International Federation on Ageing

Vaccines 4 Life

Advancing a common adult respiratory vaccination schedule as a mechanism to improve adult vaccination rates

November 2025

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Executive Summary

In line with global demographic trends, the European Union (EU) and European Economic Area (EEA) are expected to experience significant growth in their older adult populations, accompanied by a sharp rise in chronic diseases. These developments will place substantial financial and operational pressures on healthcare systems across the region. [1] Older adults specifically face heightened risk of respiratory diseases due to the increased prevalence of comorbid noncommunicable diseases and age-related deterioration of the immune system, termed immunosenescence. [2] In 2024, individuals aged 65 and older in EU/EEA countries were among the most vulnerable, experiencing higher rates of infection, hospitalization, intensive care unit (ICU) admission, and death from respiratory syncytial virus (RSV), COVID-19, and influenza. [3]

While adult vaccination decisions are shaped by personal and psychological factors, addressing practical barriers remains key to improving uptake. A major challenge is the lack of consistent eligibility criteria, national guidelines, and vaccine schedules, which continue to limit access. For example, respiratory vaccination schedules across Europe often impose increasingly restrictive age-based eligibility for high-risk groups like older adults and those with chronic conditions. [4] A promising but under-explored strategy for addressing these challenges is the development of a common vaccine schedule, involving the alignment and standardization of when and who should receive a vaccine. By streamlining approaches across populations and within healthcare systems, common and consistent guidelines have been shown to reduce missed vaccination opportunities. [4,5]

The International Federation on Ageing (IFA) explored the adoption of a common vaccine schedule as a strategy to improve adult vaccination rates and inform government policy across EU/EEA countries. This work focused on identifying key benefits, challenges, and barriers to integration. Specifically, the project aimed to:

Analyze and document current co-administration vaccination policies in each country studied.

Assess the extent of alignment in eligibility criteria for vaccines against respiratory infections across EU/EEA countries.

Develop targeted recommendations highlighting best practices to guide and engage governmental bodies in strengthening adult immunization frameworks.

To explore the development and adoption of a common vaccine schedule as a strategic approach to improving adult immunization, the IFA employed a two-pronged methodology: a policy audit and an expert think tank. The findings indicated a lack of alignment in adult respiratory vaccination schedules across countries in the EU/EEA, whereby no countries had consistent eligibility criteria and timelines across all five respiratory diseases studied. Among the audited countries, 41% (11 of 27 countries) reported co-administration of certain vaccines.

Establishing a common adult respiratory vaccine schedule offers a pathway to more efficient service delivery, reduced administrative burden, increased public trust, and ultimately, broader vaccine coverage. From the individual to the system level, a common vaccine schedule promotes improved access, cost-effectiveness, and greater equity across member states. However, implementing a sustainable and impactful vaccine schedule is not without challenges. Barriers such as limited

infrastructure, high initial investment costs, diverse health governance structures, and the underrepresentation of high-risk populations in policy development must be addressed.

This report identifies a set of actionable next steps, including standardizing age and risk-group definitions as well as strengthening co-administration practices. To advance a common vaccine schedule among adults, the report recommends engaging key stakeholders, investing in ongoing evidence synthesis and evaluation, and prioritizing guidance from trusted health authorities. These coordinated efforts can help build stronger, more equitable, and adaptable immunization systems across the EU/EEA.

01 Introduction

The population of older adults (aged 65 and over) in the European Union (EU) is growing rapidly, increasing from 90.5 million in 2019 to a projected 129.8 million by 2050. [6] This significant demographic shift is expected to drive a sharp rise in chronic diseases, placing substantial financial and operational pressures on healthcare systems across the region. [1] Factors including increased prevalence of noncommunicable diseases that present comorbidities, as well as age-related deterioration of the immune system, termed immunosenescence, place older adults at increased risk of respiratory diseases. [2] In Europe, around 75% of adults aged 65+ have at least one major risk factor, such as hypertension (51%), chronic lung disease (41%), or obesity (21%), which significantly increases their vulnerability to severe outcomes from vaccine-preventable respiratory diseases like influenza, pneumococcal disease, and COVID-19, compared to only 30–40% of adults under 65 with similar risk profiles. [7]

In 2024, in European Union/European Economic Area (EU/EEA) countries, individuals aged 65 and older were among the most at-risk for infection and experienced severe outcomes, including hospitalization, intensive care unit (ICU) admission, and deaths, at a higher degree for three respiratory diseases: respiratory syncytial virus (RSV), COVID-19 and influenza. [3] Older adults and those with chronic medical conditions represent the largest at-risk populations for serious, life-threatening complications from vaccine-preventable diseases (VPDs) when compared to the general population. [8] However, immunization programs in many countries have historically prioritized children, with less consistent focus on vaccination across the life course. Although adolescence and young adulthood are increasingly included, the specific needs of older adults often remain neglected.

