults; however, in response to decreased and inconsistent 317 funding, the Immunization Program sought to identify other options to fund vaccines for uninsured adults.

DESCRIPTION OF ACTIVITY
An immunization staff person’s prior experience working in an AIDS/HIV program was the inspiration for investigating the option to procure vaccines through patient assistance programs (PAPs) offered by pharmaceutical companies. The Immunization Program reviewed the terms and conditions of PAPs available for vaccines. Generally, the PAPs require that a patient-specific application be filled out and faxed to the manufacturer during the clinic visit, before the vaccine can be administered to the patient. The PAPs then review the application to assess the patient’s eligibility and typically provide a response to the clinic within 10-20 minutes. Each company’s PAP has a different application and qualification criteria. Flu and zoster vaccines are not included.

The Immunization Program reviewed the profiles of practices enrolled in the state vaccine program and found that the majority of the state’s uninsured/underinsured patients are seen at Community Health Centers (CHCs). The Immunization Program organized meetings with administrators and clinical staff at each CHC, as well as a few other community-based organizations serving the uninsured, to discuss the potential use of PAPs; all but one CHC agreed to participate. The Immunization Program purchases a limited “seed” supply of adult vaccines for each CHC; the CHCs replenish their supply through the manufacturers’ PAPs.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Immunization Program and the CHCs are partners in this activity. The Immunization Program did the background research on using PAPs and shared this information with the CHCs; immunization program staff continue to help CHCs with the process. RIDOH staff reached out to each pharmaceutical company to confirm viability of the use and approval of the PAP.

DISSEMINATION
The Immunization Program communicates directly with each CHC about this activity, including providing a reference sheet on using PAPs.
INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Not applicable at this time.

FUNDING
Federal 317 funds are used to purchase the “seed” vaccine given to CHCs. Insurer assessment operation funds support the RIDOH staff person responsible for this effort.

STAFFING
The Immunization Program’s adult and influenza program coordinator is responsible for this activity. The bulk of this individual’s time was spent upfront getting the effort going. If a CHC has staff turnover, she will review the PAPs information with the new person.

IMPLEMENTATION STATUS
This activity is ongoing.

SUCCESSES
• Although using PAPs can be a burdensome process (e.g., staff time to complete and submit the PAP application), all but one CHC agreed to participate. The alternative for them is purchasing vaccines with their own funds or referring patients elsewhere.
• With this partnership, the program has been able to provide vaccine at no cost for uninsured adults at critical access points.
• Accessing the vaccine companies’ PAPs has occasionally led to other grant funding opportunities for CHCs through these companies.

CHALLENGES
• CHC staff time needed to fill out and fax the PAP applications can be burdensome for some CHCs.
• There is a time delay while PAPs review a patient’s application; patients do not always wait to see if they are eligible for the program, which can result in missed opportunities to vaccinate. However, most PAP approvals are good for 30 days, so the patient can return if they choose not to wait.
• The vaccine companies do not store the PAP application information for a patient; after 30 days, a new application needs to be filled out and sent in for a particular patient.
• Some small community-based organizations do not have the infrastructure to use the PAP (e.g., no fax machine). In these cases, the Immunization Program provides vaccine for uninsured adults as needed.
• Due to varying PAP criteria across companies, RIDOH staff attempted to work with all the companies to see if it was possible to develop universal PAP guidance to reduce the burden of managing different forms and criteria; eventually this was deemed not
possible. All of the pharmaceutical companies did state that although they currently have a PAP in place, at any point in time the company can choose to discontinue its PAP.

- Some private providers who see the uninsured/underinsured may not want to refer their patients to another primary care location (e.g., a CHC) for vaccination.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**

- For efforts to immunize uninsured/underinsured adults, it is helpful to focus on the sites where the majority of these patients seek services. It is also important to understand whether these sites are accepting new patients, whether they will accept patients referred to them for vaccination only, whether they have a waiting period for seeing new patients, and whether their clinic workflow will accommodate the burden of doing the PAP applications.

**RELEVANT RESOURCES**

- Merck Patient Assistance Programs: [http://www.merckhelps.com](http://www.merckhelps.com)
- Pfizer RxPathways: [http://www.pfizerrxpathways.com](http://www.pfizerrxpathways.com)

**FOR MORE INFORMATION**

Contact Denise Cappelli, Adult/Influenza Coordinator, Rhode Island Department of Health, at (401) 222-6737 or Denise.cappelli@health.ri.gov.
IMMUNIZATION PROGRAM’S LEVEL OF ENGAGEMENT
in increasing adult vaccination rates by partnering with community health centers (2014) \(^6\)

2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey

- 10% Did not engage/not a priority (7)
- 9% Did not engage but would like to if resources were available (6)
- 30% Had some engagement in activity but could not expand because of limited resources (19)
- 13% Had some engagement which was all that was needed (8)
- 30% High level of engagement because this is part of our program's core activities (19)
- 5% Immunization program does not have the infrastructure and/or policy to support this activity (3)
- 3% No answer (2)
OVERVIEW OF ACTIVITY
The Chicago immunization program provided technical assistance and vaccines to participating community health centers (CHCs) to help improve their adult vaccination efforts.

BACKGROUND/IMPETUS FOR THE ACTIVITY
Community health centers in Chicago have been reluctant to invest in adult vaccination due to inconsistency in vaccine supply and competing priorities. Federal PPHF funding afforded the opportunity for the Chicago immunization program to develop an intervention to encourage adult immunization in CHCs.

DESCRIPTION OF ACTIVITY
The Chicago immunization program, through the Chicago Department of Public Health (CDPH), put out a request for proposal for CHCs to apply for the adult immunization initiative. All CHCs that applied were funded at varying levels. Participants included a single-site federally qualified health center (FQHC), 6 sites of a multi-site FQHC corporation, and 7 CHCs (15 sites) within a large CHC integrated service network.

Each clinic had to implement quality improvement interventions that incorporated electronic health record (EHR) modifications (e.g., assessing coverage levels, standing orders, patient and/or provider reminders) and begin the process of having their EHR interface with the state immunization information system (IIS). For example, the large CHC network modified its EHR system to be able to generate coverage level reports so that sites can monitor their own immunization rates. CDPH met monthly with CHC staff to provide guidance and technical assistance, and supplied the clinics with Tdap, pneumococcal, influenza, hepatitis B, and zoster vaccines. CHCs were required to submit monthly and quarterly reports.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The immunization program provided technical assistance and oversight to the CHCs, including monthly meetings. The program also communicated with state immunization registry staff so that CHCs ready to interface their EHR with the registry could be prioritized in the onboarding process.

DISSEMINATION
The immunization program posted the RFP announcement in a local newspaper, and shared the funding opportunity through the Illinois Primary Health Care Association. The immunization program used existing materials to provide technical assistance to CHCs during the project.
INTERSECTION WITH OTHER PROGRAM ACTIVITIES
This activity intersects with the objective of increasing adult data in the state IIS.

FUNDING
This activity was funded through the immunization program’s federal 2012-2013 PPHF grant. Vaccine doses were purchased using federal 317 and local funds.

STAFFING
The medical director of the immunization program and another immunization program staff person supported this activity.

IMPLEMENTATION STATUS
Funding of the quality improvement activity is completed. Limited vaccine amounts continue to be available to CHCs through an application process.

SUCCESSES
• Over 17,000 vaccine doses were distributed to the participating CHCs.
• The CHCs made progress in developing the capacity of their EHRs to support adult immunization efforts. All of the CHCs in the integrated service network interfaced successfully to the state IIS and continue to transmit adult vaccinations on a regular basis.

CHALLENGES
• Without funding, CHCs do not have time or resources to put toward adult immunization efforts. PPHF funding was essential to getting CHCs to consider participating in quality improvement efforts around adult immunization.
• Other lessons learned/Advice to other programs
  • In the initial vaccine application process, CDPH did not specify the amount of funding available for vaccines; the total amount requested was much greater than the available funds. In addition, the initial application included all adult vaccines and an array of strategies. However, implementation was too diffuse to make a measurable impact. For the next application cycle, the immunization program will tie the funding to a more specific focus (e.g., a particular vaccine or population), so that the CHCs can be more targeted in their efforts.
  • Working with a CHC network (the Alliance of Chicago) was very helpful; part of Alliance’s mission is to share resources and integrate services across their CHCs. All of the CHCs within the network use the same EHR, and the Alliance was the lead for developing and working on the interface for the whole network, which the CHCs then roll-out in phases.
RELEVANT RESOURCES

- Chicago Original Community Health Centers Initiative RFP:
- Chicago Vaccine for Adults Application for Community Health Centers:

FOR MORE INFORMATION

Contact Chicago Immunization Program at (312) 746-6229.
“"Our adult Un- and Underinsured Adult Vaccination (UUAV) program has been a successful strategy for equitably utilizing 317 and state vaccine resources.”

— Margaret Roddy, Minnesota Immunization Program Manager
**OVERVIEW OF ACTIVITY**

The Adult Safety Net (ASN) Program provides publicly-purchased vaccine at no cost to enrolled safety net providers for administration to uninsured adults.

**BACKGROUND/IMPETUS FOR THE ACTIVITY**

The goal of the ASN Program is to expand access to vaccination services for uninsured adults. Efforts to provide vaccines for uninsured adults have grown gradually over the past decade; the specific vaccines included and provider enrollment in the ASN program have varied over the years based on available funding.

**DESCRIPTION OF ACTIVITY**

The ASN Program currently includes all recommended adult vaccines other than influenza vaccine, as well as emergency biologicals (e.g., rabies immunoglobulin). Providers enroll in the program to receive vaccines at no cost for administration to uninsured adults aged ≥19 years. They must follow the same storage and handling guidelines as Vaccines for Children (VFC) providers and screen patients for eligibility. Providers may charge an administration fee up to $25, but may not deny vaccines for inability to pay this fee.

The program is limited to public safety net providers, which currently includes local and regional health department offices, federally qualified health centers (FQHCs), Rural Health Centers (RHCs), public hospitals, HIV and STD clinics, family planning clinics, and substance abuse clinics. Providers may advertise and host mobile clinics.

**ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED**

The state immunization program administers the program and initiated the state funding request to support the program. The program’s stakeholders and partners, including health care providers and the state medical association, were instrumental in advocating for the legislative funding.

**DISSEMINATION**

The program sends out a recruitment letter to eligible providers. Information on the program is available on the immunization program website for both providers and the public, including links for finding the ASN Program sites by city and county. The program also funds nine positions to promote adolescent and adult immunization programmatic activities, including promotion and recruitment efforts for the ASN Program.

**INTERSECTION WITH OTHER PROGRAM ACTIVITIES**

To enroll in the ASN Program, ASN providers are required to enroll as a Texas VFC provider in order to receive the vaccine storage and handling training as well as receive a compliance site visit. The majority of the providers enrolled in the ASN Program provide immunization services to both children and adults.
The program is currently working on initiatives to increase the utilization of ImmTrac, the Texas immunization information system, by ASN providers. Presentations and trainings are being developed and provided to enrolled ASN providers on the benefits of utilizing ImmTrac as well as the importance of obtaining consent from adult clients to store their immunization records within ImmTrac.

**FUNDING**
The ASN Program is supported by federal 317 funds. The receipt of federal American Recovery and Reinvestment Act (ARRA) funds in 2009 led to a major expansion in both vaccines offered and provider site enrollment. When ARRA funds expired in 2012, the vaccines available through the program were reduced and provider enrollment declined. During the 2013 Texas legislative session, the immunization program requested funds to more fully support the ASN Program and received a general revenue appropriation ($17.9 million for the 2014-15 biennium) that has become part of their base funding. The program also will be supported by new federal PPHF funding to increase awareness of the Standards for Adult Immunization Practices and recruitment efforts for the ASN Program.

**STAFFING**
As previously mentioned, the majority of the providers enrolled in the ASN Program are also enrolled in the TVFC Program. Federally-funded immunization program staff provide technical assistance and support to these providers, including assistance with vaccine storage and handling, ordering vaccines, and programmatic guidance.

The program, through the Immunization and VFC cooperative agreement with the CDC, also funds nine positions throughout Texas to promote adolescent and adult immunization activities, including providing support and technical assistance to enrolled ASN providers.

The program also contracts with local health departments throughout Texas to provide technical assistance and support to enrolled providers within their jurisdictions, including assistance with vaccine ordering, storage, and handling. In conjunction with the adolescent and adult immunization coordinators, these contracted local health departments also assist the program recruitment efforts to increase the number of providers enrolled in the ASN Program.

**IMPLEMENTATION STATUS**
This is an ongoing program, and provider recruitment efforts continue.

**SUCCESSES**
- A major success was securing state funds during the 2013 legislative session to support the program.
- Almost 500 provider sites are currently participating, and over 100,000 vaccine doses were administered through the program in 2014.
**CHALLENGES**
- Inconsistent funding made maintaining the program a challenge; receipt of state funding has addressed this challenge.
- Not all FQHCs and RHCs in the state are enrolled in the program; recruitment is ongoing.
- The number of ASN sites that order vaccines has decreased by about 12% as of October 2015. Outreach must continue with enrolled sites to increase their efforts to vaccinate uninsured adults.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**
None at this time.

**RELEVANT RESOURCES**

**FOR MORE INFORMATION**
Contact Monica Gamez, Director, Infectious Disease Control Unit, at 512-776-3711 or Monica.Gamez@dshs.state.tx.us, or Barbara Vassell, Manager, Vaccine Operations Group, at 512-776-6244 or Barbara.Vassell@dshs.state.tx.us.

**REFERENCES**
6. 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.

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Reaching Adults Where They Live

CHAPTER 4
Introduction

Providing opportunities for vaccination in the community may increase the likelihood that adults receive a vaccine, due to the increased convenience of not having to go to a provider office. Creating the opportunity for immunization services within an adult’s community can reduce barriers that prevent adults from receiving preventive services such as time away from work, transportation to a clinic facility and the need for child care. Places to provide vaccine in the community can include faith-based organizations, community groups, and colleges and universities. Residents of long-term care facilities and those in correctional facilities can benefit from on-site vaccination.

