

Demonstrating the full societal value of adult immunization: The importance of adopting a prevention-first mindset

A WHA77 side event organized by IFPMA

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Introduction

The Office of Health Economics, commissioned by IFPMA, recently published a <u>report</u> on "**The Socio-economic Value of Adult Immunization.**" The report introduced new evidence to support the important role of adult vaccination programs in addressing key health and societal challenges while aligning with global agendas such as the United Nations Sustainable Development Goals (SDGs) and the World Health Organization (WHO) Immunisation Agenda 2030 (IA2030).

On the sidelines of the 77th World Health Assembly (WHA77), IFPMA convened a <u>panel</u> to discuss the value of adult immunization not only for healthcare systems and population health, but also its impact on productivity and associated economic benefits.



Speakers

- Ms Lise Pedersen, Journalist (moderator)
- Prof Lotte Steuten, Deputy Chief Executive, Office of Health Economics
- Ms Christi Kelsey, Senior Vice President, Head Global Vaccines Commercial, GSK
- **Dr Stefania Maggi**, President, European Interdisciplinary Council on Aging (EICA)
- Dr Agnes Suares da Silva, Director, Health and Environmental Surveillance Secretariat at the Brazilian Ministry of Health

- **Dr Jane Barratt**, Global Advisor, International Federation of Ageing (IFA)
- Ms Tania Cernuschi, Unit Head, Immunization Agenda, Policy, and Strategy, WHO

What does the report show?

- → Global demographic changes and health challenges are putting ever-greater pressure on healthcare systems and society. Adult immunization programs are a powerful tool for policymakers to ease those pressures.
- → The report provides evidence for adult immunization programs across 10 countries and four vaccines. This data shows that adult immunization programs offset their costs multiple times through benefits to individuals, the healthcare system, and wider society.
- → Benefit-cost analysis revealed that adult vaccines can return up to 19 times their initial investment, when the benefits beyond the healthcare system are monetized.
- → This is the equivalent of billions of dollars in net monetary benefits to society and equates up to USD 4,637 per individual's full vaccination course.
- → Despite increasing recognition of the broader value of vaccination, substantial evidence gaps remain, leading to an underestimation of vaccine value and risk of suboptimal policy decisions.
- → Governments are recommended to adopt a prevention-first mindset to help ease increasing pressures on health systems and society. Adult immunization should play a crucial role in enabling longer, healthier, and more productive lives.

Event summary

After the presentation of the OHE report's main findings and recommendations, the panelists shared their expert insights on the value of adult immunization and the substantial human and economic costs of vaccine-preventable diseases in adults. They discussed good practices in the field, individual and policy obstacles to increasing adult vaccination uptake, and the need to raise awareness among policymakers on the value of adult immunization.

The following key messages emerged from the discussion:

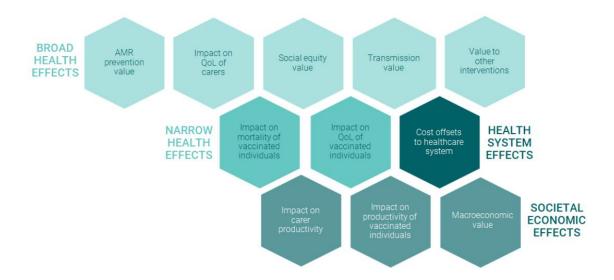
- → Vaccine-preventable diseases can have catastrophic consequences for adults, leading to significant strains on healthcare systems and societies due to the increased costs of hospitalization and other healthcare services, and loss of productivity. The burden of vaccine-preventable diseases is projected to rise in the years to come, especially with the increasing burden of chronic diseases.
- → Adult immunization programs should be implemented and optimized as part of a lifecourse immunization approach, as notably recommended by the WHO. Expanding access to immunization to a broader adult population can generate more value and higher net cost savings for healthcare systems and society. Adult immunization programs also present a great opportunity to increase healthy life expectancy.
- → Proactive and effective awareness raising campaigns are needed to inform the public about the value of vaccination. Clear concise messages that avoid jargon helps to inform and mobilize individuals to be vaccinated and even inspire pride in participating in immunization efforts that promote the well-being of all.
- → A prevention-first mindset and robust funding for adult vaccination programs can save and improve millions of lives in the years to come. Healthcare systems must invest in preventive strategies to manage unprecedented and growing demand. Robust adult immunization programs are a fundamental component of effective prevention.
- → The evidence base for the value of adult immunization programs should be further expanded and developed. Research is needed to respond to knowledge gaps that inform decision-making and target policy interventions optimized for impact and value. More robust data collection systems, widely accepted methods, and transparent/open data access would allow more accurate quantification of this value. It is especially important to close these information gaps in middle- and lower-income countries.

Estimating the whole value of adult immunization

The event opened with a presentation of the study's results, methodology, and recommendations by Prof **Lotte Steuten**, Deputy Chief Executive, Office of Health Economics. She highlighted that the study is one of the biggest undertaken by the Office of Health Economics in its 62-year history.

