Integrating Immunizations in Healthcare Settings

Traditional providers of healthcare, including private providers and public health, are adapting to changes in the transforming U.S. health system by exploring new and creative ways to work together to ensure access to quality care for all.

In an effort to examine specific opportunities to reduce the spread of infectious diseases in pregnant women in this new environment, the Association of State and Territorial Health Officials (ASTHO) convened a meeting with the American College of Obstetricians and Gynecologists (ACOG) to explore examples of successful public health and primary care integration efforts, using vaccine administration in obstetric practices as a model.

New Realities

The implementation of the Affordable Care Act (ACA) has created new drivers toward increasing public/private partnerships in healthcare. More people will have access to private insurance—many of whom have traditionally utilized public health clinic services. Specific preventive services, like some vaccines, are now covered by payers under the ACA, thereby expanding access to a vital public health intervention.

Unfortunately, as these insurance coverage opportunities are increasing, public health funding has been on the decline. The recent recession hit states hard, often resulting in cuts to state public health agencies. At the federal level, sequestration, continuing resolutions, and overall cuts to budgets have contributed to funding reductions for both CDC and state public health.

These contextual factors encourage the development of effective integration efforts between public health and healthcare. This need was identified by ASTHO’s former president, José Montero, through the 2013 ASTHO President’s Challenge to identify best practices for the reintegration of public health and healthcare. To ensure individual patients and the community at large are at their healthiest, it is important to identify ways in which the two sectors can work together. It is also important to discuss barriers that impede the efficiency with which each sector can contribute to the shared goal of improved health outcomes. To this end, conversations about what each sector can do best within their own contexts to achieve this goal, without duplication, are essential.

Building Public Health-Obstetrician Collaboration to Increase Immunizations

On August 1, 2013, ASTHO convened a meeting of members of its Infectious Disease Policy Committee—representatives from state public health agencies—as well as members of the ACOG Immunization Expert Work group and other adult immunization stakeholders to discuss ways in which public health agencies and obstetricians can work together to ensure more pregnant women receive the vaccinations.

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they need. Discussions were around the different tracks of work toward integration identified in the 2013 ASTHO President’s Challenge: value proposition, communications, and workforce.

The focus of this report is to utilize the ASTHO/ACOG collaboration as an opportunity to identify key points for consideration as public health engages in conversation with healthcare entities. While this report examines offering flu vaccines in obstetric practices as an ideal public health intervention, it is important to note this may not be feasible in all places or practices.

All engagements between public health and healthcare will fall somewhere on the integration continuum developed by the Institute of Medicine. In the case of integrating flu vaccines into obstetric practices, many obstetricians are aware of the value of vaccines and the importance of promoting them to their patients; merger of public health and primary care here, however, is usually neither feasible nor desirable. The organization of this report summarizes the discussions around the different tracks of work towards integration: value proposition, communications, and workforce. Within each section there are two sub-sections on discussion pertaining to moving along the continuum from a state of mutual awareness to cooperation (recommending vaccine) then from a point of cooperation with public health to one of collaboration with public health (offering vaccine). Regardless of where obstetricians or public health agencies find themselves relating to one another on the continuum, there is room for engagement. Public health agencies have an important role to play and expertise to share in this engagement.

Value Proposition/Business Case
Making a strong case for the value of immunizations for pregnant women—whether “value” is defined as improved health outcomes, benefit to society, return on investment, or cost savings—is a critical element in recruiting primary care professionals as both advocates for and providers of adult vaccinations. When articulating the value of this intervention, it is important to acknowledge the diverse perspectives of various stakeholders in the process and tailor the value proposition for the audience.

Recommending and Offering Vaccines in Obstetrics Practices
CDC recommends that pregnant women receive influenza vaccinations to protect the health of the mother and unborn child. Pregnant women are more likely to suffer severe illness, hospitalization, and death resulting from flu than women who are not pregnant, and accompanying complications can pose serious health risks for the baby. Thus, the flu vaccine has inherent value from a preventive health standpoint for both the primary care provider and the pregnant woman, both of whom seek to ensure the health of mother and infant.

