THE GLOBAL AGEING NETWORK

COVID-19 VACCINE DISTRIBUTION IN ELDER CARE

A Cross Cultural Snapshot

Emi Kiyota

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Acknowledgements

The Global Ageing Network thanks our sponsor, Standards Wise International, for its generous support of the research described in this report.

Standards Wise International is pleased to support this important research paper on the lessons learned around the globe during the COVID-19 vaccine rollout. As an acknowledged leader on exemplar practice in quality, governance, and risk management, we share a passion for promoting learning and collaboration to ensure the safety and quality of life for those with fewer resources who are vulnerable and marginalized. In doing this, we create standards that promote higher levels of achievement and excellence in pandemic management, senior living, home care, human rights, healthy ageing, and well-being for Indigenous communities. We work with leading organizations, peak bodies, not-for-profit and private bodies, developers, tertiary institutions, and the highest levels of government to support standards and implement our accreditation programs to drive innovation and continuous improvement for the benefit of people and the community.

Global Ageing Network

The Global Ageing Network (GAN) is an international network of leaders in ageing services, businesses, researchers, and advocates spanning about 60 countries. Over the last 30 years, GAN members have been committed to building connections, sharing knowledge, and learning from one another in our collective pursuit to make the world a better place to grow old.

Emi Kiyota, PhD (Principal Investigator)

Dr. Emi Kiyota is the founder and director of Ibasho, an organization that facilitates the co-creation with older adults of socially integrated, sustainable communities that value their elders. An environmental gerontologist and organizational culture change specialist, Dr. Kiyota is a consultant with over 20 years of experience in designing and implementing person-centered care in long-term care settings and hospitals globally.

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Foreword

The development and deployment of COVID-19 vaccines have changed the trajectory of the coronavirus pandemic in an extraordinary way. COVID-19-related illnesses and deaths have declined, often exponentially, since the vaccines became available.

Unfortunately, these changes have not been universal.

This study describes the experiences of providers of older adult services as they worked to give residents and clients access to the COVID-19 vaccines in countries around the globe. While providers in the 12 countries included in this study had a patchwork of experiences with the COVID-19 vaccine rollout, some common themes are evident across borders.

Obstacles to widespread vaccination abound in many countries and include structural, political, communication, and attitudinal barriers that continue to present challenges to residents, their families, and care providers. Residents and staff in aged care organizations, and elders living in their communities, often are not prioritized in vaccination rollout plans. Inadequate vaccine supply, especially in low- and moderate-income countries, limits access to life-saving immunizations among those who need them the most. But despite these barriers, and with an unwavering determination to save lives, elder care providers have been persistent advocates for their residents, clients, and staff.

As this important study makes abundantly clear, we have much to learn—and even more to improve—as we work toward creating a world in which no older adult is left behind.

Katie Smith Sloan, Executive Director
Global Ageing Network

Introduction

Elder care providers experienced unprecedented challenges as they attempted to protect residents from the devastating effects of COVID-19, a highly infectious and potentially lethal virus that disproportionately affected older populations in countries around the globe. When vaccines became available, most countries included in this study understandably prioritized vaccination for all residents of long-term care settings.

While vaccination rollouts first appeared to be a straightforward and effective way to reduce the spread and severity of COVID-19, those rollouts also presented new challenges for providers and their countries. The COVID-19 vaccination rollout was swiftly coordinated in countries like Israel and the United Kingdom, while other countries struggled to acquire enough vaccines and/or to coordinate logistics. It quickly became apparent that when vaccines are rolled out without careful attention to promoting equity, existing health disparities may intensify both within countries and around the world.

This report examines how elder care providers in the following 12 countries handled the COVID-19 vaccine rollout for elders and staff:

- Argentina
- Australia
- Canada
- The Dominican Republic
- Israel
- Japan
- Mexico
- The Netherlands
- Singapore
- South Africa
- Spain
- The United Kingdom

The study, conducted throughout 2021, focused primarily on residential settings such as nursing homes, group homes, and assisted living communities. However, the researcher also gathered information from providers about the vaccine-related experiences of community-dwelling elders who receive home and community-based care.

Vaccine Rollout Overview

Since COVID-19 vaccines first became available in late 2020, each of the 12 countries included in this study has been dealing with the unique challenges associated with instituting mass vaccinations. However, despite these challenges, enough people have been vaccinated to significantly slow the spread and deadliness of COVID-19 in the study countries.

As of fall 2021, and despite the emergence of new variants during fall of 2020, far fewer new cases of COVID-19 now result in hospitalizations and deaths, compared to COVID-19 infections diagnosed before vaccines were available. These positive outcomes underscore the continued importance of vaccinating individuals who are most at risk for hospitalization or death from COVID-19. Older people, especially those living in long-term care settings where infections can spread easily, belong to this high-risk group.

The coronavirus is a grave threat to the physical well-being of older adults. But COVID-19's effect on quality of life cannot be ignored. Most providers in the 12 study countries are still limiting residents' visits with family and friends and their access to in-person social events and activities because vaccine uptake rates in their areas are still too low for comfort. These restrictions, while necessary, can have serious psychological effects on residents

Critical Questions Remain

As the COVID-19 vaccine rollout progresses, providers and policymakers must address critical questions about how to ensure a high rate of initial vaccinations and follow-up booster vaccinations among both elders and staff members. Some of these questions relate to:

- **Staff Vaccinations.** Serious worker shortages make it imperative that countries take steps to ensure that the vaccination process does not create a hurdle to employment in elder care settings. Providers and policymakers must take steps to ensure that elder care workers are prioritized for the vaccine and that the vaccination process is as easy as possible for workers.
- **Inequity.** The COVID-19 vaccine rollout highlighted healthcare system challenges and inequities on a global level. The lack of equitable distribution of COVID-19 vaccines—the most critical challenge we face—calls urgently for an international solution.
- **Public Health.** The pandemic revealed the need for a broader discourse about how to resolve the tension between individual interests in making private healthcare decisions—about vaccination, for instance—and public health interests. This discourse must take place sooner rather than later so we can navigate the current pandemic and prepare for the next health emergency.
- **Knowledge Sharing.** Knowledge and data about COVID-19 in healthcare settings has been widely disseminated. However, there has been little collaboration among elder care providers and little sharing of the knowledge these providers gained on the front lines of the pandemic and the vaccination rollout. Such sharing could help improve vaccination strategies, especially in countries where vaccination uptake is still low. Shared strategies could address how to better prepare elders for the vaccine, conduct vaccine-related education and outreach, and implement logistical and communication strategies. This information sharing is especially important for countries where vaccination uptake is still low.

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This report begins to answer critical questions by identifying:

- Challenges and opportunities faced by providers as they participated in the COVID-19 vaccination process.
- Lessons providers have learned and good practices they have implemented to achieve high levels of vaccine uptake among the older adults they serve.

This report focuses on the following five objectives:

1. Understand whether existing vaccine rollout plans were effective.
2. Learn how elder care providers acquired and administered COVID-19 vaccines.
3. Understand how elder care providers perceived the effectiveness of policies developed and communication strategies implemented in their countries.
4. Identify key issues related to the COVID-19 vaccine rollout.
5. Explore effective solutions and strategies for providing COVID-19 vaccines to elders and staff members.

The report is divided into three sections:

1. Methodology
2. Findings
3. Lessons Learned

The information presented in this report is not meant to represent the perspective of individual countries or their policymakers. Rather, it is designed to share public data and the experiences of a representative sampling of elder care providers in the COVID-19 vaccine rollout.

The target audience for this report includes:

- Providers
- Policymakers
- National and regional health authorities
- Public health experts
- Decision makers who are involved in implementing vaccine rollout plans in elder care settings

Key Findings

Nine key findings emerged from this study:

1. ***Vaccine supplies and vaccination schedules were unreliable.*** Many of the surveyed providers reported challenges related to shortages of COVID-19 vaccines and frequent changes in vaccination schedules. In some countries, vaccine rollouts were announced and then delayed due to a lack of coordination in vaccine delivery, lack of vaccinators, and/or delayed delivery of second doses. These challenges undermined vaccine rollout for elders living in residential settings.
2. ***Strong leadership was critical.*** Vaccination rates increased when national governments exercised strong leadership in securing vaccines and issuing policies prioritizing residents of elder care settings for vaccination.
3. ***Community-dwelling elders faced greater challenges.*** Elders living in their community had more difficulty obtaining vaccinations than elders living in long-term care settings. Community-dwelling elders had limited access to the help they needed to navigate web-based appointment systems and had more trouble accessing vaccination sites.
4. ***Rationales behind vaccination priority categories were often unclear and sometimes inconsistent.*** Several countries excluded elder care workers from the "healthcare worker" category, causing significant delays in staff vaccinations.
5. ***Preparing residents for vaccination was challenging.*** Government agencies had difficulty coordinating vaccination logistics and often gave last-minute notice about the schedules for vaccination clinics. This created challenges for providers seeking to prepare residents to be vaccinated.
6. ***Staff vaccinations caused care-related challenges.*** Worker shortages made it more difficult for staff members to provide sufficient care to residents and clients while also obtaining vaccines or recovering from vaccine side effects. These shortages were particularly problematic when staff members could not obtain vaccinations at work.
7. ***Staff members were receptive to misinformation.*** Misinformation and rumors about COVID-19 vaccines, spread mainly through social networks, made it more difficult to reach high vaccine uptake rates among staff members.
8. ***National healthcare systems influenced vaccination success.*** Countries with a national healthcare system achieved high vaccination uptake at a faster rate than countries without such a system.
9. ***Inequities were real.*** Stark inequities emerged between high- and middle-to-low-income countries. Those inequities were particularly evident when comparing the relatively generous amount and variety of vaccines available for distribution in high-income countries, and the shortages of vaccines in lower-income nations. The international community could work harder to share vaccine doses, help secure funding for vaccines, and remove barriers to equitable vaccine distribution.

Methodology

The information included in this report comes from two sources:

1. Research based on published articles, reports, and public data available through reputable websites. Data sources included governments, think tanks, and academic and research institutions.
2. Interviews with academics, policy-makers, executive directors of elder care associations, and chief executive officers and directors of elder care organizations in 12 countries.

Data Collection

Due to geographical distances and language limitations, interviews were conducted remotely during video conferences and through email communication. A semi-structured interview (Appendix A) was employed to allow participants to provide details about their experiences and insights, and to shed light on how they:

- Acquired and administered COVID-19 vaccines to their residents and staff members.
- Prepared residents and staff for the vaccine.
- Perceived the effectiveness of government guidelines and policy support for the COVID-19 vaccine rollout.

One researcher conducted all the interviews and reviewed the empirical articles, reports, white papers, and website information. Each interview lasted approximately 45 to 70 minutes. During the video conferences, the researcher took written notes and recorded the interviews with the interviewee's permission. The recording was then converted into a written document using transcription software. The researcher obtained information through email communication from respondents who preferred to communicate in writing because of language limitations or scheduling difficulties. Desktop research was conducted to gather updated data on the vaccination situation, policies, and guidelines in the 12 selected countries.

The information collected through interviews is current as of the date the interviews were conducted (March-July 2021). Interviewees were also contacted in mid-October 2021 to share updated information, including vaccination rates in their organizations. The organizations' situations and programs, as well as the policies of their governments, may have changed since this updated information was received.

Participants

Participants were identified through connections with the Global Ageing Network and the Atlantic Fellows Program in Oxford, England. Senior managers in selected organizations were contacted by members of the Global Ageing Network and asked whether they would like to participate in a video conference interview with a researcher. Most of the selected providers also participated in a previous study, Elder Care Providers & COVID-19: Cross-Cultural Perspectives. The interview guide (Appendix A) was provided prior to the conference call. Twenty participants completed semi-structured interviews.

