Vaccines for Older Adults: Overcoming the Challenges of Shared Clinical Decision Making



A white paper developed by The Gerontological Society of America

National Adult Vaccination Program



About The Gerontological Society of America and the National Adult Vaccination Program

The mission of The Gerontological Society of America (GSA) is to: (1) promote the conduct of multiand interdisciplinary research in aging by expanding the quantity of gerontological research and by increasing its funding resources; (2) disseminate gerontological research knowledge to researchers, to practitioners, and to decision and opinion makers; and (3) promote, support, and advocate for aging education, and education and training in higher education.

In 2011, GSA created the National Adult Vaccination Program (NAVP) with the purpose of affecting policy and improving adult immunization rates to achieve the Healthy People 2020 goals. The goals of NAVP seek to:

- Diffuse evidence-based immunization information.
- Affect policy through partnership.
- Support GSA members making change in their practices to improve adult immunization rates.
- Drive sustainable solutions for gaps in knowledge and practice.

Acknowledgment

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Table of Contents

- **5** EXECUTIVE SUMMARY
- 7 INTRODUCTION
- 9 BACKGROUND
- 11 SHARED DECISION-MAKING
- 14 COMMUNICATING WITH OLDER ADULTS
- 17 VACCINE RECOMMENDATIONS
- 20 FOCUSING ON ACTIONS TO SUPPORT STAKEHOLDER RECOMMENDATIONS
- 22 REFERENCES

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Executive Summary

Background • Shared clinical decision making, a recently added category of recommendations from the Advisory Committee on Immunization Practices (ACIP), involves an informed discussion between the patient and health professional and collaborative decision on whether to use the vaccine in that patient. Four adult vaccines have been added to this category, and this has led to questions in practice about efficient and productive use of shared clinical decision making, a technique developed in situations where there is not a "right" decision.

Objective • To identify gaps in knowledge and specific tactics for health professionals to use in successfully implementing shared clinical decision making as recommended by ACIP for vaccines for older adults, with a focus on pneumococcal vaccines recommended for adults aged 65 years or older.

Methods • In August and September 2020, The Gerontological Society of America (GSA) conducted individual interviews with a sample of stakeholders with expertise in immunization of older adults, communicating with older adults, and shared clinical decision making, and convened a virtual stakeholder meeting with these experts. Participants discussed current ACIP recommendations for pneumococcal vaccines; best practices for shared clinical decision making in health care; barriers and facilitators to communicating with patients, particularly older adults; and health-system or policy-level facilitators for supporting the ACIP recommendations.

Results • From 2014 to 2019, ACIP recommended that all adults ages 65 years or older routinely receive the 13-valent pneumococcal conjugate vaccine (PCV13) and at least 1 year later, the 23-valent pneumococcal polysaccharide vaccine. Citing strong herd immunity in children, who are generally considered the reservoir for *Streptococcus pneumoniae*, and cost-benefit analyses for PCV13, ACIP in 2019 moved PCV13 to the shared clinical decision-making category. Implementation of shared clinical decision making for PCV13 and other adult vaccines has been difficult, health professionals and developers of clinical decision support software told GSA. Not all patients want to engage in conversations about their care, particularly when it concerns vaccines. A shared conversation may not be recommended for situations in which a clear value exists, a situation several stakeholders emphasized was the case with past pneumococcal vaccine recommendations in older adults. The conversation with these patients also can be complicated by hearing loss, vision loss, or dementia. In addition, federal guidance calls for vaccinators to make a "strong recommendation" as standard practice for immunizations, and how to conduct a shared clinical decision-making conversation while also making a strong recommendation is unclear.

Conclusion • Based on this input and information, GSA developed 8 recommendations (Table 1) to inform implementation of a shared clinical decision-making process for vaccines for older adults.

Vaccines for Older Adults: Overcoming the Challenges of Shared Clinical Decision Making | 5



Table 1. Eight Recommendations to Inform Implementation of a Shared Clinical Decision-Making Process for Vaccines for Older Adults

Practice-Level Support

DELIVERY OF MESSAGE

Reduce barriers to communicating with older patients, such as those who have hearing or vision loss.

Address cultural considerations, including patient preferences in certain age groups or ethnicities.

System-Level Support

Recognize patients with whom a conversation about pneumococcal vaccines should be initiated.