All providers can recommend vaccinations for their patients. Studies indicate that provider recommendation of vaccinations is one of the strongest influences on patient immunization uptake.

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Although not appropriate for all providers, stocking and offering vaccinations results in even higher rates of uptake and fewer missed opportunities. The table below describes key elements of the value proposition for recommending and offering vaccinations in obstetric offices.

<table>
<thead>
<tr>
<th>DEGREE OF INTEGRATION</th>
<th>PROVIDERS &amp; PATIENTS</th>
<th>PUBLIC HEALTH</th>
</tr>
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<tbody>
<tr>
<td>COOPERATION:</td>
<td>• Reinforces the provider’s position as a source of information and advice on</td>
<td>• Increased information dissemination and public confidence related to</td>
</tr>
<tr>
<td>Recommending Vaccinations</td>
<td>vaccinations.</td>
<td>safety of vaccine.</td>
</tr>
<tr>
<td></td>
<td>• Reduces complications for the patients.</td>
<td>• Increased provider recommendations/offers of vaccines results in increased</td>
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<tr>
<td></td>
<td>• Improves health of the mother and infant.</td>
<td>vaccine benefits (e.g., herd immunity).</td>
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<tr>
<td>COLLABORATION:</td>
<td>• Ability to ensure that patients receive recommended vaccines.</td>
<td>• Reduces infectious disease transmission.</td>
</tr>
<tr>
<td>Offering Vaccinations</td>
<td>• Reinforces the obstetric practices as medical homes for pregnant women.</td>
<td>• Establishes effective partnerships that can address a range of public health</td>
</tr>
<tr>
<td></td>
<td>• Acknowledges and adheres to the National Vaccine Advisory Committee’s Standards</td>
<td>issues.</td>
</tr>
<tr>
<td></td>
<td>for Adult Immunizations Practice.</td>
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Example: Massachusetts
During the 2009 H1N1 outbreak, the Massachusetts Department of Public Health coordinated with the obstetric provider community and the Massachusetts chapter of ACOG to disseminate information to providers and patients. In doing so, they created a strong “push-pull” of women wanting the vaccine and providers recommending and/or offering it. Data collected during the 2009-2010 and 2010-2011 flu seasons demonstrated that provider recommendation of seasonal flu vaccinations resulted in a twofold increase in immunization.

Financial and Structural Considerations
While most providers recognize the value of promoting vaccinations for pregnant women, the financial implications of setting up an office-based vaccine program are complex. Some providers report losing

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8 Ibid.
money on vaccine purchase, storage, and administration, which are critical barriers to including immunizations in obstetric (OB) practices.

**Resources and Strategies for Sustainable Office-Based Vaccine Programs**

- **Immunizations and Routine Obstetric-Gynecologic Care: A Guide for Providers and Patients**, ACOG.
- **Immunization for Women: Setting Up an Office-Based Vaccine Program**, ACOG.
- **Immunization Coding for Obstetrician-Gynecologists**, ACOG.
- **List of vaccines covered by ACA**, ACOG.
- **AHIP Vaccines and Immunization Roundtable Report: Vaccine Financing (download link)**, America’s Health Insurance Plans.
- Conduct an operational and financial analysis before implementing immunizations to think through how office flow will need to be altered, plan for expenses, and project average revenue per vaccine dose.\(^\text{10}\)
- Leverage use of immunization registries. Capturing this data can help providers order adequate vaccine supplies and avoid over- or under-ordering.

**Communications**

Communications from health departments to healthcare providers can encourage recommending vaccination to their patients or give providers information about offering vaccines in their practices.

