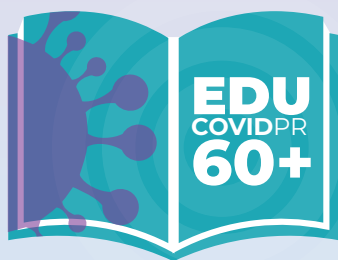


EDU COVIDPR 60+

Health Literacy
Strategies Guidelines
for Vaccinating
Older Adults
Against COVID-19

DEPARTMENT OF
HEALTH





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EXECUTIVE SUMMARY

The EDUCOVIDPR 60+ project, attached to the Auxiliary Secretary of Planning and Development (SAPD) of the Department of Health (PRDH), aims to identify and address the barriers in the COVID-19 vaccination process for older adults, one of the population groups with the greatest risk. As part of these efforts, we provide these Health Literacy Strategies Guidelines for Vaccinating Older Adults Against COVID-19, which offers our collaborators in the public health system the necessary tools to identify and mitigate the barriers to vaccination they may encounter with this population.

This document was prepared following a rigorous scientific and comprehensive methodology, based on exploratory research conducted with approximately 60 organizations that offer services that affect the older adult population. It was through this study, that the most relevant barriers impacting the COVID-19 vaccination process were identified in the resident target populations of the ten municipalities with the lowest proportion of older adults who had completed their vaccination series, according to PRDH data collected from December 2, 2020 to December 31, 2021. These are: Añasco, Cabo Rojo, Cataño, Ceiba, Guánica, Loíza, Luquillo, Maricao, Naguabo and Salinas.

The results of this assessment effort informed and directed the development of these evidence-based literacy strategies guidelines, which address the limitations identified through the assessment, namely: behavioral, structural and information barriers. This information will train such collaborators as have been identified and are interested so that they can mitigate the barriers they encounter in their daily interactions with older adults. This will increase the scope of the COVID-19 vaccination process among older adults and, undoubtedly, save lives.



HOW TO USE THESE GUIDELINES

The purpose of these Health Literacy Strategies Guidelines for Vaccinating Older Adults Against COVID-19 is to assist collaborators in the public health system to identify barriers to the COVID-19 vaccination process for older adults, and in the implementation of strategies that will allow these limitations to be effectively addressed and/or overcome. In addition, the guide is intended to serve as a continuous reference tool that stakeholders can use in order to clarify doubts about the process of vaccination. The following sections in this guide provide the reader with the background for the COVID-19 vaccination process and its significance for public health. In addition, a brief context is included where the relevance of literacy is discussed from a healthcare perspective as a strategy that successfully addresses the COVID-19 pandemic. Finally, it provides knowledge regarding the most common barriers that impact an older adult's decision to get the COVID-19 vaccine and proposes evidence-based strategies to counteract them.

The Health Literacy Strategies Guidelines for Vaccinating Older Adults Against COVID-19 is merely for educational purposes. Under no circumstances is this document intended to or should be used as a diagnostic or healthcare reference in the event of a COVID-19 infection. In such circumstances, a healthcare professional should be consulted. Likewise, to obtain information regarding the proper handling of positive cases or direct contacts with them, we recommend contacting the Department of Health's Information Line at (787) 522-3985, or your resident municipality's case investigation and contact tracing system.

This guide was developed considering the specific characteristics of the pandemic in the context of the time frame in which the exploratory research was conducted. Therefore, the behavior of the virus is likely to have changed from the time when the guide was created to the time when the reader gets access to the document. You are encouraged to stay informed regarding possible updates to public policy and COVID-19 vaccination procedures.

Who will use this guide?

This document was designed for easy use by organizations directly or indirectly involved in the issues related to COVID-19 vaccinations and/or collaborators that provide services to older adults. When the term "collaborators" is used, it refers to those organizations that participate in some of the following fundamental processes:

- Healthcare providers for older adults;
- COVID-19 vaccination providers authorized by the Department of Health;
- State government;
- Municipal governments;
- Municipal systems for case investigations and contact tracing;
- Long-term care centers for older adults;
- Community-based organizations;
- Any other interested or linked parties.

The plan was developed for implementation in community and individual scenarios, depending on the type of barrier identified. On the other hand, the document establishes the following goals for the vaccination process:

- Strengthen the Health Literacy skills of our collaborators and the community.
- Raise awareness and focus efforts on the importance of addressing the specific needs of older adults at the local/municipal level.
- Direct efforts towards using reliable sources of information in the COVID-19 vaccination process for older adults and in public health issues in general.
- Consolidate existing resources and services to facilitate access to COVID-19 vaccinations among our older adults.

INTRODUCTION



The COVID-19 pandemic has impacted every aspect of life. Since 2020, the imminent advance of the virus has forced us as a society to rethink the way we communicate, relate to our peers and go about our everyday life in general. To prevent contagion, biosafety measures were implemented that have limited our usual degree of interaction, in addition to introducing new elements into our routines such as the need for continuous masking and negative test results and/or vaccination requirements to engage in various activities such as traveling, going to our medical appointments, event participation and restaurant dining, among others.

In this context, older adults are among the populations most affected by COVID-19. In fact, the literature highlights that they are among the most vulnerable populations facing the virus. According to studies published by the Centers for Disease Control and Prevention (CDC), people over 60 years old are at increased risk of severe symptoms that may require hospitalization, intensive care, or even the need to connect the patient to a respirator (CDC, 2021). This risk increases exponentially as age increases.

Faced with these challenges, during the past two years of the pandemic, various strategies aimed at mitigating the advance of the virus and its consequent adverse health effects have been developed. Among these initiatives, vaccination is the most effective means to achieve these goals. Specifically, as of the beginning of 2021, the corresponding regulatory agencies approved the use of three vaccines that have proven effective: Pfizer-BioNtech, Modern and Janssen. They immediately began a coordinated effort to vaccinate those populations that had been identified as being most vulnerable, according to their characteristics. It was precisely the older adults who were among the first group to receive their protective doses.

It is this population, specifically, that EDUCOVIDPR 60+ is aimed at. From a holistic, biopsychosocial perspective, we seek to extend the reach of COVID-19 vaccinations to safeguard the lives of older adults. This initiative is particularly interested in providing the necessary tools to healthcare system collaborators so that they can identify such barriers as are present among the older adults that participate in the vaccination process. Once recognized, they should be able to implement Health Literacy strategies aimed at mitigating them. To this end, an intensive training curriculum was established in which such collaborators as have been identified and are interested can participate. Our initiative is expected to have the effect of expanding the scope of our immunization efforts among the population aged 60 and over, and thus, to save lives.

A look at COVID-19 after two years of the pandemic:

After two years of restrictions and intense biosafety measures, the COVID-19 situation has undergone several periodic variations in terms of an increasing and/or decreasing number of infections and deaths. Each upswing event, in turn, brings with it a resurgence of government provisions in an attempt to reduce the upward trends and to save as many lives as possible. However, the population's "fatigue" regarding the subject is becoming evident. Surveys at the US level show that one in three participants (31%) believe that the COVID-19 pandemic is over (Ipsos, 2022). This proportion is almost doubled among those surveyed who have not received their vaccines.

However, experts and public health agencies have remained vehemently steadfast in their recommendations regarding the use of masks, hand washing, to avoid crowding and for widespread vaccination as the main tools to continue fighting against the spread of COVID-19. Given this feeling of fatigue, the fight against COVID-19 must be reconsidered and reconfigured, so that it can address the prevailing areas of need while considering the current needs. The EDUCOVIDPR 60+ project is precisely intended to assist our collaborators in the selected geographical areas not to lower their guard when it comes to COVID-19 with regard to this aspect of greater resistance. An innovative approach is required to address the issues in order to ensure that they remain current.





The Need to Care for our Older Adults Moving Forward

The demographic transition that Puerto Rico is experiencing greatly demonstrates the need to focus on literacy programs to meet the healthcare needs of older adults. Census data shows that, due to the continuous drop in population, there has been a gradual aging of the island's general population. In this case, the island's adult population over the age of 18 has increased to 83%. On the other hand, 78% of the reduction in the general population represents those under the age of 18 (Technical Studies, 2021). The average age from 2010 to 2019 is estimated to have increased by 6.9 years, from 36.9 to 43.2 years of age, increasing the total population by 128,711 (Department of Health, 2021).

Specifically, it is the aging population that confirms the need for government authorities to develop and implement public policy strategies that address the specific and social needs of this situation and its effects regarding said demographic transition. This is particularly important when we take into account the effects that may imply inadequate attention on such issues as employment, savings, consumption and economic growth, among others. However, it should be based on the premise that older adults provide an opportunity to retain their knowledge and experience in the service of society (Technical Studies, 2021).

The booster dose as an alternative for greater protection

When it comes to the handling of COVID-19, literacy efforts are currently aimed at promoting booster doses as the recommended mechanism to mitigate the risks associated with the virus. It has been scientifically proven that older adults who received both doses reduce their risk of hospitalization by 94%. Similarly, being vaccinated significantly reduces the risk of severe symptoms and death. However, when compared to the general population, the protection provided by this mechanism often decreases over time, especially in adults aged 65 years and older. Therefore, booster doses reestablish the required protection by increasing the levels of immune response (CDC, 2022).

Similarly, the Health Literacy strategies disseminated through the EDUCOVID 60+ project are specifically aimed at promoting the importance that our older adults receive their appropriate booster doses. PRDH's vaccination statistics show that the importance of getting their primary dose series has been positively received by the population aged 60 years and older; however, acceptance of the booster dose has been considerably lower. Therefore, these efforts must go beyond the traditional scope of just "get vaccinated" to offer a personalized context that connects to the specific needs of the population where such opportunities prevail.

Health Literacy as a Response to the Pandemic

Health Literacy is critical to achieving comprehensive healthcare among older adults. The World Health Organization (WHO) defines Health Literacy as the social and cognitive skills that determine the level of motivation and the ability of a person to access, understand and use information in a way that allows them to promote and maintain good health. This plays a fundamental role in the individual's well-being, since low levels of Health Literacy are associated with poor physical and cognitive health (Chesser et al., 2016).

Health Literacy is a concept that has been used in multiple community scenarios to address health related problems, including COVID-19. One such initiative is the Florida Health Literacy Initiative, which collaborates with multiple healthcare centers and community leaders throughout the state to deliver training and presentations on pressing healthcare issues (Feinburg, 2021). Another example of Health Literacy in action is the Literacy Assistance Center of New York City, which has established collaborative agreements between adult education programs and healthcare facilities. It has trained over 3,000 adult trainees and 175 teachers, resulting in a greater understanding of the healthcare system and prevention methods (Feinburg, 2021).