Data Analysis

Data were analyzed using the grounded theory approach to find emerging themes and key learnings. The researcher created an analytical matrix chart (Appendix B) to compare similarities and differences across the 12 countries. Four members of the project team reviewed the analyzed data and chart. Interviewees also reviewed the analytical matrix chart to ensure its accuracy.

TABLE 1
Participant Information

Country	Features of Elder Care Organizations
Argentina	100 residents in 2 care settings
Australia	153 residents in 2 care settings 1,508 residents in 21 care settings
Canada	287 residents in 4 care settings 323 residents in 1 care setting
Dominican Republic	38 residents in 1 care setting
Israel	233 residents in 1 care setting
Japan	300 residents in 15 care settings 2,500 residents in 49 care settings
Mexico	9 residents in 1 care setting 16 residents in 1 care setting
The Netherlands	165 residents in 1 care setting 1,103 residents in 14 care settings
Singapore	250 residents in 1 care setting 380 residents in 1 care setting
South Africa	1,133 residents in 13 care settings
Spain	91 residents in 1 care setting
The United Kingdom	462 residents in 7 care settings 5,861 residents in 114 care settings

Findings

This report explores six themes that emerged from study findings:

1. Vaccination plans and preparation
2. Vaccine availability
3. Vaccine delivery and administration
4. Vaccine acceptance
5. Outreach and communications
6. Policies and guidelines related to COVID-19 vaccine rollout

THEME 1: VACCINATION PLANS AND PREPARATION

Experience with Influenza: All providers participating in the study already had some level of experience with vaccination planning before the pandemic began. However, their plans focused primarily on influenza vaccinations. While that preparation and experience was helpful, its applicability to COVID-19 vaccinations was limited.

In Their Own Words:
Vaccination Preparation

We had confidence because of our existing vaccine preparation. We knew that we could organize vaccinations by adjusting different procedure and logistics.

— *Provider in the Netherlands*

Normally, the annual influenza vaccination process in elder care settings is managed by staff members. In contrast, the COVID-19 vaccine rollout was coordinated largely on a national or regional level, with elder care organizations playing a limited role. The COVID-19 vaccination rollout also featured new challenges relating to:

- Confidentiality.
- Ethical dilemmas among people who were uncomfortable getting vaccinated.
- Public perceptions of COVID-19 vaccines that were different than perceptions of previous vaccines.

Sense of Confidence: Previous involvement in a vaccination program gave most providers a sense of confidence as they prepared for the COVID-19 vaccine rollout. However, the COVID-19 process proved more challenging because of the need to coordinate with government agencies and vaccinate large numbers of people in a short period of time. Providers in Australia and Japan reported being challenged by a lack of effective coordination with their respective governments.

Preparing for Different Age Groups: A few providers felt that the government-led vaccine rollout process did not meet the needs of older people, possibly because vaccination programs historically have focused more on children and youth than

on elders. A South African provider reported that, before the pandemic, their country had vaccination programs for children but not for elders. An Australian provider noted that their country's advisory group for COVID-19 vaccinations consisted mostly of pediatricians with expertise in vaccinating children. These reports raise questions about whether proper preparations were made for all age groups, and how future vaccine rollouts might be more inclusive.

THEME 2: VACCINE AVAILABILITY

Vaccine Rollout: The vaccine rollout started sometime between December 2020 and March 2021 in the 12 countries included in this study (Table 2). In some countries, such as Argentina, Australia, and South Africa, administering two doses of the vaccine took longer than expected, due to problems with vaccine availability.

Priority Groups: Older people in residential settings were assigned to the first-priority group for vaccination in Canada, the Netherlands, Singapore, Spain, and the United Kingdom. In Argentina, the Dominican Republic, Mexico, and Japan, elders were part of the second-priority group and received their vaccines after healthcare workers. Regional differences in vaccine availability and other logistics affected vaccine scheduling within countries.

Community-dwelling older people were vaccinated later than elders living in long-term care settings. These community-dwelling elders also faced challenges when making vaccine appointments because they could not navigate the complicated and confusing vaccine reservation system by themselves.

Good Practice
Reach Out Directly to Elders

Hospital systems in the United Kingdom and Israel did not rely on community-dwelling elders to make their own vaccine appointments on a computer or by phone, which often involved long waits. Instead, the systems reached out to these patients by phone to set up their vaccination appointments. The fact that both countries have national health care systems may have made coordination easier.

In Their Own Words:
Vaccine Availability

Our staff needed to wait till their age (group came up for) eligibility. Because most of them are in their 30s and 40s, they were unprotected for longer than they wanted.

— Provider in Australia

TABLE 2

Vaccination Starting Dates and Priority for Elders and Healthcare Workers

When did the vaccine roll-out start?

● National ● Long-term care ● Community elders

Country	DEC	JAN	FEB	MAR	APR	MAY	JUN
Argentina		Mid Jan		Mar 11 Mar 11			
Australia				Mar Mar Mar (70+)			
Canada	Dec 10 (Canada) Dec 14 (Vancouver)		Early Feb (85+)				
Dominican Republic			Feb 16	Mar 1	Apr		
Israel	End Nov & Dec End Nov & Dec	Jan (smaller ones, 3 weeks later)					
Japan			Feb (healthcare, national hospital)	Mar	Apr (Yokohama) Apr 28 (Iwate)		Early Jun (Yokohama) Jun
Mexico				Mar	Apr Apr		
Netherlands		Jan Jan					Jun
Singapore		Early Jan Jan (St. Andrew)	Feb Feb (70+)				
South Africa			Feb 17			May 17 (60+) May 19 May	
Spain	Dec 23 Dec 27 (Barcelona)	Jan 8 Mid Jan Jan					
UK	Dec 22 Dec 30	Jan					

All 12 countries gave healthcare workers first priority for vaccination. Most countries included long-term care workers as part of that first-priority group. In the few countries that did not follow this protocol—including Australia, Mexico, and some of the European countries—staff members had to wait until their age group was eligible for vaccination. This delay caused many infection-control and staffing challenges for providers.

Inequity of Vaccine Distribution: The World Health Organization (2021) reports that more than 80% of the world's COVID-19 vaccines were supplied to high-income countries. In contrast, only 0.3% of the world's COVID-19 vaccines had been distributed to people in low-income countries as of April 2021. The timing and progress of the vaccine rollout process in the 12 countries (Figure 1) clearly illustrates this inequity.

Starting dates and speed of vaccination varied among the countries, but a few distinct patterns emerged. High-income countries were able to:

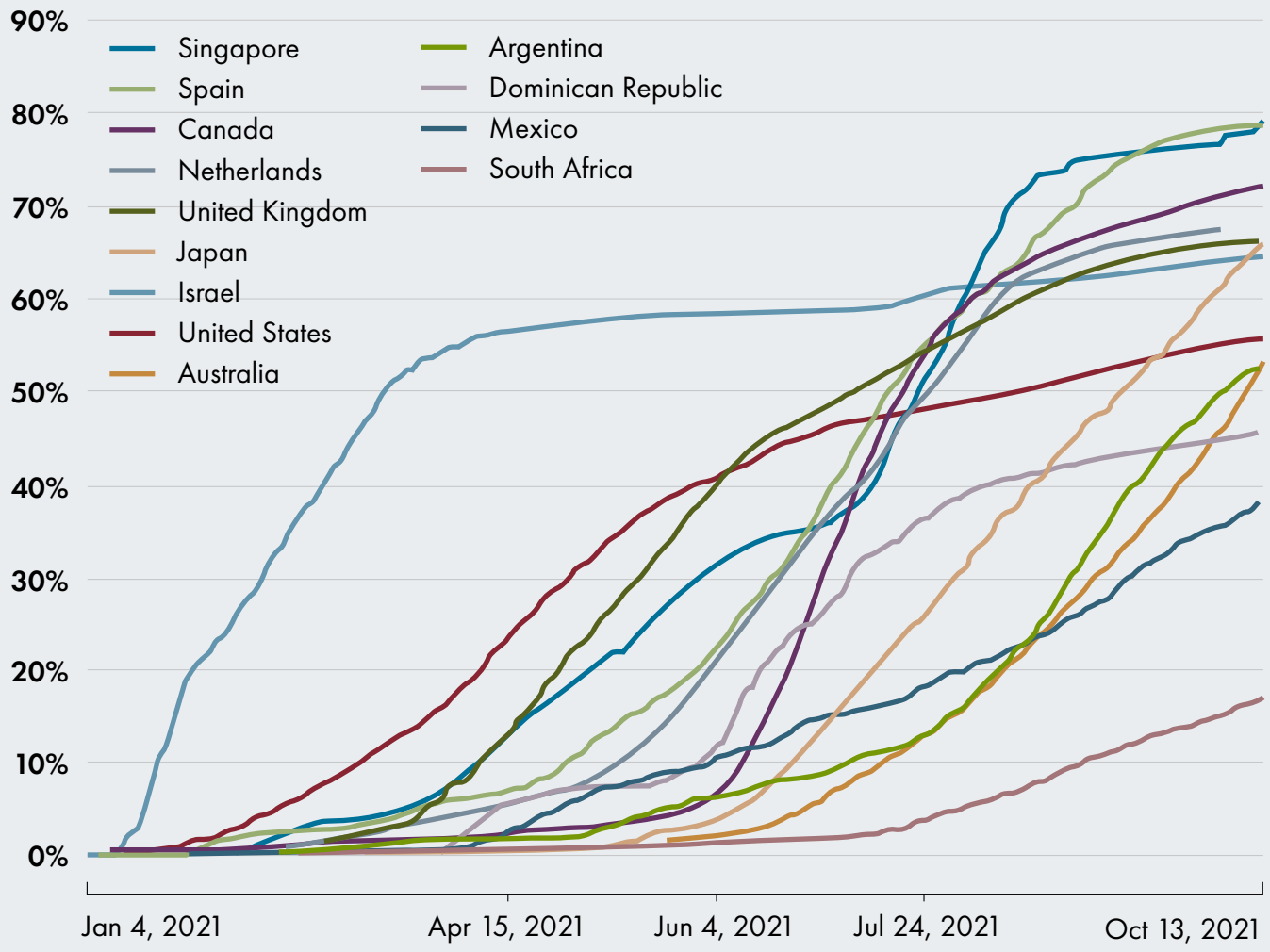
- Start vaccinations quicker than middle- to low-income countries. Australia and Japan, both high-income countries, were exceptions.
- Quickly secure enough vaccines for the needed number of doses. Providers in Argentina and South Africa reported a longer-than-expected waiting period between first and second doses due to a shortage of vaccines.

Photo by Sabrina Bracher/iStock

FIGURE 1

Share of the Population Fully Vaccinated Against COVID-19

Total number of people who received all doses prescribed by the vaccination protocol, divided by the total population of the country.



Source: Official data collated by our World in Data — Last updated 14 October 2021, 09:00 (London time)

Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and have 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

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Access to Vaccine Types: Providers in the 12 study countries did not have access to all eight types of vaccines available worldwide (Table 3). It appears that higher-income countries administered Pfizer, Oxford/AztraZeneca, Moderna, and Johnson & Johnson vaccines, while middle- to lower-income countries used these vaccines but added the Chinese and Russian vaccines when they could not obtain adequate vaccine supplies.