This noted misalignment between increased vulnerability and appropriate policy has contributed to persistently low vaccine uptake among older adults. In 2022, only 48.2% of individuals aged 65 or older in the EU were vaccinated against influenza, which is well below the World Health Organization's target of 75%. [9,10] Similarly, in terms of pneumococcal vaccination, surveys show only 20–30% of adults aged 65 and older across Europe have received the vaccine. [11] These figures reflect a significant gap in vaccine coverage among high-risk populations, driven by factors such as limited access and reimbursement, a lack of clear and accessible information, and insufficient engagement from healthcare providers (HCPs).[12,13]

Furthermore, among older adult populations, access to and uptake of vaccines are shaped by broader social determinants of health, contributing to persistent disparities in health outcomes and highlighting a critical health equity issue. For instance, a recent European study on influenza vaccination found that among older adults, those with lower income and education levels were less likely to receive influenza vaccination, highlighting socioeconomic disparities in vaccine uptake. [14] These disparities reflect broader mechanisms spanning the entire vaccination process, as confirmed by a recent review, which identified factors such as limited vaccine knowledge, low confidence in providers, financial barriers, and logistical challenges as key drivers linking socioeconomic disadvantage to lower vaccine uptake. [15] Despite these insights, the specific immunization needs of diverse older adult groups remain insufficiently addressed, underscoring the urgency of developing age-inclusive policies that ensure equitable access across the life course.

Moreover, vaccination is increasingly recognized as a key contributor to healthy ageing, with evidence highlighting its role not only in promoting physical health but also in supporting social and economic well-being.[16] Ensuring vaccine uptake is essential to reduce the burden of preventable disease, improve outcomes for older populations, and strengthen the resilience and sustainability of health systems across the region. From a life course perspective—grounded in the principle that safeguarding health throughout one's lifetime is a human right—promoting integrated immunization across all stages of life is critical to ensuring equitable access, minimizing missed opportunities for immunization, and strengthening vaccine uptake globally. [17]

02 Modifiable System Barriers to Improve Adult Vaccination Rates

In Europe, research shows that vaccine confidence has declined since the onset of the COVID-19 pandemic, with notable variation across countries. This variation is shaped by factors such as healthcare system structures, levels of public trust, the spread of misinformation, and the effectiveness of digital communication strategies. [18,19] While adult vaccination decisions are complex and influenced by personal and psychological factors, addressing practical and logistical barriers remains essential to improving uptake rates. In particular, one key barrier is the lack of consistent, well-defined eligibility criteria, national guidelines, and vaccine schedules which continue to limit access. For example, respiratory vaccination schedules for the fastest-growing subpopulations, older adults and individuals with chronic medical conditions, are increasingly restrictive in terms of age eligibility across European countries. [4]

This trend is especially concerning in light of compelling economic evidence that supports the benefits of vaccination. A recent report by the Office of Health Economics shows that adult immunization programs can return up to 19 times their initial investment when the full spectrum of benefits is accounted for. [20] Therefore, addressing current gaps and promoting higher vaccine uptake is essential not only to advancing adult immunization efforts, but also to enhancing the efficiency and sustainability of health systems. Tailored strategies that respond to the evolving needs of populations across the life course are key, particularly as vaccination plays a critical role in supporting healthy ageing and maintaining functional ability in older adults. Exploring impactful, novel approaches to promote adult immunization efforts is key.

To address ongoing inconsistencies in eligibility criteria, guidelines, and vaccine schedules, one promising approach to improving adult immunization is the development of a standardized, common vaccination schedule within each country. This approach involves aligning eligibility criteria, timing, and administration guidelines across regions and healthcare programs within a national system. Although this strategy has been proposed in the past, it remains highly debated, underused and has not been studied extensively in the context of adult vaccination. Establishing consistent national guidelines and a unified schedule could improve access to vaccines, enhance protection for populations, and support more coordinated efforts in negotiating vaccine volumes and pricing. Efforts to align and streamline vaccination requirements (e.g., age eligibility) and schedules have been shown to reduce missed opportunities for immunization by providing a more coordinated and efficient approach. [4,5]

A range of practical measures and policy tools can support the operationalization of this strategy. For example, co-administration, giving multiple vaccines during the same healthcare visit, is a routine and well-established practice in pediatric vaccination, with evidence showing that it contributes

to pediatric vaccine coverage rates exceeding 90% across the United States of America (USA) and Europe. [21] By reducing the number of separate appointments needed, co-administration simplifies the vaccination process for individuals and increases efficiency for healthcare providers. Other approaches include aligning schedules for different vaccines and standardizing eligibility criteria. These strategies help ensure that individuals receive recommended vaccines at the appropriate ages and intervals, supporting better adherence and more effective delivery within health systems.