The outlook on the level of Health Literacy in older adults is very delicate. Older adults have low levels of Health Literacy compared to younger groups (Kutner et al., 2006). On the other hand, at the COVID-19 level, Health Literacy is an effective tool to promote vaccination among the population. It motivates individuals and communities to mitigate the spread of the virus by understanding and applying the information provided through governments and healthcare authorities (Okan et al., 2022). Using this background as the cornerstone of our efforts, the Health Literacy guide aims at creating strategies for individuals and various collaborators that will obtain evidence-based information on the barriers and strategies used to address them during the COVID-19 vaccination process to achieve a higher proportion of vaccinated older adults in the identified areas throughout Puerto Rico.



Older Adults facing COVID-19

The COVID-19 pandemic has mainly affected older adults, representing a public health problem that has increased the risk of complications from associated factors, such as age and preexisting conditions such as chronic and autoimmune conditions.

This virus has affected millions of people around the world, causing numerous deaths. The rate of mortality from COVID-19 is higher for the older adult population. According to the data from the Department of Health, the highest COVID-19 mortality rates in Puerto Rico are found among adults aged 60 years and older, with 18.4% of them between the ages of 60 and 69, and 26.4% are between the ages of 70 and 79, and finally, 34.1% of them are 80 or older.

Over time, a series of delays or rejections in the vaccination process for older adults have been identified as problems in their access to vaccination, due to distrust or little knowledge about the safety and effectiveness of the vaccine. This represents a major challenge for healthcare institutions in their battle to protect against and prevent contagion with the coronavirus. Because of this, healthcare education action plans that can be replicated by collaborators in these efforts to combat COVID-19 must be established.

VACCINATION

The WHO has published an article called Tips for the Public Regarding COVID-19: Getting Vaccinated. The document stated that they had some safe and effective vaccines that prevented people from becoming seriously ill or dying as a result of COVID-19. The article stated that as of January 12, 2022, the WHO had determined that the following COVID-19 vaccines, available in Puerto Rico, meet the necessary safe and effective criteria:

• Johnson and Johnson • Moderna • Pfizer/BioNTech

Table 1
Vaccines available in Puerto Rico at recommended doses

VACCINE	HOW IT RELATES TO SENIOR CITIZENS	DOSE	BOOSTERS	DOSE SCHEDULES
Moderna (Spikevax)	Recommended for persons aged 18 or older. Senior citizens should have priority for vaccination against COVID-19.	2	2	Complete vaccination schedule: Administer two doses at 4 to 8 week intervals. Booster dose: First booster: administer at least 5 months after the second dose. Second booster for adults 50 years and older: should be administered at least 4 months after the first booster dose.
Pfizer (BioNTech COMIRNATY)	Recommended for 5 year old persons or older.	2	2	Complete vaccination schedule: Administer two doses at 3 to 8 week intervals. Booster dose: First booster: administer at least 5 months after the last dose. Second booster for adults 50 years and older: should be administered at least 4 months after the first booster dose.
Johnson & Johnson	For persons aged 18 or older.	1	2	Complete vaccination schedule: First dose with the J&J vaccine Booster dose: First booster of Pfizer BioNTech or Moderna: administer at least 2 months after the second dose. Second booster of Pfizer BioNTech or Moderna for adults aged 50 years or older: should be administered at least 4 months after the first booster dose.

Note: Information updated as of May 31, 2022, according to data collected by the CDC. Stay informed regarding future updates

The CDC defines the effectiveness of COVID-19 vaccines as follows (CDC, 2022):

- Vaccines reduce the risk of contracting COVID-19, including the risk of becoming seriously ill and dying, in people who are fully vaccinated.
- Vaccines against COVID-19 are effective, but studies have shown that protection can decrease with time, especially against the Omicron variant. Learn more about receiving a booster dose to improve or restore your protection against COVID-19.
- All COVID-19 vaccines approved or authorized by the US Food and Drug Administration (FDA) provide substantial protection against hospitalizations and deaths from COVID-19.

Vaccines are highlighted as the most effective strategy for older adults to avoid being severely affected or dying from COVID-19. According to the above, the U.S. Department of Health and Human Services (HHS) recognizes that as older adults age, their immune system weakens and may find it harder to fight off infections (2021). Furthermore, the agency states that this population is more likely to be infected and suffer complications that can also include death (HHS, 2021). That is why two booster doses are recommended in addition to the main COVID-19 vaccination schedule in order to be better protected against the virus and reduce the risk of complications. According to the CDC, people who receive booster doses are 21 times less likely to die from COVID-19 and 7 times less likely to be hospitalized as those who do not take the booster doses (Robeznieks, 2022).

RATE OF VACCINATION AND NEED ASSESSMENT FOR SELECTED MUNICIPALITIES

To learn about the current barriers to the COVID-19 vaccination process for older adults, an exploratory assessment was performed in greater detail. A data collection instrument was developed for the Microsoft Forms platform . It consists of 22 questions divided into the following 4 sections:

- 1. General perception of the COVID-19 vaccination process
- 2. Barriers to the COVID-19 vaccination process in adults aged 60 and older
- 3. Health Literacy
- 4. Participant information

These sections are able to collect information on accessibility to the COVID-19 vaccination process, the possible barriers to the process, the perception and the efforts undertaken on Health Literacy strategies and information about the participant. Once the questionnaire was completed, an internal validation process was performed among ASPD members and subsequently administered between February 2 and February 9 of 2022. Using data obtained between December 2, 2020 and December 31, 2021 by the monitoring platform of the Puerto Rico Department of Health, 57 organizations from selected municipalities with the lowest vaccination rate in Puerto Rico for adults 60 years or older and linked to the COVID-19 vaccination process for older adults were invited. The 57 organizations from the selected municipalities that met the assessment's inclusion criteria received an official invitation from the Secretary of the Health Department to participate in the exploratory assessment. The questionnaire was answered by 43 organizations, which represented a 61% participation rate.

Figure 1: Vaccination rate in selected municipalities

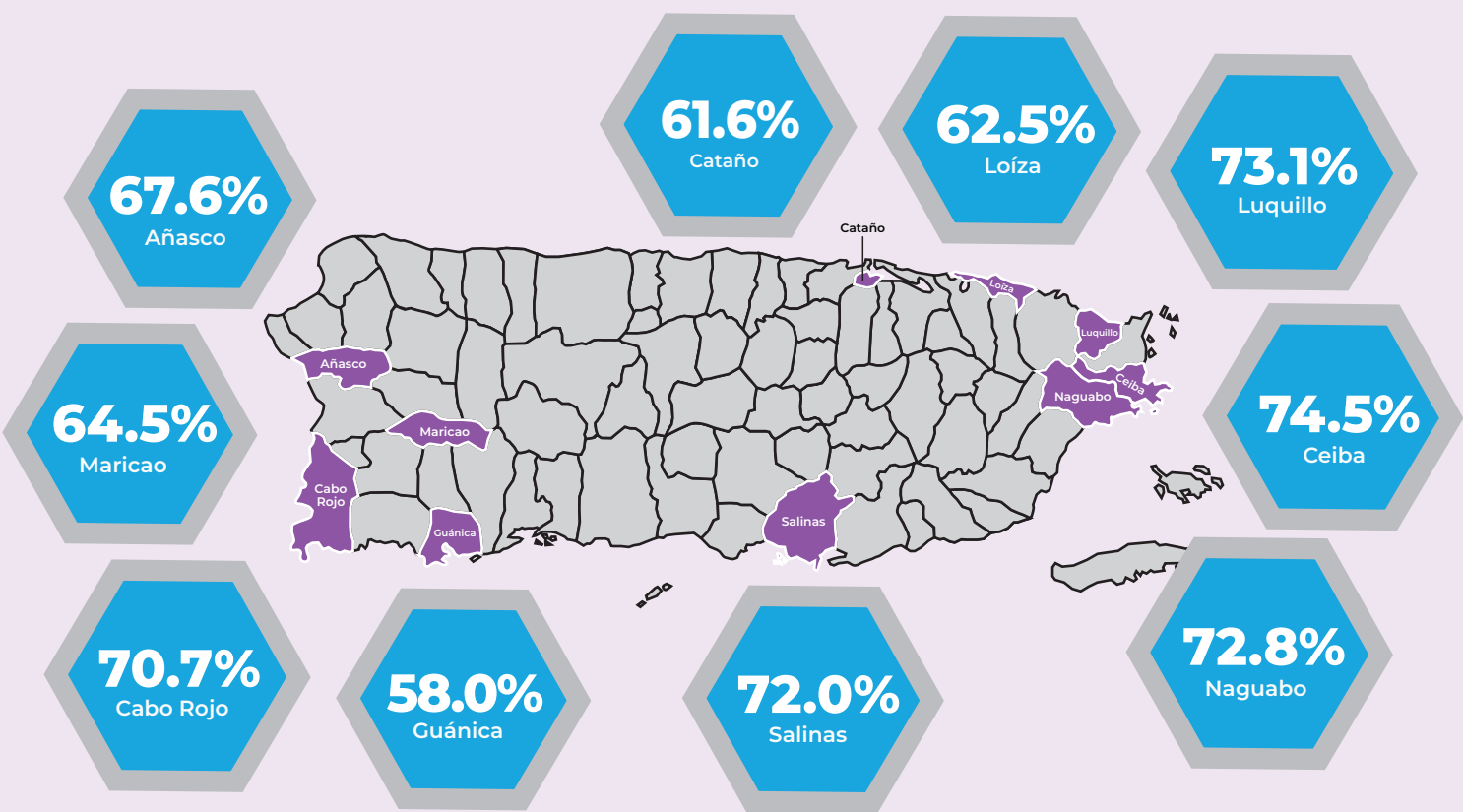


Figure 2:
 Data based on the exploratory assessment results for Health Literacy in the COVID-19
 avaccination process for older adults
 Department of Health. (2022). Exploratory assessment on Health Literacy in older adults undergoing
 the vaccination process. Assistant Secretary of Planning and Development

DATA ON EXPLORATORY ASSESSMENT

Participants included different advocacies or organizational affiliations

93%

stated that they represented entities such as community-based organizations and municipalities, among others, while the remaining 7.0% were acting as individuals.