Specifically, providers in the 12 countries were most likely to use these vaccines:

- *Pfizer-BioNTech:* All providers
- *Moderna:* Providers in every country but the Dominican Republic.
- *Oxford/AstraZeneca:* Providers in all countries except Singapore, South Africa, and Israel
- *Johnson & Johnson:* Providers in Mexico, South Africa, and the European countries

TABLE 3
Type of Vaccines

Country	CanSino	Johnson & Johnson	Moderna	Oxford/ AstraZaneca	Pfizer/ BioNTech	Sinopharm/ Beijing	Sinovac	Sputnik V	Last Observation Date
Argentina	●		●	●	●	●		●	Sep 22, 2021
Australia			●	●	●				Sep 30, 2021
Canada			●	●	●				Oct 4, 2021
Dominican Republic				●	●	●	●		Oct 5, 2021
Israel			●		●				Oct 5, 2021
Japan			●	●	●				Oct 5, 2021
Mexico	●	●	●	●	●		●	●	Oct 6, 2021
Netherlands		●	●	●	●				Oct 6, 2021
Singapore			●		●		●		Oct 6, 2021
South Africa		●			●				Oct 6, 2021
Spain		●	●	●	●				Oct 4, 2021
UK			●	●	●				Oct 5, 2021

Source: *Our World in Data, Coronavirus (COVID-19) Vaccination*

Role of National Governments:
The efficiency of vaccine distribution often depended on strong leadership at the national level and the capacity of the national government to implement an effective mass vaccination process. Typically, vaccines were acquired by national governments and distribution was coordinated with elder care providers by national, regional, or local governments or health authorities. Providers reported to health authorities the number of elders in their organizations and authorities then informed providers of the dates and times when they would administer vaccinations on-site.

The United Kingdom and Israel coordinated their vaccine rollouts through their national healthcare systems. This made it easier to coordinate vaccine administration through primary doctors.

THEME 3: VACCINE DELIVERY AND ADMINISTRATION

Provider Preparation: National and regional health authorities and ministries coordinated vaccine acquisition for elder care providers in all 12 study countries. Providers typically followed seven steps to prepare for the vaccination rollout:

1. Communicate with health departments.
2. Report the number of vaccines required for elders.
3. Communicate with elders and their family members through staff members.
4. Obtain informed consent.
5. Check each elder's health number/ identification.
6. Prepare a space large enough to provide in-house vaccinations and observe vaccine recipients after each shot to identify and respond to possible side effects.
7. Bring elders to vaccination sites.

A few organizations also created multidisciplinary task force teams that were charged with responding to urgent vaccination-related needs. All the providers participating in this study assigned either one person or a team to coordinate vaccination delivery.

Vaccinators: Vaccines could only be administered by personnel assigned by the government. In-house nurses were not allowed to administer vaccinations in nine countries. South Africa, Singapore, and the United Kingdom were the only exceptions.

Vaccination Schedules: Vaccination schedules were determined by governments. Government officials notified providers of the date and time for vaccinations and supplied the vaccines and vaccinators. Providers were expected to have elders ready for vaccination at the appointed time. Providers in Mexico did not have access to on-site vaccinations.

Instead, Mexican providers coordinated with residents' family members, who made vaccine appointments for their older relatives and brought elders to the nearest vaccination site. These sites were managed by the government.

Vaccinating Staff Members: Vaccine rollout coordination was more complex for staff members than for residents. Some countries made vaccinations available for staff members on-site at the same time residents received their vaccinations. Other countries left staff members to coordinate their own vaccination appointments.

Some providers paid staff members for the time they spent getting vaccinated and reimbursed them for associated travel expenses. Staff members who did not receive paid vaccination leave had to get vaccinated on their days off. Providers in several countries could not report their staff vaccination rates because, according to health privacy laws in those countries, staff members are not obligated to share their vaccination status with their employers.

Good Practice

A Vaccine Preparation Procedure in the United Kingdom

1. Compile staff lists, including basic details for each staff member. Those details include the staff member's name, gender, date of birth, National Health Service (NHS) number, and details about the staff member's general practitioner.
2. Provide each staff member with a letter confirming their employment in the care sector.
3. Keep staff records of vaccinations and report them through the NHS Capacity Tracker.
4. Create plans for releasing staff to get vaccinated while maintaining adequate staffing levels within the care setting.
5. Ensure that staff members understand the need to obtain consent from residents so they can help residents and families complete the necessary forms when a vaccine is ready to be delivered within the care home. These forms also provide residents and family members with information about the vaccine they will be receiving.
6. Conduct briefing sessions with each local Clinical Commissioning Group (CCG). CCGs are groups of general practices that come together in each area to commission the best services for their patients and the general population have made coordination easier.

In Their Own Words:
Vaccine Delivery and Administration

Clarity as to what would be supported and provided (by the government) was not available. Mixed messages made it difficult.

— Provider in Australia

Our staff could help provide the vaccinations. They could have done it (in) large organizations.

— Provider in Spain

Photo by UN Women/Fahad Abdullah Kaizer

Vaccine Administration Challenges:
This study uncovered several challenges related to administering the COVID-19 vaccine to residents of long-term care settings and to recipients of home and community-based care and other community-dwelling elders.

Challenges related to vaccine administration in long-term care settings included:

- Lack of coordination of vaccination logistics.
- Unclear communication from governments.
- Technology-based appointment systems.
- Wasted vaccines.
- The exclusion of elder care workers from the first-priority vaccination group of healthcare workers.
- The prohibition against nurses in elder care settings administering vaccines.

Challenges related to vaccine administration in the community included:

- Confusing web-based appointment systems.
- Difficulty arranging transportation to vaccination sites.

THEME 4: VACCINE ACCEPTANCE

Acceptance by Residents: Vaccine acceptance among residents was high in most of the countries. Vaccine refusals came primarily from family members who had concerns about side effects, the frailty of their relatives, and rumors and misinformation that had been spread through social media. South Africa had a lower acceptance rate among residents than the other countries, due to religious objections and/or fear of side effects.

Acceptance by Staff Members: The vaccination acceptance rate was initially lower among staff members, due mainly to fears spurred by misinformation, religious objections, and their own existing medical conditions. One common concern, based on unfounded rumors, was that the vaccine would interfere with fertility. Some staff members wanted to wait to be vaccinated so they could see what happened to others who were vaccinated before them. Many of these individuals eventually decided to be vaccinated. In some study countries, including the Netherlands, Spain, and the United Kingdom, providers did not know the vaccination status of staff members due to privacy laws.

In middle- to lower-income countries, acceptance rates were higher among staff members from the beginning. According to a few providers, staff appreciated having access to vaccines. To encourage vaccinations, providers in Canada, Australia, and the Netherlands gave staff members two days' paid leave to receive and recover from their vaccination.

Almost one year after the vaccine rollout started, Australia, Canada, and the United Kingdom made vaccinations mandatory for healthcare and elder care workers. Due to staff shortages, most providers found it challenging to provide care for residents while staff members were receiving or recovering from vaccinations.

In Their Own Words
Vaccine Acceptance in South Africa

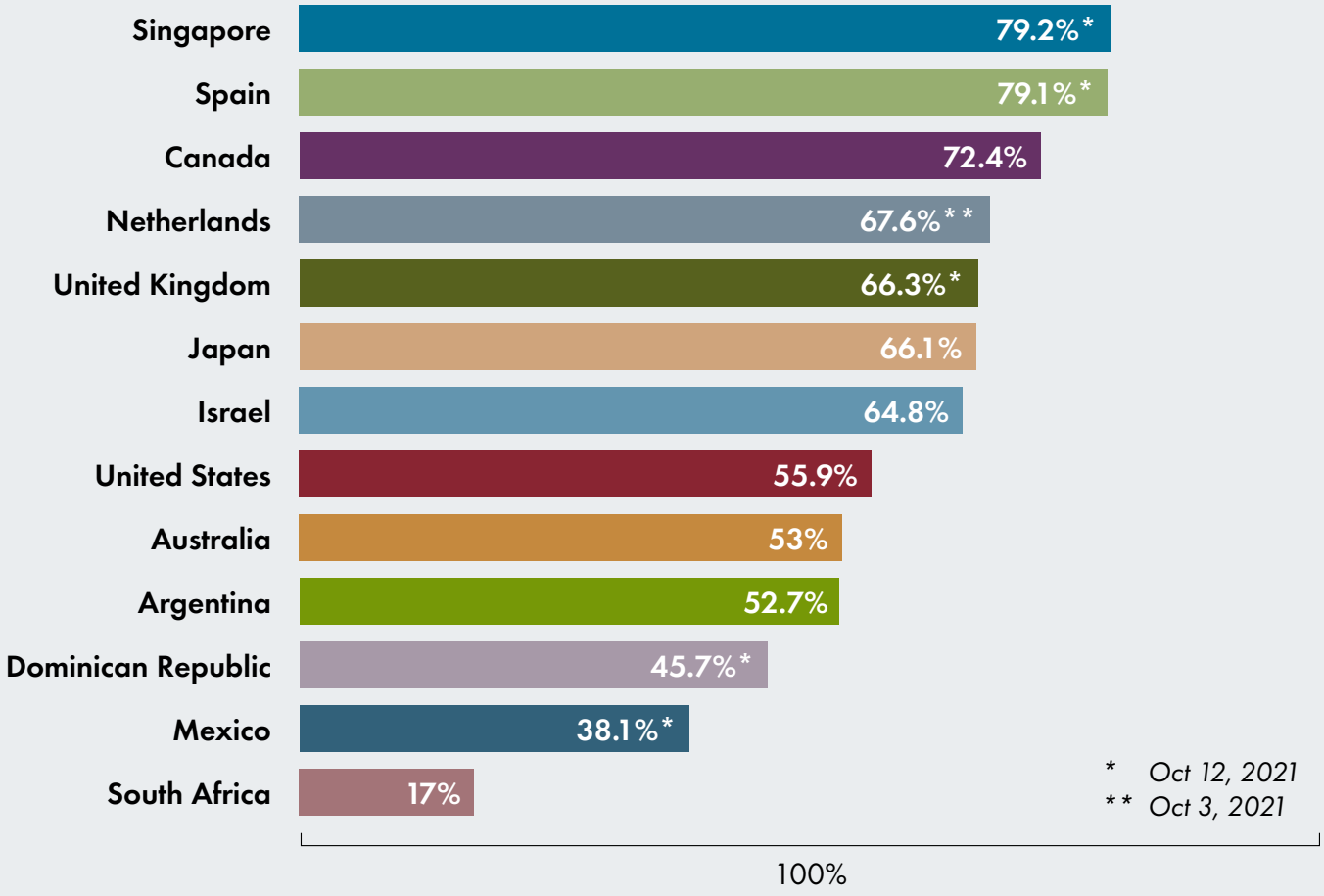
In the survey we carried out, 145 out of 1,133 elders stated they would not be taking the vaccine. Their concerns included the following:

- Side effects.
- Allergic reactions.
- Incompatibility with existing medications for such chronic conditions as cancer, diabetes, heart disease, and lupus.
- Advanced age would cause the vaccine to have a negative effect on their health.
- Family member or doctor advised them not to.
- Insufficient vaccine research.
- Vaccine they would receive was not effective enough.

FIGURE 2

Share of the Population Fully Vaccinated Against COVID-19

Total number of people who received all doses prescribed by the vaccination protocol, divided by the total population of the country.



Source: Official data collated by our World in Data — Last updated 14 October 2021, 09:00 (London time)

Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and have 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

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Full Vaccination: Higher-income countries were much more successful than lower-income countries at administering all the doses prescribed for vaccines (Figure 2). This clear divide may be due to:

- Vaccine availability.
- Logistical challenges associated with a mass vaccine rollout.
- Vaccine hesitancy, especially among younger people.
- Limited access to vaccination sites.

Figure 2 shows the total number of people in a country who received all their vaccine doses, divided by the total population of the country. This data represents the entire population, not just older adults or long-term care staff members.

In Their Own Words:
Vaccine Acceptance

At the beginning, yes, (some staff did refuse the vaccine) but they were convinced they had to have the vaccine. Otherwise, they could no longer work in the institution.

— Provider in Spain

In some facilities, staff were vaccinated as well as residents. In other facilities, staff were excluded.

— Provider in Australia

THEME 5: COMMUNICATION

Communication Channels: Providers in the study countries maintained that it was necessary for them to communicate regularly with elders and their family members, staff members, and national and local authorities. Providers also communicated with the public to address rumors and misinformation about vaccines.

