International Federation on Ageing

Vaccines 4 Life

Evidence to Action: Towards Improved Vaccination Policy for High-Risk Populations in Long-Term Care

September 2025

This initiative was supported through an unrestricted educational grant from Pfizer Global.

Contents

Background

Global populations are rapidly ageing, with estimates indicating that the number of older people will exceed 2.1 billion by 2050.[1] By this time, the share of those aged 60 and above is expected to double, while the number of individuals aged 80 and over is anticipated to triple.[1] Compared to the general population, adults over 60 are particularly susceptible to developing non-communicable diseases (NCDs), such as cardiovascular diseases, cancer, and diabetes.[2] Older people and those with chronic conditions, such as NCDs, are at high risk of severe and life-threatening complications from vaccine-preventable diseases (VPDs), including pneumococcal pneumonia, COVID-19, influenza, respiratory syncytial virus (RSV), and pertussis.[3]

Age increases the risk of many health conditions, which can often significantly impact intrinsic capacity, defined by the World Health Organization (WHO) as the composite of an individual's physical and mental capacities.[4] As individuals age, their immune systems weaken, making older adults more susceptible to infectious diseases, which is termed immunosenescence.[5] In addition, older adults are also more likely to have chronic comorbid conditions that further increase the severity of VPD-related infections.

VPDs among older adults have significant societal and economic ramifications. A 2021 study modeled the 30-year impact of population ageing on the burden of four key VPDs - influenza, pertussis, herpes zoster (shingles), and pneumococcal disease - among adults aged 50 and older.[6] According to the study, population growth and ageing alone are projected to drive the annual economic burden of these diseases from approximately $35 billion (USD) to 49 billion, with over 1 million related deaths over the 30-year period.[6]

In the context of population ageing and increased risk of severe infections among older adults, there is growing evidence that investment in immunization can not only add years to life, but life to years— aligning with the goals of the United Nations (UN) Decade of Healthy Ageing 2021-2030.[7] Vaccination is especially important to the health of older adults, as immunization supports healthy ageing and maintenance of function into later life, ensuring continued contribution to society while simultaneously reducing the demand on health and social systems.[8]

Long-Term Care Settings and the Impacts of VPDs

Healthy ageing is the process of developing and maintaining the functional ability that enables well-being in older age.[9] Functional ability combines the intrinsic capacity of the individual, the environment a person lives in, and how people interact with their environment.[10] In this context, long-term care (LTC) settings play a critical role in the global discourse on healthy ageing.

Long-term care is defined differently between countries and jurisdictions but can be broadly understood as a wide range of health and social support services.[11] Assisted living facilities, such as LTCs, are in a unique position where they are catering to the needs of individuals with reduced or diminishing capacity whose health could benefit from receiving vaccination but may not be able to access vaccinations independently due to physical or cognitive limitations. Still, immunization practices to protect these vulnerable populations in such settings remain largely unclear and underdeveloped.

This is especially problematic when one considers the several factors that place LTC residents at increased risk of contracting VPDs, resulting in life-altering health consequences or death. Firstly, congregate living settings, shared spaces, and staff working with multiple residents precipitate increased spread of infectious disease.[12,13] Secondly, many LTC residents have underlying health conditions and experience physical, psychological, and functional decline, all of which increase their vulnerability to VPDs and negatively affect their quality of life and overall well-being.[12,13] Finally, infection prevention and control may be lacking in these settings, with limited knowledge amongst healthcare providers, sparse resources to support diagnosis of infection or isolation of infected residents, and even lack of vaccination uptake amongst LTC staff and healthcare providers.[14]

Immunization Policies in Long-Term Care Settings

To strengthen immunization policies for one of the most vulnerable subgroups of older adults – residents of LTC settings—a 2023 review was conducted across 19 countries representing all WHO regions.[15] Key findings from the study highlighted significant and widespread gaps in vaccination policies for LTC. Notably, none of the countries reviewed included specific guidelines for LTC settings within their national immunization plans or aged care strategies. Moreover, no national organizations were found to advocate for or issue explicit recommendations on routine vaccination in LTC.[16] The importance of these policy gaps was further explored and reinforced through an expert meeting that convened global delegates from multiple sectors and specialties, including academia, ageing, public health, chronic disease advocacy, and geriatric medicine.[17]

By linking empirical fieldwork with expert deliberation, this study, *Evidence to Action: Towards Improved Vaccination Policy in Long-Term Care*, seeks to better understand immunization practices in LTC through a series of key informant interviews with LTC providers and subject matter experts

Methodology

The International Federation on Ageing (IFA) conducted semi-structured qualitative interviews with 12 LTC providers and experts to review LTC immunization policy and practices across ten countries: Australia, Brazil, Canada, China, the Czech Republic, France, Germany, Italy, Portugal, and South Africa.