As far as the barriers that were identified, most of the collaborators indicated that, based on their knowledge and experience, the process to access the vaccine was easy or very easy



92.0%

The structural elements affecting an older adults' decision to get vaccinated was:

68.4%



Transportation to the vaccination site

39.4%



Distance from the vaccination site

39.4%



Waiting times at the vaccination site

37.0%



Having someone to accompany them to the vaccination site

32.0%



Difficulty scheduling a vaccination appointment



90%

Regarding the sources of information, most indicated that they believed them to be reliable

While the sources of information that most effective the older adults' decision to get vaccinated were:

84.0%



Friends and family

74.0%



News media

66.0%



Healthcare professionals

53.0%



Religious communities

42.0%



Social media

Finally, some individual elements that effective the older adults' decision to get vaccinated were:

74.0%

Not trusting the effectiveness of the vaccine

66.0%

Concerns about the side effects of the vaccine

55.2%

Having a preexisting illness that limits the decision to get vaccinated

53.0%

Due to religious beliefs that limit the decision to get vaccinated

THEORETICAL FRAMEWORK: THE HEALTH BELIEF MODEL

Because it is considered an important factor that determines the health of the population, the concept of Health Literacy has been extensively studied. Due to the large scale changes that the healthcare system has undergone in recent years, the importance of studying literacy as a means for people to access, understand, evaluate and apply healthcare information and improve their quality of life, has been emphasized. That is why, according to the above definition, the person's community and environment must be considered as well as their individual characteristics.

To develop this guide, an extensive review of the literature was performed in order to determine how to effectively address the Health Literacy issues relevant to the vaccination of older adults. This guide addresses Health Literacy using a multi-systemic ecological approach, therefore, the Health Belief model will be used.



The Health Belief Model is a theoretical framework used as a guideline for health advocacy and disease prevention strategies. The model has been widely used to predict and explain health-related changes in behavior. The model used in this literacy guide attempts to explain and address the vaccination process for older adults, such as: perceived severity, perceived susceptibility, perceived benefits, perceived barriers, and self-efficacy and action signs.

The following is an outline of how these components are applied to older adults and the vaccination process:

PERCEIVED SEVERITY: Refers to the beliefs that older adults have regarding vaccination. That is, believing that they are at greater risk of COVID-19 complications due to their age or some chronic condition they may have.

PERCEIVED SUSCEPTIBILITY: : A older adult's assessment regarding whether or not they are at risk of contracting the virus according to their environment. For example, an older adult may understand that they are at greater risk because they often spend time with others.

PERCEIVED BENEFITS: Meaning the older adult's opinion regarding the usefulness or benefit of undergoing the COVID-19 vaccination process.

PERCEIVED BARRIERS: Perceived barriers are the model's most important behavioral change factor. That is, if an older adult has difficulties accessing the vaccine, they will not proceed to get vaccinated. Barriers can be tangible or intangible, the former refers to the lack of transportation or economic resources. While intangible barriers are more psychological, such as fearing the effects of the vaccine, misinformation or ignorance, among others.

KEYS TO ACTION: These are actions such as events, people or things that promote or generate a change in behavior, the educational activities proposed in this literacy guide, are an example. It may also include other education strategies that help older adults to decide to get vaccinated.

SELF-EFFICACY: This is the older adult's personal belief in changing their behavior, in this case to get vaccinated for COVID-19. Sometimes, people may perceive that change is positive. However, if they still believe that perceived barriers remain, they are not likely to take action. This is the reason that our project aims to address the barriers and improve the vaccination and literacy-related processes.

Figur3 3: The Health Belief Model



IMPORTANT ELEMENTS FOR THE USE OF THE GUIDE

HOW TO USE THESE GUIDELINES

The following section attempts to cover certain factors to be considered when using this document:

- Analyze the characteristics of the barriers described in this document to understand how the older adult's behavior may be addressed
- Evaluate the population to be effective and the community's common beliefs and perceptions.
- Decide how to address the older adult.
- Select and review educational workshops on the prevailing barriers identified in this guide to offer them to related/interested parties.
- Practice the dynamics that will address the doubts and resistance to the vaccination process.
- Evaluate the material's level of comprehension and the results obtained by the desired implementation.

COVID-19 and the Senior Citizen

The Centers for Disease Control and Prevention (CDC), alerts was through their website on the risks of contagion for adult populations:

- Vaccinated older adults are less likely to become seriously ill from COVID-19.
- Older adults who are protected by the vaccine have a lower risk of being hospitalized, being sent to intensive care, using a ventilator to help them breathe and even the risk of death.
- The risk of complications increases progressively for people in their 50s, 60s, 70s and 80s, respectively. People aged 85 and older are most likely to become seriously ill.

Vaccination

One of the key items required to transmit the information and to mitigate the known barriers is to understand the vaccination process. The following considerations are important:

- Know the details regarding the vaccination process.
- Learn about licensed and available vaccine providers in your area.
- Evaluate the information regarding vaccines and their recommended use.

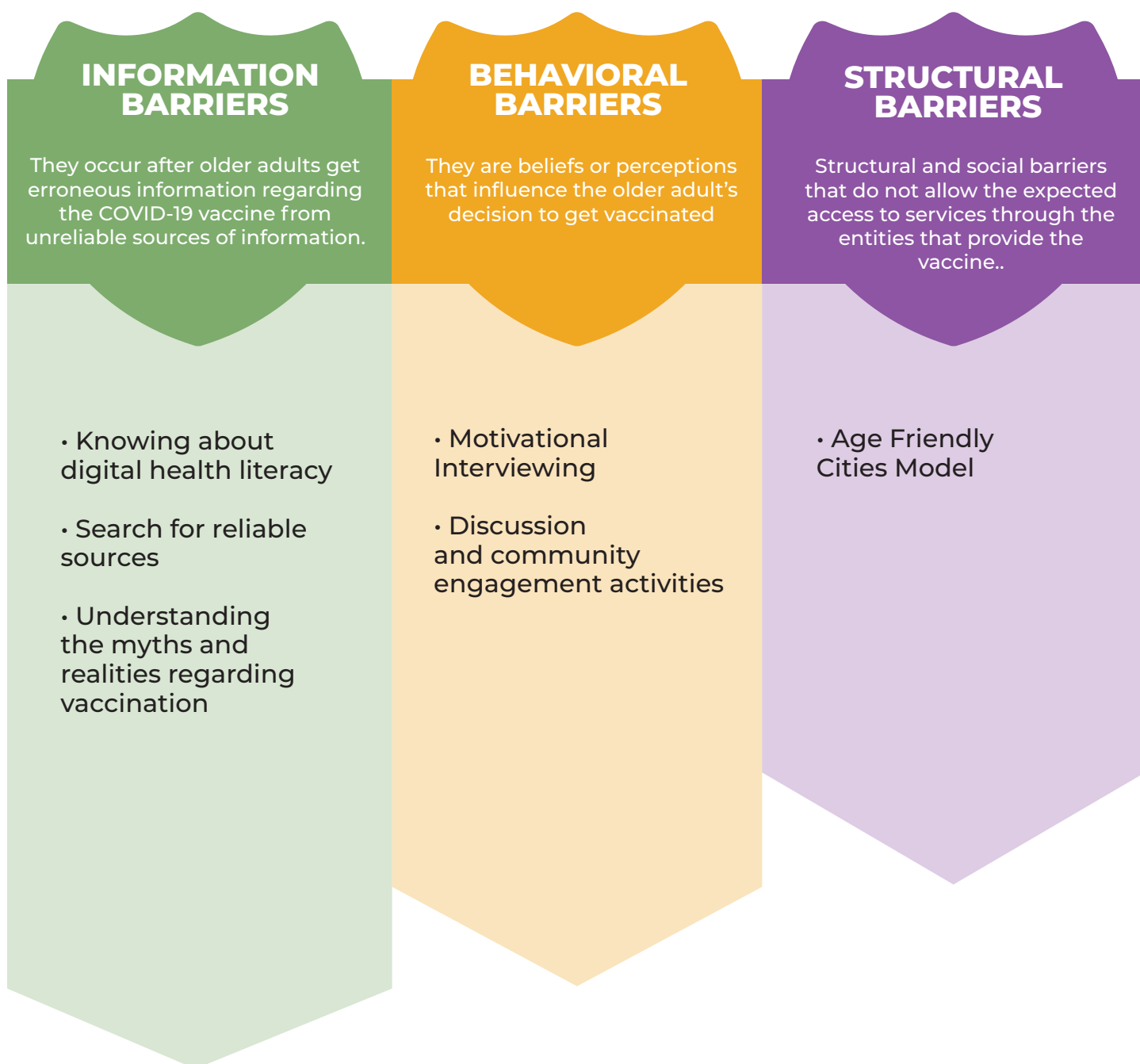
Barriers and Strategies

Given the urgency of addressing the vaccination of older adults, consider the following quick, four-step evaluation:

- Identify the type of barrier encountered.
- Understand the types of barriers that may potentially impact your environment.
- Select literacy strategies based on the type of barrier.
- Implement strategies to increase the level of inoculation.

ESTRATEGIES TO MITIGATE BARRIERS IN THE COVID-19 VACCINATION PROCESS

There are multiple barriers affecting the older adult's decision and ability to get vaccinated against COVID-19. These barriers range from limitations on access to the vaccine, individual perceptions regarding vaccinations, or ideas learned from information sources designed to misinform regarding the vaccine. This guide contains evidence-based strategies used in the United States, Latin America and Puerto Rico to mitigate the various barriers that exist, including: information, behavior and structural. It will be able to assist the collaborator involved in the vaccination process with step-by-step instructions, detailing the strategies that can be implemented to impact older adults in their community.



INFORMATION BARRIERS

The pandemic has created a challenge for finding reliable information that can provide a better understanding of the disease. Research aimed at understanding, fighting and eradicating the virus has been accompanied by unreliable communications and alternate treatments to prevent contagion. This information has a great impact in the creation of misleading news. These communications are known as information barriers, which are based on unreliable sources of information that could persuade the older adult's decision regarding the COVID-19 vaccination process.