Create unambiguous specifications of shared clinical decision making for prompts in electronic health record systems and clinical decision support systems.

CONTENT OF MESSAGE

Develop decision aids and infographics for clinicians and patients to use in shared clinical decision-making conversations about the benefits and risks of vaccines.

Train health professionals on the concepts of shared clinical decision making, specifically with regard to the vaccine recommendations for older adults.

At the health-system level, include time during encounters with older adult patients, such as the Welcome to Medicare preventive visit and other wellness conversations, to recommend vaccines—and use appropriate codes to ensure payment for the additional time.

Explain the logic behind the Advisory Committee on Immunization Practices recommendations in order to build trust with health professionals.

Introduction

Shared decision making has emerged in medicine as a model for focusing on patient-centered health care. With certain vaccinations, shared clinical decision making is vital for applying current public health recommendations in accordance with patients' desires.

Vaccines play a vital role in reducing morbidity and mortality in people of all ages. In older adulthood, age-related decline of the immune system creates greater susceptibility to pathogens. Vaccines are important boosts for the immune system in order to avoid infectious diseases and their complications.

The Advisory Committee on Immunization Practices (ACIP), an expert panel that makes recommendations to the U.S. Centers for Disease Control and Prevention (CDC), has traditionally made 3 types of recommendations regarding vaccines: routine, catch-up, and risk-based. Routine vaccinations are those that should be given to virtually all patients at a certain age, and catch-up schedules are used when immunizations were not given at the recommended ages. Risk-based recommendations cover vaccines that are used in people with personal characteristics or conditions that make them more susceptible to specific infectious diseases and their complications.

In recent years, ACIP has added a new category of recommendations, shared clinical decision making, for use with certain vaccines, including 1 product used to prevent pneumococcal disease in people aged 65 years or older. In shared clinical decision making, the vaccination decision is informed through a discussion between the patient and health professional and reached collaboratively. In contrast, routine, catch-up, and risk-based vaccines call for a default decision to vaccinate the patient based on age group or other indications, unless contraindicated. As suggested by ACIP, shared clinical decisionmaking recommendations apply to meningococcal B, human papillomavirus, hepatitis B, and 1 of the 2 pneumococcal vaccines licensed for use in adults.1

In shared clinical decision making, the vaccination decision is informed through a discussion between the patient and health professional and reached collaboratively.



Methods and Objective

In an effort to inform implementation guidance pertaining to ACIP's shared clinical decision-making recommendations, The Gerontological Society of America (GSA) in August and September 2020 conducted individual interviews with a sample of stakeholders representing expertise in immunization of older adults, communicating with older adults, and shared decision making generally, and convened a virtual stakeholder meeting with these experts. The focus was on the challenges and suggested effective practices for shared clinical decision making and vaccination of older adults. Participants discussed the following areas:

- Current ACIP recommendations for pneumococcal vaccines
- Best practices for shared decision making in health care
- Barriers and facilitators to communicating with patients, particularly older adults
- Health-system or policy-level facilitators to support the ACIP recommendations

The objective of this process was to identify gaps in knowledge and specific tactics for health professionals to use in successfully implementing shared clinical decision making as recommended by ACIP for vaccines for older adults.



From the individual interviews, GSA identified several recommendations for best implementing shared clinical decision making for vaccines for older adults. In the joint follow-up meeting, the participants reviewed these recommendations, provided feedback, and reached consensus on these necessary actions for health professionals, patients, educators, and policymakers.

The objective of this process was to identify gaps in knowledge and specific tactics for health professionals to use in successfully implementing shared clinical decision making as recommended by ACIP for vaccines for older adults. The resulting list of recommended actions can be used to inform conversations about pneumococcal vaccine between patients and health professionals as well as future policy decisions for this or other vaccines.





Background

ACIP's shared clinical decision-making recommendation evolved from its "Category B" or "permissive" recommendation, which called for individual clinical decision making about immunization. The updated terminology is meant to clarify that "individual" decisions are not determined solely by the patient or the health professional. Rather, these decisions are a shared responsibility to decide whether to vaccinate. The evolving terminology to describe this recommendation category has the potential to create additional confusion regarding future ACIP voting decisions and recommendations to use shared clinical decision making for new vaccines coming to market or older products if they are moved to this category.