**Recommending Vaccine in OB Practices**

Public health can capitalize on the relationships with primary care and community partners established during the H1N1 response. Data from the H1N1 pandemic identified pregnant women were at increased risk for infection and complications from infection with H1N1. Health departments and professional associations made a strong effort to educate obstetricians about the risks associated with infection and make the public aware of the importance of vaccination to prevent illness. Vaccination rates increased for pregnant women from lower than 30 percent in 2007-08 to 47 percent in 2009-10, based on Pregnancy Risk Assessment Monitoring System data.\(^\text{11}\)

It is important to maintain open lines of communication between public health and primary care and community partners to continue to provide updated recommendations and new evidence about the benefit of vaccination. Public health can play a role in encouraging OBs to recommend vaccines. For example, health agency outreach during the H1N1 pandemic had the potential to increase the number of OBs offering vaccines.\(^\text{12}\)

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One channel public health can use to communicate with providers is the state medical associations (e.g., state chapters of ACOG). At the provider level, obstetricians may need training on how to communicate with patients and families about the importance of vaccines, especially patients who are skeptical or who have questions about vaccines.

**Tools for Obstetricians for Communicating with Patients and Parents**
- *Resources for Educating Adult Patients about Vaccines*, CDC.14
- *Provider Resources for Vaccine Conversations with Parents*, CDC.15
- *Quick Answers to Tough Questions: Vaccine Talking Points for Busy Health Professionals*, Immunization Action Coalition.16
- *Making the CASE for Vaccines: A New Model for Talking to Parents About Vaccines*, University of Albany School of Public Health.17

**Example: New York State ACOG Chapter**
Physicians found it challenging to sift through large amounts of new medical information and then relay relevant updates to their patients. It is important to develop a communication strategy among collaborating partners and know how to disseminate info without causing confusion. The President of the New York chapter of ACOG sent several letters to the organization’s membership. These letters were helpful to the recipients because they highlighted the medical information most pertinent to their patient populations.

**Offering Vaccines in OB Practices**
Public health agencies can use data to communicate to providers the importance of offering vaccines in their practice. For example, the Massachusetts Department of Public Health communicates that among pregnant women in Massachusetts receiving the H1N1 vaccine, almost 72 percent received it in an OB/GYN office.18 Health agencies can use “Dear Provider” letters to share solutions to logistical challenges caused by stocking and administering vaccines, update providers about new immunization policies or recommendations, or provide information on outbreaks or spikes in cases and steps providers can take to address them.

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Suggestions for incorporating vaccination into clinical practice include:\(^{19}\)

- Issue standing orders for flu vaccination of pregnant and postpartum women.
- Establish flu vaccination reminders in the medical record system.
- Offer vaccination at the earliest opportunity and throughout the season.

**Sample Letters from Health Departments Communicating Recommendations with Providers**

- The Connecticut Department of Public Health partnered with ACOG Connecticut Section Chair Howard Shaw to send a letter to Connecticut ACOG members reminding them of the importance of vaccinating pregnant women against influenza.\(^{20}\) This letter was sent as a result of the ASTHO/ACOG collaboration.
- A new law in New York state requires “all general hospitals with newborn nurseries or obstetric services to offer and provide vaccination against * Bordetella pertussis* (whooping cough) to parents and anticipated caregivers of all newborns being treated in the hospital following their births.” The New York State Department of Health sent a letter to hospital CEOs advising them of the recommendation, providing background information, and offering assistance if needed.\(^{21}\)
- The Four Corners Health Department in Nebraska observed an increase in cases of pertussis. The Nebraska Department of Health and Human Services sent primary care providers a letter about the increase of pertussis, including information on Tdap vaccination recommendations and pregnant women and coothing of infants.\(^{22}\)

**Workforce**

As the landscape for providing services changes, roles and responsibilities change too. The question becomes, are providers well trained for the new roles, and, if not, what adjustments need to be made? As Terry Dwelle, state health officer of North Dakota, noted, “There’s a need to reorient the current primary care workforce so that there’s an enhanced understanding of the interface of clinical medicine and population-based health.” It is critical that public health entities be a part of this reorientation process, because it is public health that stands to make significant gains or suffer losses if the two entities are not well integrated.