Communication with Families: Providers communicated with family members through email, newsletters, phone calls, and in-person meetings, if necessary. The goal of the communication was to inform family members about the organization's vaccination plan and to obtain informed consent signatures.

In Their Own Words:
Vaccine Education

We made a PowerPoint presentation, first talking about the history of vaccines in the world and how vaccination has saved millions of lives, and later talking about the millions of people around the world that had so far been vaccinated and the percentage of fatalities that had occurred. And that activity was done for residents and staff.

— Provider in the Dominican Republic

Providers often had to explain the potential risks of not getting the vaccine because family members were nervous about having their loved ones vaccinated.

Communication with Staff: Many providers conducted in-person meetings and education sessions with staff to explain the safety of vaccines. One provider from Australia organized an eight-week, $1,000 sweepstakes to encourage staff members to get vaccinated. Israel achieved a high vaccination rate among staff members in a short period of time but, as of fall 2021, those staff members have been slower to take their second doses or third booster shots. The Israeli provider assumed staff members did not have a strong a sense of urgency about COVID-19 after they received the initial vaccine dose.

Communication with Authorities: During the national vaccine rollout, providers communicated regularly with national and local authorities. Many providers reported that their communication with the government during the infection-control phase of the pandemic made it easy to establish effective communications during the vaccine rollout.

The responsibility of providers to send reports to the government were varied.

- Providers in Argentina and Singapore did not have to report their vaccination numbers, since those countries already used a national database to coordinate the vaccine rollout.
- Mexican providers did not have to report to the government because they did not hold vaccination clinics on their property. Instead, residents went to vaccination centers where the government already had their information.
- General practitioners in Israel reported vaccination data for elderly patients living in elder care settings, since the vaccination process was organized by the national health system.

Other providers sought help from their federal or city vaccination teams to obtain information about the vaccination process.

Role of Associations: Elder care associations played an important role in distributing vaccine-related resources in the Netherlands, the United Kingdom, and Spain. South African providers sought guidance about vaccines from academic institutions and a global provider network.

Communication Challenges: Wide-spread vaccine misinformation caused the most common communication challenges encountered by providers. Providers had to rebut rumors about the efficacy of different vaccine products, side effects, and the rationale behind how groups of staff members were prioritized for the vaccine. Providers mentioned repeatedly that this challenge made it more difficult for them to ensure high vaccine uptake in their organizations.

THEME 6: POLICIES AND GUIDELINES

Communication Channels: Policy-Related Challenges: Most providers reported that their governments issued policies and guidelines for vaccinating elders in long-term care settings, but that these policies were not effective for community-dwelling elders who do not reside in those settings. Government policies created challenges for providers in several study countries.

- The Australian provider reported that the messages in policies and guidelines kept changing, making it difficult to know how to proceed.
- The Canadian provider described challenges related to how and when government policies were released. For instance, the media received information before providers, which led to confused communications between providers and family members.
- A provider from the United Kingdom discussed the need to make vaccine-related educational materials more sensitive to cultural issues that might affect vaccine acceptance.

Criteria for Priority Groups: All 12 study countries established priority groups for vaccinations, but the rationale behind these priorities was not well communicated to providers or the public. Providers agreed that these criteria should have been presented in a clear and logical manner.

In Their Own Words:
Making Government Guidelines and Messaging More Helpful

Vaccinations should not be political decisions but should be based on scientific knowledge.

— Provider in Argentina

Some people who were involved on the technical team (that developed vaccine guidelines) were pediatricians, due to their past experience with vaccinations. But the risk calculation is different when talking about older people.

— Provider in Australia

We need to know how many residences there are and how many are living there, since some went back home during the COVID lockdown time.

— Provider in Mexico

In Their Own Words:
Making Government Guidelines and Messaging More Helpful

Government should have used stronger language to say health care workers must be vaccinated unless they have a serious medical condition.

— Provider in Singapore

I think a more aggressive campaign was necessary to convince everyone of the importance of vaccination, not only because of health issues but also because of the difficulties the virus has caused to economies around the world.

— Provider in South Africa

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Changing Messages: As knowledge about COVID-19 evolved, messages from policymakers kept changing, according to providers. Moreover, multiple layers of government (federal, state, and city) and various disciplines (health, social services, and ageing services) were involved in the vaccine rollout. The messages from these entities often conflicted.

Providers offered several observations that could help make government vaccine guidance more helpful:

- Government sectors used the lessons they learned from the infection-control phase of the pandemic to streamline their messages for the vaccine rollout phase. This was helpful.
- Providers working on the front lines of the pandemic felt they would benefit greatly from a compilation of evolving government guidelines.
- Some study countries do not have an accurate census of elder care settings and residents. Providers in those countries thought it would be helpful to establish a national portal to collect and track this information.
- Providers in all study countries expressed the opinion that their input should be included when government entities are developing pandemic response plans and guidelines.

Key Lessons

Six key lessons and associated action items emerged from interviews with providers and other stakeholders around the world. These lessons can help us learn from our current health emergency and better prepare for future crises.

LEADERSHIP

Lesson 1: National governmental leadership was key to an effective COVID-19 vaccine rollout.

Action items:

- Establish national leadership around the vaccines and create a clear focal point for decision-making and communication.
- Secure funding to ensure timely vaccine acquisition.
- Develop culturally appropriate educational campaigns to encourage elder care workers to get vaccinated. Select trusted sources to deliver vaccine-related messages.
- Combat misinformation that is spread by social media networks.
- Make vaccination sites available near where elders live, ideally within walking distance.
- Develop a vaccination system that allows elders and their loved ones to make appointments and access vaccination sites easily and without long waits.

VACCINE ACCESS

Lesson 2: Elders living in long-term care settings were able to access vaccinations more easily than community-dwelling elders, due to the support offered by care settings.

Action items:

- Develop a more holistic vaccine rollout system that includes both elders and staff members in care settings and elders receiving home and community-based services.
- Develop a person-centered vaccine rollout system to ensure that elders with dementia can obtain vaccinations.
- Design an effective vaccine appointment system featuring multiple ways for community-dwelling elders to make vaccination appointments easily.
- Develop a system to train in-house nurses to administer vaccinations to residents and staff at elder care settings.
- Use long-term care settings as resource hubs for community-dwelling elders.

In Their Own Words:
Key Lessons

COVID vaccines cannot be administered by the nurses who work in long-term care, which needs to be changed.

— Provider in Japan

We already (had) a pandemic plan from 2009, so we knew what to do, including communications.

— Provider in Australia

Social development and health (governmental departments) are not well coordinated.

— Provider in South Africa

VACCINE ACCEPTANCE

Lesson 3: Staff members in long-term care settings had lower vaccine acceptance rates than elders living in those settings.

Action items:

- Clearly define the priority group for vaccinations, making sure elder care and home- and community-based care workers are included in the "healthcare workers" category.
- Make vaccination as convenient as possible. For example, staff members should have access to on-site vaccinations.
- Pay staff members for the time they spend getting vaccinated and reimburse their vaccination-related transportation costs.

INEQUITY

Lesson 4: COVID-19 revealed a troubling inequity in vaccine distribution and choice around the globe.

Action items:

- Have further conversations about the equitable distribution of vaccines during a global pandemic, with the aim of ensuring that, in the future:
  - » Higher-income countries will not be able to acquire vaccines earlier than middle- and lower-income countries.
  - » Most or all major vaccine brands will not go to higher-income countries, forcing middle- and lower-income countries to acquire less popular and presumably less-effective vaccines.


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» Steps will be taken to ensure that vaccine distribution will be equitable for urban and rural areas and for residents of all income levels and ethnicity within every country.

ETHICAL CONSIDERATIONS

Lesson 5: The COVID-19 vaccine rollout shed light on the ethical difficulty of weighing personal choice and public health.

Action items:

- Develop robust strategies to encourage staff members to vaccinate while respecting their privacy and right to choose.
- Start a conversation about the balance between public health benefits and personal rights in a pandemic.
- Develop guidelines and strategies on how to avoid discrimination against unvaccinated people.
- Develop a vaccination rollout that does not put people at a disadvantage due to their age, income, education, or comfort with technology.

COMMUNICATION

Lesson 6: Communications with a designated contact point was key to an effective vaccine rollout.

Action items:

- Establish streamlined communications with key government sectors to avoid confusion about the vaccine process for providers, family members, and staff members.
- Establish a designated contact division or individual to provide information to and answer questions from providers by phone, video call, and email.

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Next Steps

Almost two years after the coronavirus first appeared in our world, we are still facing challenges related to COVID-19. While the data gathered through this study was highly informative, it does not represent the end of the investigations that must take place so we can learn more about how to protect frail older adults from the devastating consequences of COVID-19. Providers, policymakers, and researchers must now turn their attention to additional areas of study and action.

As a first step, we must continue reaching out to providers around the world to document their experiences with COVID-19 and its vaccines. The study described in this report should be continued with a larger and diversified sample of countries so we can learn more about how to address the challenges surrounding the COVID-19 vaccine rollout. The knowledge and insights that can be gleaned from conversations with a larger group of providers will be invaluable as the pandemic continues, the status of vaccinations evolves, and new variants possibly emerge.

In addition, leaders around the world should focus their attention on four critical issues that emerged from this study:

Equity Issues: Examination of vaccine administration in the 12 study countries revealed a disturbing lack of equity in access to and choice of vaccines. Clearly, high-income countries are doing far better than their less-affluent counterparts. Close to a year into the vaccination process, some countries have surplus vaccines, due to

citizens who refuse to get vaccinated, while others struggle with vaccine shortages. These inequities occur between and within countries, as urban areas achieve high vaccination rates and rural areas lag behind (KFF, 2021). These inequities must be discussed, researched, and addressed, with special attention to the current status and availability of booster/follow-up vaccines and strategies for their dissemination.

Ethical Issues: We must also discuss and investigate a variety of ethical issues that have emerged during the pandemic and vaccine rollout, including privacy, truthful communications, and the tension between personal choice and public benefit. It is critical that we investigate the effect of the vaccine mandate on staff members and hold discussions about how to balance public health needs and privacy concerns.

Mental Health Issues: Further study is also needed to examine the impact of COVID-19 on residents and staff members in elder care settings. These studies should examine how decreased levels of social interaction during the pandemic is affecting the mental health of elders and staff and how we can address this evolving crisis.

Need for Collaboration: There is a growing need for international collaboration to tackle the challenges associated with the global pandemic. No provider can tackle these challenges alone. The long-term care sector must foster stronger collaboration and develop more robust information exchange systems to ensure that providers can depend on one another for information, advice, and support.

Afterword: Questions for the Future

This international study of issues related to the COVID-19 vaccine rollout did not include the United States. However, nursing home providers, policymakers, and other stakeholders in the U.S. can find many useful lessons from this report—lessons that can help them improve access to and administration of all vaccines, including COVID-19 vaccines.

The United States lagged behind many other countries in testing and contact tracing at the start of the coronavirus pandemic. In contrast, the rollout of vaccines was relatively rapid compared with the experience of many other countries highlighted in this report. This was particularly true for nursing home residents and staff.

Yet, the U.S. vaccine rollout was not without its challenges. Despite widespread vaccine availability, the national percent of vaccinated residents per care setting in the U.S. as of October 31, 2021, was 86%. The rate of vaccinated staff per care setting was much lower, at approximately 73%. Recent emergency regulations from the Centers for Medicare & Medicaid Services in the U.S. Department of Health and Human Services require that all nursing home staff be fully vaccinated by January 4, 2022, with the exception of those with certain medical conditions or religious beliefs.

The United States vaccination rollout was influenced by several factors that are ripe for exploration across all countries.