Under current guidelines, ACIP does not specify considerations or decision points for clinicians and patients to use in the shared decision-making process. Ultimately, the decision is formed on the best available evidence, consideration of which patients could benefit from vaccination, each patient's values and preferences, the health professionals' discretion, and the characteristics of the vaccine of interest. Conversations about shared clinical decision making could include the patient's risk for exposure to a pathogen and the risk for that person developing disease because of underlying medical conditions.

In general, ACIP makes a recommendation for shared clinical decision making when some individual patients could benefit from a vaccine or want to receive it based on their own unique risk factors, but broad vaccination of that person's age group or characteristic would not likely produce sufficient population-level benefits. ACIP indicates that health professionals can choose to discuss these recommended immunizations and foster the shared clinical decision-making process. Health professionals may choose to have these conversations with all or most patients or a more selective group. In addition, ACIP recommends that health professionals be receptive to conversations initiated by patients about these vaccines. Despite lack of specific criteria for recommending the vaccine, health professionals are encouraged to talk with patients about which vaccines are most appropriate for them.

Pneumococcal conjugate vaccine provides a good example of the challenges encountered when implementing shared clinical decision-making recommendations for older adults. Pneumonia caused by *Streptococcus pneumoniae* is a serious threat to people's health and functional status. The organism is also responsible for invasive pneumococcal disease when it infects normally sterile tissues of the body such as blood (septicemia), cerebrospinal fluid (meningitis), and heart (endocarditis). Although the value of pneumococcal immunization is recognized and emphasized by clinicians and health promotion efforts, vaccination rates can be improved among older Americans, particularly vulnerable adults who face a higher risk of serious consequences from pneumococcal disease.

Two adult vaccines are currently available for immunization against pneumococcal disease—the 13-valent pneumococcal conjugate vaccine, or PCV13, and the 23-valent pneumococcal polysaccharide vaccine, or PPSV23. Since the early 1980s, the CDC has recommended PPSV23 for people 2 to 64 years of age with certain underlying medical conditions, adults 19 to 64 years of age who smoke, and all adults aged 65 years or older. First introduced into the pediatric immunization schedule in 2000, PCV7 was replaced by PCV13 in 2010. In 2014, ACIP recommended that all adults aged 65 years or older begin receiving PCV13. ACIP stated in making that recommendation that it would revisit the decision 4 years later.²

The broad use of pneumococcal vaccines in children since 2000 led to a sharp decline in pneumococcal disease, including infections in unvaccinated children and adults. Because of the effectiveness of the pediatric vaccines in creating herd immunity against pneumococcal disease, the 2014 recommendation to administer PCV13 to all adults aged 65 years or older showed minimal impact on PCV13-related disease when the situation was evaluated in 2018.²

Vaccines for Older Adults: Overcoming the Challenges of Shared Clinical Decision Making | 9



Citing the lack of cost-effectiveness of the added dose of PCV13 recommended in 2014 for adults aged 65 years or older, ACIP voted in June 2019 to no longer universally recommend PCV13 for all older adults. Instead, ACIP recommended that use of the vaccine be determined by shared clinical decision making for most older adults. PCV13 continues to be recommended for adults ages 19 years or older who have immunocompromising conditions, a cerebrospinal fluid leak, or a cochlear implant.2

ACIP noted that a shared clinical decision-making conversation may include considerations about the individual patient's risk for exposure to PCV13 serotypes and the risk of severe disease because of underlying medical conditions. Some older adults could face an increased risk for exposure in nursing homes or other long-term care facilities as well as in settings with low or no PCV13 immunizations among children. For these patients, PCV13 vaccination would have added benefits.2

The ACIP guidance said that for patients and health professionals who decide in favor of using PCV13, it should be given first, followed by PPSV23 at least 1 year later. This order of administration creates a booster effect for the immunity induced by PCV13. Given that sequence, conversations between health professionals and patients would be key in determining which vaccines to administer and when to give the doses. However, a decision to forgo PCV13 means loss of the opportunity for the booster effect, even if the patient later decides to receive the vaccine.²

Since the 2019 ACIP decision, health professionals have questioned whether they should initiate conversations with all patients aged 65 years or older and whether the shared clinical decision-making process can include strong health professional recommendations for PCV13.2

In situations where there is not a "right" decision, the shared clinical decision-making process helps both patients and health professionals consider advantages and harms on an individual basis.