Community-based interventions in combination with vaccinations are recommended activities by the Community Preventive Services Task Force (CPSTF). The National Adult Immunization Plan and the Standards for Adult Immunization Practice both cover the need to educate and collaborate with community groups to reach adults in need of recommended vaccines.

Immunization Programs can support adult immunization through community-based outreach with groups such as faith-based organizations, and partnerships with organizations with resident populations (e.g., universities, long-term care facilities). The highlighted activities related to reaching adults where they live are:

- **Getting Started:** Utilizing existing experience working with faith-based organizations to help develop easily understandable materials for community groups to use to conduct their own flu prevention workshops
- **Moving Forward:** Conducting a competitive campaign on university and college campuses to promote flu vaccination among students
- **Taking It to the Next Level:** Forming a partnership with the Department of Corrections to develop an immunization infrastructure and culture for vaccinating the prison population
How the [State/Local/Territorial Immunization Programs] partner to reach adults in the community (2014)\textsuperscript{4}

38 partnered with colleges/universities
30 partnered with correctional facilities
24 partnered with community vaccinators
16 partnered with faith-based organizations

*Data from 2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey

Sharing Ideas with Other Immunization Programs

The National Adult Immunization Coordinators’ Partnership (NAICP) provides an opportunity for state and local adult immunization coordinators to exchange information and ideas. NAICP meets quarterly via conference call/webinar and annually in person at the National Adult and Influenza Immunization Summit. Quarterly meeting minutes and supporting materials are posted on its website. The Centers for Disease Control and Prevention (CDC) and AIM have liaison members.

Website: http://www.izsummitpartners.org/naicp/
OVERVIEW OF ACTIVITY
Through the Flu Prevention Workgroup of the Arkansas Immunization Action Coalition, the immunization program is involved in putting together a toolkit for community and faith-based organizations to conduct their own flu prevention workshops.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The Arkansas Department of Health (ADH) received a small grant to promote flu vaccination to hard-to-reach audiences through faith-based organizations. The ADH Medical Director for Immunizations is also the ADH Medical Advisor for Health Literacy and Communication. Through previous health literacy activities, she was familiar with a workshop called “Let’s Talk About the Flu,” developed by Wisconsin Health Literacy, that was delivered by literacy instructors to community members. The team working on the grant decided to adapt the Wisconsin workshop for use in Arkansas. The goal was to develop easily understandable materials that community groups could use to educate the people they serve about flu prevention in the communities where they live.

DESCRIPTION OF ACTIVITY
The team working on the grant presented the project to the Flu Prevention Workgroup and enlisted their involvement. The grant team included a professor of public health at the University of Arkansas for Medical Sciences (UAMS) with a long-standing relationship with the faith-based community in Arkansas. The professor worked with her contacts in the faith-based community in eastern Arkansas to adapt the Wisconsin materials for use in Arkansas. The adapted materials were pilot tested by members of the Workgroup through their organizations. The end-product was an online toolkit that leaders of any community or faith-based organization could use to plan and host an hour-long workshop for the people they serve. The toolkit provides easy-to-understand, plain language materials with the goal of increasing flu vaccination among the respective community members, many of whom live in impoverished areas with low health literacy.

The toolkit includes information on setting up and advertising the workshops, conducting the workshops, and a post-workshop debrief form to send in to the coalition. The toolkit also contains tips for arranging an on-site flu shot clinic through local pharmacies or medical clinics. These materials are designed to be used by any organization that conducts outreach in their community (e.g., churches, geriatric clinics). Some of the materials have versions that are Christian-specific for faith-based organizations.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The toolkit is an effort of the Flu Prevention Workgroup of the Arkansas Immunization Action Coalition, whose members include representatives from the coalition, the immunization program, and the College of Public Health at UAMS.
DISSEMINATION
The toolkit is available on the immunization coalition website. In addition, paper copies of the easy-to-read booklet for use by workshop participants are available free of charge through the Arkansas Department of Health Immunization Program.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
The workshop was initially publicized as part of a student project by a student in the UAMS College of Public Health. It has also been publicized by the ADH Office of Minority Health and Health Disparities.

FUNDING
This activity grew out of a small CDC-funded grant provided through Association of State and Territorial Health Officials (ASTHO), with support from the Emory Interfaith Health Program, to the Arkansas Department of Health. This grant was used to print hardcopies of the booklets for use by the workshop participants. Additional funding from the same source will be used to develop a Spanish-language version of the workshop.

STAFFING
The immunization program oversees the grant and participates on the workgroup. The ADH Medical Director of Immunizations provides direction and technical assistance regarding immunizations and health literacy to the workgroup for this project.

IMPLEMENTATION STATUS
The workshop toolkit is available online through the Arkansas Immunization Action Coalition, and printed copies of the participant booklets are available from ADH. Additional tools are being developed, such as a Spanish-language version, a toolkit on adult immunizations (expanding beyond flu vaccine), and materials for other faiths (e.g., Muslim).

SUCCESSES
• Several workshops were offered around Arkansas during the fall 2015 through the Centers on Aging, and the evaluations were positive.

CHALLENGES
• The workshop is designed to be given in the fall of each year. Last fall, the most significant challenge was loss of leadership and oversight for this project due to changes in staff/leaders in the Arkansas Immunization Action Coalition and Flu Prevention Workgroup. In addition, the lead student on the project moved out of state. These changes made it difficult to promote use of the toolkit in a timely manner and to provide the type of coaching support needed to make organizations aware of the toolkit.
OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

- The Emory/ASTHO document on public health and faith community partnerships (see Relevant Resources below) provides valuable guidance that could be applied to other organizations and communities.

RELEVANT RESOURCES

- Arkansas Toolkit materials: http://www.immunizear.com/#/flu prevention/toolkit/c1mhs

FOR MORE INFORMATION

Contact Jennifer Dillaha, MD, Medical Director for Immunizations at the Arkansas Department of Health at (501) 661-2864 or Jennifer.Dillaha@Arkansas.gov.
OVERVIEW OF ACTIVITY
Modeled after the American Red Cross Blood Battles between universities, the purpose of the Michigan College and University Flu Vaccination Challenge is to increase flu vaccination rates of college-aged young adults through a friendly competition among participating colleges and universities.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The 2013-14 influenza season in Michigan saw a significant morbidity and one death among young adults, while the lowest flu vaccine coverage rates for that season were among persons aged 18-24 years. The Flu Challenge was conceived by the Michigan Department of Health and Human Services (MDHHS) as a potential way to reach this population.

Description of activity. To recruit participants for the initial Flu Challenge, MDHHS searched for student health center contact information on the web for every college and university in the state. The immunization program reached out to these contacts, and MDHHS sent a letter to the president of each institution from the state’s Chief Medical Executive encouraging participation.

Each participating institution is responsible for promoting the Flu Challenge among its own student population, and purchasing and administering vaccine. A toolkit of education materials is available on the MDHHS website. Available materials include posters and flyers, templates for emails, news releases, social media messages, personal stories of Michigan families impacted by vaccine-preventable diseases, and a YouTube public service announcement (PSA).

To promote competition across institutions, MDHHS classifies participating institutions as small, medium, or large based on their undergraduate student population. The institution in each size category with the highest flu vaccination coverage wins the Flu Challenge and gets its name engraved on a trophy, which travels to each year’s winner. Student flu vaccine coverage is calculated based on the number of students who self-report flu vaccine receipt via a very brief online survey divided by the undergraduate student population. One purpose of having students report their own vaccination status is to raise their awareness of flu vaccination.

Institutions are required to enter flu doses administered in their student health centers into the Michigan Care Improvement Registry (MCIR). Awards are given to the institutions with the largest number of flu doses documented in MCIR and the largest improvement in doses reported to MCIR compared to the prior season. Awards specific to late season vaccination efforts are also given.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The immunization program is responsible for developing educational materials and administering the Flu Challenge. Its community partner is Alana’s Foundation. The Foundation’s mission is to educate the public about the importance of yearly flu
vaccinations, and it has been a member of the state’s flu advisory board for many years. Alana’s Foundation encourages institutions to enroll, and is available to assist participants with strategizing campus outreach, travelling to health fairs and other on-campus events, and providing grants to assist with vaccine purchase for uninsured and underinsured students.

The MDHHS Communications Department was involved in encouraging institutions to participate via conference calls between the immunization program and potential participants.

DISSEMINATION
The program has disseminated posters and print materials to participating institutions, as well as pharmacies and local health departments. A newspaper ad and PSA were developed and distributed in collaboration with external partners (bioCSL, Kyne, Families Fighting Flu, and Alana’s Foundation). The program communicates with participating institutions via monthly webinar, newsletters, email, and the Flu Challenge website. Biweekly results are shared with all participating institutions.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Immunization Program staff have used the Flu Challenge webinars as opportunities to promote other immunization-related topics, such as recommended vaccines for the college-age population other than flu vaccine and electronic reporting to MCIR.

FUNDING
Immunization Program staff time for this activity is supported by the Vaccines for Children (VFC) program. The trophies were purchased with funding from the Alana’s Foundation. Participating institutions can apply for grants through Alana’s Foundation to purchase flu vaccines.

STAFFING
The Immunization Program’s adolescent coordinator and epidemiologist developed many of the materials and administer the program.

IMPLEMENTATION STATUS
The first Flu Challenge was conducted during the 2014-15 influenza season; 14 public and private institutions enrolled. The second Flu Challenge was conducted in 2015-16 and had 17 institutions participating (5 new ones, 2 dropped). The goal is for this to be an annual activity that continues to grow in participation.

SUCCESSES
- The program was viewed positively by participating institutions, based on an evaluation survey conducted after the first Flu Challenge.
- 12 of 14 institutions who participated in the first year signed up again for the second year.
For the 2014-15 season, almost 6,000 individuals self-reported flu vaccine receipt and the number of doses reported to MCIR by participating institutions increased 33% from the prior season.

**CHALLENGES**

- Flu vaccination is a competing priority for university health centers; they often do not have the funding or staff needed to promote and conduct mass vaccination events or offer walk-in vaccination.
- Flu vaccination coverage levels did not greatly increase among this population (based on pilot year), although reporting doses administered to college-aged young adults did increase in MCIR. In Michigan, flu vaccination coverage is low among all age groups.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**

- MDHHS support outside of the Immunization Program (e.g., Chief Medical Executive, the Communications Department) was helpful in promoting the program.
- The involvement of a community partner (Alana’s Foundation) has been instrumental in getting the Flu Challenge going and supporting the participating institutions.
- At the end of the first Flu Challenge, the program held a debrief session with participating institutions to talk about successes and challenges, and share best practices, which was helpful for designing the next year’s Flu Challenge.

**RELEVANT RESOURCES**

- MDHHS College and University Flu Vaccination Challenge webpage: [http://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_22779-332647--,00.html](http://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_22779-332647--,00.html)
- Alana’s Foundation grant request form: [http://www.alanasfoundation.org/#!flu-vaccine-requests/c1p](http://www.alanasfoundation.org/#!flu-vaccine-requests/c1p)
- MDHHS College and University Flu Vaccination Toolkit: [http://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914-315201--,00.html](http://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914-315201--,00.html)

**FOR MORE INFORMATION**

Contact Courtnay Londo, Adolescent & Adult Immunization Coordinator at (517) 335-9948 or londoc1@michigan.gov, or Stefanie Cole, Influenza Epidemiologist, at (517) 335-3385 or ColeS4@michigan.gov.
"One of our most successful strategies has been partnering with nursing homes, congregate meal sites and employers (ie. Spectra Energy) to encourage an increase in adult immunization."

— Omar Salgado, Houston Immunization Program Manager
OVERVIEW OF ACTIVITY
The Oregon Immunization Program has partnered with the Oregon Department of Corrections (ODOC) Health Services Administration since 2003 to support the vaccination of inmates. The ODOC Health Services is responsible for providing medical care to over 15,000 inmates incarcerated within the 14 institutions housed within the state’s prison system.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The corrections population is at increased risk for viral hepatitis infections. Nationally, the prevalence of hepatitis B (HBV) infection among incarcerated persons is estimated to be fivefold that of the general population. The existing subclinical transmission risk among incarcerated persons and significant levels of acute and chronic HBV infection in this population led the CDC to identify correctional facilities as a universal HBV vaccination setting.

The medical directors of both Oregon’s Immunization Program and ODOC Health Administration initiated the effort to vaccinate Oregon inmates against HBV, among other preventable infections, to see if the effort could decrease the state’s overall rate of new (acute) HBV infection among adults.

DESCRIPTION OF ACTIVITY
Specific strategies vary from year to year, depending on the funding level and source. The program has provided tens of thousands of hepatitis vaccine doses; in some years, Tdap, varicella, and zoster vaccines have also been included. Funds available in 2007-2009 were used to support the ODOC’s immunization infrastructure, ranging from staff training on storage and handling procedures to purchasing refrigerators. Prevention and Public Health Fund (PPHF) funds available in 2012-2015 were used to train ODOC staff to report and manage doses using the state’s immunization information system (IIS), provide 4,500 doses of HBV vaccine, and upgrade vaccine storage equipment.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The main partnership is between the Immunization Program and the ODOC. For the HBV vaccination effort, the Immunization Program partners with the state’s Adult Viral Hepatitis Prevention Program, which is a program within the Public Health Division of the Oregon Health Authority.

DISSEMINATION
Within 24 hours of admission to an ODOC facility, inmates are given written information on how to access emergency and routine health services. The HBV Vaccination Project’s Documentation of Offer Form is included in this information packet. ODOC staff receive immunization education training materials through the Public Health Division. A summary of state efforts to vaccinate incarcerated populations was included in a report on viral hepatitis in Oregon, released in May 2015.
INTERSECTION WITH OTHER PROGRAM ACTIVITIES
The Immunization Program’s existing IIS-related technical assistance materials had to be adapted to accommodate specific ODOC requirements, including their requirement to document patient consent and their stringent internal approval procedures.