Our exploratory research has identified six areas of information barriers that could influence the older adult's decision of whether to accept or reject COVID-19 vaccinations. These are identified as: 1) family and friends, 2) religious community, 3) social networks, 4) community leaders, 5) healthcare professionals, and 6) the media. Through these channels, the information is spread in three different ways as shown in the image below:

Ways in which information is wrongly spread

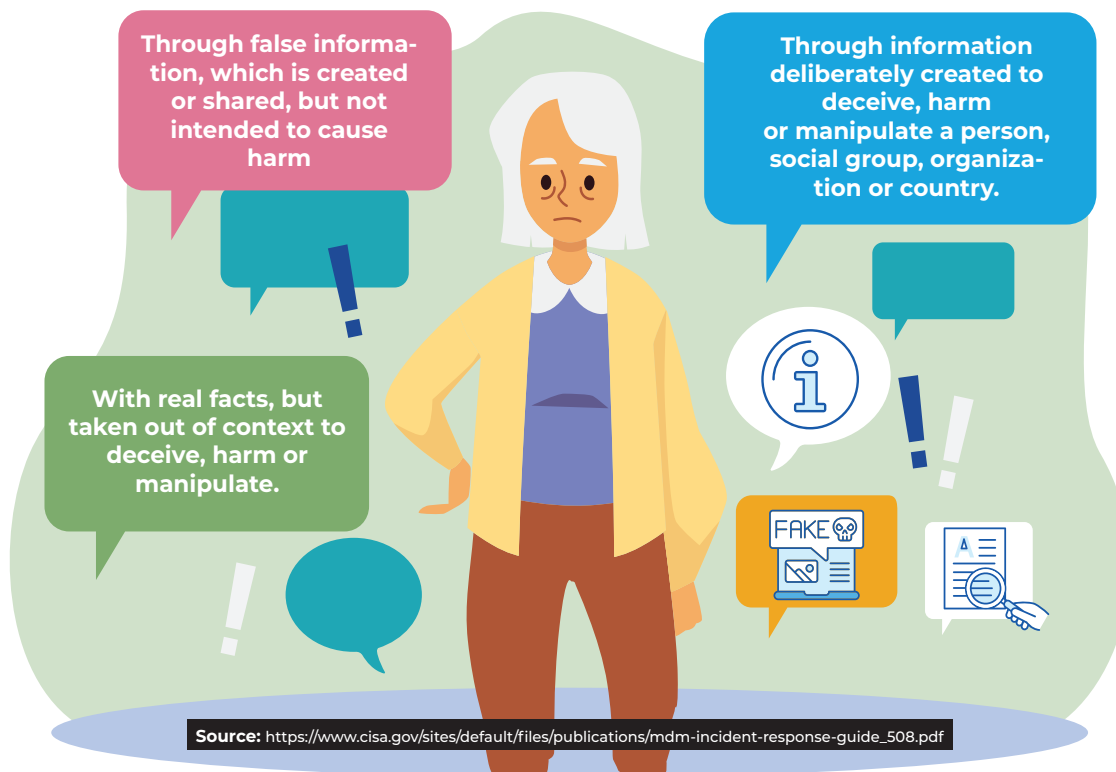


Figure 4:
Ways in which information is wrongfully spread

Prior to the onset of the COVID-19 pandemic, we have witnessed a great digital movement, using the internet and mobile applications as the main means of broadcasting news, events and government information. The need for confinement validated the importance of technological resources for the continuity of daily life, including the scheduling of appointments and access to services. In the United States alone, 90% of participants considered that using the internet and digital devices during the COVID-19 pandemic was essential as an alternative to avoid contagion and comply with the limits imposed by the recommended social distancing (McClain C, 2021). Even so, many populations were impacted by the sudden changes and transformation of the traditional ways in which services were obtained and scheduled. Older adults were forced to adapt to using technology as their primary means for channeling information. This study highlights that 48% of people aged between 65 and 74 years require assistance when using the new digital devices, such as computers, smart phones and other electronic devices (McClain C, 2021).

These changes provide the opportunity to maximize the efforts to strengthen knowledge and education. Older adults are active agents with the ability to use digital devices that facilitate searching for solutions and to organize and schedule services. These efforts are related to the active aging process highlighted by the World Health Organization (WHO), that defined it as “the process by which opportunities for physical, social and mental well-being are optimized throughout life with the purpose of extending the productivity, quality of life and healthy life expectancy of old age” (WHO, 2001). This approach allows older adults to be seen from a different perspective: as the primary agents for their needs, instead of passively waiting for assistance to obtain the full scope of services and the COVID-19 vaccines.

Faced with this reality, we are promoting the implementation of educational workshops aimed at health-care professionals, entities and community leaders so that they can educate older adults and replicate the information. Each of the accompanying strategies promotes inclusive services and equity. These are outlined according to the current need for training on how to search for reliable information, on Health Literacy and on knowing the most common myths and realities surrounding COVID-19 vaccinations. This way, we strengthen the competencies of older adults, to create a population in charge of their own health.

Table 4:

Summary of strategies to address the information barriers in the COVID-19 vaccination process

STRATEGIES	OBJECTIVE
Knowing about Digital Health Literacy	To educate the public regarding the different technological means to access digital information.
Guide for Information Searches on	To know the reliable sources of information in order to understand and advance the vaccination process.
The Myths and Realities regarding Vaccinations	To fight the common myths surrounding the COVID-19 vaccine and its safety.

STRATEGIES IN ACTION

Health Literacy

Gerontology & Geriatric Medicine presents data points regarding the need to address a Digital Health Literacy strategy that minimizes the use of emergency services (Chesser, 2016).

Use of reliable sources of information

In *Reliable Health Information* (2017), published by the National Institutes of Health (NIH), encourages the exclusive use of government agencies and medical institutions as sources of information to reduce misinformation (NIH, 2017).

Myths and Realities

The CDC provides information on different myths and realities to help stop the most common rumors surrounding the COVID-19 process (CDC, 2022).

STRATEGY #1: KNOWING ABOUT DIGITAL HEALTH LITERACY

Access to the Internet and other technologies have facilitated emotional, physical and social well-being in older adults (Szabo et al., 2019). With the multiple ways information can be searched, it becomes of utmost importance to implement digital literacy strategies that make it easier for older adults to access reliable information, especially with regard to the COVID-19 pandemic. Digital literacy consists of the ability to use and understand information in various formats, including the appropriation of new technology and the practice of reading and writing on a screen (Flauzino et al., 2020).

Literature indicates that the development of information technology devices such as computers, mobile phones and electronic tablets has impacted the way in which human beings receive, interpret, administer and transmit information. These devices make it possible to develop processes for communication, interaction and to establish interpersonal relationships through the use of technology. A review of the trends in communications and interaction shows that information is mainly gathered through technological means (Ruano Luis, 2016). The closest example was the arrival of COVID-19, where societies adapted from traditional means to access services, schedule appointments, making purchases and collecting information to Web pages. This creates a demand for digital Health Literacy tools for older adults to know or reinforce their knowledge.

Therefore, the purpose of this section is to promote digital literacy as a tool to improve access to reliable information on issues related to the COVID-19 vaccination process.

Literature provides information on trends in the use of digital devices used to search for health-related information. For example, the study named, Older Adults credibility assessment of online health information: An exploratory study using an extended typology of web credibility (2020), found the following:

- 75% of adults with chronic conditions such as cancer, diabetes and hypertension commonly performed health and wellness related searches.
- By 2018, 66% of American adults aged 65 and older increased their use of the internet as compared to 14% for 2000.

However, some challenges were highlighted, such as:

- Finding reliable health information.
- Having little experience in the use of digital devices and information searches.

Digital Devices

Computers are one of the digital means used to access information. These help in the learning process by facilitating access to information, rapid communications and the development of long-distance inter-personal relationships (Calderin, 2009). Smart phones have the ability to carry out various functions in addition to telephone conversations and to send traditional text messages (Vazquez, 2016). Technological advances have turned telephones into personal assistants to serve the whatever needs may arise.

How can professionals provide Digital Health Literacy?

Today, many healthcare organizations have adopted these technologies as their main means for communication, to access services and schedule appointments. Therefore, professionals hold a key role in providing the digital literacy tools that allow older adults to achieve and obtain equity in services. This is in keeping with the concept developed by the World Health Organization for active aging, where health, participation and safety opportunities are optimized in order to improve the quality of life as people age. An example of this could be the call centers where simple steps are offered to expedite channeling their services through digital devices.

EDUCATION IN SEVERAL STEPS

On a computer or smart phone, access the preferred search engine.
For example: Google, Safari, etc.

Once in the search engine, write the question you want to have answered as a sentence, for example:

Which vaccines are for COVID-19?

Press the "Enter" key

**CDC (Centers for Disease Control and Prevention),
WHO (World Health Organization)**

These areas will allow you to learn how to use electronic devices within reach to search for information, which gives you the opportunity to stay informed with news and announcements on the vaccination process.

INTRODUCE OLDER ADULTS TO THE DIGITAL LIFE

There are key entities and departments that maximize an effort to promote digital literacy. Some of these are:

- Municipal Governments
- State Agencies
- Service Centers
- Day Service Centers
- Vaccinations Centers
- Community Centers
- Retirement Homes
- Faith-Based Entities
- Call Centers

These devices also make it possible to access different resources, such as the following:

- Information storage
- Receive online support regarding services, classes, etc.
- Drafting work documents
- Listening to music
- Getting support
- Teamwork
- Accessing web pages
- Mobile Apps
- Perform calculations
- Watch videos
- Make video calls
- Connect to the internet
- Access to different sources of information
- Take classes
- Read texts and graphics such as books
- Interact with other people
- Get quick answers

Important considerations: Use digital devices to expand your access to trusted information from major health information sources. Encourage constant searches to learn of any changes and stay updated on disease evolution

STRATEGY #2: SEARCH FOR RELIABLE SOURCES

Advising older adults to verify information through trusted sources is one of the most effective ways to promote the COVID-19 communications effort. This will show updated information so that older adults can know the trends and evolution of the virus. This reduces the amount of unreliable information received through the different communication channels by offering public health and professional sources from pages responsible for handling this disease.

Web information searches

Encourage them to get to know the public health entities in charge of the studies, research and handling of diseases, and the services they offer. Show them the different websites that these organizations use to collect information about vaccination trends and changes.

Table 5: *Reliable Sources of Information*

RELIABLE SOURCES OF INFORMATION	WEBSITE
Centers for Disease Control and Prevention	https://www.cdc.gov/spanish
World Health Organization	https://www.who.int/es
Puerto Rico Department of Health	https://www.salud.gov.pr
U.S. Department of Health & Human Services	https://www.hhs.gov/

NOTE: Confirm that search websites are using domain systems such as .org, .gov, .edu. See the literacy strategy to clarify any doubts regarding web searches on computers and mobile phones.

Information searches in news media (television, radio and print)

The following tips are meant to encourage older adults into using appropriate sources of information:

- Encourage them to verify the information on more than one news source.
- Urge them to reinforce their information by continuously updating the discussed news to know about last-minute changes.
- Informed them on the validity of publications so that they may absorb effective information.
- Provide information on how to learn about the author of the publication and check their credentials.

Checklist to verify trusted information

This checklist will allow older adults to identify where the information came from. It also helps to verify whether a reliable source is being used or if further searches are required. On the other hand, it provides information security and generates trust in our older adults. Show them this checklist as an exercise for older adults to check the origin of the COVID-19 information they receive:

Table 6: *Checklist to verify trusted information*

QUESTIONS	YES	NO
Did you verify the information with the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO) and/or the Puerto Rico Department of Health (DSPR)?		
Did you corroborate the information with a healthcare professional to see if they have additional details??		
Did you validate the information through the media (print, radio or television)?		

If they answered "Yes" to all three questions, they have reliable health information. If they answered "no" to some of these questions, encourage them to search for additional information from reliable sources.

STRATEGY #3: UNDERSTANDING THE MYTHS AND REALITIES REGARDING VACCINATION

An infodemic is too much information including false or misleading information in digital and physical environments during a disease outbreak. It causes confusion and risk-taking behaviors that can harm health. It also leads to mistrust in health authorities and undermines the public health response. (WHO, 2022).