Shared Decision-Making

The goal of shared decision making between the health professional and the patient is to focus on personcentered care. Clinicians and patients jointly make decisions about care, including tests, treatments, and vaccines based on the best evidence and a balance of risks, benefits, anticipated outcomes, and a patient's preferences and values.

As part of the shared decision-making process, patients learn about their health, understand that a decision needs to be made, become informed about the options, and feel more prepared to discuss the options with their health professionals. This iterative process includes discussion of the pros and cons of the options and creates a collaboration that leads to a mutually acceptable decision. Health professionals share information about the risks and benefits about available options, seek the goals of their patients, and listen intently. Patients express their hopes, fears, and desired outcomes. Patients are more likely to follow through on decisions reached through shared decision making.3

Health professionals have expressed that the shared decision-making process helps patients understand the clinical considerations and build a lasting, trusting relationship. In situations where there is not a "right" decision, the process helps both patients and health professionals consider advantages and harms on an individual basis. Several tools have been developed to aid patients and health professionals throughout these conversations, including the Ottawa Personal Decision Guides, the Agency for Healthcare Research and Quality (AHRQ) model, and the Massachusetts General Hospital (MGH) Health Decision Sciences Center Process Survey.⁴⁻⁶ All of these tools feature attractive, simple, graphic presentations to help patients to read through the questions and assess their values and preferences.

Best Practices

When using the Ottawa Personal Decision Guides, patients and health professionals delineate what decision needs to be made, why they need to make the decision, when to make the decision, and how far along they are in the decision-making process. Patients are encouraged to explore their knowledge by listing the options and benefits, rating the benefits and risks consistent with their values, and determining their level of certainty about those benefits and risks. Patients also discuss their support system and what role caregivers may play in the decision-making process.4

Similarly, the AHRQ model highlights a 5-step SHARE process: Seek participation, Help explore options, Assess values and preferences, Reach a decision, and Evaluate that decision. AHRQ provides tools and training resources to support these conversations in practice, including slides, videos, reference guides, posters, and webinars.⁵

Likewise, the MGH Health Decision Sciences Center process includes a short survey that focuses on discussing 4 critical areas in shared decision making; options, pros, cons, and preferences. The survey measures whether health professionals engage in the shared clinical decision-making process during the health care visit, prompting patients to consider whether their health professionals talked "a lot," "some," "a little," or "not at all" about the reasons to pursue or not to pursue a test or intervention.6

As another avenue, a 2017 article in The BMJ focused on a 3-talk model that emphasizes team talk, option talk, and decision talk. Through team talk, health professionals explain the options to patients and elicit their goals. For the option talk, health professionals and patients compare the options and discuss the risks and benefits of each. Culminating with decision talk, the patient-health professionals team arrives at a decision that reflects the patient's preferences, which is guided by the health professionals' expertise and experience (Figure 1). 7

Figure 1. Three-Talk Model of Clinical Shared Decision Making



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Individual interviews with the stakeholders validated that all of these factors play into the possibility of engaging in shared clinical decision making with respect to vaccination. Once the conversation is broached, pictographs and decision aids can help the process. Written materials can be provided at the point of care or prior to the health care visit to explain the disease and the options for immunization. Members of the health care team, such as decision coaches or nurses, also can provide tools ahead of the clinical encounter to prepare patients and talk through choices. Some materials may be provided by mail or through patient portals as well. Although some of the interviewed experts expressed concerns



about complicated decision aids, they believe some type of take-home material could be helpful. Similar to GSA's decision aid for COVID-19, which incorporates a person's risk tolerance and the risk level of an activity, a decision aid focused on vaccines could allow patients to walk through the steps and direct questions to their health professionals.⁸

The stakeholders also noted the value of training or aids that could help health professionals individually use the shared decision-making process, particularly in the context of vaccines. A training could address how to assess patient preferences and values, reconciling a strong vaccine recommendation with the shared decision-making process, and balancing the increased time demands of conversations with the need to address pressing chronic conditions.

Some stakeholders emphasized the need for regular updates or materials to provide health professionals with the resources to better engage patients in conversations concerning pneumococcal vaccines.



