Insight on the Issues

The COVID-19 Vaccine Rollout: How the Current Vaccine Environment Could Impact Uptake among Adults Ages 50 and Older

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In February 2021, the United States reached a grim milestone: more than 500,000 American deaths from COVID-19 and over 28 million cases, according to the Centers for Disease Control and Prevention (CDC). While the rate of deaths is slowing, another 52,000 Americans have died since reaching the half-million mark. Notably, over 90 percent of COVID-19-related deaths are among adults ages 50 and older, especially those ages 85 and older.1

The virus hits older adults of color particularly hard. Black, Hispanic, and American Indian/Alaska Native adults contract COVID-19 at greater rates compared with Whites, relative to their population, and die from the virus at 2 to 2.5 times the rate.2 Nursing homes with higher proportions of Black and Hispanic residents report over 3 times as many deaths as do homes with more White residents.3

Many older adults eagerly anticipated the arrival of vaccines as critical in the fight against COVID-19. A 2020 AARP survey revealed that 65 percent of adults ages 50 and older said that they would likely get the vaccine when it becomes available, including 74 percent of those ages 65 and older.4 A subsequent survey in January 2021 showed the likelihood among adults ages 50 and older had increased to 80 percent.5

Despite these strong responses, access barriers may prevent or delay vaccine uptake among older adults. The uneven distribution of an increasing but limited supply of COVID-19 vaccine doses may leave behind those who face greater access barriers.6 Recent data on COVID-19 vaccine administration reveal the exacerbation of longstanding racial and ethnic...
disparities. While Black and Hispanic Americans represent 13 and 19 percent of the United States population, respectively, national vaccination data indicate only 8 percent of vaccine doses administered as of March 2021 had gone to Black adults and 9 percent had gone to Hispanic adults.7 At a time when officials are encouraging everyone to get vaccinated once the vaccine becomes available to them, understanding why older adults might not be getting the COVID-19 vaccine is critical. This report examines the current vaccine landscape and explores how key factors—including unfavorable attitudes toward vaccines and vaccination access and infrastructure—may limit the number of adults ages 50 and older receiving COVID-19 vaccines. The report also discusses racial and ethnic disparities in vaccine attitudes and access and presents several policy and practice recommendations to help mitigate vaccination barriers and improve vaccination rates for older adults.

COVID-19 VACCINATION AMONG OLDER ADULTS

Since the start of the pandemic, scientists have moved at unprecedented speed to help develop, test, and distribute a vaccine against COVID-19. A number of companies quickly launched clinical trials, which included cohorts of older adults, in order to test the safety and efficacy of potential vaccines. The Food and Drug Administration (FDA) evaluated the trial data and issued Emergency Use Authorizations for three COVID-19 vaccines between late 2020 and early 2021.8 Simultaneously, federal and state officials worked to determine who should receive the initial doses as they became available. The Advisory Committee on Immunization Practices, a group of medical and public health experts that develops recommendations on the use of vaccines, released a vaccine allocation framework identifying adults ages 65 and older as one of the first groups that should receive the COVID-19 vaccine.9 Although states were free to deviate from this framework, most prioritized older adults in their initial vaccination plans.10 During implementation, some states made small refinements regarding older adults, such as elevating certain age groups (e.g., adults ages 75 and older) to receive vaccinations sooner or broadening prioritization tiers to include additional populations alongside older adults.11 Data from the COVID-19 vaccine rollout show a positive response among many older adults. Surveys continue to suggest growing favorability toward COVID-19 vaccines. In November, a University of Michigan Health Aging poll revealed that 58 percent of adults ages 50 and older indicated they would be likely to get a COVID-19 vaccine, with higher rates among adults ages 65 and older.12 The March 2021 Kaiser Family Foundation COVID-19 Vaccine Monitor indicated

KEY TERMS

Vaccine Attitudes The perceptions, values, and beliefs that an individual has toward vaccines. Vaccine attitudes influence behavior.

Vaccine Behavior The way in which an individual acts regarding vaccinations, including accepting, postponing, or refusing vaccinations.

Vaccine Barriers The personal and structural impediments that prevent access to vaccination.