Across Europe, few regions have developed standardized recommendations for adult vaccinations, and efforts to align vaccination strategies at the national level, such as through coadministration or alignment of eligibility for age and risk groups across various vaccines, remain limited. As such, efforts to develop consistent, common vaccine guidelines and schedules require further investigation and understanding on how it may support vaccine coverage and uptake.

03 Advancing a common adult respiratory vaccination schedule as a mechanism to improve adult vaccination rates

The International Federation on Ageing (IFA) aimed to examine the adoption of a common vaccine schedule within a national health system as a strategic approach to improving adult vaccination rates. The overarching objective of this work is to inform government policy by comprehensively exploring and identifying the key benefits, critical challenges, and barriers, to integrate this strategy in EU/EEA countries. Specifically, the project aimed to:

- **Analyze and document current co-administration vaccination policies in each country studied.**
- **Assess the extent of alignment in eligibility criteria for vaccines against respiratory infections across EU/EEA countries.**
- **Develop targeted recommendations highlighting best practices to guide and engage governmental bodies in strengthening adult immunization frameworks.**

To explore the development and adoption of a common vaccine schedule as a strategic approach to improving adult immunization, the IFA employed a two-pronged methodology:

1. **A policy audit aimed to examine current national vaccine schedules and eligibility criteria across selected countries.**
2. **An expert think tank aimed to convene specialists in diverse fields, including vaccine policy, infectious disease, and health economics, to assess the current landscape, identify gaps, and build consensus on priorities and next steps.**

04 Synthesizing Evidence: A Policy Audit of Vaccine Eligibility and Schedules

To begin, a policy audit was completed in December 2024, to explore the eligibility for vaccines against respiratory infections (COVID-19, influenza, RSV, pertussis, pneumococcal pneumonia) in all 27 countries of the EU/EEA. Publicly available information from government websites as well as the European Centre for Disease Prevention and Control's Vaccine Scheduler were used as key data sources for this audit.

The findings indicated a lack of alignment in adult respiratory vaccination schedules across countries in the EU/EEA, whereby no countries had consistent vaccine timelines and eligibility criteria across all five respiratory diseases studied. Among the audited countries, 41% (11 of 27 countries) reported co-administration of certain vaccines. Five countries implemented nationwide strategies for co-administering COVID-19 and influenza vaccines, while one country adopted this practice in specific regions. Two countries reported co-administration of COVID-19 and influenza vaccines alongside other unspecified vaccines, and three countries co-administered various combinations of pneumococcal pneumonia, COVID-19, and influenza vaccines. 19% of countries (5 of 27) had specific policies for RSV vaccine administration and none had co-administration policies for RSV. In most countries, older adults (defined as those aged 60 to 70 and above), pregnant individuals, and people with chronic conditions were categorized as high-risk groups. Overall, whether an individual is eligible for vaccination is variable depending on age and risk group categorization within countries.

05 Fostering Dialogue: Highlighted Findings from the Expert Think Tank

Building on the work of the recent policy audit, a think tank was coordinated to leverage diverse expertise to explore the key benefits, critical challenges and barriers facing the adoption of a common adult vaccine schedule in EU/EEA countries while identifying key calls to action. The closed think tank event was conducted in April 2025 with key experts from diverse sectors, including vaccine policy, health economics, and infectious disease research, working in EU/EEA countries. The discussions supported understanding benefits, challenges, and key recommendations related to advancing alignment of vaccine schedules within a country. Using the socio-ecological model, which illustrates how interactions among individuals, social systems, and environments influence health outcomes, this analysis explores the challenges, considerations, and strengths of adopting a common vaccine schedule (see Figure 1).[22,23]

Key Barriers to Advancing a Common Vaccine Schedule

Discussions with subject matter experts underscored the following critical factors and challenges that must be addressed to advance a common vaccine schedule:

1. Diversity of population health needs and priorities

Across EU and EEA countries, significant differences exist in health priorities, funding mechanisms, levels of decentralization in healthcare delivery, and population health needs. These variations highlight the importance of a tailored approach to developing a common schedule that is responsive to the health and social needs, disease epidemiology and health structures of each country.

There is currently a lack of infrastructure to support coordinated vaccine strategies across countries. At the same time, policy and political constraints within the EU/EEA, such as national sovereignty over health matters, varying levels of decentralization, and differing health priorities, point to the need for a supporting framework that can facilitate collaboration without infringing on national authority. An organization that operates independently of national governments but works in close partnership with them could play a valuable role by providing consistent and timely guidance. This type of body could assist in the development and early implementation of common vaccine schedules by offering technical expertise, sharing best practices, and encouraging alignment where appropriate.