Some stakeholders emphasized the need for regular updates or materials to provide health professionals with the resources to better engage patients in conversations concerning pneumococcal vaccines. In particular, materials focused specifically on current ACIP recommendations could help health professionals to buy into training, especially if they believe they are equipped to handle shared decision-making conversations in general. Importantly, the stakeholders said that many health professionals may believe they are using shared decision making, but most patients would say they are not. Materials and updates could include the scientific and pharmacoeconomic data underlying the vaccine recommendations and give specific evidence that health professionals can bring into conversations.

Another support for health professionals could include video models or scripts for what a shared clinical decision-making conversation on pneumococcal vaccination could look like, depending on how an individual health professional decides to initiate conversations about vaccines with shared clinical decision-making recommendations. Scripts, models, and practice questions could allow health professionals to feel comfortable asking about individual values regarding pneumococcal vaccines in a way that feels natural to their preferred conversational style.

Stakeholders observed that the initiation of a shared clinical decision-making conversation is more often at the discretion of individual health professionals. If the health professional buys into the concept, then it happens. If the health professional does not favor this approach or feels too much time pressure, then it does not happen. The stakeholders expressed the need for more facilitators of shared clinical decision making at the health-system level. For instance, with an institution-wide addition of time during visits when pneumococcal vaccine may be discussed, health professionals may feel more comfortable engaging in the shared clinical decision-making process with patients. Shared clinical decision making has been successfully used in hospice and oncology settings, particularly when lasting relationships are of paramount importance and patient-health professional contact is frequent. Additional system-level facilitation could help primary care health professionals emphasize these conversations, too.

Barriers

Notably, health professionals should realize that patients are not always ready to engage in the shared clinical decision-making process. A recent study in *Patient Education and Counseling* found that various characteristics of both the patient and the clinical decision itself can influence readiness, and patients may need more support to have this conversation (Figure 1).^{7, 9}

Another barrier to shared decision making noted by the stakeholders is the reality that not all patients want to engage in conversations about their care, particularly when it concerns vaccines. As noted in Table 1, patients from certain cultures or age groups may prefer that their health professional state a specific recommended treatment or preferred course of action. A shared conversation may not be recommended for situations in which a clear value exists; several stakeholders emphasized this was the case with past pneumococcal vaccine recommendations in patients aged 65 years or older. Health professionals also may feel that they are abdicating their responsibilities and placing the burden of the decision on their patients, and thus they do not elect to use a shared clinical decision-making process.

System and policy factors play a role in facilitating shared clinical decision making as well, stakeholders said. Medicare and other health insurance options do not always reimburse for the time needed for shared clinical decision-making conversations. One option to avoid this hindrance would be to conduct these conversations during the Welcome to Medicare visit. Since the focus of this encounter is patient wellness, discussion of vaccines is a good fit.

Stakeholders also expressed concerns about the clinical uncertainty surrounding certain aspects of vaccine recommendations and whether studies include representative populations. Older adults and people of color, for instance, have often been poorly represented in clinical trials, which could affect both health professionals' ability to provide accurate information as well as patients' ultimate decisions based on risks and benefits that may not be applicable for them individually.

Measures of efficacy for shared clinical decision making were also among the topics that the interviewed experts considered and they recommended the development of additional measures to better understand best practices and outcomes. The group also recommended that coding definitions be expanded in Medicare to include shared clinical decision making in additional areas where it could be beneficial or is already recommended, such as with vaccines.

Communicating with Older Adults

As shared clinical decision-making processes are incorporated into patient conversations, health professionals need to consider potential modifications that address unique communication needs of some older patients.

Some older adults can have hearing loss, vision loss, or dementia—all of which require accommodation during communications with them and their caregivers. Patients with challenges that affect ease of communication highlight the need for individual conversations that incorporate various types of decision aids, including print and audio materials, that can also assist with communication for all types of patients.



Visual aids and conversational facilitators can help patients with communication barriers—whether hearing loss, vision loss, dementia, or other chronic conditions—to clarify their values and preferences.