With the advent of COVID-19, a number of myths have emerged that influence how older adults decide whether to accept vaccination and booster doses. These myths are characterized by false information, continuously replicated at the social level. Every professional is being perceived as a reliable source of information at the service of health care. As such, they can direct older adults to change how the vaccination process is perceived. To this end, knowing some of the most common myths is an important part of mitigating the barriers in the vaccination process.

Figure 6
Example of a discussion on distrust and vaccine safety

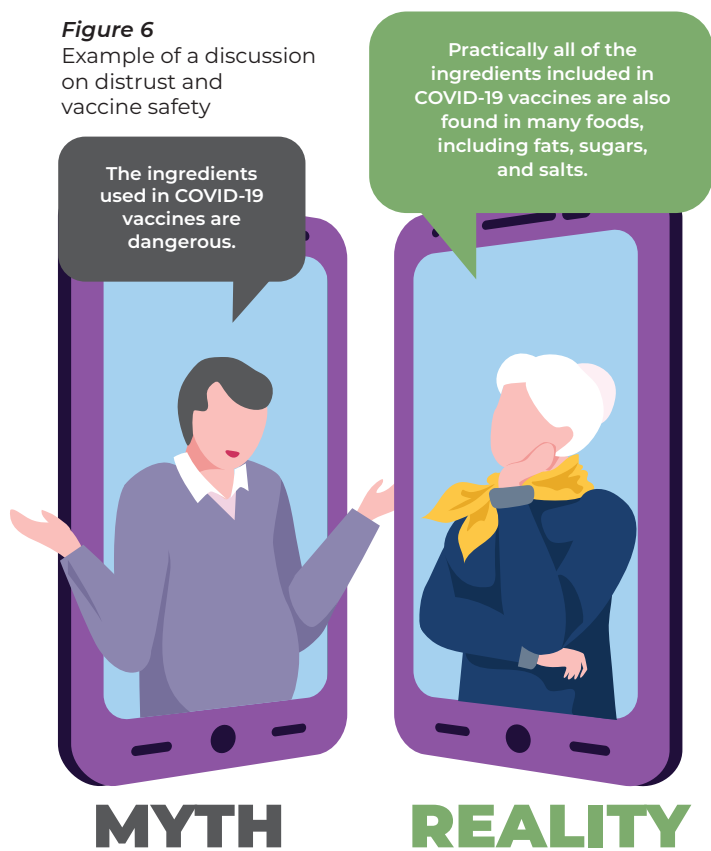
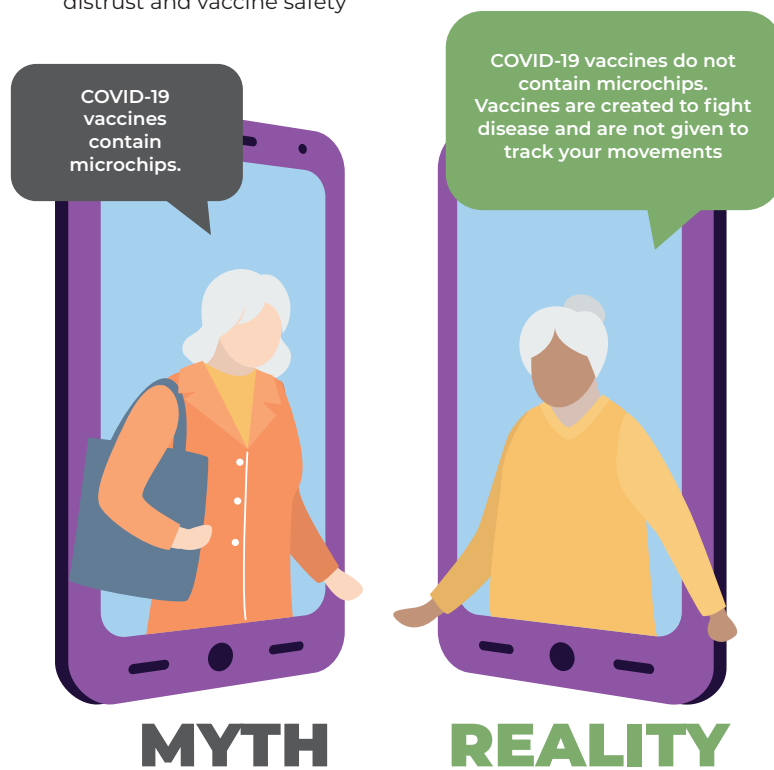


Figure 7
Example of a discussion on distrust and vaccine safety

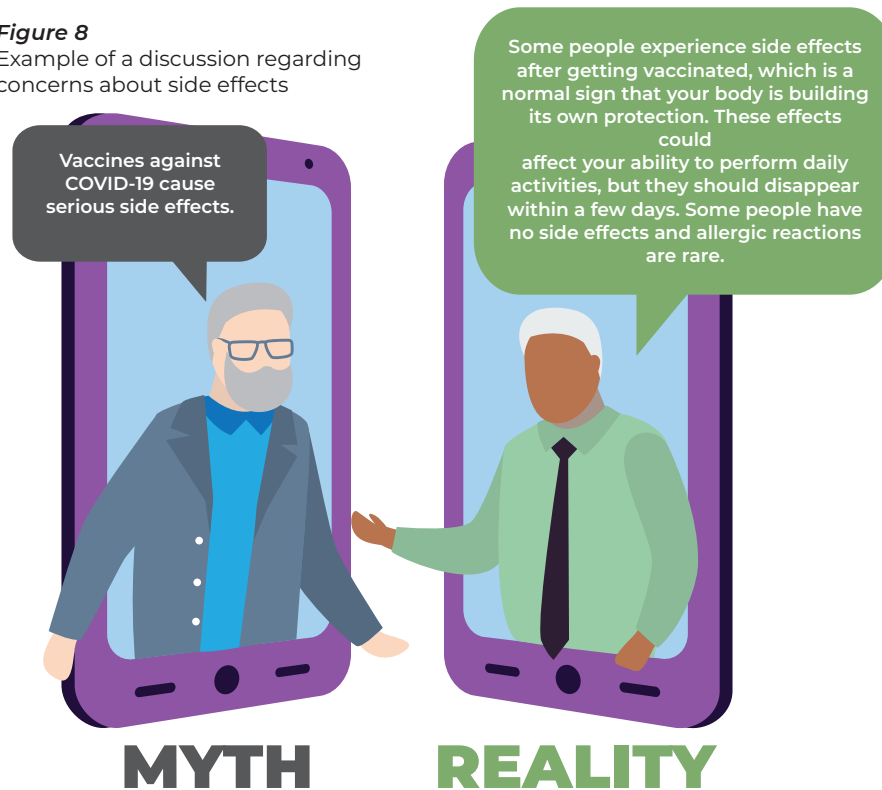


Distrust of the vaccine and safety

Vaccines work by stimulating the production of antibodies in an individual's immune system, just as they would if exposed to the disease. After getting vaccinated, a person develops immunity to the disease without having to get it first.

Vaccine ingredients vary according to the manufacturer. Pfizer and Moderna vaccines contain messenger RNA (mRNA), while the ones from Johnson & Johnson/Janssen have a harmless version of a non-COVID-19 virus. These vaccines instruct the cells in the body to generate an immune response. Vaccines instruct the cells of our immune system to create the first line of defense against COVID-19, known as antibodies. This process of immunity can take up to two weeks after vaccination. Because of this, our body is able to recognize the virus and will automatically begin to protect itself from the pathogen, which offers protection to avoid getting sick from it. COVID-19 vaccines do not contain preservatives, tissues (such as fetal cells from abortions), antibiotics, food proteins, medicines, latex or metals (CDC, 2021).

Figure 8
Example of a discussion regarding concerns about side effects

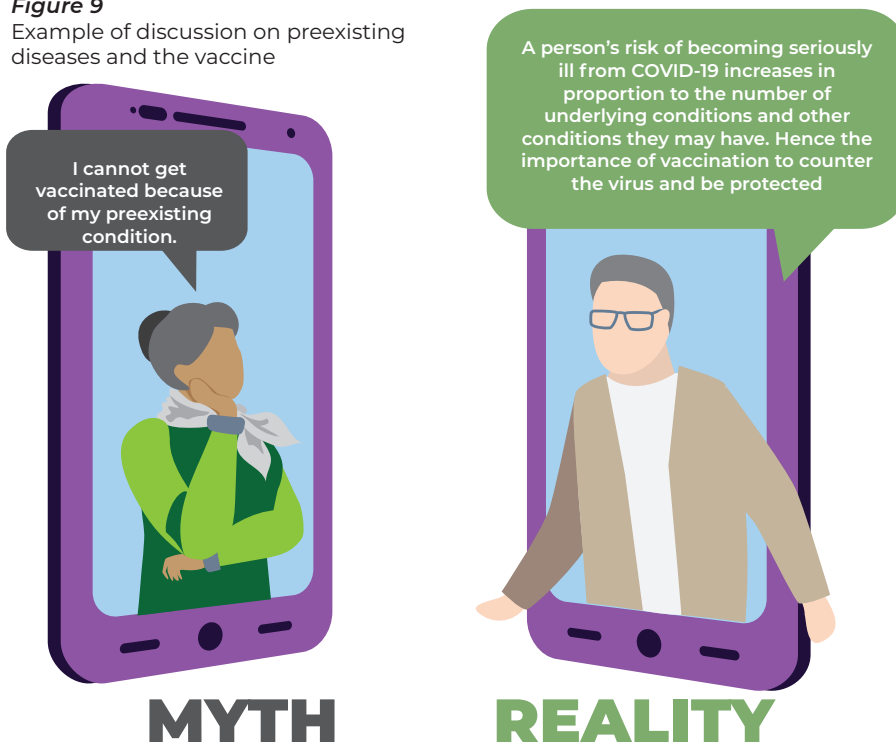


Concern about side effects

Adverse reactions that could cause long-term health problems are very rare after any vaccine, including the COVID-19 vaccine. Some people have no side effects and allergic reactions are rare. We recommend consulting a medical professional for further information about your eligibility to receive the vaccine and the possible effects it may have (CDC, 2021).

*Consult your doctor for more information.

Figure 9
Example of discussion on preexisting diseases and the vaccine



Preexisting Diseases

Older adults have a greater risk of becoming seriously ill from COVID-19. More than 81% of COVID-19 deaths occur in people over the age of 65. The number of deaths among people aged 65 and older is 97 times higher than the number of deaths among people aged 18 to 29. You are advised to talk to your doctor to clarify your doubts before going to your vaccination appointment or making a decision, so that you can make informed decisions (CDC, 2021).