Additionally, the upfront costs and resource demands associated with implementing a common vaccine schedule can be substantial, posing a challenge for many countries. Long-term planning and sustained investment are essential to support effective strategic development, budgeting, and implementation.

2. Underrepresentation of older adults' and civil society organizations' perspectives

The underrepresentation of older adults, among other high-risk populations, and civil society organizations (CSOs) in National Immunization Technical Advisory Groups (NITAGs) and related decision-making bodies results in critical perspectives being overlooked. [24] This absence limits the inclusivity and responsiveness of immunization policies, further compounding the barriers older adults face in accessing vaccines and diminishing the likelihood that their specific needs are adequately addressed in planning and implementation.

3. Operational challenges within health systems

In order to achieve impactful uptake and greater efficiency, considering system constraints, including workforce readiness, health workforce limitations, and system burden, is necessary. Within the current context of European healthcare and system challenges, key challenges include staff training burdens, workflow challenges in primary care, and increased complexity of patient visits. Addressing implementation challenges and leveraging enablers is critical to ensuring effective vaccine delivery, promoting vaccination prioritization, and ultimately strengthening health systems.

Key Benefits to Advancing a Common Vaccine Schedule

Several significant benefits emphasize the importance for advocating for advancing a common vaccine schedule among EU/EEA countries, ranging from individual to societal and community level impacts:

1. Enhanced access to vaccine information strengthens patient-provider relationships and addresses vaccine hesitancy

A common vaccine schedule supports clear and consistent messaging about vaccine administration, ensuring that individuals receive reliable information to make informed decisions. This clarity is critical for countering misinformation and directly addressing vaccine hesitancy. In addition, a unified schedule enhances transparent communication between healthcare providers and patients, which is essential for building trust and confidence in vaccination. By strengthening this relationship, a common vaccine schedule can empower individuals to better understand vaccination recommendations, while also enabling providers to communicate more clearly and deliver key information more efficiently. As this strategy is implemented, it is important to ensure that additional communication responsibilities do not place an undue burden on frontline providers. Support systems, training, and resources will be necessary to help providers effectively deliver these messages without adding strain to their existing workload.

2. Simplified vaccine schedules enhance system efficiency

Common vaccine schedules and consistent recommendations streamline the vaccination process for both providers and the public, reducing administrative burdens and minimizing confusion about eligibility and timing. By making the vaccination journey more predictable and coordinated, this strategy improves overall coverage rates and enables healthcare systems to better manage routine and seasonal vaccination demands, such as those during respiratory disease seasons.

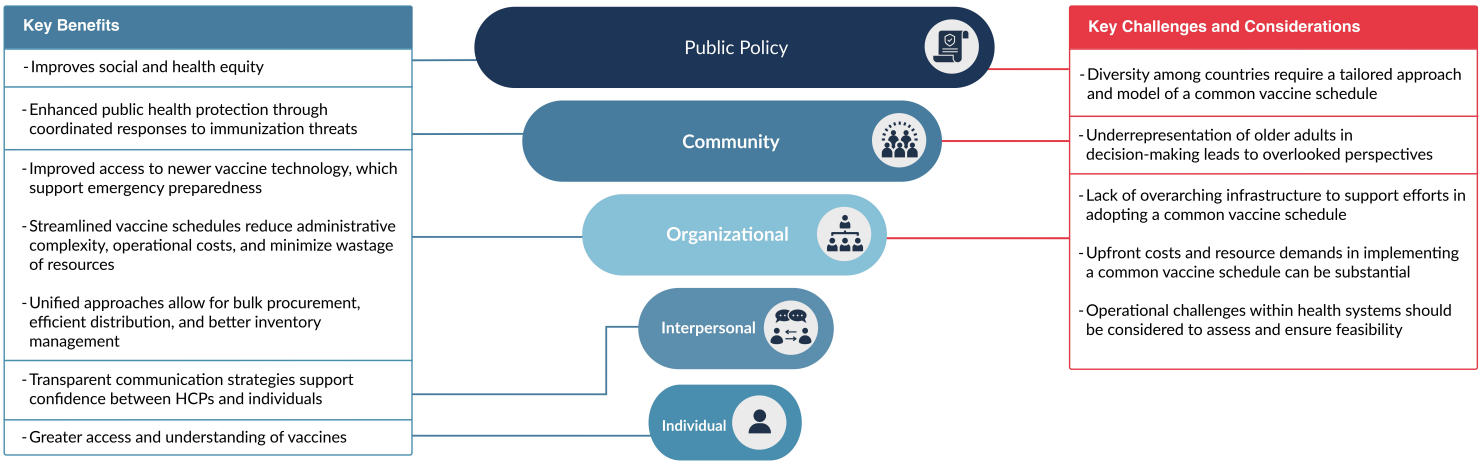
3. Streamlined efforts promote cost-effectiveness and emergency preparedness