The goal of these interviews was to recognize existing benchmarks in policy and to identify gaps and best practices in the absence of policy. The study focused on identifying cross-cutting themes related to vaccine delivery, uptake, and policy environments within LTC systems.

Participants

Interview participants were selected using targeted sampling, guided by environmental scans and expert referrals within each respective jurisdiction. Participants included LTC care providers (physicians and LTC organizers/managers), academics, advocates, and an LTC resident across the ten selected countries.

Data Collection and Analysis

Semi-structured interviews were conducted via Zoom teleconferencing between December 2024 and June 2025, each lasting approximately 30 to 60 minutes. A standardized interview guide was used to ensure consistency while allowing for open-ended discussion. Participants were asked about the structure, regulation, and practices of LTC in their respective countries, with a particular focus on adult immunization policies and implementation within these settings.

All interviews were transcribed and analyzed manually using a thematic approach. Emerging patterns were organized into core themes that captured common challenges, strategies, and contextual differences across health systems. These themes were then synthesized to inform the development of policy and practice recommendations. Recommendations draw directly from on-the-ground insights to ensure recommendations are rooted in the lived realities of LTC service delivery across diverse national contexts.

Findings

When analyzing the intricacies of LTC immunization policy, it is first important to contextualize LTC within the funding and regulatory structures of its jurisdiction. The countries interviewed illustrate a mix of publicly and privately funded systems, with varying levels of regional, provincial, and federal oversight.

Globally, LTC falls under the purview of different ministries and portfolios, reflecting a broad and varied approach to older adult care infrastructure. See Appendix A for a detailed overview of the regulatory structure and oversight mechanisms in the 10 countries included in this study.

Figure 1: Key study findings on LTC immunization policy and practice

The analysis of the interviews revealed several key themes (*Figure 1*) relating to systemic barriers to LTC immunization practices, as well as examples of innovations and promising practices. It is important to note that each country's LTC systems are subject to different levels of centralization or fragmentation.

Vaccine Hesitancy

According to the WHO, vaccine hesitancy can be understood as the "delay in acceptance or refusal of safe vaccines despite availability of vaccination services". [18] It is often driven by concerns about the safety of vaccines, which are frequently fueled by misinformation and distrust – whether in the healthcare system, political institutions, or healthcare providers.[18]

Vaccine Hesitancy Among LTC Residents

Interviews from France and Portugal indicated high vaccination uptake among LTC residents. In contrast, vaccine hesitancy and cultural resistance to LTC were identified as significant barriers in most other countries studied, including Australia, Canada, South Africa, Germany, Brazil, the Czech Republic, China, and Italy. Notably, interviews from Australia, China, and Canada explicitly cited vaccine hesitancy as a critical barrier to improving the distribution and uptake of vaccination in LTC.

Specifically, participants identified mistrust, misinformation, and vaccine fatigue, particularly in the aftermath of the COVID-19 pandemic, as key drivers of vaccine hesitancy among many LTC residents. In both Australia and Canada, interviewees emphasized that misinformation, political polarization, and residual pandemic fatigue have intensified skepticism toward vaccination across these settings.

In contrast, participants from South Africa, Germany, and China pointed more broadly to systemic mistrust and limited vaccine literacy as major contributors to hesitancy, highlighting the importance of contextual factors across countries.

Familial Influence on Vaccine Hesitancy

Experts from Canada, Italy, and Australia underscored the pivotal role of family members in influencing vaccination decisions, especially when they are consulted or required to provide consent for cognitively impaired residents. In such cases, the attitudes and hesitations of families can significantly shape vaccine uptake.

LTC Provider-Level Vaccine Hesitancy

Informants from Canada and the Czech Republic reported that healthcare providers often face barriers in initiating vaccination discussions with residents. This reluctance stems in part from the complexities of securing informed consent from individuals with cognitive impairments, coupled with fears of backlash from vaccine-hesitant families or guardians.

Additionally, provider-level vaccine skepticism or failure to be vaccinated was also a prominent concern throughout the vaccine-hesitant countries listed above. Informants from France and South Africa noted that, amongst healthcare providers—particularly non-physicians—low vaccine literacy and health promotion education were cited as contributors to vaccine hesitancy.

Resource and Capacity Constraints

Across the countries, key informant interviews revealed shortcomings in data monitoring and collection, as well as human resource limitations and constraints. This is significant in both understanding the reach and efficacy of vaccination programs, as well as immunization delivery and access.

Data Monitoring and Collection Infrastructure

While many countries may have robust data collection and monitoring programs for childhood/adolescent vaccination, these programs rarely extend to adult vaccination distribution or uptake. Interviews from Brazil, Germany, South Africa, China, and, to a lesser extent, the Czech Republic (where adult vaccination monitoring is still in its early stages) indicated that data monitoring and collection are underdeveloped and/or inadequate in their countries. In contrast, countries with more established vaccination monitoring programs, including Canada and Portugal, emphasized the importance of these systems in understanding vaccination trends, behaviours, and gaps.