FUNDING
Funding has been variable, and has included federal 317 funds and other CDC grant funds. Currently, there are no funding sources within the Public Health Division to support this activity. When vaccine funds are unavailable through the immunization program, the Department of Corrections has purchased vaccines with its own funds (which are generally from private sources). The immunization program provides them with 317-purchased vaccine whenever possible; it is a priority of the immunization program’s medical director.

STAFFING
Immunization program staff mainly consult on technical assistance issues. Much of the direct work with ODOC facilities is conducted by the Adult Viral Hepatitis Prevention Coordinator in collaboration with the ODOC’s Chronic Disease Prevention and Intervention Program Coordinator.

IMPLEMENTATION STATUS
Vaccination of the corrections population has continued since 2003. Currently, the immunization Program is unable to actively support this effort due to lack of funding.

SUCCESSES
• Vaccinations administered in correctional facilities are regularly reported in the state IIS. The viral hepatitis program is currently conducting an evaluation using data from the IIS and patient consent forms to determine the impact of this activity.
• This program has generated significant improvement in the immunization infrastructure for ODOC; over 130 staff members have received IIS training, and vaccine storage equipment has been upgraded.
• This collaboration has reached the point where ODOC Health Services Administration understands the value of immunizing inmates for community public health systems. The ODOC has maintained vaccination efforts without state-supplied vaccine.

CHALLENGES
• Correctional institutions have a different culture; it took time to understand the correctional health system perspective. Several years were invested with the ODOC Health Administration to learn about health care delivery, develop shared public health perspectives, and put in place the infrastructure to support vaccination activities at all
facilities. The ability to support ODOC equipment purchases, staff training, and vaccine doses were critical components of partnership development.

• A major challenge is the inability to find a consistent funding source to support this activity. Over the years, funding has been cobbled together through federal and private funds awarded to the immunization, corrections, and viral hepatitis programs. There has been no direct state funding for this activity.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

• When providing vaccines to a new partner, take the time to ensure the partner has the infrastructure and training to appropriately store and handle vaccines. The first vaccine doses provided to the ODOC facilities were wasted; the immunization program had to refocus their efforts on building the immunization infrastructure first.

• In working with corrections officials, it is important to help them appreciate the broader public health benefits of immunization. As with most state prison systems, the ODOC is not required to provide vaccines, including HBV vaccine, to inmates. In addition, although prison vaccination programs have been found to be an effective strategy for improving HBV vaccination coverage among injection drug-using populations, research has shown that HBV vaccination of inmates is not cost saving from the prison’s perspective. Rather, the savings are realized by community health care systems. The ODOC Health Administration has demonstrated its commitment to state community health through their investment in adult vaccinations.

RELEVANT RESOURCES

• ODOC Nursing Treatment Protocols, with links to protocols for Hepatitis A and B vaccine and influenza vaccine: http://www.oregon.gov/doc/OPS/HESVC/pages/protocol.aspx

FOR MORE INFORMATION

Contact Judith Leahy, Viral Hepatitis Prevention Coordinator, at judith.m.leahy@state.or.us.

REFERENCES


4 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.
Reaching Adults
Where They Work

CHAPTER 5
Introduction

Reaching adults where they work can help increase adult immunizations by reducing the inconveniences of visiting a provider office, thereby reducing barriers to vaccination. By providing employer-sponsored vaccination programs, employers seek to improve workers’ health and reduce sick days and absenteeism. For example, about 17 million workdays are lost to influenza-related illness in adults aged 18 to 64 years every year.¹

Creating the opportunity for immunization services on-site can also reduce costs for workers such as time away from work, transportation to a clinic facility, and the need for child care.

Community-based interventions in combination with vaccinations are recommended activities by the Community Preventive Services Task Force (CPSTF).² Additionally, employer-based vaccination clinics are recommended by the Centers of Disease Control and Prevention (CDC) to increase influenza vaccination rates.³

Immunization Programs can support workplace vaccination, including for health care workers, through initiatives that encourage employers to promote vaccination and offer on-site vaccine clinics. The activities highlighted here related to reaching adults where they work are:

- Getting Started: Working with an outside organization to assist with its pilot program to promote worksite vaccination campaigns
- Moving Forward: Conducting targeted site visits of long-term care facilities to assess employee and resident vaccination, and promote participation in the statewide immunization registry
- Taking It to the Next Level: Providing funding to local health departments to support their efforts to conduct employer outreach and worksite clinics
IMMUNIZATION PROGRAM’S LEVEL OF ENGAGEMENT IN increasing adult vaccination through partnerships with employers (2014)\textsuperscript{4}

2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey

- **27%** Did not engage/not a priority (17)
- **34%** Did not engage but would like to if resources were available (22)
- **19%** Had some engagement in activity but could not expand because of limited resources (12)
- **3%** Had some engagement which was all that was needed (2)
- **8%** High level of engagement because this is part of our program’s core activities (5)
- **8%** Immunization program does not have the infrastructure and/or policy to support this activity (5)
- **2%** No answer (1)
OVERVIEW OF ACTIVITY
The Arizona Immunization Program was approached by an outside group to assist with planning its new initiative to increase employee vaccination through education and on-site vaccine clinics during the 2013-2014 influenza season.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The CEO of Scientific Technologies Corporation (STC), which is Arizona’s immunization information system (IIS) vendor headquartered in Arizona, is involved in developing a new initiative around worksite vaccination. The project is marketed to employers, with the goal of reducing absenteeism through vaccination. After conducting a small pilot during the 2012-2013 influenza season, STC approached the Arizona Immunization Program and the statewide immunization coalition to assist with its expanded effort for the 2013-2014 influenza season.

DESCRIPTION OF ACTIVITY
During the 2013-2014 influenza season, this initiative, now called All American Flu Fighters (A2F2), signed up 20 companies in Arizona and provided on-site vaccinators with access to the state IIS to determine the number of employees with a record in the IIS and assess which immunizations were due or past due. As announced by STC in July 2015, annual membership in A2F2 is now available nationally. A $199 annual membership fee provides employers with a resource kit (e.g., training webinars for pharmacy staff, recruitment materials) to hold their own clinics. For an additional fee ($49 per clinic), A2F2 will set up and run the clinics.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Immunization Program provided feedback on the project’s materials during the 2013-2014 influenza season. The Immunization Program is no longer directly involved, and does not officially endorse or advertise the A2F2 program. STC initiated and manages the project.

DISSEMINATION
Membership in the A2F2 program is available online.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Not at this time.

FUNDING
No funding for this activity came from the Immunization Program. Staff time for review of A2F2 materials was concurrent with other activities.
STAFFING
Immunization Program staff provided input on the materials used for the employee vaccination campaign.

IMPLEMENTATION STATUS
The Immunization Program’s involvement was concentrated in the 2013-2014 influenza season.

SUCCESSES
• Efforts to expand workplace vaccination and employee education programs are important, even if the Immunization Program is not directly involved.

CHALLENGES
• Several groups within the health department (e.g., hospital acquired infections group) and a large county health department were preparing influenza campaign messaging during the same timeframe. Immunization Program staff worked to have consistent messaging across these initiatives; however, it was challenging as each group had their own missions, strategies, and key messages. The Immunization Program opted not to continue its involvement with A2F2.
• Project data are housed at STC; data are not shared with the Immunization Program, so it is unclear how many and which employers are involved.
• This activity has the potential to increase the number of adult doses entered into the state IIS, but the program is unaware of whether any new individuals or doses have been added to the IIS as a result of A2F2.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
• Any opportunity to spread the word about vaccination is valuable, so it is worth trying to figure out a way to support the work of external groups, if possible, even if it is behind the scenes and the Immunization Program cannot officially endorse the materials.

RELEVANT RESOURCES
• A2F2 website: http://allamericanflufighters.org/
  (Note: Access to resource kit materials requires paid membership.)

FOR MORE INFORMATION
Contact Dana Goodloe, Chief, Immunization Program Office at (602) 364-3639 or Dana.Goodloe@azdhs.gov.
OVERVIEW OF ACTIVITY
The Utah Immunization Program (UIP) conducted targeted site visits to long-term care facilities to increase adult vaccine coverage rates and promote participation in the statewide immunization registry.

BACKGROUND/IMPEITUS FOR THE ACTIVITY
Licensing requirements for long-term care (LTC) facilities in Utah require them to report employee and resident vaccination data to the state annually. These data show low vaccination rates among employees, with little improvement over the past decade. Educational materials mailed to LTC facilities over the years did not appear to have had a positive impact. In-person education and training visits were thought to be more effective, but staffing levels in the Immunization Program did not allow for such a labor-intensive effort.

DESCRIPTION OF ACTIVITY
As part of a federal grant funding opportunity, the Utah Immunization Program developed a plan to conduct site visits to LTC facilities. The goal was to conduct at least 100 site visits over a two-year period, targeting the subset of LTC facilities with at least 50 residents and with the lowest employee flu vaccination rates. Follow-up visits were conducted in a small, random sample of the initial 100 visits to assess progress. Site visits were piloted to refine materials and protocols. During the site visits, Immunization Program staff reviewed the site visit questionnaire; checked vaccine storage equipment; discussed the facility’s vaccine coverage rates; provided educational materials; and offered training on storage, handling, and reporting to the Utah Statewide Immunization Information System (USIIS). LTC facilities received an Assessment, Feedback, Incentives, eXchange (AFIX) follow-up letter with site-specific vaccine rate comparisons and recommendations for improvement.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
Immunization Program staff were responsible for developing the site visit protocols and materials (e.g., questionnaire, AFIX follow-up letter, educational materials checklist, trainings), and for conducting the site visits.

DISSEMINATION
Initial and follow-up site visits were done in person. AFIX follow-up letters were mailed to each LTC facility visited. Additional materials and trainings were provided upon request.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
This activity overlapped with the efforts of several local health districts (LHDs) to work with LTC facilities to increase employee vaccination coverage. The Immunization Program and these LHDs collaborated to share data collected and conduct group training sessions. VFC site visit materials were used as a basic template for the site visit questionnaire, protocols, and AFIX follow-up letters.
FUNDING
This activity was funded through a federal Prevention and Public Health Fund (PPHF) cooperative agreement.

STAFFING
A part-time staff person was hired to conduct the site visits.

IMPLEMENTATION STATUS
The LTC facility site visits are continuing using 317 funds, albeit at a slower pace. The Immunization Program is also developing an immunization-focused guidebook and website for LTC facilities.

SUCCESES
- The Immunization Program conducted 100 site visits and 9 follow-up visits; 64 sites received USIIS training, and 56 site enrolled in USIIS.
- There was a significant improvement in LTC facility employee influenza vaccine coverage rate in the first post-intervention measurement (2013), which increased an additional two percentage points in 2014.
- This activity helped to improve the relationship between the Immunization Program and LTC facilities.

CHALLENGES
- Getting LTC facilities to schedule site visits was a big challenge. Midway through the project, the Immunization Program began conducting drop-in visits with those LTC facilities that were not responding to phone calls about visit scheduling.
- There is a high turnover rate among LTC facility staff, and follow-up visits found that immunization-related materials provided at the initial site visit were not being shared with new personnel. Plans to address this challenge in the future include getting LTC facility management buy-in and creating standard procedures to train new staff.
- Establishing policies to maintain improvements will be an ongoing challenge that will require system-level changes at each facility. Site visit questionnaires illuminated poor immunization practices at LTC facilities on many levels, such as lack of immunization tracking, lack of standing orders or employee vaccination policies, poor vaccine storage and handling practices, and non-adherence to the state immunization licensing rule.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
- Some LTC facilities seemed to treat the site visit as more of a disciplinary procedure. Emphasizing the site visits as being beneficial to the facility, rather than a punitive action, might help LTC facilities be more willing to make and sustain improvements.
• Keeping LTC facilities engaged in making immunization-related improvements will require routine follow-up visits or calls. Drop-in visits may be more effective than scheduled visits in identifying issues.

• The program found that the site visit questionnaire could be improved by including fewer direct questions for the facility and more ways to record observations.

• Working with LTCF-related associations might be a helpful entry to these facilities and provide an outlet for group trainings.

RELEVANT RESOURCES

• Utah LTC site visit questionnaire: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT%20LTC%202015%20Site%20Visit%20Questionnaire.docx

• Utah LTC site visit checklist: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT_LTC_Site_Visit_Checklist.docx

• Utah LTC site visit thank-you letter: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT_LTC_Site_Visit_Thank_You_Letter.docx

• Utah LTC immunization rate comparison report: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT_LTC_Immunization_Rate_Comparison_Data_2012.docx

• Oregon State Health Department LTC facility toolkit: https://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/ImmunizationProviderResources/Pages/LTCFResource.aspx

FOR MORE INFORMATION

Contact Carlie Shurtliff, Adult Immunization/Perinatal Hepatitis B Coordinator, at (801) 538-9168 or cshurtli@utah.gov.
Immunization Program Highlights

Taking It to the Next Level

**Program:** Utah  
**Activity:** Employer vaccination outreach and immunization policies

**OVERVIEW OF ACTIVITY**

The Utah Immunization Program supported local health district (LHD) efforts to increase adult immunization activities through outreach to employers.

**BACKGROUND/IMPETUS FOR THE ACTIVITY**

Employer immunization outreach was a required activity under the cooperative agreement for awardees receiving federal PPHF funding. The Utah Immunization Program had not previously done employer-specific outreach, and it does not have the capacity to conduct immunization clinics. However, the program allocates funding to its 12 LHDs to provide clinical services, as well as other immunization-related support.

**DESCRIPTION OF ACTIVITY**

The Immunization Program offered increased funding for one year through its annual contract with LHDs to conduct employer outreach and worksite clinics; 8 of the 12 LHDs participated. Due to the diversity of the jurisdictions (e.g., population size and density), each LHD was encouraged to design its own employer outreach plan, which was approved by the Immunization Program. Activities included contacting, surveying, and educating employers about immunizations and assisting in organizing or conducting worksite immunization clinics that offered adult vaccines such as influenza vaccine.

**ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED**

The Immunization Program provided funding and oversight for the project, developed outreach materials and reporting templates, and conducted a project evaluation. The participating LHDs were responsible for conducting activities in their own jurisdiction and regular reporting to the state.