Politics and Ageism: Many U.S. politicians made the vaccine a political issue rather than focusing on the central role that vaccines could play in solving a public health crisis. A large portion of people

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in the U.S. continues to question the need for the COVID-19 vaccine—a sharp contrast with the high acceptance rate of the vaccine to mitigate polio, which disproportionately afflicted children after World War II. This is particularly troubling, considering COVID-19's disproportionate effect on older adults and others with multiple co-morbidities and compromised immune systems.

Further investigation of the role of politics and ageism in vaccine administration and hesitancy in other countries would provide important insights into whether these barriers to effective vaccine rollout are limited to the U.S. or are more widespread across the globe.

Mistrust of Science: A related barrier to effective vaccine rollout in the U.S. has been a pervasive mistrust of science in many regions of the country. This report highlights the influence of misinformation, spread primary by social media, on lower vaccination rates in many countries. It would be interesting to explore in more detail whether and how "science denial" contributes to the global spread of conspiracy theories and other forms of inaccurate information about the contents and efficacy of vaccines.

Ethnic/Cultural Influences: Finally, higher rates of vaccine access and hesitancy have been documented among disadvantaged groups of people in the U.S. and many other countries. We could benefit from more comparative analyses of how ethnic and cultural backgrounds contribute to variations in acceptance of public health mandates and attitudes toward and concerns about vaccines in general and the COVID-19 vaccines in particular. In addition, we could gain important knowledge and insights from the experience of the U.S. and other countries with various strategies used at the national, regional, local, and individual levels to increase vaccine uptake rates among hesitant populations.

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APPENDIX A: Interview Guide for Providers

Vaccine Preparedness

1. Did you have vaccination plans before the COVID-19?
2. Were your plans effective in preparing for the COVID-19 vaccination rollout?

Vaccine Availability

1. When did the vaccine rollout start in your country?
2. When did the vaccine rollout start in your long-term care organization?
3. When did the vaccine rollout start for elders who are living in their community?
4. What types of vaccines were administered in your organization?
5. How did you acquire vaccines for your organization?
6. Have you encountered any challenges in acquiring vaccines for staff and residents in your organization?

Vaccine Delivery & Administration

1. How did you prepare for the vaccination rollout?
2. Who administered the informed consent—and how?
3. How did you coordinate the vaccination schedule for staff members?
4. How did you coordinate the vaccination schedule for residents?
5. Who coordinated vaccination delivery in your organization?
6. Did you need to provide any special equipment for the vaccination?
7. How did you prepare the space for the vaccination?
8. Who administered the vaccines?
9. Any challenges associated with vaccine delivery and administration?

Vaccine Acceptance

1. Did any residents refuse to be vaccinated?
2. Why?
   - The long-term effects of the Covid-19 vaccines are unknown
   - You might experience serious side effects from the Covid-19 vaccines
   - The Covid-19 vaccines are not as safe as they are said to be
   - The Covid-19 vaccines are not as effective as they are said to be
3. What percent (estimated) of residents in your organization received the vaccines?

4. Did any staff members refused to be vaccinated?
5. Why?
    - The long-term effects of the Covid-19 vaccines are unknown
    - You might experience serious side effects from the Covid-19 vaccines
    - The Covid-19 vaccines are not as safe as they are said to be
    - The Covid-19 vaccines are not as effective as they are said to be
    - They might get Covid-19 from the vaccines
6. What percent (estimated) of staff members in your organization received the vaccines?

Outreach & Communication

1. How did you communicate with residents about the safety of COVID-19 vaccines?
2. How did you communicate with staff members about the safety of COVID-19 vaccines?

Policies & Guidelines

1. Have you communicated with the health department regarding COVID-19 vaccines?
2. Did you need to submit any reports related to COVID-19 vaccinations? If so, to whom?
3. Where and from whom did you seek for advice for COVID-19 vaccines administration?
4. Were government policies and guidelines helpful?
5. Did you receive any support from policymakers? If so, was it well-coordinated effort?
6. How could vaccination policies and guidelines be more helpful for providers?

Moving Forward: Lessons Learned

1. What barriers prevented residents and staff members from completing the vaccines effectively?
2. What general lessons have you learned that could improve vaccination rollouts in the future?

APPENDIX B: Analytical Matrix Chart

Data from this study were analyzed using the grounded theory approach to find emerging themes and key learnings. Contents from interview transcripts and researcher's notes were used to learn about provider experiences with the COVID-19 vaccination rollout in their countries. The researcher created this analytical matrix chart to compare similarities and differences among the 12 countries represented in this study.

VACCINATION PREPAREDNESS		
Planning		
Country	**Did you have vaccination plans before COVID-19?**	**Were your plans effective in preparing for the COVID-19 vaccination rollout?**
Argentina	Yes	Yes
Australia	Yes. Plan called for annual influenza vaccinations for all residents and staff. As of 2020, flu vaccines are mandatory for staff.	Effectiveness was limited due to changing knowledge about COVID-19.
Canada	Yes	N/A. Provincial government took charge, so we did not have to administer the vaccines for staff members. However, we administered vaccines for residents. Our plans were effective.
Dominican Republic	Yes	Yes
Israel	Yes. Children and adults received free influenza vaccines. Influenza vaccine is mandatory for residents and staff.	Yes and no. The government brought vaccines to nursing homes and some residents got vaccinated through health maintenance organizations. It was a different process than having an outside company bringing the influenza vaccines.
Japan	Yes	Yes. Influenza vaccine plan was helpful.
Mexico	Yes. Plan covered vaccines for influenza and local diseases.	Yes
The Netherlands	Yes. We had an influenza vaccination plan.	Yes. Confidentiality and ethical dilemmas associated with COVID vaccines were new for this vaccination process.
Singapore	Yes. Healthcare workers who were born overseas and might not have vaccines received catch-up immunizations.	Not always. Backlog of patients and queue for staff members was very long.
South Africa	Yes. Annual influenza vaccines are managed through private healthcare.	No. No plans were made, as our government did not offer to collaborate with our sector on a vaccine rollout strategy, despite our requests for collaboration.
Spain	Yes. We had an annual plan for influenza vaccine.	Yes. We had a base to build on, but it was different due to the quick and urgent development of COVID-19 vaccines.
The United Kingdom	Yes. The plan covered annual flu vaccinations.	Yes. We were prepared. However, there were unique issues that needed to be addressed.

VACCINE AVAILABILITY				
Starting the Rollout				
Country	**When did the vaccine rollout start in your country?**	**When did the vaccine rollout start in your long-term care organization?**	**When did the vaccine rollout start for elders who are living in their community?**	**What types of vaccines were administered in your organization?**
Argentina	Mid-January 2021	March 11–June 3, 2021	March 11–June 3, 2021	Oxford/AstraZeneca; Sinopharm (Beijing); Sputnik V
Australia	March 2021	March–June 2021	March 2021 for people aged 70 and older	Oxford/AstraZeneca; Pfizer-BioNTech
Canada	December 10, 2020, throughout Canada; December 14, 2020, in province clinics in Vancouver	Mid- December 2020 through early January 2021	Early February 2021 for people aged 85 and older. Public health personnel went into senior housing to administer vaccines.	Moderna; Oxford/AstraZeneca (for people over 40); Pfizer-BioNTech (for long-term care and healthcare); Moderna (distributed first in nation)
Dominican Republic	February 16, 2021	March 1, 2021	April 2021	Oxford/AstraZeneca; Pfizer-BioNTech; Sinopharm (Beijing); Sinovac
Israel	Late November and December 2020. Priority was given to nursing homes, healthcare professionals, and people over age 65.	January 2021. Smaller settings received vaccines three weeks later.	Late November and December 2020	Moderna; Pfizer-BioNTech
Japan	February 2021 in healthcare settings and national hospitals; March 2021 in local areas. The rollout in local areas was faster compared to urban areas. Distribution in urban areas had challenges and varied, depending on city responses. For example, Yokohama started its rollout in April 2021.	April 28, 2021 in Iwate; early June 2021 in Yokohama	June 2021	Moderna; Pfizer-BioNTech
Mexico	March 2021	April 2021	April 2021, same day as elder care settings	CanSino; Oxford/AstraZeneca; Pfizer-BioNTech; Sinovac; Sputnik V
The Netherlands	January 2021	January 2021 through second week of March, 2021	June 2021	Johnson & Johnson; Moderna; Oxford/AstraZeneca; Pfizer-BioNTech
Singapore	Early January 2021	February 2021 for home care, nursing homes, and adult day health programs; January 2021 for hospitals	February 2021 for people aged 70 and older	Moderna; Pfizer-BioNTech; Sinovac
South Africa	February 17, 2021, for national rollout; May 17, 2021, for people 60 years and older.	May 19, 2021	May 2021	Johnson & Johnson; Pfizer-BioNTech
Spain	December 23, 2020; December 27, 2020, in Barcelona; February 2021 for community-dwelling elders	Mid-January 2021	February 2021	Johnson & Johnson; Moderna; Oxford/AstraZeneca; Pfizer-BioNTech
The United Kingdom	December 22, 2020	December 30, 2020	January 2021	Moderna; Oxford/AstraZeneca; Pfizer-BioNTech

VACCINATION AVAILABILITY		
Acquiring the Vaccine		
Country	**How did you acquire vaccines for your organization?**	**Have you encountered any challenges in acquiring vaccines for staff and residents in your organization?**
Argentina	Health ministry in the city asked us to make a list of staff and residents for vaccination. Union coordinated the vaccines for staff members.	No issues in Buenos Aires
Australia	The government brought vaccines to residents, and we prepared consents. Logistics were coordinated by the local health authority. Staff were vaccinated at partner clinics and were paid for two hours by the organization. We also arranged on-site clinics for staff and their households.	The challenge did not revolve around availability for aged care, but the lack of ability to coordinate logistics.
Canada	The public health authority delivered vaccines to hospitals through the provincial government, and hospital personnel came to the organization with vaccines. Informed consent was in place. Currently, staff are trained to administer vaccines. Cooperation among regions took place through daily morning calls among long-term care providers, organized by the health authority.	No challenges. Vaccines for long-term care was a high priority.
Dominican Republic	Vaccines were acquired and distributed by government.	No issues.
Israel	We contacted the ministry of health, which created a special division for taking care of elders. Vaccines were distributed by region to nursing homes by doctors and the regional coordinator. Residents were vaccinated at vaccination centers, after registering and receiving a time and place by computer and SMS text message. Families helped with this process. The national "Mothers and Fathers Shield" project, established by the government in April 2020, contacted nursing homes.	
Japan	City officials visited our organization in March to count vaccine recipients. Then, the prefecture distributed vaccines to us through the city. Organizations need to find doctors to vaccinate their residents, staff, and home care recipients.	The challenge was making vaccine appointments for persons who have no access to the internet. City workers helped to make these appointments but were not able to cover all older persons living in community settings. Another challenge occurred because COVID vaccines cannot be administered by the nurses who work in long-term care. This needs to be changed for follow-up vaccinations in the future.
Mexico	Local government coordinated the vaccine rollout. We brought elders to the vaccination site. People can use a government website to sign up for a vaccine. They receive a vaccine ticket, with the vaccination site identified.	We had no trouble with vaccination logistics. Only hospital doctors, not private doctors, were eligible to administer the vaccine.
The Netherlands	Pharmacy coordinated with central office to determine how many vaccines each provider needed. Providers reported the number of vaccinations and health status of residents to the health region. Providers consulted with families of residents and coordinated logistics with health region.	No challenges for the first group of vaccine recipients. However, it took a long time to administer the vaccine to recipients of home care.
Singapore	Vaccines are acquired and distributed by Ministry of Health.	To win over staff, we held a town hall meeting to answer questions. Not enough staff members were willing to be vaccinated due to fears about potential vaccine side effects.
South Africa	The Department of Health has acquired vaccines for organizations like ours.	There was inconsistent rollout of vaccines at different care settings. In some settings, staff and residents were vaccinated. In other settings, staff were excluded. In addition, nursing staff could not administer vaccines. Finally, the successful rollout of the program was dependent on coordination between many departments, but there were challenges ensuring that coordination.