Human Resource Limitations

Limited human resource capacity poses a significant barrier to adult vaccination. In countries such as Germany and South Africa—where vaccination administration is largely restricted to physicians and nurses (i.e., pharmacists may only deliver certain vaccines, and community health workers or midwives are largely excluded from administering vaccines), interviewees expressed difficulty in having enough professionals available to meet the demand for vaccination. This barrier is further compounded when considering the rapidly growing population of older adults and future demands for timely and widespread vaccination.

To compound this issue, several interviews revealed that access to fully vaccinated providers is also scant. Vaccination requirements for staff are seldom present; and even in facilities where vaccination is required for LTC staff, enforcement is weak or nonexistent. In particular, participants from France and South Africa expressed poor vaccination uptake by care providers working in LTC. In France, while resident vaccination campaigns are relatively successful (with 83% vaccination uptake), mandatory vaccination for healthcare workers was discontinued following the COVID-19 pandemic. Only approximately 22% of healthcare professionals in LTC are vaccinated across the country; with enforcement made difficult by existing staffing shortages. Similarly, in South Africa, the quality of care and access to vaccination vary significantly between facilities due to the absence of national standards and varied dedicated funding for LTC and immunization.

Vaccinating staff appears to be a lower priority compared to addressing broader staffing needs within facilities.

LTC Oversight and Regulation

The centralization or decentralization of LTC oversight and regulation emerged as a challenge for vaccine rollout and dissemination of information and policies across the jurisdictions interviewed.

Centralization refers to countries where the federal government holds the primary authority over LTC oversight and decision-making, whereas decentralization describes systems where this authority rests at the provincial, municipal, or regional level.

This division of oversight and regulation was often apparent in one of two ways: first, decentralization of vaccination programs, whether informed federally, provincially, or regionally, resulted in inconsistent or unclear vaccination protocols; second, responsibility for LTC oversight was often split between ministries of health or social services—impacting both public perception and resource access.

Gaps in Policy and Standardization

Portugal was the only country to report a centralized approach to older adult vaccination in LTC, which has proven highly effective, with vaccination rates exceeding 85% for influenza and 65% for COVID-19 among adults aged 85 years and older.

In contrast, Italy, South Africa, Germany, France, the Czech Republic, China, and Brazil reported the absence of a formal, systematic national vaccination program or procedure to guide immunization in LTC facilities. The lack of consistent protocol makes it difficult to standardize vaccination practices across LTC facilities and complicates efforts to inform care providers and residents. Moreover, highly decentralized systems, as seen in countries like Italy and Canada, makes it difficult to gauge national-level vaccination behaviours, as protocol and practices vary widely by region. Additionally, Canadian insights reveal that vaccination programs designed at higher levels of government, without sufficient coordination with individual facilities, can make it difficult to communicate and implement policy changes effectively at the institutional level.

Social and Health-Based Perceptions of LTC

Long-term care oversight and regulation often fall under social ministries, instead of health or health-based ministries, resulting in pronounced disconnects between the facilities and broader public health efforts. This was especially evident in interviews from Brazil, France, South Africa, and Portugal. For example, in Brazil, LTCs are commonly perceived as charitable institutions rather than as part of healthcare systems. This perception undermines the sector's legitimacy and can lead to underfunding, lack of prioritization, and exclusion from immunization policy development and campaigns. Public trust in LTC institutions is essential for securing institutional legitimacy; without it, both policy attention and public support may wane.

Both these structural and perceptual barriers contribute to persistent gaps between policy and practice. Vaccination fatigue may also exacerbate this disconnect and divide: in one interview, a Canadian LTC resident expressed frustration and exhaustion with how frequently public health messaging changed during the COVID-19 pandemic, noting that the information was poorly communicated and difficult to follow.

Access to Immunization

Challenges in LTC residents' access to vaccination appeared to be twofold: physical access to vaccination and cost.

First, physical accessibility to vaccinators proved to be a significant issue across all countries interviewed. LTC residents have considerable challenges accessing off-site vaccination services. In countries where pharmacists are restricted from prescribing and/or administering vaccines, such as the Czech Republic, the inability to access physical vaccination sites is a significant inhibitor of vaccination for LTC residents.

Moreover, the cost of vaccines presents a substantial barrier. In contexts where individuals must pay out of pocket—such as in China, and in parts of Canada and South Africa for certain vaccines—financial constraints were cited as a major deterrent to vaccine uptake among LTC residents.

Innovations and Good Practices

Despite notable gaps in international immunization policy in LTC, key informant interviews also identified best and emerging practices and innovations, particularly those transferable to settings where formal policies are absent. These practices were most prominently highlighted in the areas of increasing access to vaccination and in the mobilization and translation of knowledge and evidence.

Increasing Access to Vaccinators

Interview highlights pointed to several successful approaches for improving vaccination reach and implementation, including the use of mobile vaccinators, expanding pharmacists' authority to administer and prescribe vaccines, and providing financial coverage of vaccines.