**DISSEMINATION**

The Immunization Program disseminated outreach materials (e.g., poster, flyer, bookmark, adult immunization card) to the participating LHDs to use at their discretion. Through monthly project conference calls, the Immunization Program and the participating LHDs shared progress, disseminated ideas, and helped solve problems.

**INTERSECTION WITH OTHER PROGRAM ACTIVITIES**

Some LHDs worked with long-term care facilities to increase employee vaccination coverage, which overlapped with the state’s effort to increase health care worker vaccination rates in these facilities.

**FUNDING**

The Immunization Program provided funding to LHDs through its federal PPHF grant.
STAFFING
Immunization Program staff managed the project, including organizing and participating in the monthly conference calls with the LHDs, developing and disseminating materials to them, and fulfilling PPHF grant reporting requirements.

IMPLEMENTATION STATUS
This activity is completed; all of the participating LHDs plan to continue to work with employers.

SUCCESSES

- Encouraging LHDs to develop their own outreach plans allowed for activities to be tailored to the needs and capacities of each jurisdiction.

- LHDs contacted a variety of employer types (small and large businesses, schools, health care employers, public agencies, long-term care facilities); 40% of those contacted engaged in at least one immunization activity, ranging from immunization presentations to onsite immunization clinics.

- All of the outreach materials developed by the Immunization Program were used by at least one LHD, and most were considered helpful.

- This initiative dovetailed with other efforts around school immunization. Measles outbreaks prompted a focus at the state and local level on the fact that although the MMR vaccine was required for students, it was not required for teachers, and schools did not have records of teachers’ vaccination status. Two LHDs initiated a push for schools to adopt employee immunization policies and expand school-based immunization clinics. The success of these efforts prompted other LHDs to conduct similar activities.

CHALLENGES

- It was a challenge for the LHDs to determine the most effective ways to contact and engage employers. One of the most effective ways was contacting those that had collaborated with the LHD in some capacity previously (e.g., H1N1 pandemic). Phone calls were generally thought to be more effective than mailings in establishing an initial connection, but it was often difficult to get past gatekeepers or find the most appropriate contact person within an organization.

- The employer survey was not a required intervention, so not all LHDs used it. Also, though it was developed as an online survey, some LHDs administered it on paper and one conducted it by phone. These methods were not equally effective, and the completion rate was low. Phone was the most successful method in terms of completion rate and for stimulating follow-up discussions; it was also the most direct way for determining whether an appropriate contact person had been identified.
• Some outreach and reporting materials were developed after project initiation, so not all data collected were comparable and not all outreach materials were fully utilized. Also, it was a challenge to design end-of-project reporting templates that could capture the different outreach models used across LHDs.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

• The monthly calls with all participating LHDs were very valuable for exchanging ideas. For example, efforts to implement school district employee immunization policies grew out of this process and were initiated at the LHD level.

• Allowing LHD-specific interventions should be balanced by the need to establish clear expectations upfront, to help with subsequent evaluation of the impact across LHDs. Also, for a short-term project, programs must balance the need to get a project underway with the need to spend time developing outreach and reporting materials.

• One suggestion for initiating employer outreach is to work with employer association groups to conduct outreach and establish employer contacts.

RELEVANT RESOURCES


• Outreach data collection sheets: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT%20Employer%20Outreach%20Tables.docx


• “We Can Do It” flyer: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT%20We%20Can%20Do%20It%20Flu%20Campaign%20Flyer.jpg

• “We Can Do It” bookmark: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT%20We%20Can%20Do%20It%20Flu%20Campaignbookmark.pdf

• “We Can Do It” newsletter story: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/UT%20We%20Can%20Do%20It%20Newsletter%20Story.pdf

FOR MORE INFORMATION
Contact Carlie Shurtliff, Adult Immunization/Perinatal Hepatitis B Coordinator, at (801) 538-9168 or cshurtli@utah.gov.

REFERENCES
4 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.
NEW Adult Immunization Quality Indicators

Efforts or programs that touch on quality indicators for adult immunization include:

- CMS has 27 programs that measure quality and performance (e.g., Physician Quality Reporting System) of which 15 use at least one adult immunization quality metric. These metrics draw on a several sources, such as the National Committee for Quality Assurance (NCQA), and include those reported by physicians or health care facilities as well as state Medicaid programs.

- The National Adult Immunization Plan includes priority indicators and related milestones under each of its four main goals for tracking specific improvements to be achieved by the year 2020. These national-level indicators will be used to establish baseline levels, where possible, and to measure progress and inform future quality improvement efforts.

- In June 2014, the Pharmacy Quality Alliance (PQA) convened an Adult Immunization Task Force, which is focused on developing measures for reporting pharmacist-administered vaccines to immunization information systems and conducting vaccine needs assessment of patients receiving medical therapy management services (MTM).

- In 2013-2014, HHS funded the National Quality Forum (NQF) to “systematically and comprehensively identify, analyze, prioritize, and make recommendations for filling the measure gaps” for adult immunization. This effort included an environmental scan that produced a database of 225 existing measures and concepts related to adult immunization and a final report that identified priority for measure development (e.g., composite measure of Tdap and influenza vaccination of pregnant women, and zoster vaccination for adults aged 60-64 years). Link to NQF environmental scan and report: http://www.qualityforum.org/Prioritizing_Measure_Gaps_-_Adult_Immunization.aspx
Partnering with Pharmacists

CHAPTER 6
Introduction

Pharmacists are an important provider group to include in activities and initiatives that increase adult immunization rates and expand the existing infrastructure to respond to pandemics. Approximately 18% of adults were vaccinated against influenza at a pharmacy during the 2011-12 influenza season. Fifty-two states and territories allow pharmacists to provide at least one vaccine to adults. In comparison to traditional physician offices, pharmacies offer wider business hours such as evenings and weekends, and are better integrated into the community with multiple locations closer to where adults live and work. The conveniences provided by pharmacy vaccinations can reduce barriers to vaccinations, such as the need for time off from work, and transportation to and from a provider office.

Immunization Programs can strengthen pharmacy engagement in providing adult vaccines by partnering with local pharmacy associations, schools of pharmacy, and state/local pharmacy boards, as well as medical societies. The collaborative network among pharmacies, the community, and the immunization program can be used to address policy barriers and strengthen communication. The highlighted activities related to partnering with pharmacists are:

- **Getting Started**: Expanding pharmacists’ authority to vaccinate and requiring pharmacists to report to the state immunization information system (IIS)
- **Moving Forward**: Determining pharmacist-specific barriers to IIS reporting and using this knowledge to tailor education and training materials, with the help of a pharmacist immunization champion
- **Taking It to the Next Level**: Determining the immunization-related educational needs of pharmacists and developing a multi-pronged education plan

Immunization Resources for Pharmacists

The American Pharmacists Association (APhA) maintains a website of immunization-related resources for pharmacists, including:

- APhA immunization guidelines;
- State Immunization Authority for pharmacists;
- “Ask the Expert” and links to Immunizing Pharmacist Resources (e-community, e-newsletters, etc);
- Videos on vaccine administration technique;
- APhA Immunization Champion Awards;
- The current edition of APhA’s Immunization Handbook;
- A three-component interactive training program on pharmacy-based immunization delivery, which includes five self-study modules, a live seminar, and a hands-on assessment of injection techniques; and
- Online home study activities that address immunization protocols, laws, and best practices, including one that addresses immunization registries

**APhA Immunization Center**: [www.pharmacist.com/immunization-center](http://www.pharmacist.com/immunization-center)
IMMUNIZATION PROGRAM’S LEVEL OF ENGAGEMENT IN increasing adult vaccination rates by partnering with pharmacist (2014)\(^3\)

2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey

- **17%** Did not engage/not a priority (11)
- **17%** Did not engage but would like to if resources were available (11)
- **31%** Had some engagement in activity but could not expand because of limited resources (20)
- **11%** Had some engagement which was all that was needed (7)
- **17%** High level of engagement because this is part of our program’s core activities (11)
- **3%** Immunization program does not have the infrastructure and/or policy to support this activity (11)
- **3%** No answer (2)
OVERVIEW OF ACTIVITY
Louisiana has revised its Board of Pharmacy Practice Act to include the requirement for pharmacists to report administered vaccines to the state immunization information system (IIS), and to expand their authority to administer vaccines without a prescription.

BACKGROUND/IMPETUS FOR THE ACTIVITY
State officials involved in planning and implementing the 2009-2010 influenza/H1N1 vaccination campaign raised concerns about the potential insufficient availability of vaccination services across the state. Including trained and certified pharmacists as vaccinators was viewed as important for increasing access for adults, especially in rural areas, but was limited by the requirement to have a physician prescription and by the lack of reporting of vaccines administered at pharmacies.

DESCRIPTION OF ACTIVITY
In September 2009, Louisiana's State Health Officer issued an executive order allowing pharmacists certified as vaccinators by the Louisiana Board of Pharmacy to administer influenza vaccine without a physician prescription. Pharmacists were required to report doses administered using the mass immunization module in the state IIS. Based on the success of this effort, further incremental expansions and enhancements related to pharmacists' role in vaccinating were pursued, so that pharmacists trained and certified as vaccinators by the Louisiana Board of Pharmacy could administer influenza vaccine to any person aged ≥7 years and any other Advisory Committee on Immunization Practices (ACIP) recommended vaccine to persons aged ≥17 years without a prescription.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Louisiana Office of Public Health (OPH) Immunization Program worked with a variety of partners, including the state Board of Pharmacy, Association of Retail Chain Pharmacies, Board of Medical Examiners, Association of Independent Pharmacies, Louisiana State Medical Society, Louisiana State Board of Nursing, and medical professional associations. The Board of Pharmacy held a vote to change the Pharmacy Practice Act to include these provisions and was responsible for certifying immunization-related training materials.

DISSEMINATION
The Board of Pharmacy communicated with their pharmacist network regarding the updated provisions and encouraged pharmacists to participate in the state's immunization training. The training was based on the Louisiana OPH Immunization Policies and Procedures Manual, which reflects Centers for Disease Control and Prevention (CDC)/ACIP guidance.
INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Immunization Program staff provided input on immunization training resources and IIS staff provided in-person registration, certification, and training on the immunization registry as part of their regular training duties. Pharmacists can also attend regular IIS training sessions.

FUNDING
There was no special funding stream for this project. Prior to this effort, federal preparedness funding was used to develop the mass immunization module included in the state’s IIS that pharmacists used during the H1N1 pandemic. Assistance with immunization-related and IIS training was funded as part of regular duties of the Immunization Program, which are supported by federal Vaccines for Children (VFC) and 317 grants.

STAFFING
Immunization Program and IIS staff were involved with immunization-related training, as part of their regular training duties. Pharmacists were included in training that was already ongoing for physician offices, Vaccines for Children providers and Parish Health Units, making the transition easier.

IMPLEMENTATION STATUS
This activity is completed. Further expansions of pharmacists’ authority to vaccinate may be considered in the future.

SUCCESSES
- Pharmacists are well equipped to be vaccinators and have done very well with immunization and IIS training. In addition, pharmacy involvement in immunization has increased the visibility of immunizations in the community (e.g., through pharmacy vaccine advertising campaigns).
- Expanding pharmacists’ authority incrementally and providing data along the way (e.g., safety track record) helped with buy-in from health care providers. For example, to expand beyond influenza vaccine for adults, the Immunization Program used the challenge of shingles vaccine to illustrate that pharmacists not only could handle vaccine administration, storage, and handling, but also billing, which was a barrier for physicians. It was often challenging for seniors to get shingles vaccine prior to pharmacist involvement. The success with shingles vaccine led to further expansion to all vaccines for seniors and then to all ACIP-recommended vaccines for adults (≥17 years).
CHALLENGES

• Because the immunization-related requirements for pharmacists fall under the Board of Pharmacy rules, the Immunization Program has no authority to enforce them (e.g., IIS reporting requirement). Also, differences in interpretation of terms (e.g., report to IIS in “reasonable time”) can be harder to resolve; currently, they are trying to come to agreement on how specific to make this timeframe.

• IIS reporting works well for pharmacies submitting data electronically through their billing system, but many are not. This is mainly an issue for mid-level pharmacies; the big chain pharmacies are already reporting electronically, and the very small pharmacies are entering their data via the web. This challenge is slowly being overcome by working with the pharmacies and billing systems.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

• To adopt a similar expansion, a program would need to have an IIS with no age restrictions (i.e., allows adult data) that is capable of linking with pharmacists, and has the capacity to bring on and train pharmacists to report.

• The partnership with the Board of Pharmacy was facilitated by a longstanding working relationship between the Medical Director for Immunization and the state’s Director of Pharmacy.

RELEVANT RESOURCES

• Louisiana: Language of Board of Pharmacy Practice Act related to Immunizations: http://www.pharmacy.la.gov/assets/docs/pharmacist/521MedicationAdministration.pdf


• Louisiana: Outline of immunization training packages for pharmacists: http://www.pharmacy.la.gov/index.cfm?md=pagebuilder&trap=home&pid=9

FOR MORE INFORMATION

Contact the Louisiana Immunization Program at (504) 838-5300.
One of our successful partnerships involving adult immunization has been working with Medicaid which will now allow pharmacies to be reimbursed from Medicaid for the administration of adult vaccines to Medicaid clients including influenza.”

— Bob Swanson, Michigan Immunization Program Manager
OVERVIEW OF ACTIVITY
The Washington State Office of Immunization and Child Profile (OICP) worked with the Washington State Pharmacy Association (WSPA) to increase pharmacists’ use of the Washington State Immunization Information System (IIS).

BACKGROUND/IMPETUS FOR THE ACTIVITY
Community pharmacies offer a convenient location for adults to receive vaccines. Having pharmacies use an IIS promotes continuity of care with other health care providers. However, prior research had shown that the majority of pharmacists in Washington were not aware of Washington’s IIS. At the time this project was initiated, there was no requirement for pharmacists to report doses to the IIS, and thus reporting was limited.