VACCINATION AVAILABILITY

Acquiring the Vaccine

Country	How did you acquire vaccines for your organization?	Have you encountered any challenges in acquiring vaccines for staff and residents in your organization?
Spain	Vaccines were provided by the national government. Vaccination was managed by the autonomous government, which provided organizations with the vaccination date and asked for the number of persons, residents, day center users, and staff so they could vaccinate everyone at the same time.	No issues.
The United Kingdom	Local vaccination services visited the care homes to vaccinate residents and staff on duty. Staff who did not get vaccinated in the village/care home used vaccination centers at large-scale venues, such as football stadiums. These vaccine appointments could be obtained through a national booking service. Vaccinations were coordinated and organized by National Health Service, which proactively reached out to and cooperated with the health authority.	Some colleagues weren't present when the vaccination team visited. There were some delays in getting them vaccinated elsewhere. It was difficult to get everyone to vaccination hubs, particularly those working night shifts. Finally, the vaccine had several logistical challenges, including sporadic vaccine distribution. Local general practitioners helped smaller organizations access the vaccines.

VACCINE DELIVERY AND ADMINISTRATION

Preparing for Vaccinations

Country	How did you prepare for the vaccination rollout?	Who administered the informed consent—and how?
Argentina	We communicated with the health department in Buenos Aires about the number of vaccines we needed.	Staff members
Australia	We coordinated with the state health division, prepared a vaccination room, developed a waste management plan, and monitored residents by providing 24-hour follow-up observation after vaccination. We also prepared an informed consent process.	Staff members
Canada	We collected informed consent from residents, emailed staff members encouraging them to participate, prepared vaccination space, developed a waiting list, and checked to make sure vaccination numbers were correct.	Staff members
Dominican Republic	We worked in collaboration with the Area Health Authority.	Staff members talked to the residents and their relatives.
Israel	Doctors coordinated and put necessary information into the system to arrange all the logistics needed for vaccination.	Staff members
Japan	We communicated with the city, collected signed informed consent, and prepared a large space for vaccination and observation.	Everyone in our organization is trained on informed consent and coordinated with the administration and caregivers.
Mexico	We provided names of residents to the local government and brought residents' IDs to the vaccination sites. Family members of elders registered the vaccination, not the organization.	The consent process was carried out by government personnel at the vaccination site.
The Netherlands	Our task force group, a multidisciplinary team, coordinated the vaccination process with the health region. We prepared all the residents to sit outside their rooms, 1.5 meters apart. Doctors vaccinated and observed residents.	Nurses spoke with residents and family members.
Singapore	Nurses were trained to administer the vaccine.	Our staff used a template provided by the Ministry of Health.
South Africa	Nurses were trained to administer the vaccine. A survey was conducted with residents to determine how many had registered for the vaccine and the reasons that others did not want to be inoculated. An aggressive communication strategy was devised and implemented to disseminate correct information. We established contact with local vaccination sites to coordinate dates for the rollout. On-site teams at the care settings managed the logistics.	Staff members

VACCINE DELIVERY AND ADMINISTRATION

Preparing for Vaccinations

Country	How did you prepare for the vaccination rollout?	Who administered the informed consent—and how?
Spain	We registered the identity of the residents and staff members and sent that information to the local health authority in order to help vaccinations go more smoothly on vaccination day. We communicated the total number of residents, day center clients, and staff who were going to be vaccinated. We coordinated a communication strategy among staff, residents, and families to get as many persons vaccinated as possible. We also collected consent forms from residents and families.	Residents and families were given information about informed consent requirements during meetings and in newsletters. The informed consent had to be given by persons who were capable of providing consent. Consent could be given verbally, although we gathered written consent too. In cases where residents could not provide consent themselves, families provided that consent.
The United Kingdom	Care home managers (a) put together staff lists, including basic personal information details for each staff member; (b) provided each staff member with a letter confirming their employment in the care sector; (c) kept staff records of vaccinations and reported those records via the National Health Service Capacity Tracker; (d) considered the logistics of releasing staff to receive their vaccine while maintaining staffing levels within the care setting; (e) took steps to ensure that staff understood the need for obtaining consent so they could help residents and families complete the necessary forms; (f) used guidance developed for COVID visitation to establish a safe and clean vaccine room; and (g) held briefing sessions with each local Clinical Commissioning Group.	We used standard forms from the National Health Service and gained consent from individuals or persons with legal power of attorney. The consent was stored in the individual's electronic files. Staff consent was obtained when vaccines were provided on-site but were not required at the vaccination hubs. Local authorities provided their own consents.

VACCINE DELIVERY AND ADMINISTRATION

Coordinating Vaccine Delivery

Country	How did you coordinate the vaccination schedule for staff members?	How did you coordinate the vaccination schedule for residents?	Who coordinated vaccination delivery in your organization?
Argentina	No need.	We followed the schedule set by the city.	We coordinated the vaccine delivery with the city.
Australia	We coordinated with the health authority to provide a human resources team that contacted all staff to arrange off-site appointments. We also sponsored on-site vaccinations.	The government provided the date and time for resident vaccinations, which was managed internally by nurses.	We had a COVID-19 response team in our organization that took care of infection control and vaccination rollout.
Canada	Staff members made their own appointments and providers covered their time.	We were told by hospital staff to vaccinate room by room and neighborhood by neighborhood, depending on staff capacity.	We assigned in-house staff. Our leader for professional practice coordinated with public health officials.
Dominican Republic	We convinced the Area Health Authority that it would be more convenient to vaccinate everyone at the same time.	We followed the same protocols when vaccinating staff and residents.	Personnel from the Ministry of Health delivered the vaccines and brought personnel to administer them.
Israel	Staff were vaccinated the same day as residents.	Residents were vaccinated the same day as staff.	The regional coordinator/director of healthcare coordinated vaccine administration.
Japan	Staff members made their own appointments with their own clinics.	Detailed schedule was requested by clinic.	Vaccine delivery was coordinated by a COVID-19 response team led by a nurse.
Mexico	Staff members coordinated their vaccination schedule with their internal caregiver team to ensure adequate coverage in the care setting.	Family members took care of the vaccine appointment.	Our doctor coordinated vaccine delivery.

VACCINE DELIVERY AND ADMINISTRATION

Coordinating Vaccine Delivery

Country	How did you coordinate the vaccination schedule for staff members?	How did you coordinate the vaccination schedule for residents?	Who coordinated vaccination delivery in your organization?
The Netherlands	We asked staff to get vaccinated when they were not working. We provided financial support for travel costs and paid for the time it took to get vaccinated. Vaccination status was confidential.	Pharmacists delivered vaccines to each site. The health region set the dates for vaccinations.	A staff member oversaw the vaccine rollout.
Singapore	Staff members had access to in-house vaccinations. We held an early, three-hour vaccination clinic to accommodate the night shift and a three-hour afternoon vaccine clinic to accommodate the day shift.	We vaccinated residents one unit at a time.	The director of operation and her staff coordinated the timing and scheduling of the vaccination rollout and sent vaccination data to the Ministry of Health. A nurse manager was assigned to coordinate vaccinations. In January 2021, the government decided that treatment of any long-term effects caused by the vaccine would be covered by public funding.
South Africa	There was lack of clarity about the protocol for staff vaccination as part of the rollout in care settings. In some instances, staff were included in on-site vaccination clinics and in other instances staff were asked to access offsite vaccination sites. Staff who were vaccinated offsite were supported with time off work. Managers monitored, tracked, and recorded the vaccination of staff and reported these vaccinations to the organization's human resources department.	Residents were notified by the Department of Health about the date and time when officials would be on-site for vaccinations. In situations where residents were not able to mobilize, the on-site staff assisted.	The on-site managers coordinated the logistics at specific care settings. Central coordination was provided by the organization's head office.
Spain	We had a one vaccination day for staff and residents. Staff members were vaccinated first, followed by residents. Almost everyone came on the date they were scheduled to be vaccinated.	The staff of the public hospital near our nursing homes gave us the date on which they would administer the vaccine. Residents who were bedridden received the vaccine in their rooms. Residents who were ambulatory received the vaccine in an open area, such as the gym. Residents were placed into groups for observation after they received the vaccine.	Staff from the health center/hospital were assigned to vaccinate residents and register vaccination data with the local and national governments. After we sent the hospital the number of residents to be vaccinated, the hospital requested that number of vaccines from the local health authority. Vaccines arrived the day they had to be administered in the nursing home, based on staff availability. Hospital staff brought the vaccines to the nursing home and administered vaccines with help from our own sanitary staff.
The United Kingdom	We gave staff members dates for on-site vaccinations sessions, plus websites where they could arrange for vaccination at hospitals and vaccination hubs. Some staff members were able to receive vaccinations on-site when sufficient vaccinations were available. The rest received vaccinations at small community venues. Communications to encourage staff members to be vaccinated were challenging.	We got consents ready and then worked with visiting nurses and general practitioners to vaccinate everyone in the care households at one time. We also tried to include the tenants of the apartments, but many of them had to go to their general practitioners to be vaccinated.	Registered managers and nurses coordinated vaccine delivery.

VACCINE DELIVERY AND ADMINISTRATION			
Administering Vaccines			
Country	**How did you prepare the space for the vaccination?**	**Who administered the vaccines?**	**Any challenges associated with vaccine delivery and administration?**
Argentina	We found a large communal space where residents and staff members could practice social distancing and safely be observed for post-vaccine conditions.	Doctors and nurses from the city	One frail older adult with Alzheimer's disease had a reaction to the vaccine and died. We had to inform her family.
Australia	Resident vaccinations occurred in their rooms. For staff, a dedicated room was equipped with appropriate screens, sharps containers, hand washing facilities, and personal protective equipment. Residents of each unit gathered in a common area where staff helped vaccination providers identify residents. The government brought everything needed for vaccinations.	The government contracted with vaccination providers who were predominantly nurses.	Logistics were a challenge. We lacked clarity regarding what would be supported and provided. Mixed messages made it difficult to provide adequate information to staff members.
Canada	We went to where residents were. Residents received vaccinations in a lounge or chapel, not a clinical setting.	The government provided clinic staff, mostly doctors and nurses.	Communication was challenging. It would have been helpful to call a centralized number for vaccine coordination or email a communication person directly. The external team was late in acting and logistics were a struggle. A public health nurse delivered the vaccine to us.
Dominican Republic	We divided one of our multipurpose rooms into three spaces: one to explain and fill in the consent form, another for vaccinations, and a third area where vaccinated individuals could sit for 20 minutes in case there was a reaction to the vaccine.	Doctors were sent from the Ministry of Health.	
Israel	We set aside a special room for observation.	A manager coordinated the vaccinations at each site. Vaccines were administered by doctors, nurses, and Pfizer experts.	We encountered two challenges: (a) It was difficult for older adults, especially those aged 80 and older, to register for the vaccine online; and (b) nurses in our organizations could not administer vaccines.
Japan	Living room space	Doctors and nurses	We were not familiar with the observation protocol and that uncertainty caused anxiety. Additional challenges were associated with residents needing help setting up vaccination appointments and, depending on the city, arranging for transportation to the vaccination site.
Mexico	N/A	Government personnel	Persons with wheelchairs encountered challenges obtaining the vaccine.
The Netherlands	We secured a large space and carried out other logistics. We did not use hallways because of limited mobility and difficulties with social distancing.	Nurses who are allowed to vaccinate administered the vaccines. Some residents visited their general practitioners (GP). Seventy percent of residents have their own GP. GPs administered vaccines in health regions that did not allow nurses to inject vaccines.	It was challenging not to waste the vaccines since each bottle had five-to-six doses. We also encountered logistical challenges due to the constantly changing nature of vaccine policy and the difficulty in defining who was a health worker and what services these workers could provide.