Vaccine Hesitancy The delay in acceptance or refusal of vaccines, despite their availability. Vaccine hesitancy is a form of vaccine behavior that can result from unfavorable vaccine attitudes.*

that 64 percent of adults ages 65 reported they had already received at least one dose and another 17 percent reported that they wanted to get vaccinated as soon as possible. At the end of March, the White House reported that 50 percent of adults ages 65 and older were fully vaccinated and some 73 percent had received at least one dose.

**VACCINE ATTITUDES, BEHAVIOR, AND HESITANCY AMONG OLDER ADULTS**

Vaccine attitudes are the perceptions, values, and beliefs an individual has toward vaccines that contribute to his or her decision of whether to accept or forgo vaccination. These attitudes may be positive or negative, relate to matters of vaccination confidence, complacency, or convenience, and stem from a variety of factors, including the perceptions and experiences of family and friends, information collected from various sources, and previous experiences with vaccines. Vaccine attitudes can also influence vaccine hesitancy, which is the delay in acceptance or refusal of vaccines despite their availability.

The 2020 AARP survey of older adults’ likelihood of getting a COVID-19 vaccine illuminated how vaccine attitudes can influence behavior (figure 1). Among the 34 percent of respondents who reported being somewhat or very unlikely to get a COVID-19 vaccine, many raised safety and efficacy concerns about the vaccines. Over half (59 percent) of this group reported being concerned about a COVID-19 vaccine’s side effects. Nearly a third (29 percent) believed a vaccine would not protect them or would not work, and 16 percent perceived that they were healthy and did not need a vaccine. Desire to avoid health care sites and a lack of concern about contracting the virus were the least-cited reasons for planning to forgo a vaccine (13 and 12 percent, respectively).

Another factor that could be driving COVID-19 vaccine hesitancy is mistrust. The 2020 AARP survey found that older Americans report only moderate levels of trust in local and national organizations to provide factual information about the COVID-19 vaccine. Approximately half of respondents considered local hospitals and health officials (51 percent), the CDC (46 percent), and the FDA (42 percent) to be honest sources of factual information about the COVID-19 vaccine. Providers are generally more trusted sources, with 74 percent of AARP survey respondents identifying their provider as the most trusted source of information about vaccines.

**Racial and Ethnic Differences in Vaccine Attitudes**

The 2020 AARP survey also found substantial differences in attitudes toward COVID-19 vaccines by race and ethnicity (figure 2). Black and Hispanic older adults who indicated they were unlikely to get a COVID-19 vaccine were more worried about the vaccine’s side effects (63 and 69 percent, respectively) compared with their White counterparts (55 percent). Among this vaccine-
hesitant group, Hispanic respondents had greater concern about the vaccine’s efficacy (38 percent) than did White (28 percent) or Black (30 percent) older adults. Hispanics were also more likely to avoid health care sites because of COVID-19 (27 percent) than were their White (12 percent) and Black (11 percent) counterparts. Over two-thirds of Black respondents in this group (67 percent) expressed a lack of trust in the government, a significantly higher share than among White or Hispanic respondents (both 42 percent).

These attitudes are not surprising. Centuries of racism and medical mistreatment have fueled longstanding medical mistrust among communities of color. Such issues remain pervasive in US health care, contributing to health disparities and playing a role in vaccine hesitancy for many older adults.

Recent surveys indicate that opposition to getting a COVID-19 vaccine is diminishing overall, but there continue to be some attitude differences among racial groups. The March 2021 Kaiser Family Foundation COVID-19 Vaccine Monitor found that White respondents were most likely to report definitely not wanting to get the vaccine, though Black respondents were more likely than were White or Hispanic respondents to report wanting to “wait and see” how the vaccine works for others before getting vaccinated.

Misinformation also intensifies mistrust and vaccine hesitancy among older adults. Research indicates that older adults, particularly those ages 65 and older, are highly susceptible to misinformation, especially from digital sources and social media platforms. Compounding this susceptibility is the fact that groups seeking to sow misinformation about the COVID-19 vaccine target the Black community and other groups with existing skepticism about the medical establishment.

*FIGURE 2
Attitudes among Adults Ages 50 and Older Who Are Unlikely to Get a COVID-19 Vaccine, by Race and Ethnicity

Source: 2020 AARP Vaccine Survey
VACCINE ACCESS AND INFRASTRUCTURE

Part of the vaccine decision-making process is determining where to get a vaccine. Traditionally, adults traveled to health care settings (e.g., primary care provider’s office, hospital, health department, community-based clinic) to get vaccinated. However, as the vaccine infrastructure has shifted to make vaccines more accessible, some adults opt to use nontraditional settings for vaccinations, such as pharmacies, grocery stores, and workplaces.