Best Practices

GSA publishes the *Communicating With Older Adults* series, which covers the broad range of communication issues that older adults may experience. To start, health professionals can establish respect by using formal language, asking patients for their preferred forms of address, and avoiding terms that could sound patronizing. Older patients appreciate a comfortable sitting area and may need an escort when moving to examination rooms, offices, restrooms, and waiting areas. They may also need more time to build rapport and adapt to an examination room. When building rapport, health professionals should start slowly, perhaps beginning with conversations about family or patients' favorite activities.¹⁰

During older adults' health care visits, health professionals should take the time to speak slowly, allow time for cognitive processing, and reduce the number of questions asked in succession. Discussions may take longer but using these techniques can lead to valuable conversations about risks, benefits, and values. Active listening, eye contact, and empathic statements can help with patient understanding and improve treatment adherence.¹¹

Moreover, health professionals should avoid medical jargon, explain terms such as "pneumococcal disease," and outline the advantages and risks of being vaccinated. Word meanings and connotations can shift over time, making it important to consider generational and cultural differences when communicating with patients. Health professionals should provide take-away points in writing so that older adults can refer to the document after the visit, and summarize and repeat main points to check for understanding.¹¹

Specific considerations for patients with hearing loss can enhance conversations with health professionals. Nearly a quarter of people ages 65 to 74 years—and half of the adults ages 75 years and older—have hearing loss that can impair communication. Health professionals can include caregivers in conversations when appropriate and ask patients about the use of hearing aids or other assistive

devices. Using a lower tone of voice and matching the pace of the patient's diction can also help to communicate effectively. Shouting or speaking in a raised voice can distort sounds and should be avoided. In situations where opaque masks are not being used, facing the person directly can allow patients to read lip motions and pick up on visual cues. 11

For patients with partial vision loss, health professionals can check for adequate lighting in the room and ask whether the patient brought or needs glasses. Handwritten instructions should be easy to read using neat penmanship, and printed type should be in a large font size (at least 14 points) for readability. Large pictures, diagrams, and recorded instructions may help as well.¹¹

Patients with dementia or other cognitive impairments require additional communication strategies. Patients can struggle to find the words that they want to express, repeat ideas, or display a decreased attention span. Health professionals may ask closed questions that require a yes or no response, use simple sentences, speak slowly, ask 1 question at a time, and use verbatim repetition to emphasize main points. Health professionals can also involve caregivers in these conversations.¹²

Visual aids and conversational facilitators can help patients with communication barriers—whether hearing loss, vision loss, dementia, or other chronic conditions—to clarify their values and preferences. These additional steps can make shared clinical decision making an insightful and valuable process between patients and their health professionals.





Barriers

Health professionals, with their own backgrounds, experiences, and values that are brought into the shared clinical decision-making conversation, should take patients' cultural and ethnic considerations into account during these discussions. The proportion of older adults in minority racial and ethnic groups is increasing rapidly, and growing attention is being placed on broadening the approach to cultural conversations with respect to the values and preferences related to immunizations. Health professionals can develop culturally sensitive communication strategies and learn more about the cultural and ethnic factors that could affect vaccination uptake during these shared clinical decision-making conversations.¹³

Stakeholders contributing to this report cited other challenges for communicating with older patients. For example, certain assistive technologies, including hearing aids, may not be working properly or may be too expensive for patients.

Health professionals should consider overall barriers to care that can affect conversations with patients—including vaccination costs, patient schedules, and transportation—as they can influence a patient's decision to accept a vaccine or their ability to return for another visit later for immunization. Different norms may be needed for urban, suburban, and rural settings, and conversations with patients might include inquiring about public transportation and geographic access to clinical offices or pharmacies with vaccines available in stock.

Stakeholders emphasized the pitfalls of assuming that an older patient cannot engage in a shared clinical decision-making conversation. Older patients are capable of contributing to conversations, expressing their values and preferences, and understanding risks and benefits. Health professionals should make every effort to discuss the options with their patients, regardless of communication challenges.

Vaccine Recommendations

When vaccine recommendations call for shared clinical decision making, the goal shifts from vaccination as an end goal to holding the collaborative conversation between patients and their health professionals. The overall focus moves away from the presumptive recommendation to embrace a new model.

Health professionals have taken a variety of approaches in their vaccine conversations. With a presumptive recommendation, health professionals inform patients that it is time for a vaccine and suggest that patients receive the immunization during that day's visit. With a participatory recommendation, health professionals might ask what the patient thinks about vaccines, whether the patient wants to hear about available vaccines, or whether today is a good day to receive the vaccine.