VACCINE DELIVERY AND ADMINISTRATION			
Administering Vaccines			
Country	**How did you prepare the space for the vaccination?**	**Who administered the vaccines?**	**Any challenges associated with vaccine delivery and administration?**
Singapore	The vaccination space was prepared by the adjacent hospital.	The Agency for Integrated Care coordinated the vaccinations and allowed staff at some organizations to administer the vaccine. The vaccination team consisted of doctors and registered nurse managers.	One challenge involved providing vaccines with accuracy while avoiding waste when extracting five doses from one bottle.
South Africa	Each home identified appropriate space depending on feedback from health officials.	All vaccines were administered by the state personnel.	We experienced a variety of coordination delays. For example, the state staff could only arrive at the site with a police escort and if the police were unavailable, the plans for that day were not implemented. In addition, staff did not always have sufficient vaccines and there was lack of clarity regarding the inclusion of staff in the vaccination rollout.
Spain	We carried out basic logistics, including setting up a table and chairs. We also secured a room, like the gymnasium, that was large enough to accommodate quick vaccinations. The hospital staff brought the computers.	Nurses from the nearby public hospital administered the vaccines with help from our own nurses and doctors.	The vaccination rollout was slow at the beginning because the authorities only used nurses who were specially designated for this role. The rollout gained speed when staff from the hospital came to our nursing home to vaccinate and when our organizations offered our own staff to help.
The United Kingdom	Vaccines were administered in resident rooms and in one of the meeting rooms.	Nurses or general practitioners from outside the care setting.	The Pfizer-BioNTech vaccine was challenging to transport to the care homes due to the storage-temperature requirements. Later, the Oxford/ AstraZeneca was used for care homes and Pfizer was used in vaccination hubs and hospitals, mostly for staff.

VACCINATION ACCEPTANCE		
Resident Acceptance		
Country	**Did any residents refuse to be vaccinated? Why?**	**What percent (estimated) of residents in your organization received the vaccines?**
Argentina	Yes. One family did not agree to the vaccine, due to the resident's frailty.	All but two residents.
Australia	Families, not residents, refused the vaccine in cases where the resident was living with a cognitive impairment. Families were not afraid of the resident dying from COVID.	99%. This percentage includes resident turnover.
Canada	Some families have refused the vaccines for their relatives, either because they did not understand the vaccine, were afraid of it, or wanted to wait. A small percentage chose not to be vaccinated.	95%
Dominican Republic	Yes. Two residents refused the vaccine: one because she was very allergic to many things and the other because of concerns about possible side effects.	96%
Israel	More residents refused the vaccine at the beginning of the rollout in response to rumors circulating about the vaccine, but this improved when municipalities conducted targeted vaccine campaigns and made it easier to access vaccinations.	99%
Japan	Some families refused the vaccine for their relatives, due to concern about side effects, allergies, and pre-existing medical conditions, frailty, or high fever. These families were psychologically affected by the pandemic.	99%
Mexico	No one in my organization refused the vaccine.	100%
The Netherlands	Only three out of 700 residents refused the vaccine because they were not healthy enough or had religious objections. Two families made this decision for relatives who were frail and living with dementia.	96%
Singapore	Yes, quite a few clients of the adult day center and residents of the nursing home refused to be vaccinated. Some families did not give consent for relatives living with dementia. Some refusers had a fear of the unknown.	95%
South Africa	We conducted a survey to determine who would take the vaccine. The 145 elders who stated they would not take the vaccine expressed concerns about side effects; allergic reactions; incompatibility of the vaccine with medications they were taking for chronic diseases like cancer, diabetes, heart disease, and lupus; and advanced age, which they thought would cause the vaccine to affect their health negatively. These residents did not trust the vaccine because their family or doctor advised them against vaccination; they felt the vaccine was insufficiently researched; or they did not believe the vaccine we were initially going to receive was effective enough.	68%
Spain	Only one person ultimately refused the vaccine, although we started with three or four residents who didn't want to be vaccinated. The decision of this one unvaccinated person was made by her family, because she was unable to make the decision herself. The family was concerned about long-term side effects.	95%
The United Kingdom	A very small number refused the vaccine and the reasons for refusal were complex, including concerns about ongoing health treatment that does not allow vaccines, timing, culture, and misinformation.	98.4% received the first dose; 61% received the second dose, administration of which is ongoing.

VACCINATION ACCEPTANCE		
Staff Acceptance		
Country	**Did any staff members refuse to be vaccinated? Why?**	**What percent (estimated) of staff members in your organization received the vaccines?**
Argentina	No, we all felt privileged.	100%
Australia	Yes. A small proportion refused, predominantly due to misinformation and mistrust of the vaccines. Six staff members resigned or were terminated because the government mandated vaccination of staff.	Now at 100% due to mandate.
Canada	Yes. About 20% of staff have not been vaccinated due to concerns about pregnancy-related issues, allergies, religious objections, rumors, or personal choice.	78% (18 refusers)
Dominican Republic	Yes, at the beginning. They were convinced to take the vaccine when vaccination became mandatory in the organization.	100%
Israel	Yes. Thirty-five percent of staff have not received their third doze of the vaccine.	99%
Japan	Yes. Staff members refused the vaccine due to concerns about side effects, allergies, pre-existing medical conditions, or a desire to wait. Many refusers are part of the younger generation.	Less than 10%
Mexico	N/A	100%
The Netherlands	N/A. Young women were concerned about their ability to get pregnant after receiving the vaccine.	N/A
Singapore	Yes	90%
South Africa	Yes. Some staff members refused the vaccine for religious reasons. Others were not satisfied that sufficient testing was done to demonstrate the efficacy of the vaccines. Some were influenced by myths surrounding the vaccines that were circulating on social media, including the myth that the vaccine would make them more susceptible to the virus. Some were also concerned that the vaccine was tested for a particular strain of the virus and would offer little protection against variants.	55%
Spain	Yes. Between 30% and 40% of staff members refused vaccination at the beginning, but that figure dropped to 4% later. Three staff members continued to resist vaccination due to concerns about side effects.	96%
The United Kingdom	Yes. Some staff members were concerned about vaccine-related fertility issues or had cultural and religious reasons for refusing the vaccine. There was resistance from minority groups and from those who wanted to wait before getting the vaccine. The vaccine is now mandatory for staff in care settings.	99.5%. The remaining 0.5% are medically exempt.

OUTREACH & COMMUNICATION

Communicating About Vaccine Safety

Country	How did you communicate with residents about the safety of COVID-19 vaccines?	How did you communicate with staff members about the safety of COVID-19 vaccines?
Argentina	In the case of residents living with cognitive impairment, we contacted family members and explained that their relatives would be at greater risk of contracting COVID-19 if they did not get vaccinated.	We conducted in-person conversations to explain the different types of vaccines.
Australia	We conducted extensive communication, which included a video.	We made a video featuring a message from our chief medical officer, sent regular emails about the vaccine, offered the opportunity to speak with members of our clinical governance committee, and provided information to groups and individuals. We also sponsored an eight-week, $1,000 sweepstakes for those who were vaccinated.
Canada	We used email, newsletters, phone calls, and in-person conversations to explain the probability of contracting COVID-19 and potential side effects of the vaccine. Most of our activity was conducted through the informed consent and publicity campaign available through the province.	We used emails, newsletters, phone calls, and staff meetings to discuss the vaccine, and staff rights and freedom regarding vaccination. Staff could also obtain their own information about the vaccines.
Dominican Republic	We made a PowerPoint presentation to explain the history of vaccines in the world, how vaccination has saved millions of lives, how millions of people around the world had been vaccinated so far, and the percentage of fatalities that had occurred.	We shared our PowerPoint presentation with staff.
Israel	We offered presentations and explanations multiple times. The state did not communicate well. It would have been better if the state had developed campaigns to educate the public.	
Japan	Staff members developed a manual that was based on communication reports and guidelines from the central government.	We presented and shared information during staff meetings.
Mexico	Doctor spoke to residents and communicated with their families using government materials.	Doctor spoke to the staff.
The Netherlands	We conducted in-person dialogues with clients and families using a communication brochure produced by the health region.	We shared information with staff on our website and conducted internet-based communication. We produced a video and video blog for staff.
Singapore	We sent a flyer to all residents. Nurse managers conducted individual, in-person communications with residents.	We shared information during Zoom townhalls and produced a PowerPoint presentation.
South Africa	We wrote articles in our newsletter, produced an ongoing poster series, raised awareness through our social media platforms, and used our text messaging portal to inform elders about registering for the vaccine. Our social work team sponsored awareness talks about the vaccine.	We communicated with staff through our newsletter and through face-to-face discussions with on-site managers.
Spain	Our director ran information meetings for residents at the nursing home and sent newsletters to families. We also used our website to communicate with residents and families. When needed, the doctor also communicated directly with individual residents and family members.	We used in-person group meetings to communicate messages about the importance of solidarity, our responsibility to care for older adults, and the benefits of the vaccine. During our vaccination campaign, doctors spoke at staff meetings. We also facilitated peer-to-peer communications.
The United Kingdom	We wrote to all residents, clients, and families about the vaccine and shared available information from the National Health Service. We held video meetings with family members to prepare them for the vaccine and keep them informed. We also held conversations with residents. Finally, older adults and their families were involved in our general communications efforts, which were directed to staff.	Our communications methods included peer-to-peer communications, Facebook, direct access to leadership teams, communication networks to help employees develop trust, posters, guidance, and question-and-answer sessions. We also developed materials that managers can share with employees and use in discussions.

POLICY & GUIDELINES		
Communication with Outside Entities		
Country	**Have you communicated with the health department regarding COVID-19 vaccines?**	**Did you need to submit any reports related to COVID-19 vaccinations? If so, to whom?**
Argentina	Yes. We use phone or email to communicate with the health ministry in the city. We have 24-hour access to a COVID geriatric specialist.	No. They have everything already.
Australia	Yes. We have been in touch with the health department since the pandemic started. Reporting is now mandatory.	Yes. We file weekly statistics for residents and staff members with the commonwealth.
Canada	Yes. We are always in touch with the health authority, by email or phone regarding the vaccine rollout.	Yes. We file compliance reports listing the number of persons who have been vaccinated, how many people have refused the vaccine, and the reasons for refusal.
Dominican Republic	Yes. We are always in contact with the health department.	Yes. We report any side effect to the area health authority.
Israel	No. The regional registration system already had information about vaccines.	No. This is the responsibility of general practitioners.
Japan	Yes. We communicate with the health department in the city.	Yes. We submit the names of vaccinated individuals to city and to doctors' offices.
Mexico	Yes. We send data to city, region, and federal health authorities for residents who have been vaccinated and those who are not vaccinated.	No.
The Netherlands	Yes. We are constantly in touch with the city health department.	The national government already has data through registration of the vaccine appointment.
Singapore	Yes. We participate in the Agency for Integrated Care's What'sApp group chat for 200 leaders from senior care sector.	No.
South Africa	Yes. Communication took place at all phases of the rollout.	Yes. We send reports to the Department of Social Development, which oversees our sector. We also file ongoing reports to the National Institute for Communicable Diseases as new cases are diagnosed.
Spain	Each day we send a report on management of COVID-19 to the local health authority. The report details whether new residents and staff members are vaccinated.	Yes. We had to report to the local health authority so we could open the care home to families and let residents leave the care home for outings.
The United Kingdom	Yes. The vaccine rollout has been led by the Department of Health and Social Care (DHSC). DHSC facilitates calls and collects updated information.	Yes. There is a Coronavirus Yellow Card reporting site to report adverse vaccine reactions. We also use a Capacity Tracker to report to the National Health Service all vaccinations, workforce numbers, bed availability, and COVID outbreaks.