Streamlined vaccine schedules reduce administrative complexity, lower training and operational costs, and minimize wastage of vaccines and resources. Aligned approaches allow for bulk procurement, efficient distribution, and better inventory management, resulting in direct and indirect cost savings. For example, a 2022 study examining 27 vaccination programs across eight European countries, covering a combined population of over 200 million children and older adults, found that broad, unified seasonal influenza vaccination strategies were cost-effective in most contexts. These findings underscore the value of coordinated population-wide approaches over fragmented or narrowly targeted efforts.[25]

In parallel, consistent vaccination policies also improve emergency preparedness. Unified policies and infrastructure ensure rapid, coordinated responses to outbreaks or emerging diseases, which minimizes delays and confusion in vaccine deployment. As seen during the COVID-19 pandemic, it is critical to prioritize emergency preparedness when considering vaccine promotion approaches.

4. Unified vaccination policies remove access barriers and promote health equity

Consistent vaccination policies help ensure equitable access to vaccines across regions and population groups, addressing persistent gaps in coverage and reducing disparities. For example, high-risk populations, such as older adults, often encounter multiple barriers to healthcare access, including fragmented services, complex eligibility criteria, administrative and digital barriers, and out-of-pocket costs. By standardizing schedules and reducing unnecessary administrative hurdles, a common vaccine schedule can address underlying social determinants of health, which often intersect with one another to amplify health disparities, making vaccination more accessible and inclusive.



(Click the image to expand) *Figure 1. Key benefits, challenges, and considerations of adopting a common vaccine schedule are described and organized using the socio-ecological model.*

06 Strategic Framework for Adopting Common Adult Vaccine Schedules and Policies in the EU/EEA

Building on the key challenges, considerations, and benefits outlined above, the following section examines potential next steps and strategies to advance a common vaccine schedule and consistent policies among adults.

Identifying and Mobilizing Best Practices

Focusing on the national level—where population health needs and immunization efforts can be effectively addressed—the development of a unified, evidence-informed vaccine schedule, supported by clear guidelines, can be a valuable tool to enhance immunization uptake.

Guidelines should be informed by multiple considerations, including cost-effectiveness, the latest scientific evidence, epidemiological trends, equity implications, national health priorities, and the structure of healthcare governance, specifically the degree of centralization or decentralization in implementing and evaluating immunization programs.

The initial schedule would prioritize those most at risk of infection and severe outcomes, such as older adults and individuals with chronic conditions, and focus on coordinating a core set of vaccines, including those for respiratory diseases. In order to do so, several key considerations must be taken into account:

Standardize age eligibility of vaccines and identify consistent categorization of high-risk groups

The findings of the policy audit indicated a range of variability whereby the definition of older adults was inconsistent across respiratory disease vaccines, with age thresholds ranging from 60 to 70 years and above. In order to effectively protect this high-risk group, among others, consistency in eligibility is needed. Using a clear age baseline (e.g., 60+), with flexibility according to different contexts, can help guide eligibility policies effectively. At the same time, expanding vaccine access to a broader group of older adults — beyond those at highest clinical risk — helps ensure prevention across the ageing population, supports healthy ageing, and delivers wider socioeconomic benefits of vaccination.

Coordinate effective co-administration policies

Where possible, administering vaccines conjunctively can be supportive of greater uptake rates while improving cost-effectiveness and resource efficiency. Currently, as highlighted in the policy audit, co-administration practices are most commonly applied to COVID-19 and influenza vaccines. However, advancing the use of timely, evidence-based guidance is essential to expand safe and effective co-administration strategies across a broader range of vaccines.

Achieving these objectives will require focused advocacy and strong multi-sectoral collaboration to translate national strategies into meaningful, long-term outcomes. The following strategies outline key actions that can serve as a roadmap for advancing a common vaccine schedule. Please note this roadmap intends to support advocacy within the EU/EEA region, however tailoring approaches and strategies to national context is critical to success for integration.

Synthesize and mobilize evidence to advance efforts towards a common vaccine schedule

Building a foundation of evidence and mobilizing timely research is key to advancing public health strategies. Current knowledge gaps include: short-term (e.g., cost of vaccines) and long-term costs for national and regional health authorities (e.g., hospitalizations due to extreme cases of infection and lost productivity as a result), the link between respiratory vaccines and other areas of health (including cardiovascular health, frailty, and other noncommunicable diseases), and a thorough analysis of the benefits of unified vaccine schedules (e.g., improved coverage, reduced disease burden, and cost savings).

Published economic analyses, epidemiological studies, and case studies can help fortify advocacy efforts through tangible evidence in this area. Further, monitoring and evaluation tools are needed with implementation efforts to support the identification of gaps in vaccination, support targeted interventions, and inform broader population health strategies. Additionally, this would serve as a critical tool for improving vaccination coverage across medical specialties by systematically tracking updates and ensuring that healthcare professionals, including general practitioners, geriatricians, and specialists managing chronic conditions such as cardiologists, stay informed and aligned when delivering vaccines alongside other health services.