DESCRIPTION OF ACTIVITY
OICP and WSPA conducted a survey of 400 pharmacists to identify barriers to awareness and use of the IIS. The results were used to target the messages and efforts for increasing pharmacists’ participation in the IIS, and develop tailored trainings (e.g., 3-5 minute videos, onsite trainings).

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
OICP staff managed the project, helped develop the survey and IIS training materials, and processed new information-sharing agreements (which allow use of the IIS) from interested pharmacists. Key partners in this effort were an immunization champion within WSPA, who was able to get pharmacists on board and contributed to the training materials, and the IIS software vendor, who trained pharmacists on using the IIS and integrating it into their workflow.

DISSEMINATION
WPSA staff communicated with pharmacies (e.g., using email, fax) throughout the project, sending educational materials and invitations to participate in the IIS.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
This activity overlaps with IIS efforts to educate all providers and increase reporting.

FUNDING
This activity was funded through the immunization program’s federal Prevention and Public Health Funds (PPHF) grant.

STAFFING
OICP staff provided technical assistance and consultation to WSPA.

IMPLEMENTATION STATUS
This activity is completed. Training opportunities for pharmacists continue to be offered through the WSPA and OICP.
**SUCCESSES**
- There was a substantial increase in the number of pharmacy entities with information-sharing agreements, the number of pharmacies routinely reporting doses to the IIS, and the number of doses reported by pharmacies to the IIS.

**CHALLENGES**
- Once pharmacists’ awareness was improved, it was still a challenge to get them to use the system. To address this challenge, OICP and WSPA focused on educating pharmacists about the full range of IIS features (e.g., patient profiles, vaccine recommendations) and the benefits to community of IIS reporting by pharmacists (e.g., better communication across providers).
- One large pharmacy chain was concerned that non-mandatory reporting conflicted with patient privacy policies. The current solution is to allow their pharmacists to have individual logins for accessing the IIS, viewing patient histories, and vaccine recommendations.
- IIS staff were initially overburdened by the sudden increase in data being submitted to the IIS. These staff developed mechanisms to handle the quality assurance, de-duplication and other internal processes necessary for the increased number of users/doses.

**OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS**
- Working with a state pharmacy association was critical for communicating directly with pharmacists. Also, having a pharmacist deliver the message was important for soliciting pharmacy participation.
- Surveying pharmacists at the beginning was important for understanding the barriers to awareness and use of the IIS, and allowed tailoring of education and training materials to the target audience.
- The Immunization Program found it helpful to focus on the range of benefits of IIS participation for the target audience.

**RELEVANT RESOURCES**
- WSPA immunization training: http://www.wsparx.org/?65

**FOR MORE INFORMATION**
Contact Ann Butler, Immunization Health Promotion Supervisor, at (360) 236-3731 or ann.butler@doh.wa.gov.
OVERVIEW OF ACTIVITY
The Minnesota Immunization Program in the Minnesota Department of Health (MDH) created pharmacy-specific educational resources to promote immunization best practices.

BACKGROUND/IMPETUS FOR THE ACTIVITY
At the time that this activity was initiated, pharmacists in Minnesota could administer all recommended vaccines to adults and influenza vaccine to children aged 10-17 years. The Immunization Program identified pharmacists as a provider group on which to focus efforts to expand access to adult immunizations and to assure that best practices were being followed.

DESCRIPTION OF ACTIVITY
To assist the program in identifying the educational needs of pharmacists, the program established a Pharmacy Advisory Group of key stakeholders, such as the Minnesota Board of Pharmacy, the University of Minnesota College of Pharmacy, and pharmacists from various settings. The program then conducted a needs assessment, through an online survey of a sample of pharmacies and key informant interviews. Based on the data collection results and feedback from the Pharmacy Advisory Group, the program developed an Immunization Educational Resource Plan for Minnesota Pharmacies and Pharmacists. Specific activities conducted in implementing this plan included:

- Providing feedback on the University of Minnesota College of Pharmacy’s Immunization Delivery Training curriculum to reflect current best practices and promote the use of Minnesota’s immunization information system (IIS), Minnesota Immunization Information Connection (MIIC).
- Partnering with pharmacist professional organizations to present or exhibit immunization-related information at their annual conferences or other meetings.
- Creating and continually updating an MDH Immunization Delivery in Pharmacy Settings Web page and two corresponding fact sheets that provide immunization resources for pharmacists and clarification on Minnesota pharmacy immunization practice. The Pharmacy Immunization Practice in Minnesota fact sheet is a frequently asked questions (FAQs) document maintained by the Minnesota Board of Pharmacy, and the Immunization Delivery in Pharmacy Setting fact sheet is maintained by the MDH Immunization Program.
- Promoting use of MIIC to pharmacists and communicating how MIIC can enhance pharmacy immunization practice through the creation of: 1) an MDH MIIC and Pharmacies Web page and corresponding fact sheet and 2) an educational video that illustrates how MIIC is an easy tool that can be used in current pharmacy practice to better coordinate patient immunization care.
ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Immunization Program initiated and led this activity in collaboration with the Pharmacy Advisory Group and other pharmacy partners, such as the Minnesota Board of Pharmacy, Minnesota Pharmacists Association, and the Minnesota Society of Health-System Pharmacists.

DISSEMINATION
Throughout the project, information was disseminated to pharmacists and pharmacies through the Pharmacy Advisory Group and other pharmacy partners.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Concurrent activities focused on increased pharmacy reporting to MIIC, as well as using MIIC as a clinical decision report tool to assess patients’ immunization histories. Additionally, members of the Pharmacy Advisory Group collaborate with MDH to amend the pharmacy practice statute to expand pharmacists’ scope of immunization practice and incorporate best practice standards.

FUNDING
This activity was funded through the program’s CDC Immunization Program cooperative agreement, as well as a cooperative agreement focused on adult immunization funded through PPHF.

STAFFING
Several Immunization Program staff members were involved in these efforts, particularly the Adult Immunization Coordinator, Immunization Program nurses, communications staff, MIIC staff, and MIIC Regional Coordinators.

IMPLEMENTATION STATUS
The activity is complete, but the program plans to maintain and update the web pages and corresponding fact sheets, and continue to pursue opportunities to participate in pharmacy professional organization meetings.

SUCCESSES
- The partnerships developed through the Pharmacy Advisory Group were key to the success of the project and MDH continues to connect with these stakeholders in its current work, such as:
  - MDH continues to engage Pharmacy Advisory Group stakeholders in legislative conversations, which has resulted in another expansion of pharmacists’ scope of immunization practice, as well as requirements to use MIIC to assess patients’ immunization histories prior to vaccination and document vaccines administered.
— MDH established a pharmacy pandemic preparedness workgroup comprised of members from the Pharmacy Advisory Group, in addition to national, state, and local public health professionals engaged in pandemic preparedness planning.

• The web pages and corresponding fact sheets, and the MIIC in Pharmacy Settings video were successfully created and disseminated. The input of the Pharmacy Advisory Group helped ensure that materials were relevant to practicing pharmacists.

CHALLENGES
• The Pharmacy Advisory Group members were a diverse array of stakeholders representing a variety of pharmacy immunization practice settings. At times, it was challenging to make sure all pharmacy perspectives were represented in the outreach activities and resources that were developed.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
• The partnerships and collaborations established with and through the Pharmacy Advisory Group were critical for guiding the development and dissemination of education materials for pharmacists, especially since the Immunization Program had not previously prioritized work with these providers.

• Immunization practice differs across pharmacy settings (e.g., retail, hospital), so it is important to include representatives of different pharmacy settings in planning and implementation efforts.

• It is important to communicate how the IIS can enhance pharmacy immunization practice, stressing that the tool is easy to use and supports clinical decision-making for providing appropriate vaccines at the correct time.

RELEVANT RESOURCES
• Minnesota Needs assessment survey instrument:

• Minnesota Educational Resource Plan:

• Minnesota Immunization Delivery in Pharmacy Settings Web page:
  http://www.health.state.mn.us/divs/idepc/immunize/hcp/pharmacists/index.html
  — Corresponding fact sheet used during outreach events:
    http://www.health.state.mn.us/divs/idepc/immunize/hcp/pharmacists/pharmacists.pdf

• MIIC and Pharmacies Web page and video:
  http://www.health.state.mn.us/divs/idepc/immunize/registry/pharmacies.html
  — Corresponding fact sheet used during outreach events:
    http://www.health.state.mn.us/divs/idepc/immunize/registry/pharmacies.pdf

• Minnesota Board of Pharmacy Immunization Practice in Minnesota FAQ:

• Minnesota Pharmacy Practice Act, with current statute and statute history over the duration of this grant:
  https://www.revisor.mn.gov/statutes/?id=151.01#stat.151.01.27
FOR MORE INFORMATION
Contact Annie Fedorowicz, Adult Immunization Coordinator, at 651-201-3525 or anna.fedorowicz@state.mn.us.

REFERENCES
3 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.
Check out the many adult immunization resources available on the IAC website at www.immunize.org/handouts/adult-vaccination.asp. Adult-specific materials are available in English and Spanish covering topics related to:

- Administering Vaccines
- Documenting Vaccination
- Patient-Friendly Schedules
- Standing Orders
- Vaccine Summaries
- Vaccine Recommendations
Promoting Vaccination of Pregnant Women

Chapter 7
Introduction

Immunization is an important piece of overall health care for mothers and their infants. Pregnant women and their unborn babies are especially vulnerable to certain vaccine preventable diseases, like influenza and pertussis. Receiving vaccinations against influenza and pertussis during pregnancy helps mothers protect babies until they are old enough to receive a vaccination of their own by passing on the mother’s antibodies. There are many factors influencing successful maternal vaccination, including: attitudes towards vaccination, understanding the risks and benefits of vaccines, access to health care, and a strong provider recommendation.

The Advisory Committee for Immunization Practices (ACIP) recommends that pregnant women receive an influenza vaccination every year, and a pertussis vaccine with each pregnancy. Vaccination rates for both influenza and pertussis fall below national objectives for pregnant women. Healthy People 2020’s target for pregnant women vaccinated against seasonal influenza is 80%, but there are no targets for pertussis. In the 2014-15 influenza season, only 50% of pregnant women received a seasonal influenza vaccine. Estimates of vaccination coverage against pertussis in pregnant women range from as high as 29% to as low as 6.2%. These low rates of vaccination against influenza and pertussis leave many women and their children vulnerable to disease.

Immunization Programs can promote the vaccination of pregnant women through both provider and patient education initiatives. The highlighted activities related to promoting vaccination of pregnant women are:

- **Getting Started**: Creating a poster, to highlight the reasons for pregnant women to receive Tdap and influenza vaccines
- **Moving Forward**: Collaborating with birthing hospitals to develop cocooning policies, procedures, and provider education materials
- **Taking It to the Next Level**: Conducting a multi-faceted provider awareness campaign, including the use of internal department expertise to guide content and geographic target areas
How the [State/Local/Territorial Immunization Programs] target pregnant women (2014)\(^4\)

- **27** use general media to address vaccination of pregnant women
- **43** distribute information/educational materials about maternal immunization to non-VFC enrolled OB/GYNs
- **23** use social media to address vaccination of pregnant women
- **12** provide on-site training for maternal immunization to non-VFC enrolled OB/GYNs
- **14** provide virtual training for maternal immunization to non-VFC enrolled OB/GYNs
- **35** provide IIS enrollment/training to non-VFC enrolled OB/GYNs

*Data from 2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey*

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The American College of Obstetricians and Gynecologists (ACOG) website provides information and resources related to immunization of pregnant women, non-pregnant women, adolescents, and other special populations for both physicians and patients.

**ACOG Resources for physicians and patients include:**

- Information about vaccine-preventable disease and relevant vaccines, vaccination during pregnancy, and vaccine safety.
- Toolkits, webinars, and Frequently Asked Questions for patients and providers specific to Influenza, Tdap, and HPV vaccines. Practice management resources including a webinar entitled “Immunization Business & Clinical Strategies for Ob-Gyn Practices” and a guidebook for starting an office-based immunization program entitled “Immunizations and Routine Obstetric-Gynecologic Care: A Guide for Providers and Patients.”
- Current ACOG clinical guidance, including specific Committee Opinions regarding Tdap and flu vaccination during pregnancy, and integrating immunizations into OB/GYNs’ practice.
- A coding guide entitled “Immunization Coding for Obstetrician-Gynecologists” to help ensure that practices receive payment for vaccines given to patients.

Contact ACOG’s Immunization Program staff at: immunization@acog.org. ACOG Immunization for Women website: http://www.immunizationforwomen.org
OVERVIEW OF ACTIVITY
The Idaho immunization program developed a one-page poster highlighting the reasons for pregnant women to receive Tdap and influenza vaccines.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The Idaho Immunization Program was participating in an expo hosted by the Idaho Business League called “Babypalooza” for new and expectant parents, and wanted to provide relevant vaccine information in a simple and attractive format.

DESCRIPTION OF ACTIVITY
A staff member used a free graphics design website to produce a one-page, 8½ x 11 inch color poster. The poster provides information gathered from Centers for Disease Control and Prevention (CDC) documents on the importance of Tdap and influenza vaccines during pregnancy.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The poster was developed internally and approved through the program manager.

DISSEMINATION
The poster is available from the immunization program website, and hard copies are distributed at Babypalooza and other outreach events.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Not applicable.

FUNDING
This activity was funded as part of the program’s regular CDC grant-funded activities.

STAFFING
One staff person, with limited graphics design training, created the poster with limited available resources.

IMPLEMENTATION STATUS
The activity is complete. The poster will be updated if the CDC vaccine recommendations for pregnant women change.
SUCCESSES
- The poster has been a good conversation starter, and the program has distributed many copies.

CHALLENGES
- Not applicable.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
- When developing brief information for the general public, it is important to review the text and graphics carefully to make sure the information is consistent with national recommendations.
- It is also important that any images used are “creative commons,” i.e., not copyrighted.

RELEVANT RESOURCES
- Link for graphic design website: www.Easel.ly
- Link for Babypalooza website: http://ibleventsinc.com/events/babypalooza

FOR MORE INFORMATION
Contact the Idaho Immunization Program at (208) 334-5931 or iip@dhw.idaho.gov.
OVERVIEW OF ACTIVITY
Tdap vaccine is provided at no cost to participating birthing hospitals and OB/GYNs to vaccinate pregnant or newly delivered mothers and one additional family member.