The research, based on a targeted literature review of recent relevant studies and health economic modelling, assessed the benefits of immunization not only in terms of saved lives, but also improved quality of life, social equity (because underprivileged populations are often worse affected by vaccine-preventable diseases), productivity, and macroeconomic effects.

The study aimed to determine the broader socioeconomic value of vaccination programs for four different diseases (influenza, pneumococcal, herpes zoster, and respiratory syncytial virus (RSV)) in a diverse set of countries (Australia, Brazil, France, Germany, Italy, Japan, Poland, South Africa, Thailand, and the United States). The benefits were quantified for a broad range of impacts, including on people, broader health and health system effects, and societal economic benefits.



The results were striking, with overwhelming returns on investment. "Our research shows that for each euro invested in adult immunization, there are up to 19 euros in benefits for patients, the healthcare system, and society at large," Prof Steuten said. "It's time to shift to a prevention-first mindset." The findings highlighted the high burden of vaccine-preventable diseases and the huge benefits of immunization. These include preventing diseases, reducing symptoms, sequelae and mortality, fighting antimicrobial resistance (AMR), protecting unvaccinated individuals, and sparing healthcare resources. Despite many adult immunization programs delivering net cost savings to healthcare systems, these are often not accessible or routine for people under 65 years of age. Considering all this, Prof Steuten recommended creating and optimizing adult immunization programs and further expanding the evidence base on the value of immunization in the latter half of life.

The shift to prevention is particularly necessary given the rising pressure on healthcare systems due to aging populations and the increased prevalence in chronic diseases, including among younger adults. While the call to shift from treatment to prevention is not new, Prof Steuten argued that it bore repeating and being acted upon. Adult vaccination is a fundamental preventive measure, but access to it is inconsistent across countries and inclusion of adult vaccination in routine immunization schedules worldwide is limited.

The catastrophic consequences of vaccine-preventable diseases

Dr Stefania Maggi, President, European Interdisciplinary Council on Aging (EICA), provided an overview of the often-devastating human consequences of vaccine-preventable diseases among adults. She stressed that this was not only due to natural decline in immunity, known as immuno-senescence, but to the failure to take preventive broader actions, especially vaccinations, good nutrition, regular physical exercise, and screening for preventable diseases during the life course.

Diseases like influenza and RSV are insufficiently prioritized in the context of immunization because they are often wrongly considered simple and easy to treat. However, both diseases can have catastrophic consequences, especially for older adults. For influenza, this includes a massive increase in the risk of cardio- and cerebro-vascular events and physical disability, which may lead to significant loss of autonomy. Both influenza and RSV can also require costly hospitalization, due to the exacerbation of co-existing comorbidities. Adults with respiratory diseases may face long-term consequences, both physical and cognitive, as well as forming reservoirs of infection that can spread to others. Even if "long COVID" is now much in the spotlight, "long flu" has been a reality long before.

Dr Maggi further noted that other vaccine-preventable diseases can also have devastating impacts. Pertussis can cause debilitating and painful rib fractures as well as stroke in older people, while herpes zoster might cause stroke and post-herpetic neuralgia, difficult to control with pain killer drugs, and can significantly reduce quality of life and emotional well-being. As immunization can help prevent these diseases and their consequences, Dr Maggi called for a paradigm shift from treatment to prevention, including immunization, as part of a holistic approach.

From eradicating polio to containing COVID-19: Lessons from Brazil's immunization efforts

Dr Agnes Suares da Silva, Director at the Health and Environmental Surveillance Secretariat at the Brazilian Ministry of Health, presented some of the nation's activities in immunization. She stressed that Brazil has a public, universal, and free healthcare system that provides services to over 215 million citizens.

The Brazilian healthcare system aims to uphold equity and leave no one behind. As a result, healthcare is also provided to migrants and to people in remote locations, including the Pampas, the Amazon jungle, and islands. Achieving this goal is not easy and requires substantial organizational efforts. The country maintains 38,000 vaccination rooms, some of which are off the grid.

Dr Suares da Silva stressed how health is a right enshrined in the Brazilian Constitution and is therefore not a governmental choice, but a duty. Brazil also seeks to ensure social participation in healthcare schemes. Immunization programs favor an incremental approach initially focusing on the most vulnerable populations and then expanding to the general population.



Brazilian immunization programs began decades ago with the goal of eradicating diseases such as a polio. This goal created a sense that vaccination is a public good. At the time, Brazil created Zé Gotinha as a popular mascot in support of vaccination. His image often appeared on T-shirts and in awareness-raising campaigns, and it was also active in COVID-19 vaccination efforts.

Recalling the fact that the COVID-19 pandemic coincided with a rise in anti-vaccination activists, Dr Suares da Silva pointed to the role that compelling communication efforts play in achieving immunizations objectives. In fact, thanks to public awareness efforts, many Brazilians are proud to be vaccinated. Engaging the population is therefore of the utmost importance.