Important considerations: Use the information contained in myths and realities as tools to combat misinformation surrounding COVID-19. Practice this dynamic to learn how to interact with older adults in order to defeat existing myths. Motivate and encourage vaccination using complementary strategies such as motivational interviewing and community engagement activities that address older adults. It is always recommended to consult your doctor and healthcare field specialists to clarify doubts and other recommendations. In the case of preexisting diseases, it becomes even more important to have the opinion of healthcare experts.

BEHAVIORAL BARRIERS

Behavioral barriers are defined as beliefs or perceptions that may influence an older adult's decision or interest in the COVID-19 vaccination process. According to the exploratory study, some behavioral factors that influence the decision of older adults are distrusting the effectiveness of the vaccine, concern about its side effects and with preexisting conditions, religious beliefs, vaccine safety, and trust in the government. It is of the utmost importance that this literacy guide is able to mitigate these behavioral barriers, facilitating strategies that health professionals and community leaders can use to improve vaccine confidence among older adults, both individually and throughout the community. Therefore, to meet this goal, we propose the following strategies: Motivational Interviewing and discussions and community engagement activities



Table 7: Summary of strategies to address the behavioral barriers in the COVID-19 vaccination process

STRATEGIES	OBJECTIVES
Motivational Interviewing	Know the aspects of a motivational interview and use the seven (7) steps to build older adult confidence in the COVID-19 vaccine.
Discussion and community engagement activities	Use community engagement strategies to learn about the doubts and concerns of the older adult community regarding the COVID-19 vaccine

STRATEGIES IN ACTION

Motivational Interviewing

This strategy was implemented in pharmacies across the Pittsburgh area to motivate their beneficiaries to get vaccinated against COVID-19. It is also used in multiple medical scenarios, such as the prevention and management of diabetes and HIV.

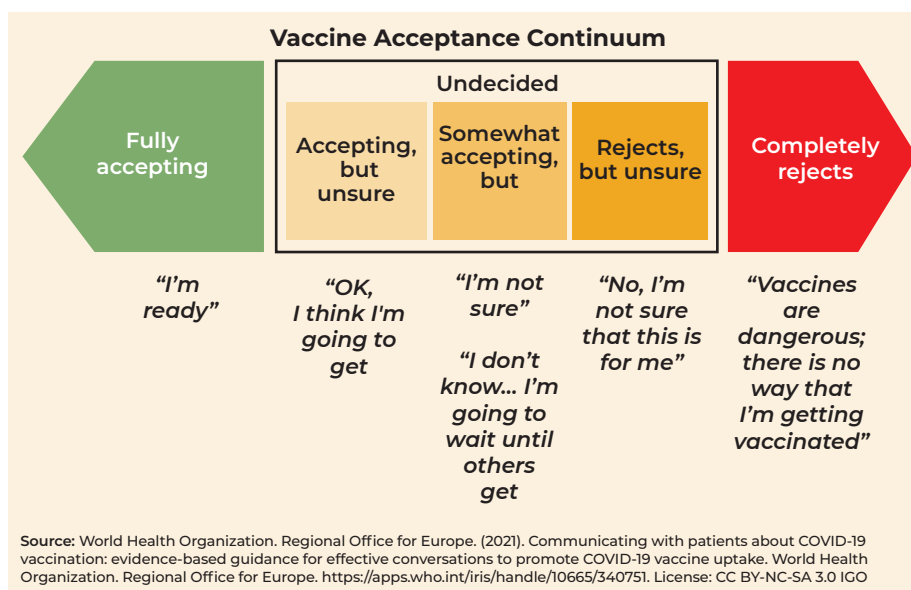
Discussions and Community Engagement Activities

This guide was created by the World Health Organization (WHO), and may be adapted to the community's background and reality.

STRATEGY #1: MOTIVATIONAL INTERVIEWING

Motivational interviewing is a patient-centered communication style used in a healthcare setting. This method seeks to improve the internal motivation of an individual and achieve behavioral changes, exploring and addressing the concerns they may have (Gagneur et al., 2018). The interview is also intended to serve as a guide to communication that relies on follow-up (listening attentively) and guidance (providing information or advice), designed to empower the individual and bring about change in a respectful way (Miller & Rollnick, 2013). In the case of a person who is hesitant about getting the vaccine, the strategy can be used by following the steps below, allowing for a dynamic collaboration and for the individual to feel involved in the decision to change in a respectful and nonjudgmental way (Zolezzi et al. 2021).

Figure 10:
Vaccine
acceptance
continuum



Below are several examples of how to follow the steps to conducting a motivational interview::

1. Start with a statement that assumes acceptance of the vaccine

"Did you know you can arrange for a COVID-19 vaccine appointment today?"

2. Listen to their response

If the person responds uncertain about the vaccine, but shows no signs of rejection, you are with a hesitant person.

3. Ask open questions

"I understand you're worried. Tell me, what have you heard about vaccine development that causes your concern?"

4. Repeat the information to validate and acknowledge doubts

"If I understood correctly, you're worried that it is a new vaccine and was developed quickly."

5. Affirm and provide encouragement

"I understand your concern. I think it is important that you state your concerns regarding the safety of the vaccine."

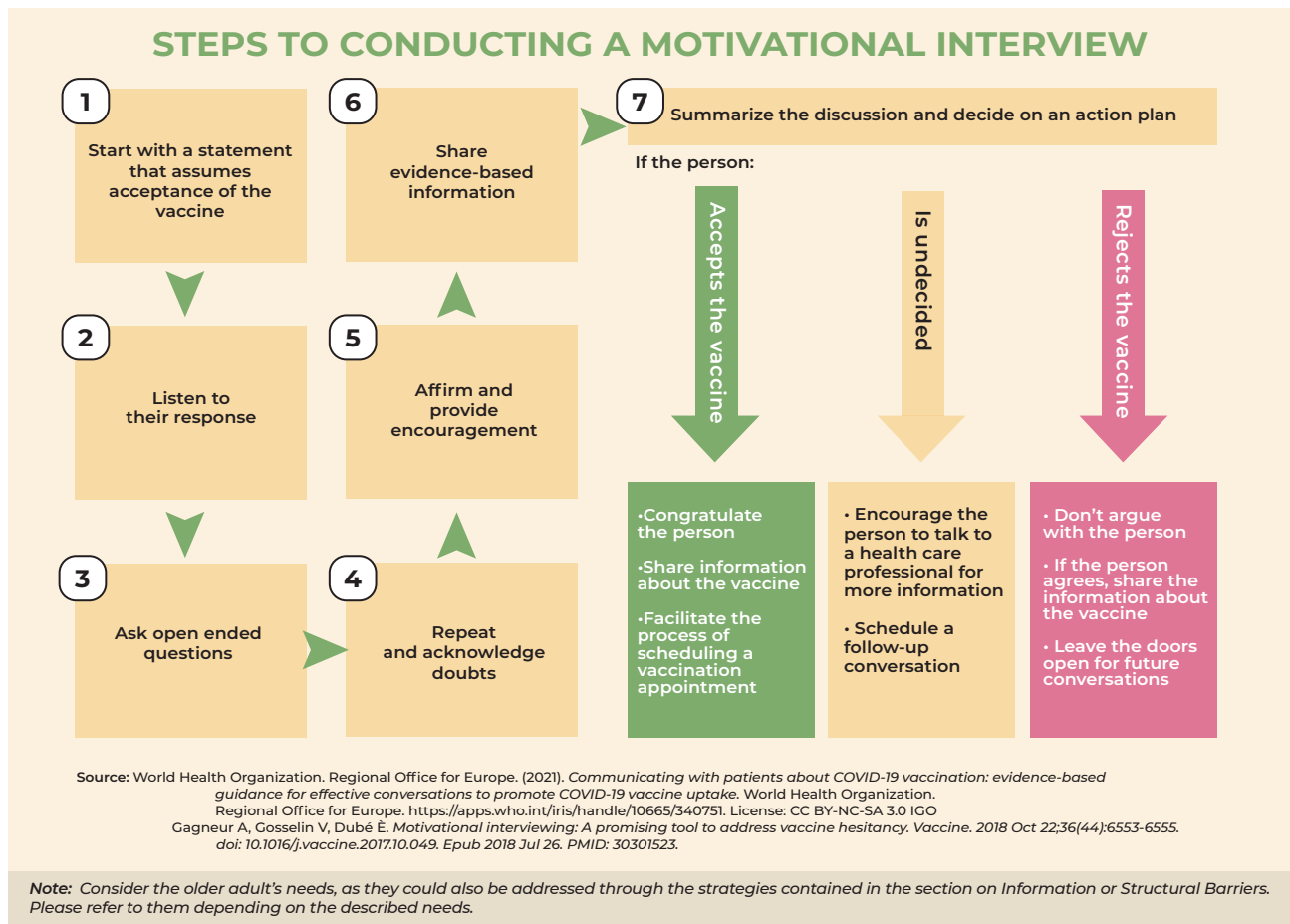
6. Share evidence-based information

"There could be side effects such as arm pain, headache, fatigue, muscle pain, fever, and chills and these usually last 24 to 48 hours. Consult a health care professional for more information about side effects and symptoms."

7. Summarize the discussion and establish an action plan

"After our conversation on vaccine safety, what do you want to do?"

Figure 11.
Steps to conducting a motivational interview



STRATEGY #2: DISCUSSION AND COMMUNITY ENGAGEMENT ACTIVITIES

Community engagement activities are aimed at increasing the likelihood that communities will lead on the issues that affect them and make use of health related services (WHO, 2021). It is of the utmost importance that these strategies are implemented at the community level, in addition to addressing vaccinations at the personal level. Due to its participative, empathic approach and based on the community's input, community engagement is the key to identifying and mitigating the behavioral barriers to the vaccination process presented by the community's older adults. For this reason, it is intended to contribute to the knowledge of community leaders and show them the steps and considerations needed to organize community engagement activities aimed at promoting COVID-19 vaccinations for older adults.

Follow the steps below to organize a community discussion or engagement activity:

Invite the community

- Integrate the community into the design and execution of community engagement activities.
- Organize community discussions to empathize and listen to their concerns, doubts, and needs regarding the vaccination process.



Get to know their concerns

- Get to know the doubts, concerns and needs that people have.
- Show empathy by explaining that you understand their doubts and concerns. Listen to their point of view before sharing yours.
- Ask open-ended questions. For example, what worries you about the vaccine?



