Welcome to the 2020 National Adult Vaccination Program (NAVP) Immunizations Newsletter—with the same great content but a new look! The newsletter will no longer be segmented by GSA member sections; instead, you will see icons throughout the text indicating an updated recommendation, new data, communication tip, or research opportunity. As always, we welcome your feedback at navp@geron.org.

**NEWS**

- Recommendations for pneumococcal vaccines in older adults are clarified in a recent *Morbidity and Mortality Weekly Report* article [2019;68(46):1069–1075]. For adults aged 65 years or older, the Advisory Committee on Immunization Practices now recommends a routine single dose of 23-valent polysaccharide vaccine (PPSV23; Pneumovax 23—Merck Vaccines). Shared clinical decision-making is recommended regarding administration of 13-valent pneumococcal conjugate vaccine (PCV13; Prevnar 13—Pfizer) to those in this age group who do not have an immunocompromising condition, cerebrospinal fluid leak, or cochlear implant and who have not previously received PCV13. If a decision to administer PCV13 is made, PCV13 should be administered first, followed by PPSV23 at least 1 year later.

- Modernizing American vaccine manufacturing capacity for responding to pandemic influenza is the goal of a $226 million contract announced in December 2019 by the U.S. Department of Health and Human Services (HHS). The 6-year agreement with Sanofi Pasteur involves the Biomedical Advanced Research and Development Authority, a part of the HHS Office of the Assistant Secretary for Preparedness and Response. The contract “is in accordance with the September 19 presidential executive order to enhance national security and the public health by modernizing influenza vaccines and technologies,” HHS said in a news release.

- One possible outcome of mass immunization of children with chickenpox vaccine was that the incidence of herpes zoster in unvaccinated individuals would rise due to lack of exogenous boosting by circulating varicella vaccine. A meta-analysis shows no such population level impact [Clinical Infectious Diseases. 2019;69(8):1329–1338].
• Concerns about diminishing effects of influenza vaccines during a single season are unsupported by a study showing protective effects of vaccination for up to 5 years [Journal of Infectious Diseases. 2019;220(7):1136–1140]. Overall, vaccination in several prior seasons was as protective as current-season doses, but this effect diminished with time and was lower in older adults and those with chronic conditions.

• Could neuraminidase be a better influenza vaccine target than the currently used hemagglutinin? A mouse study published in Science [2019;366(6464):499–504] shows that three human monoclonal antibodies directed against the neuraminidase component of the influenza virus coat protein bind to a wide variety of isotypes, including those from A and B strains. The finding could be important since the neuraminidase component does not mutate as frequently and easily as the hemagglutinin component.

RESOURCES

• Vaccines for All: Longevity Unleashed for Everyone (VALUE) is a $1 million grant initiative launched in November 2019 by the Global Coalition on Aging and Pfizer Global Medical Grants. Letters of intent for the program are due on January 10. VALUE seeks to support, advance, and validate quality improvement strategies that measurably increase the number of older adults in Japan who are immunized against at least one targeted vaccine-preventable disease. It will also uncover pathways for more effective management of health costs in Japan’s aging society.

DRIVING VACCINE UPTAKE: A PSYCHOLOGICAL APPROACH

The 2010s have come to a close, and with them goes the “Decade of Vaccines.” Ensuring a continued focus on adult vaccines is the designation by the World Health Organization (WHO) of the 2020s as the “Decade of Aging.” The 2010s provided much success from a scientific and vaccinology standpoint, but the spike in opposition to critical vaccines has produced outbreaks of disease that were close to eradication. Seeking to address reasons why people do not receive vaccines, WHO is looking at the psychology involved in vaccine acceptance, demand, and hesitancy. Prominent on the agenda of WHO’s Strategic Advisory Group of Experts (SAGE) on Immunization is an effort to understand determinants of vaccine hesitancy, tailor evidence-based strategies to improve vaccine uptake, and monitor and evaluate the impact and sustainability of the interventions.

MOTIVATION FOR VACCINES

A global group of experts working with SAGE, Measuring Behavioural and Social Drivers of Vaccination (BeSD), met in May 2019 and plans to issue a final report later this year. The BeSD group’s objective is to advance the development of tools and guidance to enable immunization programs and partners to measure and address local reasons for undervaccination and track consistent and comparable data over time.
One of the tools the BeSD work group is using to assess factors that drive immunization uptake is a vaccination model based on work by Brewer et al. (Figure 1). The process begins with considering what people think about vaccines and their personal strategy. Do they view vaccines as beneficial or risky? Is staying current on vaccines an altruistic act that benefits their community? Or are they “free riders” who take advantage of the herd immunity created by others while refusing to get vaccinated themselves?

Combined with social processes—including the all-important recommendation by health care providers—the cognitive processes lead to a person’s motivation regarding vaccines. This influences a person’s readiness to vaccinate. The BeSD work group will incorporate these and other factors into a quantitative tool for use with caregivers who make vaccine decisions for children younger than 5 years of age.

**PRACTICAL CHALLENGES IN HEALTH CARE**

Once a person is ready and willing to get needed vaccines, a number of practical issues can affect whether the person acts on this intent (Figure 1). Is the vaccine available at the site where a trusted provider makes a strong recommendation? If the vaccine must be administered at a different site, is getting there convenient? Is an appointment needed? Is the product available? What is the out-of-pocket cost to the patient? These and other factors affect whether a motivated patient actually receives the vaccine.

The BeSD work group will apply its research in developing a qualitative tool for use with caregivers or by health care and community health workers and immunization program managers. The group is planning for the tool to be used in four possible ways:

- As an exploratory presurvey that would identify areas of focus for a subsequent quantitative survey.
- As a postsurvey to enrich and contextualize findings of the quantitative survey.
- For “horizon scanning” over the long-term to “listen for change.”
- For rapid response during emergencies to offer understanding and inform responses.

**FIGURE 1. The “Increasing Vaccination Model”**

IMPROVING AND SUSTAINING VACCINE UPTAKE

When WHO’s SAGE members receive the report of the BeSD work group, its members will apply the findings in ways that enable national health authorities to influence vaccination intentions, decision, and behaviors. This goal will be accomplished through actions such as tailoring immunization programs, addressing missed opportunities, addressing hesitancy, supporting health care workers, and engaging with communities, SAGE said in a recent report.

“Increasing and maintaining vaccination uptake is vital for vaccines to achieve their success,” SAGE said. Achieving optimal use of vaccines will be realized through understanding the determinants of vaccine hesitancy and refusal, tailoring evidence-based strategies to improve uptake, and monitoring and evaluating the impact and sustainability of interventions.

SOURCES AND RESOURCES