This multi-setting environment has contributed to increasing flu vaccination rates.24 While adults ages 50 and older most frequently go directly to their health care provider (40 percent) to receive a flu vaccination (figure 3), a similar share visit supermarkets and pharmacies (35 percent) to get flu shots. Additionally, some older adults (9 percent) opt to get flu vaccines at their place of work.25

Preferred locations for flu vaccinations differ by race and ethnicity.26 A health provider’s office is the preferred location for receiving flu shots among most racial and ethnic groups. White, Black, and Asian adults are most likely to get their flu vaccination in this setting, while Hispanic adults are equally likely to go to another setting (e.g., hospital, community health clinic). White adults are more likely than other racial and ethnic groups to get vaccinated at a pharmacy or supermarket.

Using the Existing Infrastructure for COVID-19 Vaccine Distribution

In the rollout of COVID-19 vaccines to the public, most states have pursued opportunities for quick and wide distribution, supplementing the existing immunization infrastructure (including health systems and pharmacies) with more nonconventional settings. For example, many states are holding mass vaccination events or using mobile clinics to reach older adults in rural and underserved areas, while others are engaging nontraditional providers such as health professional students, dentists, and paramedics to increase the direct care workforce available across a variety of settings.27

States are also facing vaccine distribution challenges. Requirements to keep the first authorized COVID-19 vaccines in ultra-cold temperatures (ranging from –112 to –15 degrees Fahrenheit, depending on the vaccine) limits which entities can receive and store the vaccines, resulting in hospitals and large provider settings receiving the bulk of initial doses.28 In addition, as of early 2021, delays in distribution and insufficient supplies have prevented some states from utilizing primary care providers and pharmacies to a greater extent. In other words, state plans for vaccination administration currently do not mirror the existing

FIGURE 3: Where Adults Ages 50 and Older Report Getting Flu Shots, 2019

Source: AARP Public Policy Institute Analysis of Behavioral Risk Factor Surveillance System data
patterns of vaccine behavior among older adults. Such differences could have implications for COVID-19 vaccination efforts. A shift away from trusted settings and familiar processes for getting vaccinations has contributed to the widespread confusion about how to get a vaccine, questions about when and how one becomes eligible to get a vaccine, distrust toward groups involved in vaccine administration, and, ultimately, delays in vaccination.29

Unorthodox COVID-19 vaccination efforts may create access barriers for individuals familiar with only traditional vaccine systems. For example, online registration can make it difficult for those without a computer, reliable Internet, or computer literacy to make an appointment or find out where to receive a vaccine, exacerbating a digital divide that disadvantages older adults, rural residents, and people of color.30 Further, even if someone can get an appointment, early reports indicate that COVID-19 vaccination sites are mostly located in neighborhoods with higher shares of White and affluent residents.31 As a result, people who do not live in such neighborhoods may have to travel a considerable distance to get a vaccine, creating barriers for many older adults, low-income individuals, and people of color who lack transportation to travel to the vaccination sites.32 In fact, a recent survey found that, among people still deciding whether to get vaccinated, Hispanic and Black respondents had more concerns about transportation to a vaccination site or having to take time off work to get vaccinated than did White respondents.33

CONCLUSIONS

The distribution of COVID-19 vaccines is occurring at a time when millions of older adults are already going without recommended vaccines, including vaccines to prevent and limit the effects of influenza, pneumonia, and shingles.34 If not addressed, negative attitudes about the COVID-19 vaccine and access barriers could limit COVID-19 vaccination rates among older adults. The share of older adults reporting they would likely not get the COVID-19 vaccine continues to shrink during rollout. The percentage of adults ages 50 and older dropped from 34 percent in October 2020 to 20 percent in January 2021, according to AARP surveys. Only 15 percent of adults ages 65 and older reported they would probably or definitely not get a COVID-19 vaccine, according to the March 2021 Kaiser Family Foundation COVID-19 Vaccine Monitor.35 Even so, efforts must continue to address lingering concerns about the vaccine among those who remain hesitant. The vaccine infrastructure also plays a significant role in vaccine uptake, and lack of access to vaccinations through preferred and trusted sources can hinder uptake. Racial and ethnic differences in attitudes toward and disparate access to COVID-19 vaccines can also contribute to disparities in vaccination rates.