**Recommending Vaccine in OB Practices**

OB/GYNs, unlike pediatricians or family physicians, may not be well trained on the importance of offering vaccines to their patient populations. This may result in part from a lack of knowledge or awareness of current recommendations for adult vaccinations among both providers and patients.

One strategy for addressing these barriers is to update training curricula for providers to include an enhanced focus on immunizations. The National Vaccine Advisory Committee has identified “integrating

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educational information on immunizations in professional training of students in undergraduate and post-graduate settings as a key strategy in promoting provider advocacy for immunizations.\(^2\) One study demonstrated that contextual learning case-based modules are effective in increasing participant knowledge of when and for whom vaccines should be recommended.\(^3\) The National Adult Immunization Summit is looking at ways to help encourage residency trainings across the country to expand their trainings around immunizations. Public health can also work with online CME providers to promote vaccinations among adults and especially pregnant women.

**Offering Vaccine in OB Practices**

As with encouraging the promotion of vaccines, it is critical to educate providers about the importance of actually offering vaccines in their practices. For OBs who have little practical experience administering vaccines to their patients, public health agency staff (when adequately funded) can play a role by going to clinician sites to provide education, training, and technical assistance to providers.

**Example: ACOG District V (Indiana, Kentucky, Ohio, Michigan and Ontario)**

CDC funded ACOG District V to identify 60 practices and hold onsite training sessions to improve OB/GYN immunization services. The state health departments, in coordination with ACOG, developed materials for these pilot trainings. As a result of these trainings, 33 percent of the sites added at least one vaccine to the list of vaccines they offer, 29 percent reported administering more vaccine doses, 86 percent identified vaccine coordinators, 48 percent now participate in the state registry, 83 percent now have a point of contact at the state health department, and 41 percent are working on introducing immunizations into the practice.

Incomplete or inaccurate information about a provider’s liability when it comes to vaccines presents a barrier that may limit the number of providers who choose to administer vaccinations to pregnant women. There are a number of resources that address this important issue and frequently held but inaccurate beliefs:

- **HRSA** has presented an overview of the liability and compensation issues pertaining to immunizing pregnant women.
- **ACOG** also provides information pertinent to vaccination liability issues, including information about Vaccine Information Statements, the Vaccine Adverse Events Reporting System, and the National Vaccine Injury Compensation Program.
- **The HHS National Vaccine Program Office** has proposed recommendations that address current vaccine liability issues.

**Conclusion**

The healthcare market is in a state of transition. There are new opportunities for increased access to healthcare with expanded insurance, while public health grapples with its new reality of reduced budgets. This changing landscape is well suited for improved integration between public health and


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healthcare. Specifically for the immunization of pregnant women, integration has the potential to benefit the goals of public health, OB practices and, of course, pregnant women.

A critical aspect of increasing immunizations for pregnant women is making sure vaccinators and their office staff has the resources necessary for vaccination efforts that are both successful and sustainable. Measuring and demonstrating success are key to supporting sustainable integration efforts, particularly as they relate to articulating return on investment. Public health and primary care are both interested in measuring success and identifying areas for improvement.

This report highlights some of the key points raised by experts in the public health and provider communities during the integration discussion: value proposition, communications, and workforce. Discussion around each aspect brought barriers to light, along with creative solutions.

There are varying degrees of interest in working together (and capacity to do so) to protect pregnant women from vaccine preventable diseases such as influenza. Understanding the benefits for both public health and providers is the initial step in forming an effective partnership that can maximize limited resources and increase protection for pregnant women. This summary provides some initial tools and strategies for both entities to continue the conversation and enhance the partnerships.

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