Embed the adoption of a common vaccine schedule into key policy processes

Identifying key policy windows and decision-making processes is critical to strategically align efforts and ensure that timely, actionable recommendations reach decision-makers. Opportunities such as national health strategy reviews, budget planning cycles, and responses to emerging health threats provide ideal time frames to advance the adoption of a common vaccine schedule on the policy agenda. Equally important is framing the value of a common vaccine schedule within the context of national health priorities and current population health challenges, such as the rising number of older adults and individuals with chronic conditions, to underscore its relevance, potential benefits, and long-term impact.

Foster multisector engagement to advance advocacy efforts

The engagement of multiple stakeholders is needed to guide the development of strategies that promote vaccination. These processes should involve representatives from key government sectors, such as health, planning, and budgeting, as well as immunization program managers, national immunization technical advisory groups (NITAGs), civil society organizations, academic institutions, scientific and medical societies, and frontline healthcare providers including physicians, nurses, midwives, and pharmacists. It is also important to include specialists who routinely manage chronic conditions, metabolic disorders, and immunosuppressive states. These professionals frequently interact with older adults who are at increased risk of vaccine-preventable diseases, particularly respiratory infections. Mechanisms for stakeholder engagement, including co-design of eligibility criteria, citizen panels, and monitoring committees that involve older adults, should be leveraged to integrate various perspectives in advocacy and strategy development processes.

At the same time, it is essential to prioritize outreach strategies tailored to at-risk and equity-deserving groups to ensure inclusive participation. By bringing together diverse expertise and perspectives, this stage would play a critical role in shaping policy transitions, setting priorities, and supporting the effective implementation and evaluation of a common vaccine schedule.

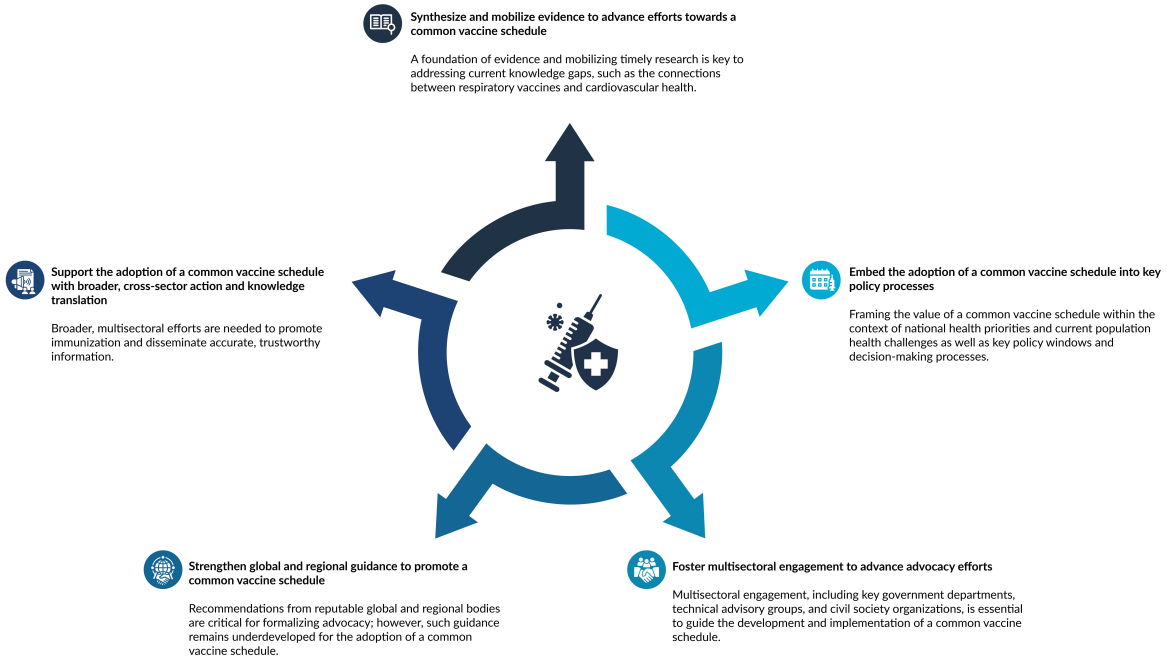
Strengthen global and regional guidance to promote a common vaccine schedule

Recommendations developed and issued by reputable international organizations (e.g., WHO, UNICEF) and regional authorities (e.g., NITAGs) play a critical role in guiding national efforts toward a common vaccine schedule. Referencing such guidance can empower national authorities and public health agencies to drive meaningful change. However, to date, no prominent global or regional bodies have explicitly endorsed a common vaccine schedule for adults.

