



In recent years, scientists have greatly expanded our understanding of the behavioral influences associated with influenza vaccination, and the relative effectiveness of specific policies designed to support immunization. These insights into the factors that encourage vaccine uptake can help boost the success of local immunization initiatives.

Executive Summary

- **Recommendation by a family doctor or nurse greatly encourages vaccination.** Research suggests healthcare worker recommendation is the single most important factor in motivating immunization.
- **Patient reminders can increase the number of people vaccinated.** Multiple reminders are more effective than a single patient contact, and telephone reminders have more impact than the post.
- **Wide-scale communication campaigns can improve vaccination rates.** Understanding the risk of influenza, and the role of vaccination in its prevention, can motivate patient immunization.
- **Financial support for vaccination can increase coverage.** Removing financial barriers to immunization can encourage uptake, such as having reimbursement policies in place.
- **Improving access to vaccines can boost coverage levels.** Providing vaccination via 'non-traditional channels', such as the workplace and pharmacy, can help improve access.
- **Multi-component campaigns can increase healthcare worker uptake.** Combining education, easy vaccine access and mandatory elements (e.g. wearing a mask if unvaccinated) can increase coverage.
- **Official recommendations may provide a foundation for higher coverage.** Including influenza in immunization guidelines may be an essential pre-requisite for achieving high levels of uptake.

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6

Effective Immunization Policies

Seasonal Influenza Vaccination Series: Paper 6



IFPMA

Influenza Vaccine Supply
International Task Force

Vaccine uptake is impacted by a wide variety of influences, which can result in both rational and irrational decision-making processes. In recent years, research into these factors and the impact they have on immunization levels has become more sophisticated, drawing on insights from behavioral and social sciences. As a result, studies have identified a number of factors that can help improve the uptake levels achieved by seasonal influenza vaccination campaigns.

Recommendation by healthcare workers is particularly important in motivating immunization

Research suggests personal recommendation by healthcare workers, in particular family doctors or nurses, is the single factor most likely to encourage patients to be immunized. The United States' Centers for Disease Control and Prevention (CDC) notes that, 'Studies consistently show that provider recommendation is the strongest predictor of vaccination'¹. Similarly, several studies conducted in Europe report this type of proactive recommendation as the most common reason, or one of the most common reasons, for seasonal influenza vaccination^{2,3,4,5,6}.

Patient reminders can boost vaccination levels

A Cochrane review of patient recall systems found reminders can increase immunization rates by up to 20%⁷. Unsurprisingly, the research found providing multiple reminders was more effective than contacting patients just once. Similarly, reminding people in person over the telephone proved more effective than via postcard or letter.

Wide-scale communication and education campaigns can encourage vaccine uptake

Studies show patients' understanding that influenza is a serious disease, and their wish to avoid infection, are important motivating factors for vaccination, while an expectation that they will not contract influenza is a major barrier^{2,3,4,5,6}. Wide-scale communication campaigns can capitalize on these findings by educating target groups on the disease and the benefits of vaccination. In its position paper on influenza vaccination, the World Health Organization supports this approach emphasizing the importance of 'raising the public consciousness'⁸. These conclusions are supported by a study conducted by IFPMA in 26 countries from each region of the world. The results show that of

the influences analyzed, the use of wide-reaching communication campaigns was the single factor most strongly linked with influenza vaccine coverage (positive : negative correlation = 5.3 : 1)⁹.

Financial support for vaccination can encourage uptake

The United States' CDC states, 'Successful vaccination programs combine...efforts to remove administrative and financial barriers that prevent persons from receiving the vaccine'¹. A study in Europe noted that vaccine coverage was 'low' in countries with only partial or no subsidy for influenza vaccine⁴. These findings are supported by IFPMA research, which found financial support for vaccines and/or administration costs was closely related to immunization rates, and had the second greatest influence of the factors analyzed in the study (positive : negative correlation = 4.5 : 1)⁹.

Providing vaccination in 'non-traditional' settings can improve access

The provision of influenza immunization in non-medical settings can complement more traditional vaccination channels. For instance, in the US, the CDC reports that 33% of seasonal vaccination occurred in alternative settings in 2009-10¹, and confirms that availability via channels such as the workplace or pharmacies is important for those who do not regularly access the health system. Similarly, vaccination in assisted living, retirement communities and recreation centers can assist in reaching the elderly¹.

Strong campaigns with mandatory elements can increase coverage among healthcare workers

Many studies have examined the effectiveness of vaccination campaigns aimed at healthcare professionals. A systematic review¹⁰ of this work concluded that in non-hospital settings campaigns with greater numbers of distinct elements ('including education or promotion, better access to vaccines, legislation or regulation and/or role models') increased vaccine uptake. In hospitals, campaigns based on education/promotion or increased vaccine access alone had limited effects, while the inclusion of mandatory elements (such as declination forms or masks for unvaccinated workers) resulted in substantially greater increases in vaccine usage¹⁰.

Official guidelines may form a foundation for higher vaccine coverage

Although nearly 80 countries worldwide include seasonal influenza vaccine in their national immunization schedules¹¹, coverage rates vary greatly⁹. IFPMA research in 26 countries from each region of the world did not find a direct link between the presence of official vaccination recommendations and levels of immunization (positive: negative correlation = 1.3 : 1)⁹. However, vaccination recommendations did appear to be a pre-requisite as they were present in all countries that reached higher rates of coverage**.

Conclusions

Recent research provides valuable insights into the factors that can improve seasonal influenza vaccination programs. Studies show that the personal recommendation of a family doctor or nurse greatly encourages vaccination, while formal patient reminders, particularly when repeated and via the phone, can improve vaccine uptake. Wide-reaching campaigns providing education on influenza and the benefits of vaccination, and financial support for immunization, can also help increase coverage rates. The provision of vaccines in non-medical settings, such as workplaces, pharmacies and retirement communities, can improve access. Strong healthcare worker campaigns combining education, promotion, easy vaccine access and mandatory elements (such as masks for the unvaccinated) can boost coverage. Finally, although official recommendations alone may be insufficient to drive high levels of vaccine uptake, they appear to be an essential foundation for successful vaccination programs.

References

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** As defined in the study; please see the full reference for further details

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About the IFPMA

IFPMA represents the research-based pharmaceutical companies and associations across the globe. The research-based pharmaceutical industry's 1.3 million employees research, develop and provide medicines and vaccines that improve the life of patients worldwide. Based in Geneva, IFPMA has official relations with the United Nations and contributes industry expertise to help the global health community find solutions that improve global health.

IFPMA manages global initiatives including: IFPMA Developing World Health Partnerships Directory studies and identifies trends for the research-based pharmaceutical industry's long-term partnership programs to improve health in developing countries, IFPMA Code of Practice sets standards for ethical promotion of medicines, IFPMA Clinical Trials Portal helps patients and health professionals find out about on-going clinical trials and trial results.

About the Influenza Vaccine Supply (IVS) Task Force

The IVS Task Force includes 16 vaccine manufacturing companies that are involved in research, development and production of influenza vaccines, representing more than 95% of world production. The IVS member companies are, Abbott, Adimmune Corporation, Baxter, Biken, CSL Limited, Crucell, Denka Seiken, GlaxoSmithKline Biologicals, Green Cross Corporation, Hualan Biologicals, Kaketsuken, Kitasato Institute, MedImmune, Novartis Vaccines & Diagnostics, Sanofi Pasteur, Sanofi Pasteur MSD, and Sinovac.



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