Immunization Agenda 2030: Shifting to a life-course approach

Ms Tania Cernuschi, Unit Head for Immunization Agenda, Policy, and Strategy at the WHO, outlined the WHO's Immunization Agenda 2030 (IA2030). This agenda puts forward a global vision for immunization in which everyone, everywhere has access to vaccination services, no matter their age.

Ms Cernuschi noted that the IA2030 promotes a life-course approach to immunization, not limited to child or adult vaccination only, therefore seeking to leverage healthcare services and

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touch points throughout life to provide opportunities for vaccination. Immunization must be integrated into primary health care.

Unfortunately, efforts are lagging in most countries. Not counting COVID-19, only 24% of countries report universal recommendations for immunization across the life course. More countries recommend immunization for people over 65.

Immunization has positive returns for pregnant women, newborns, children, adolescents, working-age adults, and over-65s. Life-course immunization means seizing those opportunities. Moreover, there is added value in terms of pandemic preparedness and prevention. Several diseases – including tuberculosis, yellow fever, meningitis, and influenza – can be tackled through vaccination at various life-course touchpoints.

Impact goals of the WHO's 2030 Immunization Agenda

- → Reduce mortality and morbidity from vaccine-preventable diseases for everyone throughout the life course.
- → Leave no one behind by increasing equitable access and use of new and existing vaccines.
- → Ensure good health and well-being for everyone by strengthening immunization within primary health care and contributing to universal health coverage and sustainable development.

Due to limited healthcare resources, particularly in the current difficult economic situation, countries must choose what to prioritize. As outlined by Ms Cernuschi, the WHO encourages countries to prioritize vaccine introductions using multi-criteria decision analysis. This approach looks at return on investment in terms of preventing mortality and morbidity, but also boosting local and global health security, equity, and other relevant factors based on local context.

Enabling healthy and active aging through immunization

Dr Jane Barratt, Global Advisor at the International Federation of Ageing (IFA), provided an overview of the major drivers transforming the infectious disease landscape and the world we live in. These include population aging, globalization, and climate change.

Vaccination is an effective public health intervention against rising infectious disease burden and subsequent threats to population health. Despite the evidence, suboptimal adult vaccination threatens to overwhelm health systems and impact the social and economic fabric of many countries. More than 94 million years of life were lost among those aged 55-64 years

from COVID-19, yet many countries now limit eligibility for COVID-19 vaccines to people over 65 years of age.

Aging populations are often considered a burden on healthcare systems, but these same systems do not provide simple pathways and opportunities for easy vaccination. Sustained investment is required for a comprehensive immunization schedule across the life course so that the broader societal and economic benefits can be realized across all ages.

Dr Barratt called on all stakeholders, including governments and civil society, to wake up to the need to go beyond childhood vaccination and ensure immunization is timely, affordable, and accessible to adults and at-risk populations. This can be achieved through

- → Developing and conveying clear messages on vaccines and vaccination to make sense to all ages, creeds, and socio-economic backgrounds.
- → Expanding the pharmacists and other healthcare professionals' role in vaccine administration.
- → Simplifying pathways to all vaccines for all ages and population groups, especially those at risk of death and life-altering consequences from infectious diseases.

Reasons for optimism for adult immunization

Ms **Christi Kelsey**, Senior Vice President, Head Global Vaccines Commercial at GSK, concluded the event by asking the audience to reflect on how the IA2030 will be achieved a mere six years from now.

Whereas adult vaccination programs are often "typecast" for their cost, the OHE report shows the astounding returns in terms of health and socioeconomic benefits, proving how adult vaccination should become the norm. She said the report provides "a common language to disrupt a status quo."

Ms Kelsey added that she is optimistic about adult immunization for three reasons:

- → Our societies know how to upscale vaccination given the infrastructure and collective experience for childhood vaccination. The same mindset can be taken for life-course immunization, including the latter half of life.
- → The facts about the benefits of adult immunization can be shared with ministers of health and finance. "Knowledge shared is knowledge multiplied," she said.
- → 80% of the current vaccines R&D pipeline is for adults. Healthcare systems must change and adapt to ensure adults and those with chronic conditions have full access to this effective public health intervention.

Ms Kelsey encouraged everyone to take up the evidence in the report and be empowered to have the much-needed conversations to protect everyone from vaccine-preventable diseases. Just as we take preventive measures every day – by wearing a seat belt, going to the dentist, or minding our diet – so adult vaccination should become a normal part of everyday life.

About IFPMA

The International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) represents over 90 innovative pharmaceutical companies and associations around the world. Our industry's almost three million employees discover, develop, and deliver medicines and vaccines that advance global health. Based in Geneva, IFPMA has official relations with the United Nations and contributes industry expertise to help the global health community improve the lives of people everywhere.

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