Health officials and providers have the dual challenges of effectively managing vaccine distribution and administration for older adults and combatting negative vaccine attitudes and vaccine hesitancy. Quickly and efficiently addressing these challenges to turn vaccines into vaccinations will require strong coordination across health and government sectors and increased resources for public health, and attention to the unique issues facing specific populations.

POLICY AND PRACTICE RECOMMENDATIONS

Vaccine Attitudes, Behavior, and Hesitancy

- To improve trust in COVID-19 vaccines among older adults, local officials should communicate clearly with the public regarding the development and administration of vaccines and put in place transparent and equitable vaccination plans.
- Providers should routinely explain the risks and benefits of vaccination to older patients as well as communicate with clarity and consistency to allay concerns and build trust.
- Health officials should conduct robust, linguistically and culturally appropriate outreach and education campaigns to reach diverse communities, partnering with influential community leaders to serve as trusted messengers about vaccines (e.g., Black church leaders and Native American elders). Officials should include trusted leaders and organizations in vaccination outreach and education programs.
throughout all phases, including planning, implementation, and evaluation.

- Messages to encourage vaccine uptake should focus on matters related to confidence, such as the safety and efficacy of each vaccine.
- Providers and other health professionals involved in vaccine administration should participate in training on explicit and implicit bias, cultural competence and humility, and antiracism.
- Officials should monitor the long-term impacts of outreach and education campaigns and continue to track vaccine confidence and hesitancy. Successful efforts should be scaled, as appropriate.

**Vaccine Access and Infrastructure**

- To the extent that they are able, providers should check in with and inform patients about COVID-19 vaccination eligibility and direct them to and assist them with vaccination registration when they become eligible.
- Registration for vaccinations should be easily accessible by phone or onsite at vaccination clinics in addition to online, in order to reach older adults, rural residents, and people of color who may not have broadband at home.
- States should utilize both traditional vaccination settings and new, supplemental settings to increase vaccine uptake. Officials should base new efforts on evidence of consumer preferences and ensure equity in their approach.
- Policy makers should strengthen the existing vaccine infrastructure and ensure vaccination sites are equitably distributed and widely available in communities that have been disproportionately impacted by COVID-19.
- Vaccination settings should be widely accessible, convenient, trusted, and safe. Officials should disseminate information about vaccination locations, mark locations clearly, ensure sites are well served by public transit, and provide free transit to sites.

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8 Emergency Use Authorization (EUA) differs from full drug approval. When the Department of Health and Human Services declares an emergency, the FDA can issue an EUA if it reasonably believes that the drug’s benefits outweigh its risks, that it may be effective, and that no alternative drugs are available. For more on the FDA’s use of Emergency Use Authorization, see “Emergency Use Authorization for Vaccines to Prevent COVID-19: Guidance for Industry,” FDA, February 2021, https://www.fda.gov/regulatory-information/search-fda-guidance-documents/emergency-use-authorization-vaccines-prevent-covid-19.


16 Vaccine hesitancy, as defined by the World Health Organization, is the delay in acceptance or refusal of vaccines, despite their availability. Vaccine hesitancy is a form of vaccine behavior that can result from unfavorable vaccine attitudes. For more on vaccine hesitancy among older adults, see James McSpadden, *Vaccine Hesitancy among Older Adults, with Implications for COVID-19 Vaccination and Beyond* (Washington, DC: AARP Public Policy Institute, February 2021), doi:10.26419/ppi.00123.001.


25 Although data are not available on the specific patterns of utilization for shingles and pneumococcal vaccines, evidence suggests that many older adults who vaccines are likely to get them from either their provider or a pharmacy. The CDC’s website promotes these two settings as the principal places to receive either vaccine, and most states have passed laws allowing pharmacies to administer both vaccines.


34 James McSpadden and Elizabeth Carter, Influenza Vaccinations among Adults 50 and Older: Slow Progress over the Past Decade (Washington, DC: AARP Public Policy Institute, September 2020), doi:10.26419/ppi.00110.001.