BACKGROUND/IMPETUS FOR THE ACTIVITY
This activity was designed to decrease pertussis cases in Nevada and protect vulnerable infants from pertussis. Cocooning is a way to protect babies from catching diseases from the people around them by vaccinating people like their parents, siblings, grandparents, and child-care providers. The Nevada Cocooning Program started in 2006 with a pilot project to implement postpartum cocooning with one birthing hospital in northern Nevada. The program subsequently expanded to all 19 birthing hospitals in the state. When Tdap vaccine was recommended for pregnant women in 2011, OB/GYNs were recruited to provide antepartum cocooning. The program for OB/GYNs has since expanded to include influenza vaccine.

DESCRIPTION OF ACTIVITY
The program provides state-purchased vaccine to participating OB/GYNs to administer to the mother and up to one additional family member, chosen by the mother. OB/GYNs are not required to vaccinate a second person. Hospital policies vary; some will vaccinate any close contacts while others only vaccinate the mother. At the initial stages, the Nevada State Immunization Program collaborated with the birthing hospitals to develop policies, procedures, and provider education materials related to pertussis and Tdap vaccination. Participating providers receive site visits from the Nevada State Immunization Program; they must follow VFC/317 Program guidelines for vaccine storage and handling, and report vaccine inventory and usage data to the state IIS (Nevada WebIZ).

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
This activity involves staff from the Immunization Program and the statewide immunization coalition (see Staffing below).

DISSEMINATION
The program was publicized through a regional cocooning conference in 2011 and national cocooning conference in 2012.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
This activity uses educational materials and site visit guidelines developed for the federal VFC/317 vaccine programs. All providers are required by Nevada Statute to enter vaccine doses administered into NV WebIZ, unless the patient or child’s parent/guardian has opted out.
FUNDING
Federal 317 funds initially supported vaccine purchase and an Adult Project Coordinator to oversee the program. Project support for vaccine purchase was changed to state funding in FY2013; staff support continued until the coordinator retired in FY2014. The Nevada State Immunization Program now contracts with the statewide coalition, Immunize Nevada, to have a nurse conduct the site visits required for OB/GYNs. State staff conduct the visits to the hospitals, as they participate in other federal immunization programs as well.

STAFFING
The statewide immunization coalition has an adult nurse coordinator; as one of her many responsibilities, she works with the Nevada State Immunization Program’s quality assurance manager to conduct site visits for OB/GYNs participating in the Nevada Cocooning Program. The Immunization Program and Immunize Nevada provide enrolled OB/GYNs with technical assistance on vaccine storage and handling, and proper reporting to the IIS. The Immunization Program’s vaccine manager monitors their temperature logs, reviews vaccine inventories, and authorizes additional vaccine distribution. Enrolled OB/GYN offices will all be using data loggers to monitor vaccine storage unit temperatures by the end of CY2016.

IMPLEMENTATION STATUS
The Nevada Cocooning Program is ongoing. Currently all 19 birthing hospitals and more than 30 OB/GYNs participate and receive vaccine.

SUCCESSES
• Nevada has maintained lower incidence rates of pertussis than other states (for 2014, 4.3 per 100,000 in NV vs. 9.1 per 100,000 persons in the US).
• Keys to recruitment included getting buy-in from nursing, pharmacy, and infection control leadership at birthing hospitals at the beginning stages of the program. Technical assistance has been helpful in retaining program participants.
• Because 317 funds can only be given to uninsured or underinsured adult patients, providers participating in the Nevada Cocooning Program would have to screen their patients to determine the appropriate vaccine supply to use. The Immunization Program determined that this would be a substantial barrier to hospital and provider participation, so they initiated and received approval for state funding to support the program. These are the only state general funds that the immunization program receives ($500,000 per year for 2016-17). The Nevada State Immunization Program justified the funding by noting that many Nevada residents were enrolled in plans that lacked the essential health benefits required by the Affordable Care Act.
CHALLENGES

- Vaccine wastage was an initial challenge; the immunization program responded by developing a plan for transferring expiring vaccine between birthing hospitals.

- While participating hospitals are relatively self-sustaining, OB/GYN offices have a lot of staff turnover, requiring regular training and technical assistance.

- Recruitment of OB/GYNs is a hard sell; only about 10% of Nevada’s OB/GYNs participate in the program. Most participants are not VFC providers and participating in the Cocooning Program has not prompted them to join VFC. They do not want the added administrative burden (e.g., eligibility screening), because they usually do not serve a large number of eligible children under the age of 19 years.

- To address the issue of restrictions on the use of 317 vaccine funds, the Immunization Program and Immunize Nevada are working to create a billing toolkit that will assist OB/GYNs with billing for the Tdap vaccine and administration for pregnant patients outside of their “global fee” pregnancy coverage.

- Maintaining the Cocooning Program is subject to the availability of state funds; it is unclear how stable the state funding will be over time.

- General sustainability of antepartum cocooning in Nevada will require OB/GYNs to absorb Tdap recommendation and administration into their routine clinical practice, including initial vaccine purchase and requesting reimbursement from payers.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

- A clinical staff person within the Immunization Program was very passionate about this issue; she initiated the program and was very persistent in her recruitment efforts. For any adult immunization outreach efforts, you need to have a champion that “stays on it.” Having a clinically trained person in this role is helpful for recruiting providers.

RELEVANT RESOURCES

- The most current documentation of the Cocooning Program’s policies/procedures are available from the Immunization Program by request.

FOR MORE INFORMATION

Contact Karissa Loper, Immunization Program Manager, at 775.684.3209.
Taking It to the Next Level

**Program:** Texas  
**Activity:** OB/GYN Education Awareness Campaign

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**OVERVIEW OF ACTIVITY**

The Texas immunization program conducted a multi-faceted outreach campaign targeted to OB/GYNs and pregnant women regarding the importance and safety of Tdap vaccination.

**BACKGROUND/IMPETUS FOR THE ACTIVITY**

In 2012, pertussis was reported in 87 of 254 Texas counties; children less than one year of age accounted for 80% of pertussis-related hospitalizations, and 4 of 6 deaths from pertussis were infants younger than 2 months of age. To address the issue of pertussis outbreaks, especially the vulnerability of infants to pertussis infection, the Texas immunization program developed education materials targeted to OB/GYNs, as these providers have the opportunity to talk with pregnant women about Tdap vaccination.

**DESCRIPTION OF ACTIVITY**

The program conducted a direct mailing of an educational toolkit to over 3,000 OB/GYNs in the state; the mailing list was purchased from the state licensing board. The toolkit included a poster, brochures, and guide designed to help providers start the conversation with pregnant women about pertussis and Tdap vaccination.

The program also developed TV, radio, online web message, mobile application ads, and as well as graphics for Pinterest.

In addition, the program created two websites (one English, one Spanish; both also available in mobile-friendly format), designed to provide basic information on pertussis and Tdap vaccination, including vaccine safety. The websites include an e-card, which can be sent to friends and family members to remind them to be vaccinated, and the ability to share the information on social media (Facebook or Twitter). The websites also link to one of the TV ads and to a related website on cocooning, which has additional information and another TV spot.

**ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED**

The immunization program was responsible for managing the campaign and developing related materials. To assist the immunization program, a marketing contractor was hired to help develop the toolkit materials and a dissemination plan, and an outside media company created the TV ads.
DISSEMINATION
Print materials were mailed to OB/GYNs. TV and radio ads ran for certain periods of time. Dissemination was targeted to areas of the state where pertussis cases were highest. All materials have both English and Spanish versions, per legislative requirement.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Different groups within the immunization program contributed to this effort, led by the public information education and training group. The vaccine preventable disease surveillance group and epidemiologist helped determine the geographic target areas. The materials were reviewed by the Department of State Health Services Office of Communications.

FUNDING
Federal 317 funds were used for campaign development and commercial air time. Some staff positions (e.g., the program’s information specialist) are funded through the program’s CDC cooperative agreement. State funds support licensing and domain names of the pertussis websites, and cover the staff time to maintain them. Federal funds are used to reprint and disseminate print materials.

STAFFING
Program staff did a scan to see what materials were already available nationally and to determine what was still needed. Materials were developed with an outside marketing consultant and media company. The program’s information specialist and state-supported website staff person continue to make sure that website information is kept up to date.

IMPLEMENTATION STATUS
The pertussis websites are active. Print materials can be ordered from the immunization program’s main website. The media campaign has ended.

SUCCESSES
- There were more than 10,000 hits on website in first 9 days of the media campaign, mainly generated from TV and radio ad exposure.
- The program has created in-house brochures and posters in the past, but using outside marketing and media companies helped the materials to look more professional and expanded what the program was able to do.
- The program has heard positive feedback from OB/GYNs on the materials.

CHALLENGES
- Despite positive feedback from OB/GYNs on the outreach materials, it is a struggle to get these providers on board as vaccinators. The program continues to explore other ways to encourage their active participation.
OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

• When working with marketing companies, diligence is needed to make sure their vision is in line with the goals of the program. As with any creative endeavor, marketing companies will propose concepts and strategies that would work; however, there are parameters that the program must work within to ensure the overall messaging and marketing brand is in alignment with the program’s goal and vision.

• Outreach efforts should be focused where they are needed most (in this case, areas with highest rates of pertussis) to maximize the return on investment.

• When designing outreach materials, it is important to keep the audience in mind; the overall look and tone of these materials were designed to appeal to pregnant women and their providers.

• Project planning and budgeting should take into account the need to translate materials, if applicable.

• The Immunization Program’s main website (www.dshs.state.tx.us/immunize) is limited in the interactive components that it can support. Microsites provide the immunization program with an opportunity to include attention-drawing interactive components, such as the e-card, links to share information on social media platforms, and embedded videos. As such, the Immunization Program utilizes microsites to create the pertussis-specific websites for the media campaigns.

RELEVANT RESOURCES

• Texas websites: www.preventpertussis.org and companion Spanish website http://www.previenetosferina.org

• Texas DSHS Literature & Forms Online Order Form link, from which the Pertussis Cocooning Poster (Stock #11-13654P), Pertussis Cocooning Brochure (Stock #11-13655), and Pertussis Cocooning Handbook (Stock #11-13656) can be viewed and downloaded: https://secure.immunizetexasorderform.com/default.asp

• Texas master files for toolkit materials, the TV master ads and radio read scripts are available to any program by request (with a signed letter of agreement), and can be rebranded with own logo and contact information.

FOR MORE INFORMATION

Contact Monica Gamez, Director, Infectious Disease Control Unit, at 512-776-3711 or Monica.Gamez@dshs.state.tx.us; or Rey Velazquez, Operations Manager, Immunization Branch, at 512-776-6203 or Reynaldo.Velazquez@dshs.state.tx.us.

REFERENCES


4 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April – June 2015.

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Chapter 8

Vaccinating High-Risk Adults
Introduction

Certain groups of adults are at increased risk of infection or complications from vaccine preventable disease due to working conditions, behavioral and/or health issues. Risk factors for specific diseases can vary, and common risk factors include age and chronic illnesses.\(^1\) For pneumococcal disease, the case fatality rate among younger adults (aged 18 to 64) with risk conditions has been estimated to be more than twice that of younger adults with no risk conditions.\(^1\)

Vaccination rates for high-risk adults, like the general adult population, remain lower than recommended levels. Pneumococcal vaccination among adults aged 19–64 years at high risk was 20.3% in 2014.\(^2\) Healthy People 2020 targets pneumococcal vaccination for high risk adults at 60%.\(^3\) Healthy People 2020 also targets hepatitis B vaccination in health care workers, a high risk group, at 90%, but the coverage rate was only 64% in 2008.\(^3\) Healthy People 2020 objectives also include increasing influenza vaccination for all persons to 70%, yet only 47.6% of 18-64 year olds were vaccinated against influenza in the 2014-15 season.\(^3\)\(^4\)

Immunization Programs can expand education and outreach to high-risk adults by working with a variety of partners, including public clinics (e.g., community health centers), other divisions within their own health department (e.g., sexually transmitted diseases, tuberculosis control), and local health departments. The activities highlighted here related to vaccinating high-risk adults are:

- **Getting Started**: Providing 317-funded vaccines to a local health department that uses them for community outreach to vulnerable seniors
- **Moving Forward**: Providing funding and training support to two community health centers serving a large Hispanic/Latino population to develop a customized quality improvement plan to improve adult flu and Tdap vaccine coverage rates
- **Taking It to the Next Level**: Conducting a multi-faceted project to support hepatitis B vaccination of high-risk adults, which includes working with multiple partners who serve this population and the use of surveillance data to help target outreach efforts
Immunization Initiative through the CMS Quality Innovation Network

Medicare’s Quality Innovation Network (QIN)-Quality Improvement Organizations (QIOs) are funded by the Centers for Medicare & Medicaid Services (CMS) to work with beneficiaries, consumers, physicians, hospitals, and other providers to improve care delivery systems. There are currently 14 QIN-QIOs, covering 37 US states and territories.

In April 2015, CMS awarded each QIN-QIO a 4-year contract to improve immunization rates (influenza, zoster, and pneumococcal vaccines) and reduce immunization disparities among Medicare beneficiaries. Under the contract, QIN-QIOs will collaborate with key partners and stakeholders to improve the routine assessment of beneficiaries’ vaccination status, and increase the documentation of beneficiaries’ immunization status in electronic health record systems and immunization registries.

- For more information on the QIN-QIO immunization initiative: http://qioprogram.org/qionews/topics/immunizations
- For more information on QIN-QIOs in general: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityImprovementOrgs/index.html

*Data from 2015 AIM Annual Survey, 63 of 64 Immunization Programs responded to survey

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How the [64 State/Local/Territorial Immunization Programs] use media to target high risk adults (2014)

9 used general media to address vaccination for those with chronic medical conditions

6 used social media to address vaccination for those with chronic medical conditions

10 used both general and social media to address vaccination for those with chronic medical conditions

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9 + 6 + 10 = 15
OVERVIEW OF ACTIVITY
The Nevada State Immunization Program provides 317-funded vaccines to a local health district (LHD) for community outreach to vulnerable seniors.