In Australia, the establishment of on-site vaccination clinics in aged care facilities and the availability of mobile vaccinators significantly improved vaccination rates by increasing access. Given that many LTC residents experience physical or cognitive limitations that restrict their ability to leave the facility, it is essential that vaccinators are able to deliver vaccines on-site.

Moreover, countries where pharmacists are authorized to both prescribe and administer vaccines reported improved accessibility and broader reach of immunization efforts. Expanding the pool of qualified vaccination providers helps alleviate pressure on overburdened healthcare systems, a challenge noted across many of countries interviewed. This approach can not only increase vaccination uptake among residents but also strengthens their understanding of the benefits of vaccination, as expanded access affords providers greater opportunity to address individual questions and concerns.

Lastly, cost remains a significant barrier to vaccination, particularly for LTC residents who are often on fixed income. Providing full or partial vaccine coverage at a federal level is essential to increasing uptake and preventing the life-threatening consequences of VPDs among this high-risk group. In Australia, for example, influenza, COVID-19, pneumococcal, and shingles vaccines are offered free of charge to residents and staff in LTC facilities.

Education and Knowledge Mobilization

The pervasive vaccine hesitancy and misinformation documented across interviews represents a critical threat to public health that requires immediate, evidence-based intervention. Several countries across interviews highlighted the use of strategic educational campaigns targeting both older adults and healthcare providers to address hesitancy and improve vaccination uptake.

Key informant interviews from Australia, the Czech Republic, Brazil, and Canada emphasized that these campaigns should be directed at both the general public and care providers to encourage vaccination more broadly. Combating misinformation requires unwavering commitment to transparent and accessible communication. In the Czech Republic, public health efforts to expand vaccination has taken form in training, tailored materials, and video content across literacy levels—exemplifying best practice in public health messaging.

Interviews also emphasized the importance of collaboration in designing vaccination education initiatives. In Brazil, partnerships with civil society organizations, academic institutions, and public health bodies are leveraged to develop educational resources for healthcare providers and to launch campaigns that dispel myths about vaccination.

Discussion

Adult immunization is essential to healthy ageing and plays a key role in building sustainable health systems, workforces, and societies. While childhood and adolescent vaccination programs are relatively robust in many of the countries studied, national programs for older adult vaccination remain underdeveloped and inconsistently implemented, particularly for LTC settings.

Barriers to uptake and access are compounded by a range of factors, as outlined in this study, including vaccine hesitancy, LTC oversight models, resource and capacity constraints, and structural access issues. Despite the lessons of the COVID-19 pandemic, many LTC facilities still lack robust prevention systems, placing residents at risk and increasing strain on the broader health system.

At its core, this is a human rights issue: older people should—and must—have access to comprehensive services, including immunization, at all stages of life and in all settings, including LTC. A rights-based approach to health emphasizes that access to health care and the conditions necessary for good health are fundamental human rights that should be guaranteed to all individuals, without discrimination.[17]

Barriers to Adult Immunization Policies and Implementation

Interviews with global stakeholders revealed the importance of understanding the broader cultural context surrounding LTC structures and systems themselves. In many countries, intergenerational living remains a deeply rooted norm, with family members assuming primary caregiving responsibilities for ageing relatives. Various typologies classify LTC systems according to the extent to which they rely on informal care rather than formal services, where care is expected to come from the family, and formal supports are limited.[19]

Interview findings highlighted that in some countries, such as Brazil, South Africa, and China, the LTC sector is still emerging, and public attitudes toward institutional care are frequently marked by hesitation or stigma. High out-of-pocket costs, particularly in private facilities – which constitute the majority of LTC units in countries such as Brazil and Italy – further reinforce the common preference for home care. These cultural perceptions significantly influence both the utilization of LTC services, and the reach of vaccination programs targeted within them.

As a result, LTC facilities are relatively new in many settings and are often met with skepticism. This can undermine both the perceived legitimacy of these institutions and the credibility of the health services they provide. In addition, deeply rooted cultural beliefs regarding science and public health significantly shape attitudes toward vaccination and overall vaccine uptake.[20] When these cultural perceptions intersect with doubts about the legitimacy of LTC facilities, multiple layers of distrust or hesitance may emerge among residents. These overlapping barriers help explain persistently low vaccine uptake in LTC settings, despite the high-risk nature of the resident population for VPDs.

The findings of this study reveal that vaccine hesitancy influences decision-making across multiple levels—institutional, provider, social, and individual. These overlapping layers of hesitancy create numerous barriers that may discourage LTC residents from receiving vaccines. Institutional, interpersonal, and individual deterrents to receiving immunization leave individuals and their communities vulnerable and at risk of contracting VPDs.

For example, the European Centre for Disease Prevention and Control (ECDC) found that respiratory tract infections are among the most commonly reported healthcare-associated infections in LTC settings, accounting for a prevalence of 27.3%.[21] Many cases of these infections are preventable through targeted vaccination programs and policies.