POLICY & GUIDELINES			
Advice & Guidance			
Country	**Where and from whom did you seek for advice for COVID-19 vaccine administration?**	**Were government policies and guidelines helpful?**	**Was there any support from policymakers? If so, was it a well-coordinated effort?**
Argentina	Vaccine team at the health ministry	Yes. There was nothing new, but it was nice to have them.	Yes
Australia	There was one channel of advice: the Australian Department of Health website.	Yes, sometimes. We are still struggling with some policies.	No. Policymakers kept changing their messages.
Canada	British Columbia Centre for Disease Control, SafeCare BC, and internal teams in our organizations	Yes	Yes. Media gets information before providers do.
Dominican Republic	There was a person to contact if you had any questions.	Yes	It has been a very well-coordinated and extraordinary effort.
Israel	Information was available through a special department in Ministry of Health. We also sought advice from general practitioners and associations.	Policies kept changing and that made it difficult. Policies and guidelines could have been simpler and clearer and could have given more explanation.	Political will was strong but messaging was not consistent because it was not based on scientific findings.
Japan	We sought advice from doctors, the city vaccine department, and the city public health authority.	Yes	Yes. It was helpful when city officials came and organized question-and-answer sessions with staff and residents.
Mexico	We sought advice from the city and from personal connections.	Priority and phasing were not effective. Caregivers and private doctors were not included.	Coordination was good.
The Netherlands	We sought advice from ActiZ, the association of long-term care providers, and the National Institute of Public Health and the Environment.	Yes	It was helpful. I did not need to create from scratch.
Singapore	We sought advice from SingHealth headquarters, which coordinated the training and education, and Changi General Hospital, which managed operations. We followed instructions from the Ministry of Health.	A Zoom seminar for general practitioners and doctors from private hospital was helpful, but guidelines needed to be developed.	A multi-ministry task force held meetings and press conferences, so there was a lot of support from policymakers.
South Africa	We sought counsel from numerous academic institutions, the National Command Council, and the Ministerial Advisory Committee on COVID-19. These are all expert bodies responsible for the government's COVID-19 response plan. They have all met dead ends. Instead, we now rely on the government's website portals and peer collaborations within the sector.	Yes. Government policies and guidelines were extremely helpful in informing our COVID-19 disaster management response plan. No guidelines have yet been communicated regarding the vaccination rollout.	We were given some support from the regional Department of Social Development for our COVID-19 disaster management response.
Spain	Local health authority held a weekly meeting with employer associations to provide information and advice to associations so they could pass it on to members. This was coordinated by the government health department's COVID team.	Yes, it has been very helpful.	Yes. I don't agree with all the decisions, but it was well-coordinated.
The United Kingdom	Advice was sent to us via the Department of Health and Social Care and the local National Health Service Clinical Commissioning groups.	Yes, very. A standard operating procedure and green book was developed.	Yes, very well coordinated. Overall, the support was positive for residents. Potential areas of improvement include cultural issues around vaccine updates.

MOVING FORWARD

Lessons Learned

Country	How could vaccination policies and guidelines be more helpful for providers?	What general lessons have you learned that could improve future vaccination rollouts?
Argentina	Streamline the messaging from the province and city. Address inequality within the country to increase access to vaccines in small cities and/or communities. Vaccines were not well handled. The national government must distribute vaccines to provinces and cities.	Strong leadership makes all the difference. The minister of health is working so well.
Australia	The Australian Technical Advisory Group on Immunisation (ATAGI) developed guidelines and its programs were robust. The ATAGI technical team included pediatricians who had past experience with childhood vaccinations, but the risk calculation is different for older persons.	Create a "Pandemic Inbox," one contact point for information. A strong, in-house clinical team can help the medical team make collaborative decisions. We learned that risk could come from staff, not relatives. We had a pandemic plan from 2009 so we were better prepared and knew how to conduct communications.
Canada	Populations at greatest risk for COVID should receive attention first. Start by educating those populations about the vaccines. It is also important to emphasize societal values: the responsibility to protect others and to value public health.	Communicate with staff about liability and incentives, making an annual commitment to get vaccinated, and freedom and responsibility. Select credible people to offer education and make it easy for people to be vaccinated.
Dominican Republic	A more aggressive campaign was necessary to convince everyone of the importance of vaccinations not only because of health issues but also because of the difficulties the virus has caused for economies around the world.	Start earlier with a communication campaign that is informative and does not try to disguise the truth to avoid panic.
Israel	Fewer guidelines with more clarity would be helpful. Create a basic guideline, based on the knowledge we have acquired, that helps to prepare for a future pandemic.	Use video call systems for better communication in future pandemics. Systematize communication strategies through Zoom. Create a round table where government and providers can touch base. Provide incentives to encourage doctors to administer the vaccine. Promote equitable vaccine distribution. Our vaccination success factors included having enough vaccines, a vaccination campaign, and personal contact through health maintenance orgs.
Japan	Guidelines were helpful but they could easily become outdated or need modifications.	It would have been better if the government worked directly with providers to include concrete examples in their communications. The response to vaccines and infection control from the regional level should have been quicker.
Mexico	We need an official census of elder care organizations and their residents. We need to know how many care settings there are and how many residents are living in those settings. Many residents went back home during the COVID lockdown.	Vaccinations of healthcare workers should be mandatory.
The Netherlands	Priority groups can be better defined and coordinated. We should start with the most vulnerable groups and employ clearer communication.	
Singapore	Criteria for the vaccination was challenging. The Ministry of Health should use stronger language. Health care workers must be vaccinated unless they have a serious medical condition. When the situation stabilized, the government should have compiled a collection of various guidelines.	Assure the population that it is worthwhile to be vaccinated. Ensure that older adults are healthy before the first vaccination and remain well until after the second vaccination.
South Africa	The response plan impacting our sector should have been formulated with our input.	Increase communication between the department of health and care providers. Create a vehicle, like discussion groups, to help residents seek clarity and raise concerns. Employ elder-friendly communication strategies to ensure that messaging is relevant, clear, simple, and understandable.
Spain	Take steps to communicate with and use the capacity of organizations and social sectors. Stricter and more effective infection control measures are needed.	Seek best practice from the world. Government should give organizations the flexibility to make operational decisions and should coordinate better with the private sector.
The United Kingdom	Make vaccination mandatory. Increase collaboration between social and healthcare sectors.	The use of vaccine hubs and an online self-service booking system proved very effective in getting large percentages of the population vaccinated very quickly. The process also highlighted the need for powerful communication/public information campaigns to ensure high opt-in from the public. Another factor that undoubtedly had an influence on vaccinations was the lifestyle impact of getting vaccinated. For example, vaccinated individuals were able to travel without testing.

APPENDIX C: References

Australian Government. (2021). Australia's COVID-19 vaccine national rollout strategy. Retrieved November 18, 2021, from https://www.health.gov.au/sites/default/files/documents/2021/01/covid-19-vaccination-australia-s-covid-19-vaccine-national-roll-out-strategy.pdf.

de Benito, Emilio. (2020, November 27). Spain's coronavirus vaccination drive: These are the 15 priority groups. EL PAÍS English Edition. Retrieved November 18, 2021, from https://english.elpais.com/society/2020-11-27/spains-coronavirus-vaccination-drive-these-are-the-15-priority-groups.html.

Government of British Columbia. (2021, November 16). COVID-19 immunization plan. Province of British Columbia. Retrieved November 18, 2021, from https://www2.gov.bc.ca/gov/content/covid-19/vaccine/plan.

Govex. (2021). International vaccine data. GitHub. Retrieved November 18, 2021, from https://www2.gov.bc.ca/gov/content/covid-19/vaccine/plan.

Iglesias, E. (2021, April 3). Vaccination plan advances but with difficulties, as second wave nears. Buenos Aires Times. Retrieved November 18, 2021, from https://www.batimes.com.ar/news/argentina/vaccination-plan-advances-but-with-difficulties-as-second-wave-nears.phtml.

International Rescue Mission (2021). Analysis shows 87% of COVID-19 vaccine doses have been given in wealthier countries, despite surges in cases in conflict-affected countries, warns IRC. Retrieved from https://www.rescue.org/press-release/analysis-shows-87-covid-19-vaccine-doses-have-been-given-wealthier-countries-despite.

KFF. (2021, November 17). Does The Public Want to Get a COVID-19 Vaccine? When? Retrieved November 18, 2021, from https://www.kff.org/coronavirus-covid-19/dashboard/kff-covid-19-vaccine-monitor-dashboard/.

Kiyota, E. (2021). Elder Care Providers & COVID-19. Retrieved November 18, 2021, from https://globalageing.org/wp-content/uploads/2021/02/Global-Ageing-Network-COVID-19-Research-Report.pdf.

Ministerie van Algemene Zaken. (2021, November 17). Dutch vaccination programme against COVID-19. Coronavirus COVID-19 | Government.nl. Retrieved November 18, 2021, from https://www.government.nl/topics/coronavirus-covid-19/dutch-vaccination-programme.

Ministry of Health in Singapore. (2021). COVID-19 vaccination. Retrieved November 18, 2021, from https://www.moh.gov.sg/covid-19/vaccination.

Ministry of Health, Labour and Welfare. (2021). Retrieved November 18, 2021, from https://www.mhlw.go.jp/content/10900000/000856269.pdf.

Ontario (2021). Ontario's COVID-19 vaccination plan. Retrieved November 18, 2021, from https://covid-19.ontario.ca/ontarios-covid-19-vaccination-plan.

Public Health England. (2021, May 5). COVID-19 vaccination first phase priority groups. GOV.UK. Retrieved November 18, 2021, from https://www.gov.uk/government/publications/covid-19-vaccination-care-home-and-healthcare-settings-posters/covid-19-vaccination-first-phase-priority-groups.

Ritchie, H., Mathieu, E., Rodés-Guirao, L., Appel, C., Giattino, C., Ortiz-Ospina, E., Hasell, J., Macdonald, B., Beltekian, D., and Roser, M. (2020, March 5). Coronavirus (COVID-19) vaccinations — statistics and research. Our World in Data. Retrieved November 18, 2021, from https://ourworldindata.org/covid-vaccinations.

Rosen, B., Waitzberg, R., and Israeli, A. (2021, January 26). Israel's rapid rollout of vaccinations for COVID-19. Israel Journal of Health Policy Research. Retrieved November 18, 2021, from https://ijhpr.biomedcentral.com/articles/10.1186/s13584-021-00440-6.

Sevillano, E.G. (2020, November 23). Spanish PM announces 'unique' vaccination strategy via the country's primary healthcare system. EL PAÍS English Edition. Retrieved November 18, 2021, from https://english.elpais.com/society/2020-11-23/spanish-pm-announces-unique-vaccination-strategy-via-the-countrys-primary-healthcare-system.html.

Solutions, EIU. (2021). The Economist Intelligence Unit. Dominican Republic rolls out first Covid-19 vaccines. Retrieved November 18, 2021, from http://country.eiu.com/article.aspx?articleid=650755448&Country=Dominican%2BRepublic&topic=Economy&_4.

South African Government. (2021). Vaccine safety and adverse events following immunisation FAQs. Retrieved November 18, 2021, from https://www.gov.za/coronavirus/faq/vaccine/safety-and-adverse-events-following-immunisation.

The National Law Review. (2021). Mexico: The latest on COVID-19 and vaccination measures. Retrieved November 18, 2021, from https://www.natlawreview.com/article/mexico-latest-covid-19-and-vaccination-measures.

Thomson Reuters. (2021, February 16). Dominican Republic Launches COVID-19 vaccination campaign. Reuters. Retrieved November 18, 2021, from https://www.reuters.com/article/health-coronavirus-dominicanrepublic-vac-idUSL8N2KM77N.

World Health Organization. (2021). COVAX: Working for global equitable access to COVID-19 vaccines. Retrieved from https://www.who.int/initiatives/act-accelerator/covax.

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