BACKGROUND/IMPETUS FOR THE ACTIVITY
The Nevada State Immunization Program makes 317-funded vaccine available to LHD partners for administration to uninsured adults. This activity is a local initiative in Washoe County to reach uninsured seniors who are eligible to receive 317-funded vaccine.

DESCRIPTION OF ACTIVITY
The Kids to Seniors Korner (KSK) Outreach Program is a public and private collaboration that includes the Washoe County Health District, Catholic Charities of Northern Nevada, the Reno Police Department, Washoe County Senior Services, the Washoe County Sheriff’s Office, and Washoe County Social Services. The program provides community-based outreach to at-risk populations such as low-income children, families, and senior citizens.

A team of community professionals (law enforcement, social work, health care) conducts bi-weekly “Knock-n-Talks” in selected neighborhoods in Washoe County, going door-to-door to provide information about community resources, conduct free safety and health assessments, and suggest referrals to other community services. Seniors can receive flu and pneumonia vaccines, chronic disease prevention and treatment education, and referrals to primary care providers.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Nevada State Immunization Program provides the Washoe County Health District with 317-funded vaccines for administration to uninsured seniors. The statewide coalition (Immunize Nevada) also receives funding through the Nevada State Immunization Program to partner with the local health districts on immunization outreach; the coalition also participates and assists with the KSK outreach events.

DISSEMINATION
Promotion of this activity is generally conducted at the local level by the LHD and other local partners.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
This activity is locally driven, but the Immunization Program provides technical assistance if requested, and monitors the distribution and use of the 317 vaccines. State law requires that all doses administered are reported to the IIS.

FUNDING
Federal 317 vaccine funds are used to purchase the vaccines that are provided to the LHD for administration to uninsured adults.
STAFFING
The Nevada State Immunization Program vaccine manager is involved in supplying and monitoring use of the vaccines provided to the LHD. At the request of local organizers, IIS staff may participate in the outreach events to check and print immunization records.

IMPLEMENTATION STATUS
This outreach activity is ongoing.

SUCCESSES
- In 2014, the Kids to Seniors Korner Outreach Program’s mobile clinic served 10,368 children, families, and seniors, including providing 4,012 immunizations. The program is a unique way to reach vulnerable populations.

CHALLENGES
Nothing to report.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
- With autonomous LHDs, it is a typical arrangement for the local level to provide direct services (e.g., vaccinations) and conduct community events, with support from the state (e.g., providing vaccine).

RELEVANT RESOURCES

FOR MORE INFORMATION
Contact the Kids to Seniors Korner program at (775) 858-5251.
OVERVIEW OF ACTIVITY
The Washington State Office of Immunization and Child Profile (OICP) worked with community and migrant health centers to conduct quality improvement activities aimed at increasing adult immunization rates.

BACKGROUND/IMPETUS FOR THE ACTIVITY
Working with community health centers to expand adult immunization was an optional activity for the Centers for Disease Control and Prevention’s (CDC) Prevention and Public Health Funds (PPHF) adult immunization grants. OICP staff had an existing contract within the Washington Association of Community and Migrant Health Centers (WACMHC), which represents 26 federally qualified health centers (FQHCs) in the state, and thought that the PPHF grant would be a good opportunity to work with this community health network.

DESCRIPTION OF ACTIVITY
The goal of this project was to expand adult vaccination activities, increase provider awareness and use of the Washington State Immunization Information System (IIS), and increase community awareness of adult immunizations. The immunization program established a contract with the WACMHC, which then issued a Request for Proposal (RFP) to its health centers for a $10,000 grant as a small incentive to support adult immunization-related activities. Two clinics were selected for the project; both clinics have an active Promotores de Salud (Health Promoters) program, serve a large Hispanic/Latino population, and together geographically represent the east and west sides of the state.

The clinics worked with OICP and WACMHC staff to assess clinic adult immunization rates and barriers to increasing those rates. Based on each clinic’s assessment, a customized quality improvement plan was developed to improve flu and Tdap vaccine coverage rates in their adult population. OICP staff, in collaboration with WACMHC staff, also worked closely with each participating clinic to train Promotores de Salud/Community Health Workers in adult immunization and outreach to the Hispanic/Latino population. This effort also included promoting and providing adult vaccines at health fairs and community events.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
This project involved a partnership between the two participating FQHC clinics, WACMHC and OICP. The clinics implemented system improvements with technical assistance and consultation from WACMHC and OICP staff. WACMHC facilitated interactions between the clinics and OICP staff, and conducted health fairs.

DISSEMINATION
Spanish-language training materials were disseminated to promotores training attendees, and are posted online. English- and Spanish-language outreach materials were distributed at community outreach events/health fairs. Outreach events were advertised in Spanish and English by the clinics in various formats (posters, radio ads, and social media).
INTERSECTION WITH OTHER PROGRAM ACTIVITIES
The training materials developed may be used more broadly for provider education.

FUNDING
The Immunization Program’s federal PPHF grant funded the work of the WACMHC and provided the small grants given to the two participating FQHCs. Immunization Program staff time was covered as part of federal 317 immunization grant-funded work. OICP did not provide vaccine for this project.

STAFFING
OICP staff provided technical assistance and consultation to the clinics related to evidence-based interventions to improve adult immunization rates, usage of the WAIIS, and assessment and evaluation of the project. An OICP staff person developed the Spanish-language training materials for promotores.

IMPLEMENTATION STATUS
This activity has been completed.

SUCCESSES
- The two clinics successfully implemented strategies that changed their workflow to identify adult patients due for immunizations, such as adding a prompt to their electronic health record (EHR).
- Flu and Tdap vaccine coverage rates increased for adult patients in both clinics.
- 58 individuals attended promotores training.
- 59 outreach events were held, in addition to 3 health fairs.

CHALLENGES
- The clinics’ EHR system was more accurate than the state’s IIS for checking patient’s immunization status, due to the mobility of patients between sites; integrating the IIS and EHR helps to address this challenge, and was accomplished at one of the clinics.
- The clinics experienced periodic vaccine shortages due to unanticipated demand; future planning for vaccine ordering must take into account the new process to determine every patient’s immunization status at intake, which has led to greater uptake of vaccines.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
- Establishing a relationship with umbrella organizations for community health centers is valuable in and of itself, but it is also helpful for providing structure and oversight to implement immunization interventions at individual clinics.
• It is important to help clinics find options that are low cost and sustainable, and that meet multiple needs (e.g., HEDIS) where possible. The planning process should include staff members who perform a variety of tasks, and patient information should meet the needs of the target audience.

• Having the clinics lead the process of deciding which specific activities to undertake is important for helping clinic staff to feel vested in the process.

RELEVANT RESOURCES


• Washington assessment questionnaire used by CHCs to identify areas for improvement: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/WA%20CHCsAssessmentToolQuestionnaire%202012.docx

• Washington example agreement with pharmacy/vendor to provide vaccines at health fair/outreach events: https://aim.site-ym.com/resource/collection/BAE93F84-9249-4F41-99C8-38A16645E182/WAOffSiteClinicAgreement.docx

• Washington Immunization training manual for promotores (Spanish; to be updated in 2016): http://www.doh.wa.gov/Portals/1/Documents/Pubs/348-326-LaVacunacionenlosAdultos.pdf

FOR MORE INFORMATION

Contact Ann Butler, Immunization Health Promotion Supervisor, at ann.butler@doh.wa.gov
Immunization Program Highlights

Taking It to the Next Level

**Program:** New York City  
**Activity:** Hepatitis B prevention for high-risk adults

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**OVERVIEW OF ACTIVITY**

The New York City (NYC) Department of Health and Mental Hygiene (DOHMH) Bureau of Immunization (BOI) conducted a multi-faceted project to support hepatitis B vaccination of high-risk adults.

**BACKGROUND/IMPETUS FOR THE ACTIVITY**

The overall goal of this project was to reduce the incidence of acute hepatitis B infection among adults by increasing hepatitis B vaccination. Elements of the project were developed based on surveillance data showing a higher incidence of hepatitis B infection in certain neighborhoods, and ethnic differences in the proportion of newly reported cases. In addition, the project built on the successes and lessons learned in prior work on hepatitis B vaccination conducted by the program over the years.

**DESCRIPTION OF ACTIVITY**

The program provided hepatitis B vaccines and conducted several different interventions, with a focus on high-risk geographic areas. The interventions included developing and disseminating patient education materials, as well as encouraging reporting to the Citywide Immunization Registry (CIR), which requires having procedures in place to collect consent from adult patients. Interventions were tailored to the particular partner/site involved as stated below:

- A full-time nurse was hired for one of DOHMH’s Bureau of Sexually Transmitted Disease (BSTD) clinics to address previously identified barriers (e.g., lack of staff to administer and consistently document vaccines, insufficient reminder/recall capability).
- Focus groups with English or Spanish-speaking adults of different races/ethnicities were conducted to develop messaging to promote hepatitis B vaccination.
- DOHMH’s Correctional Health Services (CHS) staff were trained to screen and offer hepatitis B vaccine to all persons at admission to the correctional facility; educational materials were provided to patients; and efforts were made to improve reporting of vaccines administered in the CHS system’s electronic health record and obtain patient consent for CIR reporting.
- A referral form was developed to refer patients from two Bureau of Tuberculosis Control (BTBC) clinics to nearby BSTD clinics that provide hepatitis B vaccine, and hepatitis B-related education was provided to patients.
- Participating community health centers (CHC) agreed to screen and provide eligible high-risk adult patients hepatitis B vaccine and serve as referral sites. These CHCs were given patient education materials, with education and training for key staff members.

In addition, BOI added patient text recall functionality to the CIR that can send reminder messages for patients to complete the hepatitis B series.
ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
BOI worked with several internal and external partners for this project, including BSTD, CHS, BTBC, the DOHMH Hepatitis B Workgroup, the NYC Hepatitis B Coalition, an intravenous drug use/harm reduction clinic, and three community-based health clinics (CHCs), one of which operates two facilities.

DISSEMINATION
As part of this project, BOI worked with a media vendor to produce a hepatitis B-related public service announcement (PSA) promoting vaccination, which is available online in English, Spanish, and Chinese. Additionally, DOHMH worked with B Free CEED, a national resource and expert center committed to eliminating hepatitis B disparities in Asian and Pacific Islander communities, and the Charles B. Wang Community Health Center to develop print ads and a PSA in Chinese, Korean, and English promoting hepatitis B testing. Parts of the campaign have been displayed in a branch of the New York City Public Library, on an LED screen in a major shopping center, and on a popular Korean community website. A brochure of hepatitis B facts is available on the program’s website in English, Spanish, Chinese, French, Korean, and Russian.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
These activities intersect with efforts by CIR staff to obtain adult patient consent and increase reporting of adult vaccine doses administered to the CIR.

FUNDING
Project activities were funded by a two-year Prevention and Public Health Fund (PPHF) cooperative agreement (October 2012-September 2014), with a one year no-cost extension. Hepatitis B vaccine was provided through the PPHF cooperative agreement using federal 317 funding.

STAFFING
Three Immunization Program staff members were directly involved with this project, including the Program Manager, the Adult Immunization Unit Chief, and a Public Health Prevention Specialist fellow, with responsibilities that included collecting vaccination data and monitoring the vaccine-related activity of participants, developing and/or distributing health education and training materials, and drafting monthly and quarterly reports.

IMPLEMENTATION STATUS
The grant period ended in September 2015. Patient education materials continue to be available online. BSTD assumed funding for the nurse position at the STD clinic when grant dollars were exhausted, and has continued the activities implemented to address the barriers to vaccination it identified earlier.
SUCCESSES

- 12,400 doses of hepatitis B vaccine were distributed by the Immunization Program and administered to high-risk populations.
- Focus groups provided valuable feedback on educational materials (e.g., prototype referral sheet).
- Participating sites obtained a 90% consent rate overall from adult patients to enter vaccine doses in the CIR.
- Efforts at the BSTD clinic increased the number and percentage of patients initiating and completing the hepatitis B vaccination series.
- Vaccine uptake in CHS facilities was robust; more than three times as many doses of vaccine projected for use in the jails were administered.
- The program developed stronger relationships with participating bureaus within DOHMH and other partner organizations.

CHALLENGES

- The screening and reporting requirements specified by the project staff for the cooperative agreement deterred originally selected community-based clinics from participating. BOI was able to recruit another group of sites serving at-risk populations, although not all sites were ideal replacements.
- BOI’s own immunization clinic did not participate in this project due to the screening requirements. The clinic’s policy was to ask patients whether they had any risk factors, not specify which risk factors they have. It is important to differentiate data needs versus data “wants,” including consideration of the barriers to data collection.
- The success rate for obtaining patient consent for CIR reporting varied by site.
- While almost 1,900 referrals were given at the participating tuberculosis clinics, few of these referrals led to receipt of vaccine.
- Legal (HIPAA) and technical issues concerning e-recall texting delayed implementation of this activity.
- CIR data entry was problematic at some facilities, including some CHCs and CHS, because it was not well integrated into their workflow (for direct data entry) or their own electronic health record did not allow for direct communication with the CIR.
- Vaccination sites that did not have a history of providing vaccines and had insufficient staff to sustain efforts faltered.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS

- A clinic must have a solid immunization infrastructure to successfully implement a vaccination program, and having staff dedicated to providing vaccines is especially important. When choosing partners for immunization efforts, it is important to assess their current capacity to provide vaccination service and whether they are able to support infrastructure improvements, if needed.
- Reporting requirements should be minimal to attract community-based health clinics as vaccinators. Screening requirements should be able to be incorporated into their established workflow.
- Most adults are comfortable with consenting to having vaccination data in the registry; the process for obtaining consent must be built into a clinic’s workflow.
• PSAs are not practical in every setting. PSA use in vaccinating facilities is limited to sites with video playback capabilities in areas where patients congregate.