Overall, studies show that presumptive recommendations are more likely to lead to vaccine acceptance, particularly when speaking to parents about their children's scheduled immunizations. ¹⁴ The presumptive approach suggests expertise, knowledge of the science, and a strong recommendation for moving forward with the decision. After all, trust in their health professional is 1 of the top reasons that patients elect to receive a vaccine, and this could be even more important in older adults because of cultural factors and past experiences.

Vaccines for Older Adults: Overcoming the Challenges of Shared Clinical Decision Making | 17



Health professionals need better decision supports in electronic health records that reflect the complexity of the ACIP recommendations.



Best Practices

Two key studies of pediatric patients and their parents demonstrate the complex nature among the type of vaccine recommendation made by the health professional, the likelihood of acceptance of that recommendation, and how the parent rates the visit experience.

Overall, patients were significantly more likely to resist vaccine recommendations when health professionals used a participatory approach compared with a presumptive approach. When health professionals responded to resistance by re-emphasizing their original recommendation, nearly half of those who initially hesitated then decided to move forward with vaccination.¹⁵

A second study demonstrated an inverse relationship between use of a presumptive approach by health professionals in making vaccine recommendations and the parental ratings of the visit experience; the more participatory the discussion of vaccines, the more satisfied the adults were with the child's visit. However, in that study, participatory discussions were associated with low rates of immunizations.¹⁶

The CDC suggests a "strong recommendation" as standard practice for immunizations, regardless of whether the vaccine is available in the health professional's office at that moment. When a recommendation is not enough for some patients, the SHARE approach can help health professionals to explain why the vaccine is appropriate based on factors such as age, health status, lifestyle, or other risk factors. Health professionals can then address patient questions and explain the potential outcomes of contracting a disease that can be prevented through vaccination.¹⁷

With regard to PCV13 and PPSV23 in particular, the CDC created an information sheet for patients that lists who should get each of these vaccines and addresses their safety, efficacy, and potential side effects. The sheet also explains that adults ages 65 years or older "can discuss and decide, with their vaccine provider, to receive PCV13." The 2-page guide may help patients to understand the basics of pneumococcal disease and the risks they face as older adults. Health professionals should provide this guide to patients before or during a clinical encounter and use it to initiate a shared clinical decision-making conversation about risks, benefits, values, and preferences of this particular patient.

Barriers

In 2014, the National Vaccine Advisory Committee created a standard that health professionals should strongly recommend needed vaccines to adult patients. The presumptive recommendation has become a standard practice, and the shared clinical decision-making conversation creates a culture shift that requires health professionals to adopt a new approach. They may face challenges in changing to this new practice and understanding the reasons why they should do so.19

For all vaccines, but particularly pneumococcal vaccine recommendations, stakeholders suggested that greater transparency in the ACIP process and reasons for voting a particular way would help instill health professional confidence when they make recommendations for a vaccine. To initiate a shared clinical decision-making conversation about vaccines, stakeholders indicated they need to understand the clinical, epidemiologic, and pharmacoeconomic data behind the ACIP decision and the logic behind it.

In describing the challenges of implementing shared clinical decision making in clinical settings, the stakeholders said health professionals need better decision supports in electronic health records that reflect the complexity of the ACIP recommendations. With some of these digital systems, health professionals are not being prompted to offer vaccines in the shared clinical decision-making category because programmers cannot determine how to operationalize the recommendations.

Stakeholders familiar with the CDC's Clinical Decision Support for Immunization (CDSi) project pointed out that little guidance exists on how to program these prompts since the recommendations are not based on specific patient characteristics or clinical situations. As a result, software developers have been unable to provide guidance regarding specifics or develop a consensus. Without more direction from ACIP, shared decision-making prompts are not being delivered for pneumococcal vaccines, and that decreases the health professional's likelihood of initiating a conversation.

Another substantial barrier is the logistical concern posed by the time-sensitive requirement of administering the PCV13 vaccine first, followed by PPSV23 at least 1 year later. Health professionals may not work with an individual patient throughout this timeline, and the guidance does not recognize the fluidity of older patients' living situations, as changes in functional status can necessitate changes in housing for older adults. Health professionals may not be able to track when these immunizations are given or maintain an accurate timeline for follow-up. This potential gap reinforces the need for uniform immunization information systems across the states that can be integrated with electronic health systems.