To fill this gap, the development of supportive recommendations should be promoted through structured, evidence-informed decision-making (EIDM) frameworks. This approach should incorporate a comprehensive set of criteria, including technical (e.g., safety, efficacy, disease burden, cost-effectiveness), programmatic and operational (e.g., supply chains, logistics, financing), and social (e.g., equity, public perception) factors. Advocating for the inclusion of a common vaccine schedule in policy agendas and formally assessing its potential to improve vaccine uptake will be essential to generating expert-driven guidance.

Support the adoption of a common vaccine schedule with broader, cross-sector action and knowledge translation

The success of adopting a common vaccine schedule relies on broad, multi-sectoral efforts to promote immunization and disseminate accurate, trustworthy information. There is a need to broadly strengthen public confidence and investment in immunization. Key strategies include enhancing training and education for healthcare providers, establishing robust and comprehensive data collection systems, and implementing targeted knowledge translation campaigns to address vaccine hesitancy and misinformation.



(Click the image to expand) ***Figure 2.*** *Key strategies and recommendations to advance a common vaccine schedule across EU/EEA countries is highlighted.*

07 Conclusions

The growing population of older adults and rising prevalence of chronic conditions across the EU/EEA demands a unified and strategic public health response. A recent policy audit revealed critical gaps in national vaccine recommendations, highlighting inconsistent eligibility criteria, limited guidance on co-administration, and the absence of standardized schedules. These discrepancies contribute to fragmented delivery, lower vaccine uptake, and missed opportunities for immunization.

Establishing a common adult respiratory vaccine schedule offers a pathway to more efficient service delivery, reduced administrative burden, increased public trust, and ultimately, broader vaccine coverage. From the individual to the system level, a common vaccine schedule promotes improved access, cost-effectiveness, and health equity.

However, implementing a sustainable and impactful model of consistent vaccine policies and guidelines is not without challenges. Barriers such as limited infrastructure, high initial investment costs, diverse health governance structures, and the underrepresentation of high-risk populations in policy development must be addressed. A nuanced, context-specific approach grounded in evidence is essential to ensure successful adaptation across the region.

This report identifies a set of actionable next steps, including standardizing age and risk-group definitions as well as strengthening co-administration practices. To advance the adoption of a common vaccine schedule among adults, the report recommends engaging key stakeholders, investing in ongoing evidence synthesis and evaluation, and prioritizing guidance from trusted health authorities. These coordinated efforts can lay the foundation for more resilient, equitable, and responsive immunization systems across the EU/EEA.

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09 References

1. The Lancet Regional Health – Europe. Securing the future of Europe's ageing population by 2050. The Lancet Regional Health - Europe [Internet]. 2023 Dec 1 [cited 2025 Jun 16];35:100807. Available from: https://www.thelancet.com/action/showFullText?pii=S2666776223002260

2. Patel TA, Jain B, Raifman J. Revamping Public Health Systems: Lessons Learned From the Tripledemic. Am J Prev Med [Internet]. 2024 Jan 1 [cited 2025 Feb 26];66(1):185–8. Available from: https://www.ajpmonline.org/action/showFullText?pii=S0749379723003392

3. Acute respiratory infections in the EU/EEA: epidemiological update and current public health recommendations – winter 2024/2025 [Internet]. [cited 2025 Feb 26]. Available from: https://www.ecdc.europa.eu/en/news-events/acute-respiratory-infections-eueea-epidemiological-update-and-current-public-health-0

4. Harmonization - Vaccines [Internet]. [cited 2025 Jul 6]. Available from: https://vaccine-studies.com/about/index/harmonization

5. Regulatory Harmonization and Convergence | FDA [Internet]. [cited 2025 Jul 6]. Available from: https://www.fda.gov/vaccines-blood-biologics/international-activities/regulatory-harmonization-and-convergence

6. Ageing Europe - statistics on population developments - Statistics Explained - Eurostat [Internet]. [cited 2025 Jun 16]. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ageing_Europe_-_statistics_on_population_developments#Highlights

7. Ahrenfeldt LJ, Nielsen CR, Möller S, Christensen K, Lindahl-Jacobsen R. Burden and prevalence of risk factors for severe COVID-19 disease in the ageing European population - A SHARE-based analysis. Res Sq [Internet]. 2020 Sep 9 [cited 2025 Sep 11];rs.3.rs-73657. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC7491580/

8. Doherty TM, Connolly MP, Del Giudice G, Flamaing J, Goronzy JJ, Grubeck-Loebenstein B, et al. Vaccination programs for older adults in an era of demographic change. Eur Geriatr Med [Internet]. 2018 Jun 1 [cited 2025 Jun 16];9(3):289. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC5972173/