As it stands now, the costs of inaction are substantial—not only in terms of individual morbidity and mortality but also in the increased strain on LTC systems, including higher demands on staffing, limited bed capacity, and resource constraints.[22] Improving vaccine uptake in LTC represents a high-

return investment for public health systems, reducing downstream costs, and improving resident health and well-being.

Given these clear benefits, it's all the more concerning that—despite strong evidence supporting the role of immunization in protecting older adults, particularly LTC residents, from VPDs—this population remains underprioritized in both policy and institutional investment. This is reflected in the limited implementation of immunization practices and uneven vaccine coverage across LTC settings. Although evidence is crucial to understand the landscape of needs of LTC populations, political will is imperative to secure resources for policy change.[23]

Progress and Opportunities: Life-CourseApproach

While a multitude of implementation challenges remain in improving adult vaccination uptake and access across LTC settings—significant progress has also been made at global and intergovernmental levels, providing considerable momentum for advocating for stronger LTC immunization practices. Various intergovernmental frameworks are increasingly embracing a life course approach to immunization, with growing attention to adult and older populations (*see Table 1*).

For instance, the *UN Decade of Healthy Ageing (2021–2030)* recognizes vaccination as a crucial component of healthy ageing, emphasizing the need for life course immunization strategies to prevent disease and promote health across all ages.[24] The *Long-Term Care for Older People Package for Universal Health Coverage* explicitly outlines vaccination as a health care need for LTC residents[25]. The *Immunization Agenda 2030* directly incorporates a life course approach within its strategic goals, while *UNESCO's Education for Sustainable Development (ESD) for 2030* supports the education of healthcare workers on vaccination and LTC, in the context of sustainability.[26]

More recently, the WHO *Framework to Implement a Life Course Approach in Practice* emphasizes the opportunity for national immunization programs to champion life course immunization. [27] A life course approach to immunization aims to "maximize health over the life course, targeting multiple life stages and tailored to lifestyle risk factors based on occupation and health status".[27]

Not limited to the prevention of infections, the life course approach seeks to maximize health over the lifespan—targeting multiple life stages and tailoring interventions to evolving needs and risk profiles, which is particularly relevant for LTC residents.

Table 1: Life-course immunization across key intergovernmental agendas

Framework	Key Section	Relevance
UN Decade of Health Ageing	3.3: Deliver person-centered, integrated care and primary health services responsive to older people	Identifies vaccination as a critical component of healthy ageing, underscoring its role in disease prevention and health promotion across the life course.
Long-Term Care for Older People Package for Universal Health Coverage	3.1: Health care needs	Recommends health interventions for LTC, including infection prevention and management measures such as vaccination.
Immunization Agenda 2030 (IA2030)	Strategic priority 4 (SP4): Life course & integration	Prioritizes a life course approach to immunization, with a focus on strengthening policies and service delivery across all age groups.
WHO Framework to Implement a Life-course Approach in Practice	4.1: Preventing and managing diseases and other illnesses and conditions	Presents vaccination as a means of developing and maintaining health capacities, given its broader impact in preventing impairments and chronic disease across the lifespan.

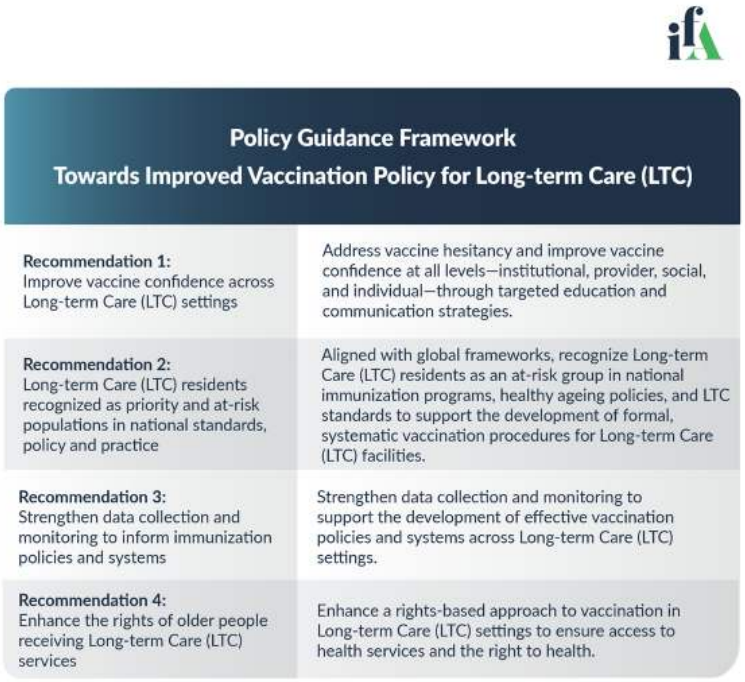
Recommendations

Irrespective of geographic location, LTC residents represent one of the most vulnerable subgroups of any population due to complex medical conditions and limitations in independent daily living. Their heightened risk of severe complications from VPDs makes disease prevention in LTC settings a national, regional, and global priority.