Furthermore, decisions about pneumococcal vaccines cannot be discussed once and checked off the list, as several other routine vaccinations are handled, the stakeholders said. If patients decide not to receive the PCV13 vaccine when the conversation first occurs, health professionals may or may not recommend it again. Whether later conversations are needed is unclear, particularly when the patient receives the PPSV23 vaccine after declining PCV13.

Other barriers exist as well. More patients are expressing vaccine hesitancy, the stakeholders said, and this has become even more prevalent during 2020 with increased concerns regarding coronavirus

and influenza vaccines. Patients are more aware of—but also more concerned about—the vaccine development and approval process, and they are asking more questions about the safety and efficacy of vaccines. Patients worry about adverse effects of vaccines and whether vaccines even work at all. These types of concerns should factor into the shared clinical decision-making process and discussions about the risks and benefits of vaccination. These conversations will require additional time for discussion between patients and health professionals.

The stakeholders also questioned whether a presumptive recommendation continues to make sense in the context of the shared clinical decision-making process. At some point, a strong recommendation must be a part of the discussion of risks, benefits, and patient values, but health professionals are unsure how or when that recommendation should occur. In addition, stakeholders voiced concerns about the efficacy of having this conversation in the primary care setting and the likelihood of patients choosing to obtain a pneumococcal vaccine in a timely manner.

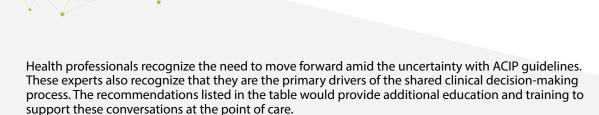
To address these intertwined areas of interest, the stakeholders suggested that implementation scientists and ethicists should be involved in the ACIP process. Vaccine protocols have changed in recent years, particularly in the context of shared clinical decision making, and new expert voices are needed to speak about the efficacy of the patient-health professional conversations needed in connection to immunizations. With additional experts and voices included in this process, the shift from a traditional presumptive recommendation to a shared clinical decision-making process can occur, including a new viewpoint on the subject of what defines an effective vaccine conversation between health professionals and patients and what constitutes measures of success.

Focusing on Actions to Support Stakeholder Recommendations

Based on input and information gained from the individual interviews with experts in relevant areas as well as a follow-up call with the full group of stakeholders, GSA developed 8 recommendations to inform implementation of a shared clinical decision-making process for vaccines for older adults (Table 1). These are categorized according to 2 major areas of focus—support of health professionals and support of health systems and policy.



By providing needed clarity and support, a conversation with patients about vaccines can be a useful tool for building relationships and trust in decisions to use this valuable public health tool.



While the process of shared clinical decision-making may be new to the vaccine world, stakeholders on this expert panel agreed that by providing needed clarity and support, a conversation with patients about vaccines can be a useful tool for building relationships and trust in decisions to use this valuable public health tool. Shifting the goals, and therefore metrics of success, however, presents a level of challenge that will require collaboration and transparency to address the new recommendations successfully.

Table 1. Eight Recommendations to Inform Implementation of a Shared Clinical **Decision-Making Process for Vaccines for Older Adults**

Practice-Level Support

DELIVERY OF MESSAGE

Reduce barriers to communicating with older patients, such as those who have hearing or vision loss.

Address cultural considerations, including patient preferences in certain age groups or ethnicities.

System-Level Support

2

Recognize patients with whom a conversation about pneumococcal vaccines should be initiated.

> Create unambiguous specifications of shared clinical decision making for prompts in electronic health record systems and clinical decision support systems.

CONTENT OF MESSAGE

3

Develop decision aids and infographics for clinicians and patients to use in shared clinical decision-making conversations about the benefits and risks of vaccines.

Train health professionals on the concepts of shared clinical decision making, specifically with regard to the vaccine recommendations for older adults.

At the health-system level, include time during encounters with older adult patients, such as the Welcome to Medicare preventive visit and other wellness conversations, to recommend vaccines—and use appropriate codes to ensure payment for the additional time.

Explain the logic behind the Advisory Committee on Immunization Practices 8 recommendations in order to build trust with health professionals.

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