9. Gavazzi G, Fougère B, Hanon O, Leroux-Roels I, Brochot E, Blanchard E, et al. Expert Review of Vaccines Enhanced influenza vaccination for older adults in Europe: a review of the current situation and expert recommendations for the future Enhanced influenza vaccination for older adults in Europe: a review of the current situation and expert recommendations for the future. 2025 [cited 2025 Jun 16]; Available from: https://www.tandfonline.com/action/journalInformation?journalCode=ierv20

10. Eurostat. Vaccination rate of older population at 48.2% in 2022 [Internet]. 2024 [cited 2025 Sep 22]. Available from: https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20241216-2?utm

11. Adult immunisation - Vaccines Europe [Internet]. [cited 2025 Sep 22]. Available from: https://www.vaccineseurope.eu/life-course-immunisation/adult-immunisation

12. Eiden AL, Barratt J, Nyaku MK. A review of factors influencing vaccination policies and programs for older adults globally. Hum Vaccin Immunother [Internet]. 2023 [cited 2025 Jun 16];19(1):2157164. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9980618/

13. Eiden AL, Barratt J, Nyaku MK. Drivers of and barriers to routine adult vaccination: A systematic literature review. Hum Vaccin Immunother [Internet]. 2022 [cited 2025 Jun 16];18(6):2127290. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC9746483/

14. Jemna DV, David M, Bonnal L, Oros C. Socio-economic inequalities in the use of flu vaccination in Europe: a multilevel approach. Health Econ Rev [Internet]. 2024 Dec 1 [cited 2025 Aug 12];14(1):1–20. Available from: https://healtheconomicsreview.biomedcentral.com/articles/10.1186/s13561-024-00535-1

15. Sacre A, Bambra C, Wildman JM, Thomson K, Bennett N, Sowden S, et al. Socioeconomic inequalities in vaccine uptake: A global umbrella review. PLoS One [Internet]. 2023 Dec 1 [cited 2025 Aug 12];18(12):e0294688. Available from: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0294688

16. Bloom DE, Pecetta S, Scorza FB, Carfi A, Carleton B, Cipriano M, et al. Vaccination for healthy aging. Sci Transl Med. 2024 May;16(745).

17. Our work: life course [Internet]. [cited 2025 Aug 5]. Available from: https://www.who.int/our-work/life-course

18. Kurpas D, Stefanicka–wojtas D, Soll–morka A, Lomper K, Uchmanowicz B, Blahova B, et al. Vaccine Hesitancy and Immunization Patterns in Central and Eastern Europe: Sociocultural, Economic, Political, and Digital Influences Across Seven Countries. Risk Manag Healthc Policy [Internet]. 2025 [cited 2025 Aug 6];18:1911–34. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC12170812/pdf/rmhp-18-1911.pdf

19. Vaccine hesitancy - Vaccines Europe [Internet]. [cited 2025 Aug 6]. Available from: https://www.vaccineseurope.eu/global-health-threats/vaccine-hesitancy/

20. Socio-Economic Value of Adult Immunisation Programmes - OHE [Internet]. [cited 2025 Jul 1]. Available from: https://www.ohe.org/publications/the-socio-economic-value-of-adult-immunisation-programmes/

21. Review: Coadministration of Adult Vaccines Both Effective and Efficient [Internet]. [cited 2025 Jul 6]. Available from: https://www.ajmc.com/view/review-co-administration-of-adult-vaccines-both-effective-and-efficient

22. Golden SD, Earp JAL. Social Ecological Approaches to Individuals and Their Contexts: Twenty Years of Health Education & Behavior Health Promotion Interventions. Health Education and Behavior [Internet]. 2012 Jun [cited 2025 Jun 25];39(3):364–72. Available from: https://journals.sagepub.com/doi/full/10.1177/1090198111418634

23. Scarneo SE, Kerr ZY, Kroshus E, Register-Mihalik JK, Hosokawa Y, Stearns RL, et al. The socioecological framework: A multifaceted approach to preventing sport-related deaths in high school sports. J Athl Train [Internet]. 2019 Apr 1 [cited 2025 Jun 25];54(4):356–60. Available from: https://www.ebsco.com/research-starters/environmental-sciences/social-ecological-model

24. Joseph S, Bouzanis K, Adepita V, Sangster A, Barratt J. Evidence to Action: A review of the National Immunization Technical Advisory Groups (NITAGs).

25. Sandmann FG, van Leeuwen E, Bernard-Stoecklin S, Casado I, Castilla J, Domegan L, et al. Health and economic impact of seasonal influenza mass vaccination strategies in European settings: A mathematical modelling and cost-effectiveness analysis. Vaccine [Internet]. 2022 Feb 23 [cited 2025 Jun 16];40(9):1306. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC8861572/

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