Given the diversity of LTC systems and the cultural norms that shape vaccination attitudes, immunization policies and practices must be grounded in local contexts. As such, LTC immunization strategies will vary by jurisdiction, reflecting the social, cultural, and structural realities of the communities they are intended to serve.

While policy implementation varies across jurisdictions, this study reveals universal challenges alongside proven best practice approaches essential for global progress. Building on existing momentum and aligned with intergovernmental frameworks that increasingly recognize life course immunization as fundamental to healthy ageing, the following recommendations outline concrete actions to advance comprehensive immunization strategies across LTC settings.

These evidence-based measures aim to strengthen disease prevention capabilities, expand vaccination access, and build system resilience within the complex landscape of LTC settings. The convergence of demographic pressures, emerging infectious threats, and evolving care models demands coordinated action that transcends traditional silos and requires sustained commitment to implementation strategies addressing both immediate needs and the long-term integration of life-course immunization approaches within LTC settings.



Recommendation 1: Improve Vaccine Confidence Through Targeted Communication and Education

Targeted, streamlined educational initiatives are a critical step towards reducing vaccine hesitancy, improving vaccination uptake, and enhancing vaccine literacy. This study highlights that vaccine hesitancy and cultural resistance to both immunization and LTC present significant barriers to vaccination across LTC settings – spanning institutional, provider, social, and individual levels. This highlights the need to address hesitancy and misinformation comprehensively, across all parts of the system.

These efforts should aim to deepen understanding of the value of adult immunization, address common misconceptions, and promote confidence in navigating vaccination decisions within both clinical and community settings. Moreover, education and policy reform must be communicated clearly and consistently, while keeping information fatigue and turnover in mind when communicating changes.

To improve vaccination uptake, regional and national authorities and policy developers must adapt LTC immunization efforts to meet the specific needs and beliefs of their older adult communities, as well as the broader public. This means that many campaigns need to address population distrust and apprehension concerning both LTC and immunization. As outlined in the findings of this study, this may take a variety of forms, and may benefit from consultation and collaboration with stakeholders, experts, and LTC residents.

Educational programming should transcend disease prevention to emphasize immunization's broader health-promoting benefits, particularly its role in supporting healthy ageing. Reframing vaccination as a tool for enhancing longevity and quality of life—not merely preventing illness—represents a fundamental shift toward positive, forward-thinking public health messaging that can transform perceptions and drive meaningful behavior change.

Recommendation 2: LTC Residents Recognized as At-Risk Populations in Standards, Policy, and Practice

Given the unique vulnerability and elevated risk profiles of LTC residents, this subgroup of older adults must be formally recognized as a priority population in national immunization policies and strategies.

A key finding of this study is the widespread absence of national standards, policies, or coordinated approaches for immunization practices in LTC settings. While jurisdictional autonomy in healthcare delivery allows for tailored, population-specific programming, the absence of overarching national guidance can lead to fragmented efforts and inconsistent prioritization of older adult immunization.

Consistent with previous research, LTC residents must be explicitly prioritized by National Immunization Technical Advisory Groups (NITAGs), with tailored immunization recommendations embedded within National Immunization Programmes (NIPs), particularly in jurisdictions with formal LTC systems in place.[13,16] Without such prioritization – supported by robust data, sustained investment, and culturally responsive outreach—barriers to immunization across these settings will persist, leaving one of the world's most vulnerable populations inadequately protected from the detrimental consequences of VPDs.

Prioritizing this group is essential not only for advancing a more equitable and responsive immunization framework, but also to shape robust and inclusive NIPs that reflect the realities of ageing populations. A life-course approach to immunization must extend beyond childhood to meaningfully protect those most vulnerable to preventable morbidity and mortality.

Recommendation 3: Strengthen Data Collection and Monitoring to Inform Immunization Policies and Systems

Population-based immunization planning, particularly for LTC residents, cannot be fulfilled without robust, sustained data monitoring, surveillance systems, and registries.

Part of gauging the success of immunization campaigns and policies requires local authorities to establish robust data monitoring systems for vaccine uptake. While childhood vaccination infrastructure is typically well-developed and routinely monitored, equivalent mechanisms for older adults—particularly those in LTC setting—remain limited or entirely absent in many jurisdictions. This study found that data monitoring and collection systems are underdeveloped or inadequate in many countries. By contrast, countries with more established, age-disaggregated vaccination monitoring systems highlighted their importance in identifying vaccination trends, behaviours, and gaps.

Comprehensive data on the elevated risk profiles of LTC residents—and the complications experienced by individuals with chronic conditions—is also essential for driving political will and justifying investment in LTC-specific immunization infrastructure. Without this evidence base, it becomes difficult to position older adults as a priority population or to design systems that ensure adequate protection across the life course.