RELEVANT RESOURCES

• NYC: BOI Hepatitis B PSA videos (English, Spanish and Chinese):
  https://www.youtube.com/playlist?list=PLz5aMT8zHe9Q88nSjQ1w0Q6AjiNa8KXkJ
• NYC: English version of brochure of Hepatitis B Facts (also available in Spanish, Chinese, French, Korean, and Russian):
• NYC: Getting Tested Hepatitis B PSA videos (in Chinese and Korean with English subtitles):
  https://www.youtube.com/watch?v=scdGHhkHLns and
  https://www.youtube.com/watch?v=ZT8AqULWCcqY
• NYC: B Free CEED hepatitis B campaign:
  http://www.testhepb.org/be_certain_campaign.html
• Unbranded versions of the PSAs are available from the program by request.

FOR MORE INFORMATION

Contact Edward Wake, Adult Immunization Unit Chief, at (347) 396-2453 or ewake@health.nyc.gov

REFERENCES

5 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.

This Resource Guide was made possible through support from Pfizer Inc.
Using IIS to Expand Adult Vaccinations

CHAPTER 9
Introduction

Immunization information systems (IIS) are confidential, community-wide, computerized databases that record vaccines administered by providers. IIS can help providers assess their patients’ immunization status, identify the types of vaccines that an adult may need based on a variety of factors, and send reminder and recall notifications to patients. IIS help providers find and take steps to reduce missed opportunities to vaccinate their adult patients. By using an IIS, providers can properly address low adult vaccination rates in their practice setting.

Currently, 60 of 64 Immunization Programs have an IIS that includes adult patients, yet adult participation in IIS remains low.¹ Only 32% of adults nationally are included in an IIS.² The National Adult Immunization Plan 2020 goal is for 50% of adults age 19 and older to have one or more immunizations recorded in the IIS.³ Challenges to increase adult participation in IIS include gathering immunization information from the many diverse providers that serve adults, a lack of state mandates for adult immunization reporting by providers, and technical challenges involving how data is submitted by provider offices to the IIS.

Immunization Programs can work toward expanding adult vaccinations using IIS through efforts to increase the number of providers reporting to IIS and by developing tools using IIS data that promote complete and accurate data reporting. The highlighted activities related to using IIS to expand adult vaccinations are:

- **Getting Started**: Supporting provider demand for Meaningful Use certification by allowing adult providers who do not participate in the state vaccine program to report to the IIS
- **Moving Forward**: Adding vaccine coverage measures for selected adult vaccines in the IIS as options for benchmark reporting
- **Taking It to the Next Level**: Creating county-level, IIS-based “report cards” of coverage level data for select vaccine measures across the lifespan, in part to motivate local health departments to improve their adult immunization coverage rates
Customizable IIS Brochure for Adult Providers

The National Adult and Influenza Immunization Summit (NAIIS) has developed a customizable brochure targeted to health care providers with adult patients to encourage them to onboard with and use their state immunization information systems (IIS). Immunization programs and other interested parties can customize the brochure (e.g., insert own name and logo) using Adobe Acrobat.

The brochure was developed by NAIIS’s Provider and Access Workgroups based on feedback from IIS managers, IIS sentinel sites, provider organizations, and a review of currently available state-specific websites and promotional brochures. The brochure is available at: http://www.izsummitpartners.org/content/uploads/2016/01/IIS_Customizable_Brochure-11-30-2015.pdf.
OVERVIEW OF ACTIVITY
The Idaho Immunization Reminder and Information System (IRIS) accepts immunization data from adult providers, even ones who are not otherwise enrolled with the Idaho Immunization Program.

BACKGROUND/IMPETUS FOR THE ACTIVITY
Idaho is a universal state for pediatric vaccines, and providers enrolled in the pediatric vaccine program must report to IRIS. Though there are no reporting requirements for adult vaccination, IRIS is set up as an “all ages” immunization registry (i.e., no age limitations in statute) and IRIS is able to accept data from adult providers. When the federal Meaningful Use incentive program first began, IRIS was the only option for Idaho providers interested in participating in the program.

Another source of adult immunization data is pharmacies. Pharmacies are not enrolled with the Idaho Immunization Program nor receiving any vaccines from the state, and they are not required to report to IRIS. However, many large pharmacies function in multiple states that do require them to report to their immunization registry; some of these pharmacies are voluntarily submitting their data to IRIS.

DESCRIPTION OF ACTIVITY
The program processes Meaningful Use requests from all providers who can supply immunization data, including adult providers and pharmacies.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
This activity is mainly the responsibility of the Immunization Program, particularly IRIS staff.

DISSEMINATION
The state has a website where providers report their intent to submit data to meet Meaningful Use requirements. It also provides relevant materials on the process of Meaningful Use certification.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Not applicable.

FUNDING
This activity is funded as part of regular, federally-funded IRIS activities.

STAFFING
One staff person is responsible for IRIS Meaningful Use certifications.
IMPLEMENTATION STATUS
This activity is fully implemented and ongoing for new providers who wish to report to IRIS.

SUCCESSES
• IRIS is being populated with adult data. Though that data are not comprehensive, they are useful for the program and providers to have. The program does not plan to use these data (e.g., for assessment) in the near future, but sees having the data as an added, longer-term benefit.

CHALLENGES
• The main challenge is handling the periodic backlog of Meaningful Use requests and educating providers about the process, which is potentially exacerbated by allowing a larger pool of providers to participate.
• Internal staff time is a factor because there are other competing program needs and priorities.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
• The Meaningful Use point person within the program needs to be very knowledgeable about the different Meaningful Use phases and timelines, and to have a good understanding of the acceptable data reporting and transmission formats. This person also needs to be able to communicate these concepts to providers, especially those who may not be accustomed to working with the immunization program.
• In addition to the immunization program, other groups within the state are now involved with Meaningful Use reporting (lab, syndromic surveillance, cancer registry); all of these groups meet regularly to discuss issues related to Meaningful Use. Meaningful Use is complicated and it is important for all parties to provide consistent messaging to alleviate confusion while navigating the stages.

RELEVANT RESOURCES

FOR MORE INFORMATION
Contact the Idaho Immunization Program at (208) 334-5931 or iip@dhw.idaho.gov.
OVERVIEW OF ACTIVITY
Measures of vaccine coverage for selected adult vaccines were added to benchmark report options in the Iowa Immunization Registry Information System (IRIS).

BACKGROUND/IMPETUS FOR THE ACTIVITY
IRIS is a WIR-based “birth to death” immunization registry. Reporting to IRIS is required only for pharmacies, but many adult records are included. IRIS had various age-specific benchmark reports for pediatric (3-72 months) and adolescent vaccines (13-15 years). Federal Prevention and Public Health Fund (PPHF) funding (2011-2012) prompted the addition of benchmark reports for adult vaccines.

DESCRIPTION OF ACTIVITY
An adult vaccine benchmark report was added as a report option available to all users and organization types, including county health departments (CHDs). The report presents the proportion of adults (≥ 18 years) with the following vaccine doses: 1 dose Tdap/Td, 1 dose MMR, 2 doses varicella, 3 doses HPV, 1 dose PPSV23, and 1 dose zoster. For CHDs, the denominator can be set as the number of adults in the county or the population served by the CHD (e.g., active patient records for that site). There is a separate report for flu vaccine, and flu vaccine coverage can be generated for the current or past flu season.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Immunization Program worked with the IRIS vendor to add this functionality.

DISSEMINATION
These reports are available for CHDs and providers to run themselves; they are not publicly available.

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
The increase in providers reporting electronically to IRIS over the past 3 years has increased the number of adult vaccines reported to IRIS, which helps improve the accuracy of the benchmark reports.

FUNDING
Federal PPHF funding jumpstarted the addition of these reports. Current and future modifications will be funded as part of routine IIS activities, through federal VFC and 317 grants.

STAFFING
IRIS staff work with the IRIS vendor to outline the desired changes in functional design documents; the vendor makes the changes to IRIS. IRIS staff communicates reporting functionality updates to users.
IMPLEMENTATION STATUS
The adult benchmark report is up and running. Modifications will be made as needed (e.g., Prevnar will be added based on recent national recommendation).

SUCCESSES
• Counties can take these data to their Boards of Health to demonstrate the need for outreach efforts.

CHALLENGES
None at this time.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
• Though the Immunization Program knows that IRIS is not capturing all adult data, having a benchmark provides a starting point and will hopefully encourage more adult data to be reported to IRIS.
• To facilitate CHD and provider buy-in and use of these reports, it is important to communicate that these reports are designed as a tool to help them, not as a way for the state program to evaluate them.
• Without PPHF funding to jumpstart this activity, it probably would not have risen to the top of the priority list. The priority of desired IIS improvements must be balanced with the ability to take advantage of available funding opportunities.

RELEVANT RESOURCES
• The program can share functional design documents upon request; other programs with WIR-based immunization registries would be well positioned to add these reports.

FOR MORE INFORMATION
Contact Kim Tichy, IRIS Coordinator, at 515-281-4288 or Kimberly.Tichy@idph.iowa.gov.
OVERVIEW OF ACTIVITY
Michigan created a county-level Immunization Report Card that presents coverage levels for select vaccine measures across the lifespan using data from the state’s immunization information system (IIS).

BACKGROUND/IMPETUS FOR THE ACTIVITY
The Michigan Immunization Program uses state-level data from national surveys of immunization coverage (e.g., National Immunization Survey) to measure progress and identify areas for improvement, such as by comparing Michigan data to those of other states. The Immunization Program thought it would be useful to have something similar within the state, at the county or local health department (LHD) level. The Michigan Care Improvement Registry (MCIR), the state’s IIS, was capable of producing these data. In addition, the program had been supplying data on childhood and adolescent coverage levels to LHDs for many years; the report card was a way to present these data in a more accessible format, to add adult and other data, and to collate multiple pieces of data onto one page.

DESCRIPTION OF ACTIVITY
The one-page report card is generated from MCIR data, including:
• Comparison of population 0-19 years and ≥20 years between the US Census and MCIR;
• Number and proportion of active providers that have reported to MCIR in past 6 months;
• Data for various vaccine series and individual vaccines for those 19-35 months, 13-17 years, and adults (≥18 years); and data for relevant influenza season for one dose (6 months-17 years, ≥18 years) and two doses (6 months-8 years); including coverage levels (county, LHD, Michigan average, US average, Healthy People 2020 goal), percentage change in county coverage level since last report, and the county rank.
• Data on school and child care immunization report completion and waivers, including proportion by county, LHD, and Michigan average; percentage change in county level since last report; and the county rank.

After one year, the program conducted an online survey among LHD staff and providers that receive email notification of report card updates. Most respondents agreed that the county rankings provide motivation to increase immunization coverage and almost half had made changes to their Immunization Program in response to the report card data.

ROLE OF IMMUNIZATION PROGRAM AND OTHER AGENCIES/GROUPS INVOLVED
The Immunization Program led this activity. An internal Michigan Department of Health and Human Services group discussed which measures to include; they tried to include measures that could also be compared at the national level. Feedback also was solicited from other stakeholders, including the Michigan Advisory Committee on Immunization, Immunization Action Plan coordinators, and the Michigan Association for Local Public Health.
DISSEMINATION
The first report card was generated on December 31, 2013. Report cards are updated quarterly and available through the immunization program’s website. The main audience is LHDs and providers. Though publicly available, they are not designed to be user-friendly for those unfamiliar with immunizations (e.g., use undefined acronyms and abbreviations).

INTERSECTION WITH OTHER PROGRAM ACTIVITIES
Producing these report cards may help to increase the number of adult providers that participate in MCIR. The Adolescent and Adult Immunization Coordinator shares the quarterly HPV data with Michigan’s Cancer Consortium to monitor HPV vaccination coverage.

FUNDING
The Immunization Program staff person responsible for this activity is covered by the federal IIS Sentinel Site grant.

STAFFING
One Immunization Program staff person is responsible for pulling the data from the IIS, creating SAS programs to analyze the data to populate the measures, and pulling the data together into a one-page PDF document by county.

IMPLEMENTATION STATUS
The report card will continue to evolve. For example, PCV13 coverage for adults was added based on user feedback. A future goal is to produce similar reports cards at the provider level.

SUCCESSES
• The report card has had a positive response from users. Local health officers and medical directors report data to their Boards of Health to inform them of the county’s vaccination level and ranking, and, in some cases, advocate for resources.

CHALLENGES
• Keeping the report to one page, which is a priority, has been a challenge. Future desired additions to the report card may come up against formatting constraints.
• Ranking counties that vary greatly in population limits the usefulness of the rankings. However, when the stakeholders who receive the report cards were surveyed, the rankings were viewed as motivators to increase vaccination coverage, so the rankings have been maintained.

OTHER LESSONS LEARNED/ADVICE TO OTHER PROGRAMS
• The program conducted a soft roll-out to the LHDs because it was unsure how they would respond to being ranked and wanted to get their initial feedback.
If you don’t use the data you have, the data won’t get better. Michigan knows that its adult data are incomplete (reporting of adult vaccines is strongly encouraged, but not mandatory in Michigan), but felt it needed to start somewhere. By generating report cards, the program hopes it will motivate LHDs to get more adult data into the IIS. A program would not need a mature IIS to start a similar effort in its jurisdiction. Michigan started reporting some county-level data to their LHDs many years ago when MCIR had been in operation for only 3 years, which provided a starting point for improvements.

- It was useful to create a report card template for getting initial feedback on measures to include; it was easier for people to react to an existing document than think of measures from scratch.
- It is helpful to have someone that can program macros, to efficiently generate the data from the IIS once the initial programming code is built.

**RELEVANT RESOURCES**

- Website with report cards (template available by request from the program): http://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914_68361-321114--,00.html
- SAS code and macros can be shared by request

**FOR MORE INFORMATION**

Contact Cristi Bramer, Vaccine Preventable Disease/MCIR Epidemiologist at (517) 335-8159 or BramerC@michigan.gov.

**REFERENCES**

4. 2015 AIM Annual Survey, 63 of 64 state/city/territorial Immunization Programs completed the survey that was administered online April - June 2015.

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