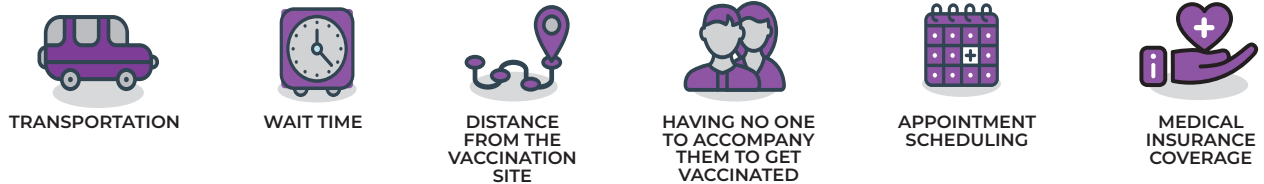
Provide information

- Provide evidence-based information aimed at older adults.
- Ensure that they have correctly understood the information you have shown them.
- Adapt your responses to the target population.
- Speak clearly and simply, and avoid technical terms.



STRUCTURAL BARRIERS

Due to the COVID-19 pandemic, many older adults have had to face structural barriers that have affected their access to health related services, including vaccination. These limitations are systemic problems that could limit the older adult's access to the COVID-19 vaccination process. The following are some of the structural barriers affecting this process:



It is imperative that we address these barriers to expedite access to the vaccination process.

According to the research entitled “Facilitators and barriers to healthcare access: A systematic, qualitative review, (2013)” by the Pan American Journal of Public Health (PAHO), there are several barriers to the scope and effective coverage of health services, including care, prevention and treatments such as COVID-19 vaccinations. These can either expedite or limit the focus on access to healthcare. (Hirmas et al., 2013). This study links accessibility to transportation, waiting time, distance from the site and plan coverage, accounting for 29% of the results. Vaccination and appointment scheduling companions, account for 11% of the findings.

Due to global trends and the aging population, it is estimated that by 2025, there will be 1,200 million people worldwide aged 60 years or older (WHO, 2001). In the case of Puerto Rico, the significant increase makes it necessary to identify, document and provide services aimed at this population, such as encouraging the creation of intervention groups where services can be disseminated, known and used to reduce COVID-19 contagions. Likewise, it is imperative to promote the creation of public policies that expedite the establishment of spaces that encourage healthy coexistence, and equity in services, prevention and access to health risk free environments. Finally, it aims to identify support channels that expedite the scope of health services under a systemic and effective communications component. All the above strategies could address the structural barriers in the vaccination process for older adults.

Table 8:
Summary of strategies to address structural barriers to the COVID-19 vaccination process

STRATEGIES	OBJECTIVES
The Age Friendly Cities Model	Promotes the implementation of friendly cities to address structural barriers in municipalities and communities

STRATEGIES IN ACTION

AARP Community Intervention Network

AARP creó una *Red de Intervención Comunitaria*, en donde se registran países que se han movili-zado a ser una Ciudad Amigable con el adulto mayor, según el modelo de la OMS. De dicha forma, estos países atienden las necesidades relacionadas a la emergencia por el COVID-19 (ARRP,2021).

STRATEGY #1: MAGE FRIENDLY CITIES MODEL

The rapidly aging population, along with urbanism, are a phenomenon that challenges community planning. To expedite these processes, WHO developed the Age Friendly Cities Model in order for communities and municipalities to adapt their structures and services according to population characteristics. To develop the model, WHO conducted a study that included different cities around the world, including Puerto Rico. The purpose of the study was to know how older adults, caregivers and providers rated their cities or municipalities in terms of how accessible they were to the needs and capacities of the older population with regard to eight (8) principal domains (SEE FIGURE 12). This model has been implemented in various areas since 2007 to effectively improve the quality of life of older adults (WHO, 2007). Therefore, the objective of this strategy is to promote the implementation of the model in the municipalities of Puerto Rico in order to address the structural barriers documented in our initiative's exploratory study.

What are the eight (8) domains of the Friendly Cities Model?

This model consists of eight key domains that communities can work on to become friendlier communities for older adults and, in general, for people of all ages. Interested parties can select the domains that they believe should be prioritized in their municipality and/or communities. They are as follows:

1. Community and healthcare Is health care accessible? Are social and health care services planned to serve the needs of older adults?

2. Transportation Are their costs affordable? Is there community transportation or friendly vehicles? Are the waiting stations adapted for older adults?

3. Outdoor spaces and friendly buildings: Are the streets, sidewalks and buildings adapted for older adults? Do they enjoy public safety in common spaces?

4. Housing: Is housing adapted and designed for older adults? Are they affordable in terms of costs? Is housing integrated to the community?

5. Social participation: Are older adults integrated into the community? Do they know about their community activities? Is isolation addressed?

6. Respect and social inclusion: Are older adults respected and included in community decisions? Are there positive interactions between generations?

7. Civic participation and employment: Are there employment and volunteer options for seniors? Are their contributions valued? Is remuneration and/or participation provided in making decisions?

8. Communication and Information: Are the elderly addressed through appropriate communication channels? Do they have access to reliable information? What is their level of digital literacy?



Figure 13:
The Friendly
Cities Model

According to PAHO, age-friendly communities have played a key role in mitigating the effects of COVID-19, especially because they have incorporated a multisectoral approach, thus involving their environment, organizations, older adults, government agencies and collaborators in general. Furthermore, many friendly communities have been able to implement strategies aimed at increasing vaccination efforts for older adults. Some of the strategies are concerned with the effort to disseminate reliable information, community outreach, provide transportation, and even to administer vaccines (AARP, 2021). However, the lack of information on how to coordinate vaccinations, transportation, and information on vaccine safety are among the friendly communities' most frequent needs.

On the other hand, the AARP collected information on the experience of how friendly communities and municipalities handled COVID-19. The findings were incorporated into the eight (8) domains of the Friendly Cities Model adapted for the response to the virus. Therefore, the documentation showed that age friendly cities used good practices to handle COVID-19, including the process of vaccination. This intends to address structural barriers by encouraging the implementation of the aforementioned model by the municipalities of Puerto Rico. The following three (3) processes will help municipalities to plan, implement and evaluate the Friendly Cities model.

How can we implement the Age Friendly Cities model in municipalities and communities to improve the COVID-19 vaccination process and health in general?

Carry out planning strategies to identify barriers and opportunities

This process attempts to identify planning strategies that reveal structural or access barriers at the municipal level. Strategic planning has been documented to help municipalities and cities achieve short, medium and long term sustainability (Guel, 2009). Therefore, the planning process intends to analyze the eight (8) components of the friendly cities model to identify the areas where the vaccination process and health in general needs to improve. The following are planning strategies that municipalities can implement to become age friendly cities.

Recommended strategies:

- Develop a work committee that includes older adults, community leaders, organizations, and municipal representatives to assist in the planning, implementation, and evaluation of these strategies at your locality.
- Identify sources of information that provide a profile of the older adult population in each municipality to identify the social, demographic and economic characteristics of the population. These could affect the vaccination process and health in general. For example: a census of the population, Department of Health statistics, and others.
- Review the literature to learn the specifics that affect the healthy coexistence with older adults.
- If you do not have specific information describing the components of the model, consider performing additional studies, such as: focus groups, meetings with older adults, questionnaires, among others.
- Integrate activities that include older adults in order to recognize their needs and strengths within the health and vaccination processes for this municipal population.
- Know the needs and strengths at community and organizational levels to meet the needs of vaccinating older adults.
- Identify whether the municipality or community has adapted to the needs of older adults regarding COVID-19 vaccinations.
- Establish meetings to create collaborative agreements between communities, entities and municipalities.
- Develop intervention and outreach strategies for the communities, based on data collected from their municipality
- Develop an action plan with your collaborators, including older adults, that incorporates the strategies they will use to implement an age friendly model in their municipality.

This analysis will allow you to have a clearer picture of the components of the Age Friendly Cities Model applied to your municipality and/or community, and expedite the development and implementation of specific strategies for each component. Before proceeding, the municipality must have established a profile for the older adults using the eight (8) domains of the friendly city model.

Use the Friendly Cities Guide to find solutions

The Guide to Age Friendly Cities aims to help individuals and groups that are interested in adapting spaces in their municipalities or cities to their populations, including governments, municipalities and organizations, among others (WHO, 2007). To develop municipalities and communities adapted to the vaccination needs of older adults, collaborations with other entities linked or related to the population must be established. This process should achieve a collective, multisectoral and structured effort by supporting these entities and/or organizations in their implementation of specific action plan strategies. Although the Friendly Cities model incorporates eight (8) components, for the purposes of this literacy plan, the strategies related to three (3) components identified as main barriers to the vaccination process, according to our team's exploratory study, will be discussed. Next, implementation strategies for the following domains will be discussed: 1) transportation, 2) health and social system, and 3) information and communication.



Transportation Barriers

Transportation is an important structural element for access to health and community services, as well as the social participation of older adults. This element has been one of the main barriers in the vaccination process for the older adults' population, as documented in the exploratory study. Therefore, the municipalities must evaluate their transportation systems in order to visualize areas of opportunity and improvement.

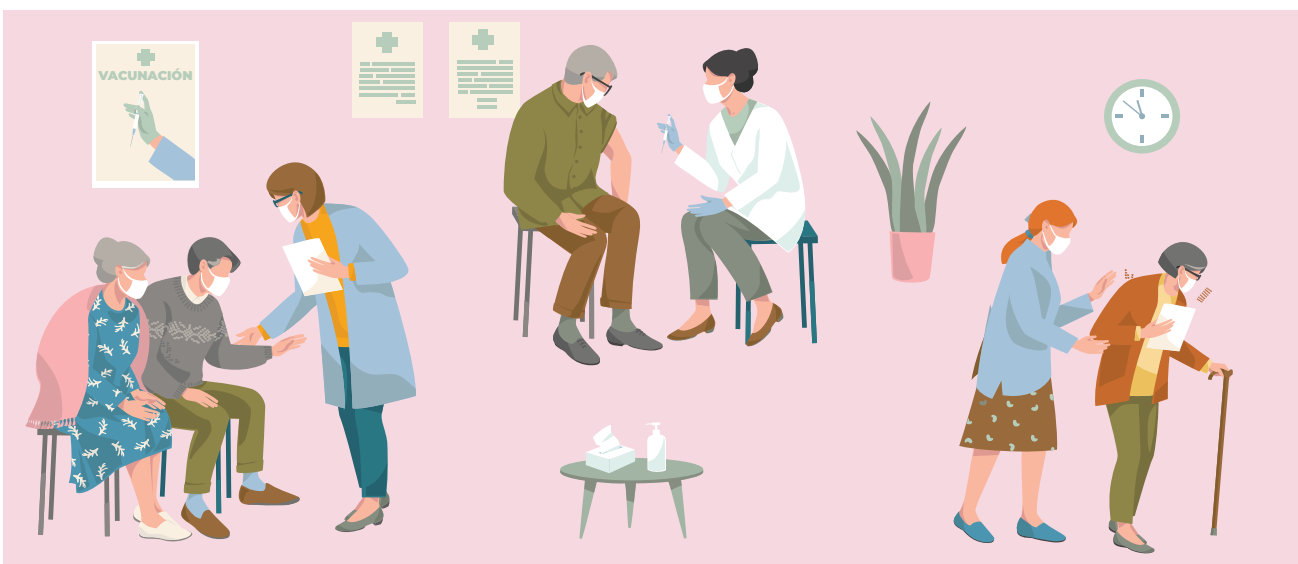
How can the community contribute to mitigating transportation barriers?