Governments must first acknowledge these critical data gaps and commit to building the infrastructure needed to inform targeted, relevant strategies and policies for older adults.

Recommendation 4: Enhance the Rights of Older People Receiving LTC Services

Aligned with previous findings,[17] access to comprehensive services for LTC residents, including vaccination, is a human rights issue. Immunization represents far more than disease prevention – it is a lifesaving intervention that supports healthy ageing, improves quality of life, and reduces complications from NCDs.

The chronic lack of systems-level efforts to protect high-risk, vulnerable LTC populations from VPDs through robust immunization standards, policies, and practices places this group at severe risk of serious health outcomes. A rights-based, person-centered approach requires that the needs, values, and dignity of older people remain central in all immunization decisions.

In LTC settings, this approach must be tailored to each facility's unique circumstances and resident populations, requiring active engagement with providers, residents, and families about immunization's role in healthy ageing.

In addition, it is important to address barriers that limit access to vaccination, such as the distance to vaccination sites and the cost of immunization for individuals who may not be able to afford it.(28,29) These barriers represent not merely logistical challenges but fundamental violations of equitable healthcare access that demand immediate policy reform and resource allocation to place human rights at the core of immunization strategies globally.

Conclusion

As global populations continue to age, LTC facilities represent a vital yet often underutilized setting for delivering adult immunizations. Despite the increased vulnerability of LTC residents to VPDs, immunization efforts in these settings remain fragmented, inconsistent, and insufficiently prioritized in many countries. Interviews conducted across ten countries reveal a range of systemic barriers, including cultural resistance to institutional care, vaccine hesitancy, inadequate data infrastructure, disjointed regulatory frameworks, limited access to vaccinators, and a shortage of qualified health personnel.

Despite these challenges, the findings point to several promising opportunities for progress. Promoting a life-course approach to immunization within policies and standards, improving education for both healthcare providers and the public, strengthening the rights of LTC residents, and investing in comprehensive data collection systems are all essential to advancing vaccine coverage, access, and equity in LTC. In countries where national standards are absent, the development of clear frameworks can provide much-needed consistency while supporting regionally tailored implementation.

Protecting the health and dignity of older adults, especially those in LTC, requires sustained investment in both policy and practice. Strengthening immunization infrastructure in LTC is not only a matter of disease prevention but also a broader commitment to healthy ageing, equity, and social justice.

Appendix A: LTC Structure Across Key Informant Interviews

Country	Funding Structure	Regulation Body
Australia	Federally funded	Regulated by Commonwealth Dept. of Health & Aged Care and Quality & Safety Commission
Brazil	Dominantly private and for-profit, with high out-of-pocket costs	Regulated under federal, state, and local laws, within social assistance
Canada	A mix of public, private, and non-profit providers	Regulated provincially
China	A mix of state subsidies, pilot LTC insurance, and out-of-pocket costs	Regulated by multiple agencies: Civil Affairs, Health Commissions, Market Supervision, and Healthcare Security Bureaus
Czech Republic	Funded through a state care allowance (up to ~$1,100/month)	Oversight by the Ministry of Labor and Social Affairs, and regional authorities
France	Medical care is covered by national insurance; personal care by local authorities	Regulated by both regional health agencies (health) and local authorities (social services)
Germany	A mix of state, private, and non-profit providers	Governed by national social legislation
Italy	Partially covered by national healthcare, the rest is paid out of pocket	Regulation varies by region or municipality
Portugal	The social branch is funded by the state and run by non-profits; the health branch is publicly provided	Highly centralized, with uniform national regulation
South Africa	Dual public-private system	Regulated by the Department of Social Development under the Older Persons Act (2006)

References

1. Ageing and health [Internet]. [cited 2025 Jul 3]. Available from: https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

2. Noncommunicable diseases [Internet]. [cited 2025 Jul 3]. Available from: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases

3. Immunization of persons with chronic diseases: Canadian Immunization Guide - Canada.ca [Internet]. [cited 2025 Jul 3]. Available from: https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-7-immunization-persons-with-chronic-diseases.html

4. Zhou Y, Ma L. Intrinsic Capacity in Older Adults: Recent Advances. Aging Dis [Internet]. 2022 Mar 25 [cited 2025 Jul 7];13(2):353–9. Available from: https://www.aginganddisease.org/EN/10.14336/AD.2021.0818

5. Privor-Dumm LA, Poland GA, Barratt J, Durrheim DN, Deloria Knoll M, Vasudevan P, et al. A global agenda for older adult immunization in the COVID-19 era: A roadmap for action. Vaccine. 2021 Aug 31;39(37):5240–50.

6. Impact of population aging on the burden of vaccine-preventable diseases among older adults in the United States [Internet]. [cited 2025 Jul 7]. Available from: https://www.tandfonline.com/doi/epdf/10.1080/21645515.2020.1780847?src=getftr&utm_source=mendeley&getft_integrator=mendeley

7. Global immunization efforts have saved at least 154 million lives over the past 50 years [Internet]. [cited 2025 Jul 7]. Available from: https://www.who.int/news/item/24-04-2024-global-immunization-efforts-have-saved-at-least-154-million-lives-over-the-past-50-years

8. Why Vaccinations Are Vital for Older Adults - NFID [Internet]. [cited 2025 Jul 3]. Available from: https://www.nfid.org/why-vaccinations-are-vital-for-older-adults/

9. Framework to implement a life course approach in practice [Internet]. [cited 2025 Jul 7]. Available from: https://www.who.int/publications/i/item/9789240112575

10. Framework to implement a life course approach in practice [Internet]. [cited 2025 Jul 7]. Available from: https://www.who.int/publications/i/item/9789240112575

11. Long-term care [Internet]. [cited 2025 Jun 24]. Available from: https://www.who.int/europe/news-room/questions-and-answers/item/long-term-care

12. Improving adult vaccination policy in long-term care settings - Vaccines 4 Life [Internet]. [cited 2025 Jul 7]. Available from: https://www.vaccines4life.com/improving-adult-vaccination-policy-in-long-term-care-settings/

13. Mobilizing Vaccination Policy in Long-term Care Settings Expert Meeting - Vaccines 4 Life [Internet]. [cited 2025 Jul 7]. Available from: https://www.vaccines4life.com/mobilizing-vaccination-policy-in-long-term-care-settings-expert-meeting/

14. AT A GLANCE CPE Transmission Risk Factors in Long-Term Care Homes.

15. Improving adult vaccination policy in long-term care settings - Vaccines 4 Life [Internet]. [cited 2025 Jul 7]. Available from: https://www.vaccines4life.com/improving-adult-vaccination-policy-in-long-term-care-settings/

16. Improving adult vaccination policy in long-term care settings - Vaccines 4 Life [Internet]. [cited 2025 Jul 15]. Available from: https://www.vaccines4life.com/improving-adult-vaccination-policy-in-long-term-care-settings/

17. Mobilizing Vaccination Policy in Long-term Care Settings Expert Meeting - Vaccines 4 Life [Internet]. [cited 2025 Jul 7]. Available from: https://www.vaccines4life.com/mobilizing-vaccination-policy-in-long-term-care-settings-expert-meeting/

18. Vaccine hesitancy: A growing challenge for immunization programmes [Internet]. [cited 2025 Jul 1]. Available from: https://www.who.int/news/item/18-08-2015-vaccine-hesitancy-a-growing-challenge-for-immunization-programmes

19. Llena-Nozal A, Barszczewski J. How do countries compare in their design of long-term care provision? A typology of long-term care systems. OECD Health Working Papers [Internet]. 2025 [cited 2025 Jul 7];(182). Available from: https://dx.doi.org/10.1787/44f5453a-en

20. Keselman A, Arnott Smith C, Wilson AJ, Leroy G, Kaufman DR. Cognitive and Cultural Factors That Affect General Vaccination and COVID-19 Vaccination Attitudes. Vaccines (Basel) [Internet]. 2023 Jan 1 [cited 2025 Jul 1];11(1):94. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9865922/

21. Point prevalence survey of healthcare-associated infections and antimicrobial use in European long-term care facilities 2023-2024. [cited 2025 Jul 17]; Available from: https://www.ecdc.europa.eu/en/publications-data/point-prevalence-survey-healthcare-associated-infections-and-antimicrobial-use-6

22. Frangos E, Barratt J, Michel JP, Ecarnot F. Vaccines in Long-Term Care Settings: A Narrative Review. Gerontology [Internet]. 2024 Mar 1 [cited 2025 Jul 21];70(3):241–7. Available from: https://dx.doi.org/10.1159/000534998

23. Lezine DQA, Reed GA. Political Will: A Bridge Between Public Health Knowledge and Action. Am J Public Health [Internet]. 2007 Jan 11 [cited 2025 Jul 20];97(11):2010. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC2040380/

24. UN Decade of Healthy Ageing – The Platform [Internet]. [cited 2025 Jul 15]. Available from: https://www.decadeofhealthyageing.org/

25. Long-term care for older people: package for universal health coverage [Internet]. [cited 2025 Jul 15]. Available from: https://www.who.int/publications/i/item/9789240086555

26. Immunization Agenda 2030 [Internet]. [cited 2025 Jul 15]. Available from: https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/ia2030

27. Framework to implement a life course approach in practice [Internet]. [cited 2025 Jul 9]. Available from: https://www.who.int/publications/i/item/9789240112575

International Federation on Ageing
1 Bridgepoint Drive, Suite G.238
Toronto, ON, M4M 2B5, Canada

www.vaccines4life.com

Published September 2025