- Evaluate the transportation services that exist in their municipality and their associated characteristics such as cost, logistics and service areas, among others.
- Consider establishing a collaboration with organizations and the community to strengthen transportation services.
- Identify volunteers in the community willing to offer transportation services for older adults. Develop the logistics based on calendar appointments to transport as many older adults in the community to the vaccination services.
- Recruit volunteers to deliver needed items to people who cannot leave their homes or use their usual means of transportation.
- Recognize the areas that need adjustment for equal treatment of older adults such as: road signs, transportation seating, ramps and bus stops within the community, among others.
- Establish the logistics for private and government transportation services

Structural barriers to health and social systems

Access to health and social inclusion to meet the basic needs of groups with a high risk of vulnerability, such as older adults, are essential. On multiple occasions, older adults are unaware of the available health services and the social opportunities for inclusion and community engagement. Therefore, based on the Age Friendly Cities model, the following recommendations have been established:

- Organize community events that get the attention of community residents. For example: community forums or consultations
- Work with municipal, private or other entities that offer COVID-19 vaccination services within the community.
- Create community and support groups available to accompany and expedite the COVID-19 vaccination process for older adults.
- Provide “deliverable” documents on the community’s health issues.
- Know the health care centers serving older adults.
- Document general assistance services for older adults both in the private and governmental sectors, such as caregivers, companions and nurses.



Structural barriers to information and communication

With constantly changing information, doubts surrounding the recent news may arise. Using the community to disseminate updated and reliable information reduces misinformation, helps to maintain a stress-free environment and promotes healthy coexistence.

How to bring vital information to the communities?

- Use community members to receive and share updated information from trusted sources.
- Publish updated information on social media to provide the knowledge in a quick and effective manner.
- Identify the community members with technological know-how that are willing to schedule appointments for older adults.
- Establish channels to deliver information through service professionals serving the community, such as: caregivers, nurses and food delivery, among others.

Implementing evaluation and monitoring strategies to measure the effectiveness of the activities

In this final process, the work plan aimed at evaluating and monitoring the implementation of the Age Friendly Cities model is implemented, either in the municipality or in the community. The evaluation consists of a systematic process where information is collected and analyzed in order to know the effectiveness of the strategies that are being implemented. The purpose of the evaluation is to increase the use of data and evidence to ensure the continuous improvement of our activities, programs and/or strategies.

The purpose of the monitoring process is to monitor the progress of regularly implemented activities. In addition, it is aimed at providing information on the immediate progress of the object of the evaluation to make short-term decisions, and thus avoiding having to wait until the conclusion of the strategy to make improvements. Each activity or strategy must be evaluated to know if it is being effective; that is, knowing with certainty if the desired goal is being achieved.

It is advisable to:

- Develop an evaluation and monitoring plan.
- Evaluate and monitor community services for older adults.
- Collect and analyze the findings and the evaluation results.
- Observe opportunities to adjust each service to existing needs.
- Implement changes in accordance with the findings and the results.
- Assess the opinions of older adults to know how they perceive the change in the services.
- Maintain a record of the evaluation processes through databases, reports, and other means.

Additional recommendations to expedite the vaccination process: Getting to know the resources

Transportation

COVID-19 has highlighted the need to actively showcase the services that are currently available to older adults in order to mitigate structural barriers. The lack of public and private transportation represents the structural barrier that most interferes in the COVID-19 vaccination process. There are several municipalities in Puerto Rico that offer transportation services tailored to the particular needs, such as vaccination and medical appointments, of older adults. The use of the public transportation system allows for mobilization with an accessible schedule within the locality and helps older adults to keep their scheduled vaccination appointments. Likewise, there are private companies that offer transportation at a cost. Although this benefit is specifically targeted to its population, there are many older adults that are unaware of its availability. These can be arranged through phone calls to schedule dates to access the service.

Wait Time

Waiting times can be corrected with an effective preparation to strategically address them. Encourage older adults to have the necessary items on hand to keep them occupied while waiting for their vaccination.

Inform older adults on how they can prepare for their vaccination appointment:

- Bring along some preferred reading material to stay entertained. Examples: magazines, newspapers, books, and others.
- Bring snacks for optimal nutrition.
- Rest on the day before the appointment.
- If necessary, identify the family members or companion services that can provide support on the day of the medical procedure.
- Consider bringing some kind of entertainment. Examples: alphabet soup, crossword puzzle, sudoku, and others.

These recommendations can ease the impatience caused while waiting and keep the older adult interested in getting the vaccine. Finally, the availability of trained staff that can assist the older adult during their scheduled appointments should be verified. These can offer support during the vaccination process.

Companion Services

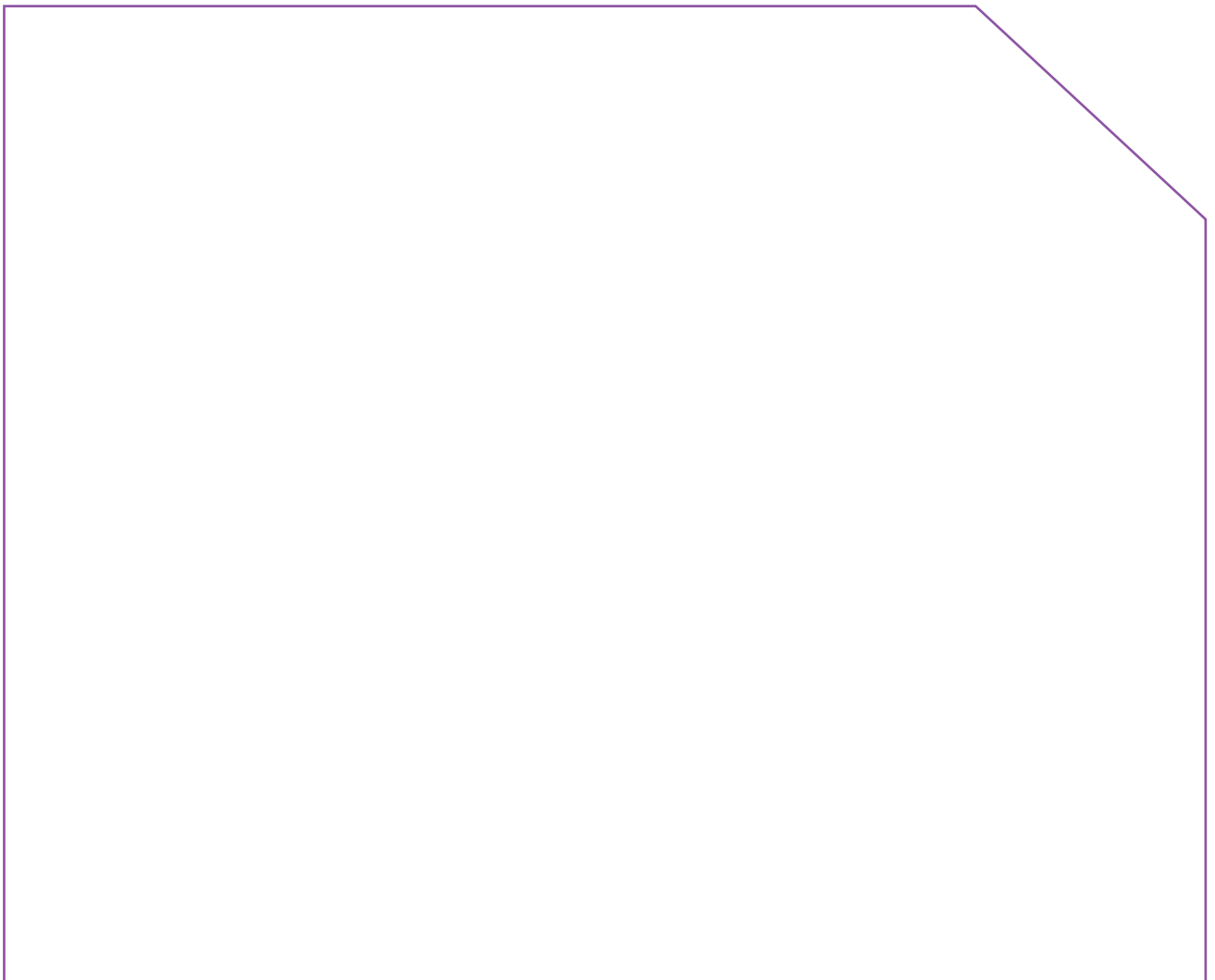
Companion services are a key part in the scope of services for older adults. These assistants have the training needed to assist the older adult at all times, so that they can carry on with their lives without problems. Some older adults find it very difficult to perform the tasks that are needed to get vaccinated (Nye and Blanco, 2021). Therefore, it is of utmost importance that older adults are able to identify such companies or institutions as provide companion assistance. Some tips that can personally support the companions as well as the older adults are:

- Make a list of concerns you want to address with the health care professional.
- Bring information and/or the relevant documentation to the appointment.
- Share any changes that have occurred since your last medical visit with your health care provider.

FINAL THOUGHTS

The rapid aging of the population, together with the emergence of new challenges to public health, has given rise to great challenges to the current social and health care systems. Therefore, society must prioritize, especially at the community level, the active implementation of evidence-based strategies to ensure the sustainability of its health initiatives, thus improving its health indicators. This was the cornerstone of the EDUCOVIDPR 60+ Project, when it implemented a study to identify the barriers facing older adults in the process of getting vaccinated against the virus, especially within the municipalities that offered the greatest opportunities. This led to the development of this Health Literacy Strategies Guidelines, with the purpose of addressing the identified barriers to improve the vaccination process for older adults in three main areas: information, behavior and structural.

It is our greatest interest that this resource can serve as a quick reference for health care system collaborators—regardless of their clinical background—to identify and address, from their respective everyday spaces, the barriers to the vaccination process. Not only that, but the information contained in this Guide can also be adapted and extrapolated to address other situations involving risks that affect the health of older adults in general. In the end, we are convinced of the need to place a special emphasis on addressing the population of older adults, so that we can eradicate the preconceptions and encourage attention to their needs. This is the only way that will we build an equitable health care system and, therefore, improve the quality of life for this population.



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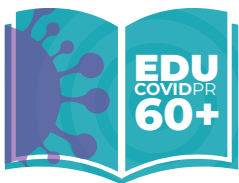
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